VOLUME 11 NUMBER 2 May 2019
ISSN 2076-9202 (Print)
ISSN 2218-046X (Online)

International Journal of Information, Business and Management



ELITE HALL PUBLISHING HOUSE

International Journal of Information, Business and Management

ABOUT JOURNAL

The International Journal of Information, Business and Management (IJIBM) was first published in 2009, and is published 4 issues per year. IJIBM is indexed and abstracted in **ROAD, OALib, Ulrich's Periodicals Directory, ProQuest (ABI/INFORM Global) , ZORA (Zurich Open Repository and Archive), IndexCopernicus, JournalSeek, New Jour, getCITED, Directory of Research Journals Indexing, Open J-Gate, Universal Impact Factor, CiteFactor, ResearchBib, EBSCO Open Access Journals, Scientific Indexing Service, InnoSpace - SJIF Scientific Journal Impact Factor, The Index of Information Systems Journals, National Central Library Taiwan, National Library of Australia , National Science Library (Chinese Academy of Sciences), German National Library of Economics, Eurasian Scientific Journal Index, INTERNATIONAL INSTITUTE OF ORGANIZED RESEARCH (I2OR), Stanford University (USA), The University of New South Wales (Australia)**. Since 2013, the IJIBM has been included into the ProQuest (ABI/INFORM Global) list. Since 2014, the IJIBM has been included into the National Science Library (Chinese Academy of Sciences) one of the top databases in China.

IJIBM is an international journal that brings together research papers on all aspects of Information, Business and Management in all areas. The journal focuses on research that stems from academic and industrial need and can guide the activities of managers, consultants, software developers and researchers. It publishes accessible articles on research and industrial applications, new techniques and development trends.

IJIBM serves the academic and professional purposes for those such as scientists, professionals, educators, social workers and managers. It provides new methodology, techniques, models and practical applications in various areas.

ISSN 2076-9202

ELITE HALL PUBLISHING HOUSE

International Journal of Information, Business and Management

CONTENTS

1 **PUBLISHER, EDITOR IN CHIEF, MANAGING EDITOR AND EDITORIAL BOARD**

2 **HUMAN RESOURCE MANAGEMENT REFORMS DURING THE FINANCIAL CRISIS: THE CASE OF THE GREEK PUBLIC SECTOR**
EVANGELIA FRAGOULI, IOANNIS CHRISTOFORIDIS

3 **CIRCULAR ECONOMY: POTENTIAL AND CHALLENGES**
LJUBOMIR DRAKULEVSKI, TATJANA BOSHKOV

4 **NEW FRAMEWORK FOR JOB CREATION: CIRCULAR ECONOMY ACTIVITIES**
LJUBOMIR DRAKULEVSKI, TATJANA BOSHKOV

5 **RELATIONSHIP BETWEEN FIRM SIZE AND PROFITABILITY: INVESTIGATION FROM TEXTILE SECTOR OF PAKISTAN**
KAUKAB ABID AZHAR, NAWAZ AHMED

6 **"WORKING SMART AND NOT HARD" KEY TO MAXIMIZE EMPLOYEE EFFICIENCY?**
EVANGELIA FRAGOULI, IRINI ILIA

7 **IDENTIFYING CONCEPTUAL VARIABLES FROM THE LITERATURE FOR PROPOSING A PERFORMANCE MANAGEMENT FRAMEWORK**
RENO RENALDI TIBYAN, DERMAWAN WIBISONO, MURSYID HASAN BASRI

8 **ON THE EFFECT OF THE ONLINE REPORTING OF ACCOUNTING INFORMATION ON INVESTMENT DECISION-MAKING PROCESS IN SAUDI ARABIA**
NIZAR ALSHOWAIMAN

9 **INCREASING BUSINESS INTELLIGENCE THROUGH A CRM APPROACH: AN IMPLEMENTATION SCHEME AND APPLICATION FRAMEWORK**
G. ATHANASOULIAS, P. CHOUNTALAS

10 **THE EFFECTS OF TRAINING AND MOTIVATING EMPLOYEES ON IMPROVING PERFORMANCE OF CONSTRUCTION COMPANIES: THE CASE OF JORDAN**
RATEB J SWEIS, RAZAN GHALION, MOHAMMAD EL- MASHALEH, ISRAA AMAYREH, AL- SAYED NIVEEN, WASIIM AL BALKHI

11 **SOCIAL MEDIA AS A TOOL IN EDUCATION: A CONTENT DESCRIPTIVE ANALYSIS**
SAHER MANASEER, AFNAN ALAWNEH, H. ALMOGDADY

12 **RELATIONSHIP AMONG BIG FIVE PERSONALITY TRAITS, JOB PERFORMANCE & JOB SATISFACTION: A CASE OF SCHOOL TEACHERS IN SRI LANKA**
WS CHANDRASEKARA

13 **FACTORS INFLUENCING CONSUMERS' RESPONSE TO CRM IN THE DEMOCRATIC REPUBLIC OF CONGO: THE MEDIATING ROLE OF ATTITUDE AND MODERATING ROLE OF CRM AWARENESS**

ISSN 2076-9202

WENZE MUDIANDAMBU FABRICE

14 SLEMAN SMART REGENCY: SYNERGIC AND SIMULTANEOUS BUREAUCRATION REFORM IN SLEMAN REGENCY

AKADUN

15 IMPROVING ORGANIZATIONAL PERFORMANCE ALONG WITH STRATEGIC PLANNING IN THE FRAMEWORK OF COMBINING THE DAVID MODEL AND BSC ASSESSMENT MODEL

MARYAM MOTTAGHI

16 EXPLORING THE CORRELATION OF OCCUPATIONAL STRESS, PRODUCTIVITY: A CASE OF POLICE OFFICERS IN IRAN

FATEMEH (HANNAH) HADIYAN, HELEN HADIYAN

17 THE IMPACT OF EXTERNAL ENVIRONMENTAL ANALYSIS IN THE CHOOSING APPROPRIATE COMPETITIVE STRATEGIES / ON THE APPLICATION OF THE FOUR-STAR HOTELS IN THE CAPITAL AMMAN / JORDAN

AYMAN ALARMOTI

18 CORPORATE GOVERNANCE AND FIRM PERFORMANCE USING GMM

SHAHZAD HUSSAIN, TANVEER AHMAD, SHOAIB HASSAN

19 VOLATILITY CLUSTERING, NEW HEAVY-TAILED DISTRIBUTION AND THE STOCK MARKET RETURNS IN SOUTH KOREA

YOON HONG, JI-CHUL LEE, AND GUOPING DING

20 FOREIGN DIRECT INVESTMENT (FDI) IN AGRICULTURE INFLOWS AND POVERTY IN SELECTED OIC COUNTRIES

INTAN MAIZURA ABDUL RASHID, NOR'AZNIN ABU BAKAR, NOR AZAM ABDUL RAZAK

21 A STUDY ON NON-PERFORMING ASSETS IN RETAIL BANKING

ARFAT AHMAD

22 INDIAN ECONOMY: IMPEDIMENTS AND INITIATIVES

MEHNAZ MANZOOR

ISSN 2076-9202

ELITE HALL PUBLISHING HOUSE

International Journal of Information, Business and Management

Publisher: Elite Hall Publishing House

Editor in Chief:

Dr. Muzaffar Ahmed (Bangladesh)
E-mail:muzaahme1@gmail.com

Editorial Board:

Dr. Claudio De Stefano
Professor, Department of Computer Science
University of Cassino, Italy.
E-mail: destefano@unicas.it

Prof. Paolo Pietro Biancone
Professor of Financial Accounting, Faculty of Management and Economics
University of Turin, Italy
Email: biancone@econ.unito.it

Dr. Michael A. Hignite, Ph.D.
Professor, Department of Computer Information Systems, College of Business
Missouri State University, USA
Email: mikehignite@missouristateuniversity.com

Dr. Seema Varshney
Assistant Professor, Waljat college of applied sciences
Muscat, Oman
E-mail: smvarster@gmail.com

Dr. Morteza Rasti Barzoki
Assistant Professor, Department of Industrial Engineering
Isfahan University of Technology, Iran
E-mail: rasti@cc.iut.ac.ir

Mr. Mohsen Fathollah Bayati
Department of Industrial Engineering
Iran University of Science and Technology, Iran
E-mail: mfbayati@ind.iust.ac.ir

Dr. Edgardo Palza Vargas
Telfer School of Management
University of Ottawa, Canada
Email: edgardo.palza-vargas.1@ens.etsmtl.ca

Dr. Solomon Markos
Assistant Professor, School of Commerce
Addis Ababa University, Ethiopia
Email: solomonmarkos5@yahoo.com

Dr. Olu Ojo
Lecturer, Department of Business Administration
Osun State University, Nigeria
Email: oluojoe@yahoo.com

Dr. Mohammed-Aminu Sanda
Visiting Research Fellow, Lulea University of Technology, Sweden
Senior Lecturer, Department of Organization and Human Resource Management, University of Ghana, Ghana
Email: masanda@ug.edu.gh

Dr. Khalid Zaman
Assistant Professor, Department of Economics,
University of Wah, Pakistan
Email: dr.khalidzaman@uow.edu.pk

Dr. Kartinah Ayupp
Deputy Dean, Economics and Business
Universiti Malaysia Sarawak, Malaysia
Email: akartinah@feb.unimas.my

Dr. Malyadri. Pacha
Principal, Government Degree College
Affiliated to Osmania University, India
Email: drpm16@yahoo.co.in

Dr. Arif Anjum
Assistant Professor, M.S.G. Arts, Science & Commerce College, Malegaon, India
Managing Editor, International Journal of Management Studies
Email: infoijcms@gmail.com

Mr. Andrew McCalister
Global Research Awardee, Royal Academy of Engineering, University of Cambridge, UK
Email: andrewmccalister@gmail.com

Dr. Mohsin Shaikh
Professor & Head, Department of Management Studies
SKN College of Engineering, Pune, India
Email: skmohs@yahoo.co.in

Dr. M. Razaullah Khan
Associate Professor, Department of Commerce & Management Science
Maulana Azad College, Aurangabad, India
Email: drrazakhan@sify.com

Mr. Kai Pan
Research Assistant & Ph.D. Candidate, Department of Software and Information Systems
University of North Carolina (UNC Charlotte), USA
Email: kpan@uncc.edu

Dr. Sundar Kumararaj
Associate Professor, Commerce Wing, Directorate of Distance Education,
Annamalai University, Annamalai Nagar, Tamil Nadu, India
E-Mail: commercesundar@gmail.com

Dr. Mohammad Alawin
Associate Professor, Business Economics Department
The University of Jordan, Amman, Jordan
E-mail: m.alawin@ju.edu.jo

Mr. Dinh Tran Ngoc Huy
Visiting lecturer, PhD candidate , Banking University HCMC, Vietnam
Email: dtnhuy2010@gmail.com

Dr. Cüneyt AKAR
Associate Professor, Department of Business Administration
Bandirma Onyedi Eylul University, Turkey
Email: cakar@bandirma.edu.tr

Web: http://ijibm.elitehall.com
ISSN 2076-9202 (Print)
ISSN 2218-046X (Online)

HUMAN RESOURCE MANAGEMENT REFORMS DURING THE FINANCIAL CRISIS: THE CASE OF THE GREEK PUBLIC SECTOR.

Dr. Evangelia Fragouli (University of Dundee, UK)
Ioannis Christoforidis (MBA, Hellenic Open University)

Abstract

The financial crisis of 2008, highlighted the importance of Human Resource Management (HRM) in the Greek public sector. The Greek Public Administration due to the large deficits has limited available resources and its services must improve in order to contribute to economic development. The present study was conducted in order to investigate how public employees perceive HRM and its reform and whether demographic differences affect employees' beliefs .Initially a first approach to the concept of HRM and its key features is presented. The current reform and the role of the financial crisis are thoroughly analyzed in comparison to similar efforts in other countries.The second part of the study includes an empirical research, the way public employees perceive HRM and its reform is explored. Primary data were collected from a random sample of 130 civil servants. The findings suggest that employees believe that the reform is necessary. However they believe that the implemented reform lacks strategy, is not intended to improve services but it is crisis driven and aims to reduce costs.

Keywords: Human, Resource, Management, public, sector, reforms, public, administration, financial crisis.

1 - INTRODUCTION

1.1 Theoretical Background

The financial crisis that began in 2008 has exposed both the structural and operational issues the Greek public sector is facing. The necessity of changing and reforming the way the Greek public sector is organized and operates nowadays, during the financial crisis that is, is more obvious than ever. Many developed countries have tried during the past decades to contribute to the development of economy and society through reforms of the public sector. However public administration reforms in Greece remained timid, incomplete and had never been a main issue of the political agenda (Ministry of Administrative Reform & e- Governance, 2011).

ISSN 2076-9202

Since the past reform programs have failed in modernizing the public administration, Greece is obligated due to memoranda to reform public sector's management in a short period. This gains more importance considering the large budget deficits that need to be dealt fast and efficiently by reducing expenses. The limited implementation period and the large volume of the needed reforms are issues of detrimental importance that result to reactions and polarizations within the administrative and the political system as well as to external stakeholders (Ministry of Administrative Reform & e-Governance, 2011).

Human Resource Management (HRM) is called to play a crucial role in the public administration. However, due to the budget cuts the available resources are limited while the offered services have to be improved and contribute to economic development. Thus, the need for public sector's HRM to be reformed is both crucial and urgent in order for the public administration to operate effectively and within the limited budgets. Austerity measures pose major challenges for HRM not only in terms of recruitment, compensation and service provision, but also in relation to job security and workforce morale (Burke et al, 2013).

There are three main reasons for focusing on HRM in public sector (Burke et al, 2013):

- The lack of attention given to the public sector context in the HRM literature.
- The importance of public sector services and the role of human resources in delivering these services.
- The level of public investment in civil services and the need to maximize this investment.

1.2 Aims and Objectives

The aim of the thesis is to examine the HRM reforms in the Greek public sector. The army, the police and the fire department were excluded by many of the ongoing HRM reforms; therefore these services were not included in the study.

More specifically the following topics are being reviewed and explored:

- HRM in the public sector and its importance.
- Challenges in HRM due to financial crisis.
- The current HRM reform programs.

As to the best of the researchers‟ knowledge there are no studies regarding the way employees in the Greek public sector perceive HRM reforms. This study contributes by offering an insight of public employees‟ beliefs about HRM reforms.

The study aims to investigate the way employees perceive HRM and its reform and whether there are different perceptions among employees deriving from demographical differences (education, working experience, duties). More particularly the survey is focused on the HRM issues that are in the reforming process, the main research questions are:

- What are the main problems public employees face?

ISSN 2076-9202

- Whether public employees believe that HRM reforms are necessary?
- What should be the priorities of the HRM reform?
- How do the public employees evaluate the implemented HRM reform?

Furthermore, since the implementation of reforms is progressing very slowly, the reasons causing the reform delay are being investigated.

1.3 Methodology

The methodology used in the present thesis is based on an empirical study and it follows a deductive approach. This methodology is more appropriate in order to investigate public employees" views about HRM reforms and whether any variation in perceptions derives from demographic differences.
The data in the present study are collected from questionnaires answered by a random sample of 130 public employees. Public employees were invited to participate in the survey via internet by completing an online questionnaire, in order to secure

that employees of the excluded categories (army, police, fire department) would not participate in the survey it was stated in the beginning of the questionnaire that they were excluded.

1.4 4 Structure of the Research

The thesis is consisted by nine parts. The first part is introductory; it refers to the necessity of the research, its purpose and the methodology that is being used. Parts two to four is a literature review; theoretical background is presented as well as the challenges that the Greek public sector HRM is facing due the financial crisis and the way HRM has been reformed internationally. Specifically, in the second part HRM as a term is reviewed as well as its implementation in the public sector. In the third part HRM reforms in the Greek public sector is reviewed along with the financial crisis and its impact in the Greek public sector and especially in HRM. The international experience is presented in part four.
Part five presents the research methodology. In the following three parts the data of the survey are statistical analyzed both descriptively and inferentially as well as interpreted. At the end, in the ninth part conclusions and limitations are synopsized.

2 - HUMAN RESOURCE MANAGEMENT IN THE PUBLIC SECTOR

2.1 A first approach on Human Resource Management

2.1.1 Defining Human Resource Management

Human Resource Management is defined as a strategic and coherent approach to the management of

ISSN 2076-9202

an organization‟s most valued assets; the people working there who individually and collectively contribute to the achievement of its objectives (Armstrong, 2006). Economists traditionally have seen HRM as a necessary expense, and not as a source that adds value to organizations. However research has shown that HRM practices can be valuable (Noe et al, 2011). The term of HRM implies that for an organization, employees are resources, as a type of resource human capital refers to the knowledge, skills and abilities embedded in employees (Dessler, 2014).

HRM has originated from personnel management by incorporating management theories (Nankervis et al, 2011). Until 1970's personnel management was seen as a less important function with a very small contribution to the success of the organization. It wasn't up until the 1980's when HRM was elevated to the same level of importance as the other major functional areas of operation of an organization (Mihiotis, 2004).

A debate about the differences and the similarities between HRM and personnel management went on. Armstrong (1987) considered HRM a replacement of the term personnel management while commentators such as Guest (1987) and Storey (1995), found HRM as a different model built on unitary, individualism, high commitment and strategic alignment. They further noted that HRM is more holistic than traditional personnel management and that it emphasizes that people should be regarded as assets rather than variable costs (as cited in Armstrong and Taylor, 2014).

The similarities between HRM and personnel management are summarized in table 2.1 and the differences in table 2.2 (Appendix I).

2.1.2 Major tasks and functions of HRM

Human resources as mentioned earlier are one of the most valued assets for an organization. Therefore, HRM as an administrative operation is of high importance. HRM plays a central role in molding workforce into a motivated and committed team

(Mihiotis, 2004) and it is concerned with all aspects of how people are employed and managed in organizations (Armstrong and Taylor, 2014).

HRM is concerned to resolve, among others issues, the following key queries (Nankervis et al, 2011):

- What quantity and quality of employees will be required now and in the foreseeable future to satisfy or exceed organizational objectives?
- Which strategies will be most effective in attracting and choosing employees into the organization?
- How can employees be productive, satisfied and motivated?
- What methods are appropriate to maintain effective relationships between employees?
- Which strategies are required to ensure that all HR activities are linked and accountable?
- What systems are suitable for administering and evaluating the overall HR function?

ISSN 2076-9202

The functional areas that constitute an HR program and contribute to the resolution of these issues include: (Nankervis et al, 2011; Armstrong and Taylor, 2014; Dessler, 2014; Noe et al, 2011):

- Work and job analysis.
- Recruitment and selection.
- Employee and management training and development.
- Performance and quality management.
- Compensations and benefits.
- Employee relations.
- Employee well-being.
- Human resource policy.
- Occupational health and safety.
- Law compliance.
- Human resource planning.

2.2 Implementing HRM in Public Sector

2.2.1 Differences of public and private sector HRM

Commentators have long argued that HRM in the context of the public sector differs importantly from that of the private sector (Boyne et al., 1999). There are a number of differences between the public and the private sector, thus it seems logical that identical HRM methods should not be used in both sectors. These differences can be summarized as follows:

- Private companies aim to obtain high profits while public organizations aim to serve civilians.
- Private companies have more flexibility while public sector employees have to cope with bureaucratic procedures.
- Public organizations face a variety of stakeholders, each of whom places demands and constraints (Boyne, 2002).
- Political constraints result in frequent changes in policy and the imposition of short time-horizons (Boyne, 2002).
- Public organizations typically have few rivals, if any at all, for the provision of their services, thus there is absence of competitive pressures (Boyne, 2002).

In addition, public sector HRM has been associated with the aspiration towards being a "model employer" setting an example for private sector. Thus, activities of public sector HRM were traditionally focused more on high levels of job security, salary increments, promotion based on seniority rather on managing for performance (Morgan and Allington, 2002).

ISSN 2076-9202

When New Public Management (NPM) emerged during the 1980ʺs, the traditional approach of public sector HRM came under attack for undermining organizational performance and for demoralizing staff who were not sufficiently rewarded or recognized for their contribution (Truss, 2008). In parallel with the general evolution from public administration to NPM there was a similar evolution from a mere personnel administration to HRM (Nelen and Hondeghem, 2000).

2.2.2 New Public Management as a starting point of HRM reforms

According to Pollitt and Bouckaert (2011) New Public Management is a general theory that the public sector can be improved by the importation of business concepts, techniques and values. Bach and Bordogna (2011) have stressed out that NPM's main

goal is to reverse the traditional approach of public management by reducing the differences between the public and the private sectors, and by shifting the emphasis from process accountability towards accountability for results. Central features and practices of NPM, regarding HRM include (Pollitt and Bouckaert, 2011):

- A greater emphasis on performance.
- A preference for lean, flat and small organizational forms over large forms.
- Performance-related pay.
- Outsourcing, contracting out.

The introduction of NPM opened the possibility of managers to develop sophisticated HRM techniques such as performance measurement, devolution of authority and decentralization. Therefore, NPM principles allowed a more flexible and responsive approach to processes of recruitment, selection, retention, training and development of public sector employees (Brown, 2004). Although each country pursuing NPM reforms has followed its own path drawing on its unique culture and history, several common HRM trends have emerged (Waxin and Baterman, 2009).

2.2.3 Different approaches of HRM in public sector.

According to an OECD report (2004) three general approaches, regarding HRM, are being used in its member countries (Waxin and Baterman, 2009; Hammerschmid et al., 2007):

- Career-based systems are career oriented. Employees are expected to retain their job for their entire working life. Initial entry is based mainly on academic credentials and examination. Group cohesion and cooperation is promoted rather on individual performance.
- Position-based systems are job oriented. Candidates are selected for each position and high mobility across private and public sector is encouraged.
- Reform trends have shown that pure career or position based models do not exist; the OECD

ISSN 2076-9202

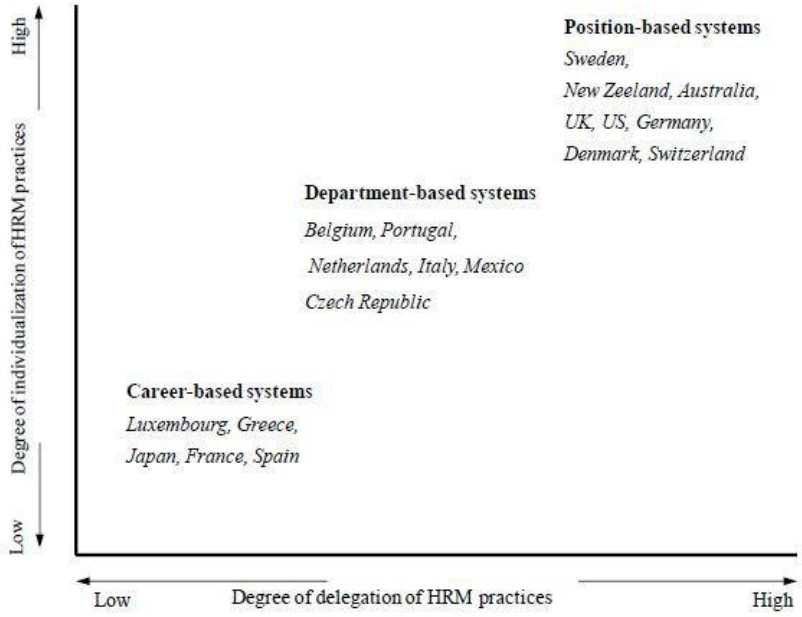
report indentified a third hybrid model department-based systems. These systems give responsibilities for HRM policies and practices to the line ministries.

The delegation and individualization approaches to HR practices in governments of OECD countries are presented in figure 2.1. Individualization refers to the degree to which management rules and practices vary according to the needs of specific

departments and less according to the idea of a unified service. Delegation levels are measured by decision-making power indicating the autonomy and flexibility of line managers in identifying staffing needs, recruiting, and managing people.

Whether a public administration is characterized by a career or position based HR system has a crucial impact on its reform agenda. Position based public administrations emphasize in modernization topics, especially HR decentralization and private sector involvement; moreover performance management plays a much higher role in these countries. On the contrary, career based public administrations tend to operate with the traditional bureaucratic-hierarchical system of public administration (Hammerschmid et al., 2007).

Figure 2.1: Delegation and individualization approaches to HR practices in central governments of OECD countries



Source: OECD,2004 as cited in Waxin and Baterman, 2009 (p. 43 Figure 3.1)

ISSN 2076-9202

2.3 Conclusion

The importance of HRM in the private sector increased gradually since the 1980's; personnel management reoriented its functions to a more strategic approach by incorporating management theories. This shift from traditional personnel management to HRM was introduced in the public sector by NPM reforms. However NPM reforms among countries ranged from radical, towards private sector HRM concepts, to more conservative.

Public administration is not organized in the same way among countries. Different historical traditions as well as different HR systems have a considerable impact on the reform programs; however there are similarities between more related public administration sectors (Hammerschmid et al., 2007). Apart from the differentiation deriving from cultural and traditional factors, modernization paths are affected by timing. Kim and Hong (2006, as cited in Waxin and Baterman, 2009) suggested that an HRM reform model should take into account apart from political and cultural factors the economic development stages. They argued that HRM reforms should start on the basis of current needs; HRM should be developed and adjusted gradually to meet the requirements of the day rather than adopting a blueprint model drawn from a notion of international best practice. This point of view may explain the wide variation of reforms among countries. Therefore, countries such as Greece are facing HRM challenges during the crisis period that other countries have already dealt.

3 - HUMAN RESOURSE MANAGEMENT IN THE GREEK PUBLIC SECTOR AND THE PRESENCE OF CRISIS

3.1 A Review of HRM in the Greek Public Sector

3.1.1 The foundation of the Greek Public Administration and its limitations

The organization of the Greek state was conceived in 1830 along the lines of the Napoleonic model. In terms of formal structures, this included (Spanou, 2008; worldbank.org, 2000):

- A system of administrative law, involving the strong distinctiveness between public and private sector.
- A high centralized state structure.
- A career civil service.

Due to Greece's social and environmental specifics, the Greek formal structures never met the efficiency and prestige of the French prototype. Two were the main differentiation of the Greek Public Administration; there is an important gap between formal and informal aspects of institutional operation and political patronage (Spanou, 2008). These two differentiations resulted to political centralization and interference.

The Greek Public Administration was characterized as bureaucratic, inflexible and inefficient that needed urgent and radical changes. Therefore, although one could assume that NPM ideas would

ISSN 2076-9202

have been implemented, Greece has never proceeded to NPM reforms (Sotirakou T. and Zeppou M., 2005).

3.1.2 Greece's lost chance for New Public Management reforms

Governments across Europe started implementing NPM reforms mainly during 1980‟s in order to reduce deficits. The priorities in Greece during 1980‟s were different; in 1981 the newly elected Andreas Papandreou administration, had a different agenda. Papandreou‟s administration represented two major changes (Spanou, 2008):

- First, it ended the monopoly of right wing governments since the end of the Second World War.
- Second, it was the first test for the consolidation of democracy after the seven years of dictatorship (1967-1974).

Greek society had high hopes for a modern democracy and of course to create a welfare state. At that time state operations among Europe were shrinking. Greece on the other hand, had its chance to develop social welfare state. Fiscal pressure was not perceived as a reform motive, thus public expenditure rose and no NPM reforms initiatives were taken.

However, Greece was not the only country that increased the public sector. In the same period (1982-2002), countries such Portugal and Spain increased their spending levels (Spanou, 2008). This shouldn‟t come as a surprise since all three countries suffered similar situations the previous decades (civil war, dictatorship).

The above mentioned facts by no means don't mean that reforms were not introduced in this period of time. On the contrary many reforms were implemented in various aspects of public administration and first and foremost human resource issues (Spanou, 2008).

3.1.3 Past efforts to reform Greek public sector HRM

Public servants are protected under the Constitution of Greece (Article 103) which guarantees permanent employment. Until at least the mid 1990's the rules regarding the HRM were clientelistic, opaque and arbitrary. The high levels of unemployment led the political system to continuously increase the number of civil employees, with little attention to the match between the recruits‟ profiles and the administration‟s needs (OECD, 2011). Employees were not encouraged to move within the public sector; therefore the development of new parts of the administration translated into a net increase of the public employment. As a result the civil service ended up over- staffed and inefficient (OECD, 2011). Thus, Greek public sector HRM could be characterised as a centralized career based model that is organised along unified rules (Spanou, 2008; OECD, 2011).

The majority of the past reforms were regarding, the merit system (recruitment, appraisal, promotion) and hierarchy. Hierarchy was the most reluctant area, resisting the evolution that most European countries underwent during the past century, due to clientelism and patronage (Spanou, 2008). Apart

ISSN 2076-9202

from reforms regarding the merit system an effort was made in reforming training of civil servants.

The main reform regarding recruitment was the establishment of the Supreme Council for Civil Personnel Selection (ASEP) in 1994 (Law 2190/1994). ASEP was introduced as a formal recruitment system in order to oversee the recruitment process and make sure that the recruitment processes were impartial and transparent, minimizing clientelism. The ASEP reform can be considered a success (OECD, 2011). Its main disadvantage was the centralization of the recruitment procedure that caused slowness, legalism and rigidity (Spanou, 2008).

However reality has proven that ASEP is the only way for the Greek Administration to guard transparency. A typical example of the lack of credibility is the way the political personnel bypassed ASEP by recruiting temporary employees with less formal procedures, who ended up reclaiming and gaining their incorporation into the permanent public workforce. Thus, decentralized recruitment could not be an alternative for Greece in order to make public employment more flexible and adaptive to new conditions (Spanou, 2008).

Concerning appraisal, hierarchies and promotions in the previous decades (1980- 2007), civil service has witnessed numerous changes and revisions of the civil service code that resulted to a confusing framework. The frequency of the changes gave the civil service little time to digest them, but it also caused employees suspicions for the motives behind the new reforms.

The frequency of changes and the multiple legislation regarding the implemented reforms about the merit system and hierarchy are summarized in tables 3.1 and 3.2.

Table 3.1: Hierarchy reforms in Greek Public Sector HRM

Year	Reforms	Legislation
1982	Abolishment of general directorates of the ministries. It was constitutionally impossible to dismiss the holders of these positions and, thus they were replaced by political	Law 1232/1982
1986	Change of the grade system to „flatter" hierarchy. A three-year renewable term was introduced for	Law 1586/1996
1990	Reestablishment of general positions, without however abolishing the political positions that had replaced	Law 1892/1990
1994	Three-year terms were re-introduced.	Law 2190/1994
1999	Revision of Civil Service Code adopting the "stable"	Law 2683/1999
2004	Three-year terms were re-introduced once again.	Law 3260/2004
On total within 25 years the hierarchy was amended 5 times		

Source: Adopted from Spanou, 2013; Aspridis, 2012 and dee.gr

Table 3.2 Appraisal - promotion reforms in Greek Public Sector HRM

Year	Amendments	Legislation

ISSN 2076-9202

1984	For the first the criteria for employee appraisal were set: Professional capacity and interest; quality and quantitative performance; initiative; administrative capacity;	Presidential decree 581/1984
1991	Measurement of results was meant to be related to employee appraisal; however the law was not really	Law 1943/1991 and
1992	Promotion procedures were amended.	Law 2085/1994
1994	Promotion procedures were amended.	Law 2190/1994
1999	Promotion procedures were amended.	Law 2683/1999
2004	Introduction of management by objectives.	Law 3230/2004
2004	Introduction of performance indicators and	Law 3260/2004
2007	Promotion procedures were amended.	Law 3528/2007
On total within 25 years 8 amendments were made regarding the merit system.		

Source: Adopted from Spanou, 2013; Aspridis, 2012 and dee.gr

Although performance indicators and measurements were introduced in 2004, up until present time the appraisal system is based on certain assessment criteria, including the knowledge of work topics, administrative capacity, effectiveness, appropriateness of behaviour, interest and creativity as described in Presidential Decree 318/1992 without the use of indicators and measurement (OECD, 2011).

In terms of human resources development and training; the major reform was the establishment of the National Centre of Public Administration and Local Government (EKDDA) in 1983.

One of its units is the National School of Public Administration (ESDDA). ESDDA is in charge of pre-entry training for high level cadres for the civil service, who are incorporated into the normal career system upon graduation (similar to the French ENA). The second unit of the centre is the Institute for In-service Training (INEP), which ensures continuous professional training (OECD, 2011; Spanou, 2008; ekdd.gr, 2015). ESDDA's mission was to provide an administrative elite (senior civil service); however strong resistance from within the civil service as well as the lack of political support undermined the emergence of an administrative elite (Spanou, 2014).

3.2 The Financial Crisis and the shift in the Reform Agenda

3.2.1 .1 Crisis as a critical juncture

According to Boin et al. (2009) crisis is defined as events or developments widely perceived by members of relevant communities to constitute urgent threats to core community values and structures. The worldwide financial crisis that spread across Europe in 2009 most certainly constitutes urgent threats to core community values and structures.

Crisis struck Greece while it was heavily indebted and its credibility toward lenders was very low. The country was vulnerable to speculations, thus raising funds from the capital markets was not a

ISSN 2076-9202

choice. Greece in order to avoid bankruptcy sought financial assistance from the European Union (EU). In March of 2010, the leaders of the Eurozone created a financial aid mechanism that involved the participation of the International Monetary Fund (IMF) and Eurozone countries through a set of bilateral agreements (Ladi, 2013).

The Memorandum of Economic and Financial Policies (MEFP) and Specific Economic Policy Conditionality (SEPC) were signed in May 2010. These were followed by two additional Memoranda in 2012 and 2015. The Memoranda, as well as their subsequent amendments, included among other reforms administrative reforms (imf.org, 2016). Similar Memoranda were signed with Ireland in December 2010 and with Portugal in May 2011. The Irish Memorandum hardly mentions public administration reforms while the Portuguese Memorandum is much less aggressive in the public administration reforms prescribed (Ladi, 2013).

The crisis conditions as well as obligations deriving from the Memoranda presented a "critical juncture" for a "big bang approach" to reform (Spanou, 2015). Critical junctures refer to historical moments, such as the current economic crisis, that have a major and lasting impact upon countries. (Ladi, 2013). Similar junctures were presented to the Greek Administration in the past. In 1981, when Greece became a full member of the European Community (EC) as well as in 2001 with Greece's entry in the European Monetary Union (EMU) (Ladi, 2013). However Greece was not able to seize the opportunity towards Europeanization.

3.2.2 .2 Reforming Greek public sector HRM during tough times

The management of human resources in conditions of crisis and drastic reduction of public expenditures constitutes one of the greatest challenges for the Greek Public Administration. On the one hand given the sovereign debt crisis public expenditures

have to be reduced. On the other hand services have to be improved and boost the economy.

The high payroll cost of Greek public employees, which according to OECD (2012) was 13,60% of GDP in 2009 compared with just 11% on average of the OECD countries, was one of the first goals of the reforms. The aim of the Economic Adjustment Programmes was to reduce the Greek public wage bill to around 9–10 percent of GDP in 2015 (Ioannou, 2013). In order to ensure the implementation of these wide-ranging reforms strict monitoring from the so-called Troika (EU, ECB & IMF) was imposed.

Greece was compelled to proceed to austerity measures regarding the reduction of wage bill and the number of employees paid from the state budget as well as the modernization of the appraisal system. Furthermore due to the fact that external stakeholders (media, opposition groups) framed civil servants as the main cause of the budget deficits, initiatives regarding the harmonization of public and private sector employment were taken.

Rationalization of the workforce and mobility

ISSN 2076-9202

The lack of organization of the Greek Public Administration was at that extend that information about the exact number of employees was not available. Public employees were obligated (Law 3845/2010) to state their employment status via internet (census) so that administration would collect the necessary data in order to set the reform programs. Thus, the Greek Public Administration managed, with a delay of many decades, to establish its human resource database.

Dismissals could not take place due to the constitutionally guaranteed tenure (Article 103) as well as to avoid having to pay redundancy indemnities. In 2011, in order to reduce public sector jobs, the government legislated the so-called labour reserve (Law 3986 & 4024). The labour reserve was adopted for 30.000 public servants (Ladi, 2013), those aged 53 and with 33 years of service were put into a labour reserve for a maximum of two years during which they were paid at 60% of their salary. Furthermore dismissals took the form of obligatory retirements, public employees aged 55 with 35 years of service were placed automatically in retirement. Many resigned on their own initiative because they were afraid that their pension would later be calculated on a lower salary base. Thus, around 10.000 public employees were

directly or indirectly pushed to the exit (Spanou, 2015). OECD's review (2011) had already highlighted that the Greek Administration had a fairly old and rapidly ageing workforce, thus measurements as the above were legitimized.

The corresponding vacant positions were abolished and it was followed by a strict replacement staff rule, for every five retirements one recruitment, while for 2011 it was one recruit for every ten retirements.

In 2012, what was initially known as the labour reserve has been redesigned and renamed, mobility scheme was the new permanent mechanism. In order to enhance mobility among various public services, the term "State Servant" was introduced in order to break the exclusive link of the public employee to a ministry (Law 4093/2012). The formation of an "internal job market" together with rotation within the public sector would provide further flexibility, while favoring the transfer of experience and expertise (Spanou, 2015).

Concerning the assessment of the state structures and the wider re-organization, two laws (4109/2013 and 4250/2014) proceeded with the merger or closure of a large number of public bodies operating under public or private law. Moreover, job positions that were outdated and were not consistent with the current needs of administration were terminated (Law 4093/2012). As a result of the mergers of organizational units and the abolition of job positions more employees were placed in the mobility scheme for a maximum of eight months in order to be assessed, before reallocation to new positions or exit.

Furthermore public employees were encouraged to seek alternative professional opportunities outside of the public sector, through the introduction of measures such as part time work up to 50% with corresponding salary cut and unpaid leave up to five years (ΓΙΓΑΓ/Φ. 51/683/νηθ.15718).

All the above reforms resulted to a rapid significant rationalization of the workforce, the tenure employees in the public sector were reduced by 18% as shown in table 3.3 (Appendix I).

ISSN 2076-9202

Rationalization of compensation: New salary grid

A Single Payment Authority was established in 2010 (Law 3845) public employees‟ census data base was interconnected with the Single Payment Authority. This was done in an effort so that public administration could have central control over the wage bill. This can be regarded as the first attempt ever, towards the alignment of HRM policy with budgets and financial management. Law 3845/2010 also provided, as prior action of the first Economic Adjustment Programme, the design of a unified remuneration system.

Numerous wage reductions were imposed starting from March 2010 when a 12% cut on bonuses (excluding family and child benefits and those related to length of service) was imposed (Ioannou, 2013). Christmas, Easter and Holiday bonuses were reduced by 30 percent on March 2010, they were further reduced on May 2010 and completely abolished in January 2013. Further cuts of 10 percent were made since January 2011 for any pay package exceeding €21.600 a year (Ioannou, 2013).

The long overdue unified wage scale structure took effect from January 2012 (Law 4021/2011) to rationalize the wage grid. At the core of the overall reform was a shift towards a system where remuneration reflects duties and productivity, introducing the end of automatic seniority-based pay increments. The goal of the unification was to correct a situation where employees with similar qualification and similar duties were uneven paid. Salaries were linked with ranks and performance. Article 19 of Law 4024/2011 introduced performance related-pay and article 7 provided for a new ranking system based on evaluation of competencies. However both articles remained inactive. Thus, while all grades were frozen, remuneration system favored the senior employees.

Since it became apparent that high skilled employees were paid less well (Spanou, 2015), the new pay scale (Law 4354/2015) decompressed the wage distribution by detaching salaries from grades. However since the new pay scale had to be fiscally neutral, increases were postponed to 2018. The wage reductions with the addition of the rationalization of the workforce resulted to a 31% reduction in the total payroll cost since 2009 (Ministry of Administrative Reform & e-Governance, 2016).

Appraisal and promotion system

While the appraisal system is pending, the existing one that is based on certain assessment criteria, including the administrative capacity, knowledge of work topics, effectiveness, appropriateness of behaviour, interest and creativity as described in the Presidential Decree 318/1992 has been altered to avoid excessive top assessments (Law 4250/2014). Fixed quota were set for each of the three group of grades (9-10: 25%; 7-8: 60%; 1-6: 15%), with the lower 15% being inflexible. Public employees were concerned due to past experience (labour reserve, mobility scheme, dismissals) that employees in the lower 15% would be dismissed. As a result the majority of

public employees, supported by their union, abstained from the appraisal procedures (ADEDY, 2014). The new system of promotion was reformed (Law 3839/2010 & 4275/2014), ASEP is going to be responsible not only for all public sector recruitment, but also for the promotion of public employees

ISSN 2076-9202

too. Candidates for top management positions are going to be selected through inter-ministerial competition and within the civil service. While in the past impartiality they were recruited outside of the civil service (Spanou, 2015). However the centralization of the procedure can cause slowness and rigidity. A clear example is that promotions via the new system are not yet introduced.

Harmonization of public and private sector employment

Civil servants have been traditionally seen as privileged among the Greek workers, due to their job security. At the time when the financial crisis struck Greece they were framed as the main cause of the budget deficits. Thus, initiatives were taken regarding the harmonization of public and private sector employees. Starting from January 2011 all new public employees were subjected to the private sector social security fund (IKA-ETAM) (Law 3865/2010). In June 2011 the weekly working time for public sector employees was increased from 37,5 to 40 hours (ΓΙΑΓΠ/Φ.Β.1/15884). Special leaves for educational reasons and sickness were limited while others were abolished (Law 4210/2013).

3.3 Conclusion

The financial crisis and the austerity measures deriving from it (wage cuts, dismissals etc.) pose major challenges for HRM, not only in terms of recruitment, compensation and service provision, but also in relation to job security and workforce morale (Burke et al, 2013). The financial crisis presented a unique opportunity for the Greek Administration to move forward reforms regarding strategic HRM; however reforms were mainly focused towards quantitative targets regarding costs.

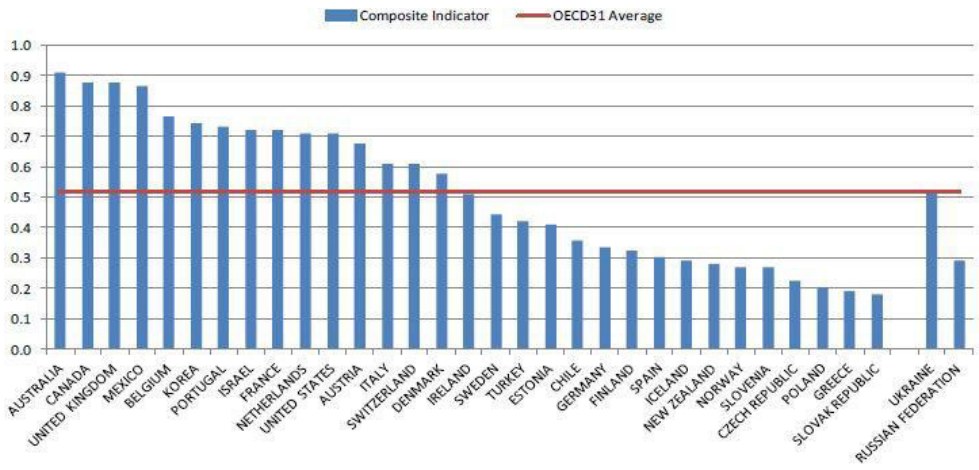
Though downsizing is inevitable, it is not a sustainable option in the long-term. The transition to a new HRM model is urgent, the new model should adapt to the special characteristics of Greek Administration and its culture (Pollitt, 2013). A more holistic approach to HRM should be adopted. The whole set of HRM tools, such as job analysis, recruitment, training and development and appraisal, must be restructured and combined so as to address the current and future needs and demands,

without ignoring the budgetary constraints. The new HRM model should not only ensure that public organizations have the right number of people, in the right position, at the right time but also that the right experience and skills exist within the organization, and that the right talent continues to be recruited, developed, and retained.

In the case of Greece, cost-cutting was the main aim of the reforms with limited concern for the improvement of administrative performance. The Greek Administration is far from using strategic HRM and workforce planning practices, Greece is second to last among the country members of OECD. In figure 3.1 the extent to which HRM bodies use performance assessments, capacity reviews and other tools to engage in and promote strategic workforce planning is illustrated.

Figure 3.2: Utilization of strategic HRM practices in central government

ISSN 2076-9202



Source: OECD, 2013 (p.9, Figure 1)

Note: The index is composed of the following variables: the existence of a general accountability framework; the existence of HRM targets built into performance assessments of top and middle managers; elements that top and middle management should take into account when planning and reporting within the general accountability framework; regular review and assessment of Departments' HRM capacity; existence of forward planning to adjust for adequate workforces to deliver services; and elements considered in governments' forward planning. The index ranges between 0 (low utilization) and 1 (high utilization).

4 - INTERNATIONAL EXPERIENCE

4.1 OECD Recommendations

According to Pollitt (2013) implemented reforms that were supposed to follow the same model may turn out very differently in different contexts. A successful reform model could fail completely in another sector or country or in another period. Although there is no single approach to HRM reform (OECD, 1996) international bodies such as the OECD can give helpful insight. However, it is of importance to maximize the use of both internal and external expertise and experience (Pollitt, 2013).

The Greek government committed under the first Economic Adjustment Programme to launch an independent external functional review of central administration (European Commission, 2010).

The OECD report on the "Functional Review of Public Administration in Greece" was published in December 2011, and it was considered as a step towards a new phase of administrative reforms. According to the review, due to limited margins for maneuver, the only option for HRM reforms was the implementation of a "big bang" approach targeting structural and institutional changes.

In the review an assessment of the current HRM was made, OECD recognized that recent reforms were towards a more holistic approach to HRM. However, as it was pointed out by the OECD this

ISSN 2076-9202

does not amount to a strategy. The elements of changing are not joined up, and some elements are missing. The issues that according to OECD need urgent reconsideration are summarized as following:

- The current hierarchy is top heavy; there is no effective structure of middle management.
- Mobility is very limited within the Greek public sector.
- Strict hiring constraints are leading to fewer and ageing human resources.
- Performance assessment is provided by Presidential Decree 318/1992, however in practice there is no performance assessment.
- The salaries of Greek civil servants are supposed to depend on an appraisal of their performance, however these appraisals are not considered as realistic evaluations of performance.
- The promotion system has long been opaque and is still high political motivated.
- There are trust issues between civil servants and political managers. Secretary Generals, who are the hierarchical links between the civil service and the government, are traditionally appointed by ministers.
- Over all there is lack of strategic vision and absence of workforce planning.

Based on the above assessments, a range of activities and projects were recommended by OECD:

- Promotion of HR networking, so that dialogue among civil servants on the modernization of the administration will be achieved.
- Enhancement of training.
- Reformation of the appraisal and promotion system with a view to creating strong incentives for performance.
- Promotion of mobility, by rationalizing job categories and by reducing the number of branches.
- Delegation of HR management responsibilities to line ministries and agencies.
- Establishment of workforce planning.
- Establishment of a central employer‟s office for strategic HR issues.

The OECD recommendations were mend to be an operational roadmap, aiming at tackling the basic deficiencies of the public administration. However, as mentioned in the previous part cost-cutting was the main goal of the reforms while few improvements have been done regarding qualitative objectives. Politicization of the administration is still the Greek reality while few initiatives have been taken towards a more strategic approach of HRM.

4.2 2 Lessons from Other Countries

The sovereign debt crisis has forced Greece to completely alter its public administration reform agenda,

ISSN 2076-9202

regarding HRM, towards reducing public expenditures. Greece is not alone in this effort. Several countries have launched similar reforms in their response to the economic crisis. Though each country is a different case, it is interesting to see how they reacted to the necessity of reforms during times of crisis. In order to conduct better conclusions EU country members of Southern Europe will be reviewed.

Portugal

The Portuguese HRM model is fully linked to strategic objectives, most of the recent HRM reforms are concerning expenditures, specifically (OECD, 2012; Gamarra et al, 2014; Di Mascio & Natalini, 2015):

- Recruitment was suspended.
- Vacancies were eliminated and temporary staff was dismissed.
- Wages were gradually reduced.
- December and Holiday bonuses were suspended, though the Constitutional Court ruled out the provision.
- Performance bonuses were frozen.
- Wage increase due to career promotion was suspended.
- Working hours were raised and free days were reduced.
- The "Requalification Program" and the "Mobility Program" were introduced. If civil servants were deemed as surplus labour, they would be reallocated in other public services. However if they were not absorbed they would have to follow a training program while their salary would be reduced to 60%. After one year the salary would be reduced again to 40%. If the civil servants were not reallocated within two years they would be dismissed.

Italy

Italy presents significant differences from the other countries and can be considered a unique case. Prior to the financial crisis of 2008 the country faced the crisis of the national currency (the Italian lira) in 1992 that generated fiscal pressure and expenditure cuts forcing reforms in public sector HRM (Ongaro, 2009). Thus, Italy had already experience on crisis-management. The implemented HRM reforms during the financial crisis were mainly towards cost reduction (OECD, 2012; Di Mascio & Natalini, 2015; Di Mascio et al, 2013; Di Mascio et al, 2016):

- Reduction of labour contracts.
- Recruitment restrictions.
- Gradual wage cuts.
- Strict policy on absenteeism.
- Reduction of sick leave compensation and increasing monitoring.

ISSN 2076-9202

- Promotion suspension.
- Performance-related pay was revised, quotas were set whereby only one- quarter of civil servants could get the highest bonus, and one-quarter would not get any bonus.

Spain

The HRM model in Spain is career based and it is highly decentralized, due to the country's "autonomous communities" (OECD, 2012; Gamarra et al, 2014). Current HRM reforms are about costs, namely (OECD, 2012; Gamarra et al, 2014; Di Mascio & Natalini, 2015):

- Recruitment suspension.
- Elimination of vacancies and dismissal of temporary staff.
- Gradual salary cuts.
- Suspension of December bonus.
- Increase of working hours.
- Implementation of forced mobility.
- Removal of dismissal restriction. According to the economic and organizational needs public employees can be made redundant.

4.4 Conclusion

HRM is high in government's reform agenda among all countries during the financial crisis, austerity measures are placed so that budget deficits can be controlled. OECD recommendations part from expenditure cuts include measures of modernization however most countries emphasize in the reduction of costs without implementing reforms towards a more strategic approach. Table 4.1 presents workforce reduction measures in OECD countries.

Table 4.1: Workforce reduction measures in OECD countries

Country	Measure	Country	Measure
Austria	Replacing 50% of	Italy	Replacing 20%
Czech Republic	10% reduction in staff	Netherlands	Reduction of 120 000
Denmark	Reduction of	Poland	10% reduction
Estonia	15% decrease in	Portugal	1% reduction in
France	Replacing 50% of	Slovak Republic	Hiring freeze
Greece	Replacing 10% of	Spain	Replacing 10%

ISSN 2076-9202

Ireland	12% reduction in staff	United Kingdom	Reduction of 490

Source: OECD, 2015 (p. 6 Table 1)

Many of the above mentioned countries have already modernized their HRM prior to the crisis, however that was not the case in Greece.

5 - RESEARCH METHODOLOGY

5.1 Research Approach

According to Newing (2011) research, at its simplest, consists of finding out about things through systematic enquiry. There are different approaches to research, differentiation arises:

- by the way questions are asked and the relationship between the theory and the data,
- whether the data reflect numbers.

Deduction and induction

Research can be divided in two groups deduction and induction, which represent two ends of a range of possible approaches to research (Newing, 2011).

In deductive research, the validity of a specific hypothesis is tested and then the data collection process is designed in order to test it. Deductive research is usually quantitative, in order to conclude whether there is significant difference of the responds among different groups data are statistical analyzed. If there is a significant difference (95%) the hypotheses is rejected otherwise it is confirmed. On the contrary, in inductive research there is no specific hypothesis, data are collected by a set of broad questions, and they are used to generate a theory (Newing, 2011).

The deductive approach is being used in this survey in order to investigate public employees‟ perceptions about HRM reforms. The deductive approach is used because it is more appropriate to test whether demographic characteristics influence employees‟ beliefs.

Quantitative or qualitative

According to Newing (2011) research can be categorized as either quantitative or qualitative depending to two different stages in the research process, data collection and data analysis. Regarding data, a quantitative research gathers data in the form of numbers, whereas qualitative data are non-numerical and usually take the form of words. As far as statistic analysis, a quantitative analysis involves the use of descriptive and inferential statistics. Both quantitative research and qualitative

research can be either inductive or deductive, although deductive research can draw the most thorough

ISSN 2076-9202

conclusions if it uses quantitative data (Newing, 2011).

Quantitative research fits best surveys with very focused questions concerning statistically significant differences between different groups. Qualitative research is more suitable for providing an overview of a situation and it can provide an in-depth understanding of reasons and motivations.

For the purpose of this paper since characteristics of quantitative research respond best on its needs, the quantitative research has been selected.

5.2 2 Questionnaire

According to Newing (2011) questionnaires are sets of specific, usually short, questions that are either asked verbally, or answered by the respondents on their own. A questionnaire is not a conversation, questions are highly specified and in most occasions the majority of questions are closed. Due to the high specification level targeted data can be gathered, comparison among different groups can be made and statistical analysis can be accomplished easier. Therefore questionnaires are considered ideal for a deductive, quantitative approach to research. Moreover they are easier managed to a large number of people and if self-administrated they offer complete anonymity (Newing, 2011).

Structure of the questionnaire

In order to maximize the response rate on a questionnaire it is crucial that all necessary information is provided (bath.ac.uk). Thus, an introduction provided the participants the necessary information and guidance. Participants were informed that the survey is part of a research of the Hellenic Open University, they were reassured that answers will be treated with confidentiality and anonymity. It was stated that the questionnaire was addressed to public employees; army, police, fire department were excluded. An estimation of the required time was made.

The questionnaire's initial version had twenty seven questions. However after the completion of the survey it was revealed that three of the questions did not provide any valuable information. Moreover these questions where related to job satisfaction an area that is not only an HRM issue, therefore they were dropped off. The final version of the questionnaire is consisted by three sections.

The first section is concerned with the respondent's profile, participants were required to state demographical and professional information such as age, marital status, level of education, years of experience etc (questions 1-7). In the second section, the current situation in HRM was assessed. More particularly questions 8 to 10 address questions regarding problems at work in relation to HRM issues that are in the reforming process.

The third and last section aims to get an insight on how public employees relate with HRM reform and how they perceive it. Furthermore the reasons causing the reform delay are being investigated (questions 11-24). The questions were based to the research questionnaire of the COCOPS (Coordinating for Cohesion in the Public Sector of the Future) project (Hammerschmid et al,2013). However, since the COCOPS questionnaire was addressed to senior executives, some of the questions

ISSN 2076-9202

regarding terminology were simplified.

The questionnaire was designed using the free software Google forms and it is presented in Appendix VIII.

Question formats

Questions are divided between open-ended questions, where respondents can write their own answer, and closed questions, where they choose between fixed answers. Since closed questions offer data that are better targeted and can be quantified easier (Newing, 2011), closed questions were used in the questionnaire, more specifically the questions consisting the questionnaire were:

- Closed checklist.
- Semantic differential scale: alternatives are terms with opposite meanings (Newing, 2011).
- Likert scale: respondents‟ state to what extent they agree or disagree with a given statement (Newing, 2011).

5.3 Sample Selection and Data Collection

According to Hox and Boeije (2005) primary data are data that are collected for a specific research problem at hand, using procedures that fit the research problem best. On every occasion that primary data are collected, new data are added to the existing one. This material collected by other researchers is made available for use; it is then called secondary data.

In this paper primary data have been used mainly. As to the best of the researchers‟ knowledge there are not any available data regarding the way employees in the Greek public sector perceive HRM and its reforms. Secondary data were available only regarding demographics. Furthermore primary analysis gives the opportunity to the researcher to collect data for specific issues, up to date while it is possible to obtain additional data during the study period (Hox and Boeije, 2005). Two are the main disadvantages of primary research, it is cost and time consuming. Both of them can be dealt with the use of internet. A researcher can use internet as a vehicle for data collection in order to increase the sample size and reduce costs and time required (Benfield and Szlemko, 2006).

The questionnaire as mentioned before was designed using Google forms, the Google Drive web-platform was used to upload it. The link of the questionnaire was distributed via mail and it was announced to blogs of public servants, while the necessary instructions were given. The sample was random and for the distribution the method of snowball was used; receivers were encouraged to forward the questionnaire to other public servants.

The snowball method was used in order to overcome the limitation of time. Moreover, snowball method was selected so that the questionnaire could be distributed to public employees of different geographical areas as well as from different public services.

The internet made the fulfillment of the questionnaire easier and more accurate. In addition another

ISSN 2076-9202

advantage was that the responses were automatically stored in a survey database, thus the possibility of data entry errors was minimized. However there is a disadvantage that limited the survey. Certain populations are less likely to have internet access, thus the participation of population such as elders was limited.

The questionnaire was uploaded on 5 March and it was disabled at the end of the month. The number of the respondents was 130, since the procedures were automated all of them were properly completed, thus no rejections were made. The response rate cannot be estimated since the questionnaire was publicly announced.

5.4 Demographic Characteristics

The analysis of the demographic characteristics has been conducted using SPSS (version 21) and Google apps (sheets), both programs produced the same results. All

demographic tables and pie charts are presented in Appendix II and Appendix III respectively. SPSS was used to generate both tables and charts.

Age (Table 5.1; Appendix II)

The majority of participants are within the 31-40 age group (53,10%). Although there were two more groups of age, below of 20 and over 61, apparently no participant was within these groups. Regarding the first group it was expected since according to the official data from the Ministry of Administrative Reform & e- Governance (2016) there are very few if any public servants below the age of 20. As far as the group aged over 61 the results were affected by the fact that the questionnaire was distributed via internet.

Gender (Table 5.2; Appendix II)

The majority of the participants are women (68,50%), there is a great differentiation with official data, where as men consist 53,30% of total while women 46,70% (Ministry of Administrative Reform & e-Governance, 2016). However the official data include employees of the army, police and fire department, these jobs are occupied mainly by men, and therefore such a differentiation was expected.

Marital status (Table 5.3; Appendix II)

Most of the respondents are married with children (52,30%). Although there was another group, single parents, since only one participant was among the specific group the answer was classified, for simplification, as married with children.

Education level and educational branch (Tables 5.4 and 5.5; Appendix II)

ISSN 2076-9202

The majority of the respondents (49,20%) hold a university degree. Although there was another group, primary education, no participant was within this group.

A branch in the Greek public sector designates job categories, or classifications according to educational requirements; postgraduate degree and doctorate fall in the higher education branch. By comparing table 5.4 and 5.5 one can observe that there are many employees that have more qualifications than the ones required for the job prescription. In particular:

- 104 persons are holding a university degree while there are 92 jobs that require one.
- 16 jobs are categorized for secondary education graduates however only 7 participants fall in this educational scale.

It is obvious that results in both tables were affected by the fact that the questionnaire was administrated via internet; people of lower education are not that familiar with the use of internet.

Work experience (Table 5.6; Appendix II)

In this question participants were asked about their work experience in the public sector and not in general. The largest percentage is gathered within the 6-15 year group (58,50%). It is fair to assume that due to the limitation caused by the internet distribution, the group of employees with the most experience has relatively small participation.

Manager / employee (Table 5.7; Appendix II)

The majority of the respondents (80,00%) are subordinates and do not exercise managerial duties.

5.5 Conclusion

For the purpose of this paper a deductive quantitative research was conducted. A questionnaire that was self-administrated on line was selected as the most appropriate method to collect the necessary primary data. Responses of 130 public servants were gathered. As far as demographical and professional features the average respondent can be described as a person that is:

- among 30 to 40 years old,
- married with children,
- higher education graduate,
- not a manager.

6 - DESCRIPTIVE STATISTICS

6.1 Introduction

ISSN 2076-9202

As the name suggests, the aim of descriptive statistics is to describe the data.

Descriptive statistics provide answers to three kind of questions (Eagle, 2011):

- What patterns do the data make?
- Do the data cluster around a central point, and if so what is its value?
- How spread out are the data values?

Descriptive statistics is the first part of the analysis, it provides some insight about the questions mentioned above, before proceeding to hypotheses testing that is conducted in the following part.

6.2 Assessment of Current HRM

The second section of the questionnaire (questions 8-10) gains information about the current HRM system in the Greek public sector; as mentioned earlier HRM issues that have been reformed or are planned to be reformed are analyzed. Descriptive statistics regarding these variables are presented in the tables below and in Appendix IV.

Support from supervisors (Table 6.1; Appendix IV)

In question 8, participants were asked whether they have the required support from their supervisors. Only 17,70% (1,5% extremely, 16,2% very) of them feel that they are offered the required support, moreover the mean is low (2,63). Both findings indicate that the respondents believe they are not offered the appropriate support from their supervisors.

Importance of problems

Question 9 is a grid, participants were asked to assess the importance of six problems that were placed under their consideration. From table 6.2 it is concluded that responders assessed the importance as following (the mean as a more proper measure is being used for the ranking):

1. Lack of communication and cooperation among departments and services (mean 4,11).
2. Lack of information and guidance (mean 4,05).
3. Lack of delegation of authority (mean 3,77).
4. Career development freeze (mean 3,76).
5. Large volume of work (mean 3,71).

ISSN 2076-9202

6. Working on certain task for long time (mean 3,30).

Table 6.2: Importance of problems

	Not				Esse	MEAN	SD	N
	1	2	3	4	5			
Lack of information	0,0%	7,7%	20,0%	31,5%	40,8%	4,05	0,959	130
Lack of delegation	1,5%	10,8%	23,1%	38,5%	26,2%	3,77	1,008	130
Lack of communication and cooperation among	0,0%	6,9%	17,7%	33,1%	42,3%	4,11	0,934	130
Large	3,8%	14,6%	22,3%	25,4%	33,8%	3,71	1,191	130
Working on certain task	4,6%	19,2%	35,4%	23,1%	17,7%	3,30	1,111	130
Career developme	3,8%	9,2%	22,3%	36,2%	28,5%	3,76	1,084	130

Importance of changes

Question 10 is a grid as well, participants were asked to assess how important are the following changes regarding the improvement of their work conditions. The data presented in table 6.3 indicate that responders assessed the importance as following (the mean as a more proper measure is being used for the ranking):

1. Training (mean 4,55).
2. Communication and cooperation among departments and services (mean 4,36).
3. Career development (mean 4,04).
4. Delegation of authority (mean 4,01).
5. New work load plan (mean 3,87).
6. Mobility across departments and services (mean 3,84).

ISSN 2076-9202

Table 6.3: Importance of changes

	Not 1	2	3	4	Esse 5	MEAN	SD	N
Training	0,0%	1,5%	10%	20,0%	68,5%	4,55	0,737	130
Delegation	0,0%	3,1%	20,8%	48,5%	27,7%	4,01	0,783	130
Communication and cooperation among	0,0%	3,1%	13%	34,6%	52,3%	4,36	0,788	130
Revising the	0,8%	8,5%	20,8%	43,1%	26,9%	3,87	0,935	130
Mobility across	0,8%	6,2%	30,0%	34,6%	28,5%	3,84	0,938	130
Career	0,8%	3,8%	21,5%	38,5%	35,4%	4,04	0,893	130

The issues that are addressed in questions 9 and 10 have common origins, although the hierarchies that arose are not exactly the same there are some interesting findings. Training and coordination are considered as the more important issues that need to be addressed, while the workload and mobility are of less importance.

6.3 Assessment of HRM Reform

The third section of the questionnaire (questions 11-24) aims to collect information about the HRM reform in the Greek public sector. Moreover participants' perception on the reforms is investigated. Descriptive statistics regarding these variables are presented in the tables below and in Appendix IV, charts are presented in Appendix V.

Necessity of reforms and briefing (Table 6.4; Appendix IV)

In question 11, participants were asked whether they think that the reform of HRM is necessary, the vast majority of the respondents agreed that there is a need for

changes. Questions 12 to 13 were set in order to conclude whether reforms are communicated to employees, results show that there is a lack of communication.

Strategy and purpose of reforms (Table 6.5 and 6.6; Appendix IV)

Questions 14 to 15 were set in order to get insight on how the participants perceive the reforms,

ISSN 2076-9202

results have shown that the respondents think that reforms are lacking of strategy (90,0%) and their aim is to cut costs (81,5%).

Evolution of HRM

In question 16, participants were asked whether HRM has improved during the last six years, a scale of five levels was used (1: better; 5: worse) the detailed results are presented in table 6.7 (Appendix IV). Of importance is to mention that only 5,04% of the respondents think that HRM has improved while 83,10% think it has deteriorated. An 11,5% of the sample thinks that it has neither improved nor deteriorated.

Question 17 was addressed only to the participants that stated in the previous question that HRM has deteriorated, thus it was addressed to 108 persons. All the measures in table 6.8 have been calculated for a sample of 108 persons and not for the initial 130.

Table 6.8: Importance of factors affecting HRM deterioration

	Not				Esse	MEAN	SD	N
	1	2	3	4	5			
Salary cuts	0,9%	2,8%	15,7%	32,4%	48,1%	4,24	0,885	108
Increase on	5,6%	23,1%	27,8%	28,7%	14,8%	3,24	1,135	108
Increase	4,6%	11,1%	23,1%	44,4%	16,7%	3,57	1,043	108
Workforc	2,8%	3,7%	11,1%	22,2%	60,2%	4,33	1,005	108
Irrational division of	0,0%	8,3%	13,0%	33,3%	45,4%	4,16	,949	108
Career developme	3,7%	7,5%	15,9%	36,4%	36,4%	3,94	1,080	108

Question 17 is a grid, participants were asked to assess the importance of six factors affecting the HRM deterioration. From table 6.8 it is concluded that responders assessed the importance as following (the mean as a more proper measure is being used for the ranking):

1. Workforce reduction (mean 4,33).
2. Salary cuts (mean 4,24).
3. Irrational division of work (mean 4,16).
4. Career development freeze (mean 3,94).
5. Increase of duties and responsibilities (mean 3,57).

ISSN 2076-9202

6. Increase on working hours (mean 3,24).

In order to get more conclusions, further analysis with the use of crosstab tables has been conducted. Table 6.9 (Appendix IV) present the findings of the assessment of salary cuts in relation to the variable "managerial duties". The crosstab table gives insight on whether all employees value similarly the importance of the salary cuts or there are differentiations among groups.

It is noticeable that there are differences among managers and subordinates. Table 6.9 indicates that managers classify the importance of salary cuts lower than subordinates. More specifically the "absolutely essential" responds decline from 51,2% to 37,5%. The fact that managers were less affected by the austerity measures can explain the differentiation.

Reform measures

Question 18 is a grid, participants were asked to assess the importance of eight reform trends of the current reform. According to the assessments of the responders the hierarchy of the reform trends is the following (the mean as a more proper measure is being used for the ranking):

1. Training (mean 4,44).
2. Appraisal (mean 4,20).
3. Collaboration among services (mean 4,16).
4. Efficiency of employees (mean 4,11).
5. Work force reduction (mean 3,64).
6. Mergers of services (mean 3,38).
7. Flexible forms of employment (mean 3,05).
8. Outsourcing (mean 2,85).

Table 6.10: Importance of reform trends

	Not				Esse	MEAN	SD	N
	1	2	3	4	5			
Appraisal	0,8%	8,5%	6,9%	37,7%	46,2%	4,20	0,952	130
Training	0,8%	4,6%	8,5%	22,3%	63,8%	4,44	0,889	130
Workforc	8,5%	15,4%	14,6%	26,9%	34,6%	3,64	1,324	130
Efficiency	1,5%	3,1%	20,8%	32,3%	42,3%	4,11	0,942	130

ISSN 2076-9202

	18,5%	28,5%	15,4%	25,4%	12,3%	2,85	1,326	130
Collaboratio	0,8%	5,4%	13,1%	38,5%	42,3%	4,16	0,905	130
Flexible	11,5%	24,6%	24,6%	26,2%	13,1%	3,05	1,225	130
Mergers	6,2%	12,3%	36,9%	26,9%	17,7%	3,38	1,102	130

Employees' opinion about the implemented reform (Table 6.11; Appendix IV)

Questions 19 to 22 are Likert type questions with a five point scale. Responders had to indicate the degree of their agreement or disagreement in four statements related to the implemented reform.
Over all the participants tend to believe that reforms are predetermined (63,9%), there is no plan (60,7%), they are crisis driven (68,4%) and inessential (55,4%).
Interesting findings derive by comparing how managers and non managers respond to questions about the participation of employees in the decision making and the strategy of reforms.

Table 6.12: Cross tabulation of managerial duties and employees participation

		Employees participate in decision making process of reforms					
		Strongl				Strongl	
Not a mana ger	Within group	56	15	11	6	16	104
		53,8%	14,4%	10,6%	5,8%	15,4%	100,0%
Manager	Within group	7	5	3	6	5	26
		26,9%	19,2%	11,5%	23,1%	19,2%	100,0%
Total	Withi	63	20	13	12	21	130
		48,5%	15,4%	10,8%	9,2%	16,2%	100,0%

ISSN 2076-9202

Table 6.13: Cross tabulation of managerial duties and strategy of reforms

		Reforms are implemented methodically and according to					
		Strongl				Strongl	
Not a manage	Within	39	30	10	7	18	104
		37,5%	28,8%	9,6%	6,7%	17,3%	100,0%
Manager	Within	5	5	7	0	9	26
		19,2%	19,2%	26,9%	0,0%	34,6%	100,0%
Total	Within	44	35	17	7	27	130
		33,8%	26,9%	13,1%	5,4%	20,8%	100,0%

The vast majority of public employees without authority believes that they do not take part in the decision making process (68,2%) and reforms are not strategically planned (66,3%). However the percentages of managers are quite lower (46,1% and 38,4% respectively). Such a finding is logical; it seems expected for managers to consider themselves as a part of the reform decision making process.

Assessment on the reform outcome (Table 6.14; Appendix IV)

In question 23 participants where requested to assess the so far outcomes of the implemented reforms, regarding the quality of services, the collaboration among colleagues and employee inducement.
The mean in all three cases was below 2,5. A measurement that indicates that the majority of the respondents believe that reforms have caused a deterioration in quality of services as well as in employee collaboration and inducement.

Reasons causing delay in the reforms (Table 6.15; Appendix IV)

In question 24, participants were requested to assess four reasons that cause delay in the implementation of reforms.
The mean of all factors is relative high it is fair to assume that all factors are regarded important. The hierarchy of the factors causing delay reforms is the following (the mean as a more proper measure is being used for the ranking):

1. Lack of meritocracy (mean 4,70).
2. Lack of political willingness (mean 4,45).
3. Employees‟ absence from decision making (mean 4,34).

ISSN 2076-9202

4. Limited implementation period (mean 3,56).

6.4 Conclusion and Summary

After the descriptive analysis of the data, a first insight on the way the public employees perceive HRM and its reforms is offered. The results reveal that as far as the support from their supervisors, the majority of the participants (82,3%) believe that the offered support is not sufficient.

The findings support that public employees believe that the main problems they have to cope with are the lack of guidance, the lack of cooperation among departments and services, the lack of delegation of authority and the career development freeze. Therefore, they believe that HRM reform is necessary (97,70%).

According to the findings, public employees believe that the reform should be emphasized in training, appraisal, efficiency, coordination of departments, career development and delegation of authority. They place mobility as the less important issue. Therefore they believe that reforms should not focus on it; their answers regarding mobility have been probably influenced by the past experience of labour reserve and dismissals.

More than 80% of the sample believes that both themselves as well as their supervisors are not adequately informed about the ongoing reforms. Regarding the planning of reforms and its objectives more than 80% of the participants believe that reforms derive from the need of reducing costs and that reforms lack strategy. While less than 20% have an opposite opinion, they believe that strategy exists in reforms and that its goal is to improve the offered services. Moreover, according to the respondents reforms are inessential (55,4%), predetermined without their own participation (63,9%) and crisis driven (68,4%).

A cross examination showed that there are different opinions among public employees depending on their duties. More specifically 68,2% of the subordinates believe that reforms are predetermined while only 46,1% of the managers share this belief; a fact that indicates that managers consider themselves part of the decision- making process.

Participants were asked to state how HRM has evolved during the last six years. The research findings, as expected, showed that 83,10% of the sample believes that

HRM has deteriorated. Employees who responded that HRM has deteriorated believe that the major reasons for the deterioration are the workforce reduction, salary cuts, irrational division of work and career development freeze; they feel that the increase of duties and working hours are the least important factors.

In regards to the reform outcome, the majority of the participants believe that reforms have caused deterioration in quality of services as well as in employee collaboration and inducement. Furthermore according to the participants the delay of the reform implementation is due to the lack of meritocracy and political willingness as well as the fact that reforms are predetermined without their own participation. Respondents place the limited implementation period as the least important factor

ISSN 2076-9202

causing reform delay.

7 - INFERENTIAL STATISTICS

7.1 Introduction

Inferential analysis is necessary in order for a researcher to generalize the results beyond the sample (Eagle, 2011). There are various tests used in inferential statistics, for the purposes of this study and in order to test whether the public employee's perception of HRM reforms differentiates among different demographic groups t-test and ANOVA could be used. T-test is used for comparing the means of two paired samples while ANOVA can be used for comparing more than two groups.

Since the demographic features that are being examined are grouped in more than one group and in order to avoid repeated pair tests, ANOVA was selected as the most proper test. The demographic features that are being examined are "educational branch", "work experience" and "duties". Since there was only one participant of the primary education branch and in order to have more trustworthy results he was classified in the secondary branch.

Normal data is an underlying assumption in parametric testing, such as ANOVA. In order to check whether the variables are normally distributed in each educational branch, each work experience group and in managers and subordinates groups the data were divided by category and then Kolmogorov-Smirnov Test was conducted (stat-athens.aueb.gr). According to the results presented in the tables of Appendix VI data are normally distributed. Since the normal distribution prerequisite is satisfied, ANOVA can be used.

7.2 Analysis of Variance

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about the necessity of HRM reforms.

H1: "Educational branch", "work experience" and "duties" affect employees' perception about the necessity of HRM reforms.

Table 7.1 (Appendix VII) presents the ANOVA results for the variable reform necessity. Since Sig in all three cases is higher than 0,05 the null hypothesis is not rejected. The conclusion is that employees‟ perception about the necessity of reforms is not affected by the demographic features.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception on whether they are adequately informed about the HRM reforms.

H2: "Educational branch", "work experience" and "duties" affect employees' perception on whether they are adequately informed about the HRM reforms.

ISSN 2076-9202

The results presented in table 7.2 (Appendix VII) point out that educational branch (Sig=0,833>0,05) and work experience (Sig=0,085>0,05) do not affect the employees' perception. However there is significant difference in perceptions of managers and subordinates (Sig=0,004<0,05). Table 7.3 (Appendix VII) indicates that managers tend to consider themselves more informed than subordinates, a finding that seems logical since they regard themselves part of the management.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception on whether reforms are strategically planned or not.

H3: "Educational branch", "work experience" and "duties" affect employees' perception on whether reforms are strategically planned or not.

According to the results shown in table 7.4 (Appendix VII) educational branch (Sig=0,486>0,05) and managerial duties (Sig=0,310>0,05) do not affect the employees' perception. However work experience seems to play a significant role in employees' perceptions (Sig=0,045<0,05).

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about the objective of reforms.

H4: "Educational branch", "work experience" and "duties" affect employees' perception about the objective of reforms.

Table 7.5 (Appendix VII) presents the ANOVA results for the variable reform purpose. Since Sig in all three cases is higher than 0,05 the null hypothesis is supported. The conclusion drawn is that employees‟ perception about the goal of reforms is not affected by the demographic features.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception on whether HRM has improved during the last six years.

H5: "Educational branch", "work experience" and "duties" affect employees' perception on whether HRM has improved during the last six years.

According to the ANOVA results presented in table 7.6 (Appendix VII) Sig in all three cases is higher than 0,05 therefore the null hypothesis is not rejected. The conclusion is that employees‟ perception about the evolution of HRM is not affected by the demographic features.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect

ISSN 2076-9202

employees' perception about the importance of factors influencing HRM deterioration. H6: "Educational branch", "work experience" and "duties" affect employees' perception about the importance of factors influencing HRM deterioration.

According to the ANOVA results presented in tables 7.7-7.12 (Appendix VII) Sig in all cases is higher than 0,05. Therefore the null hypothesis has to be accepted which means that different groups of respondents have similar beliefs about the importance of factors influencing HRM deterioration.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about the importance of HRM reforms trends.

H7: "Educational branch", "work experience" and "duties" affect employees' perception about the importance of HRM reforms trends.

According to the ANOVA results presented in tables 7.13-7.20 (Appendix VII) Sig in most cases is higher than 0,05. The null hypothesis is supported. Therefore the conclusion is that different groups of respondents have similar perception about the factors influencing HRM reforms. The only case in which the null hypothesis has to be rejected is when testing the "dismissal" factor in relation to managerial duties (Sig=0,026<0,05).

According to table 7.21 (Appendix VII) dismissals are considered as a more important factor by managers (mean 4,15) than subordinates (mean 3,51).

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about their own participation in decision making regarding HRM reforms.

H8: "Educational branch", "work experience" and "duties" affect employees' perception about their own participation in decision making regarding HRM reforms.

According to the ANOVA results presented in table 7.22 (Appendix VII) employees responds are not affected by the "educational branch" (Sig=0,972>0,05). However working experience (Sig=0,03<0,05) as well as managerial duties (Sig=0,027<0,05) affect their perception.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception on whether reforms are crisis driven or not.

H9: "Educational branch", "work experience" and "duties" affect employees' perception on whether reforms are crisis driven or not.

According to the ANOVA results presented in table 7.23 (Appendix VII) Sig in all cases is higher than 0,05. Σhe null hypothesis is not rejected which means that the variables of "educational branch",

ISSN 2076-9202

"work experience" and "duties" do not affect employees' perception.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception on whether reforms are essential or not.

H10: "Educational branch", "work experience" and "duties" affect employees' perception on whether reforms are essential or not.

Table 7.24 (Appendix VII) presents the ANOVA results, Sig in all cases is higher than 0,05. Σhe null hypothesis is accepted. The conclusion is that employees‟ perception is not affected by demographic features.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about HRM reform outcomes.

H11: "Educational branch", "work experience" and "duties" affect employees' perception about HRM reform outcomes.

According to the ANOVA results presented in tables 7.25-7.27 (Appendix VII), Sig in most cases is higher than 0,05. Σhe null hypothesis is accepted, which means that employees‟ perception is not affected by demographic features. The only case in which the null hypothesis has to be rejected is when testing the "quality of services" factor in relation to working experience (Sig=0,001<0,05). The conclusion is that the perception of employees regarding the influence of the reforms on quality of services is affected by the working experience.

Hypothesis statement:

H0: "Educational branch", "work experience" and "duties" do not affect employees' perception about the factors causing delay on the implementation of HRM reforms.

H12: "Educational branch", "work experience" and "duties" affect employees' perception about the factors causing delay on the implementation of HRM reforms.

Tables 7.28-7.31 (Appendix VII) present the ANOVA results, Sig in most cases is higher than 0,05. Σhe null hypothesis is accepted, which means that employees‟ perception is not affected by demographic features. However in the case of meritocracy there is a significant difference in perceptions among different work experience groups (Sig=0,044<0,05).

Table 7.32 suggests that more experienced employees believe that the lack of meritocracy is a factor that causes delays (mean 4,14), however they tend to consider it less important than employees with less working experience.

ISSN 2076-9202

7.3 Conclusion and Summary

The inferential statistics analysis that was presented in this part offered some interest findings. According to the hypothesis testing the educational branch (higher, technological, secondary education) does not influence public employees‟ beliefs. However working experience and managerial duties influence in some ways employees responds.

The working experience affects employees‟ perception:

- on whether reforms are strategically planed or not,
- on whether employees participate in decision making regarding HRM reforms,
- on how much the reform has influenced the quality of services and
- on how much delay to the implementation of reforms is caused by the lack of meritocracy.

Managers compared to subordinates:

- consider themselves more informed and
- they are more concerned about dismissals.

8 - DISCUSSION ANALYSIS

This study has examined the way public employees perceive HRM and its reforms. The statistical tests have shown that employees' beliefs are not significantly influenced by demographical features; most of the hypothesis tests support that over all public employees share similar believes.

As far as the main research questions it has been concluded that according to public employees:

- The main HRM problems derive from the lack of collaboration among departments and services, the lack of guidance, the lack of delegation of authority as well as the career development freeze.
- HRM reforms are necessary.
- Reforms should focus on training, collaboration among departments, appraisal and delegation of authority.
- The implemented HRM reform lacks strategy, is crisis driven and about cost cutting.
- The main reasons causing the reform delay are the lack of meritocracy and political willingness as well as the employees absence from decision making.

Since there are no other available related studies, it is difficult to compare results. However surprisingly interesting findings arise by comparing our results with the OECD recommendations. Although OECD is a technocratic organization, many of its ascertainments and suggestions coincide with public employees' beliefs.

Both the OECD and the public employees assessed that HRM in the Greek public sector lacks strategy.

ISSN 2076-9202

According to the OECD the Greek public administration should reconsider the strict hiring constraints, as it leads to fewer human resources; similarly public employees believe that workforce reduction has caused a deterioration in their work. Moreover, OECD as well as public employees place the enhancement of training, the delegation of responsibilities and the participation of employees in a dialogue about the reforms as important issues.

A partial comparison of our results can be made with the results of the COCOPS research project (Hammerschmid et al,2013). However the comparison can be made up to a certain point, since the particular survey was addressed only to senior executives and it was concerned with the whole spectrum of reforms. The COCOPS

research was addressed to ten countries, in order to reach better conclusions Spain, as a country with similar background, was selected as a comparison.

The findings of the study indicate that Greek public employees consider the HRM reform necessary (97,70%). It is noticeable that although employees seem to accept the necessity of reforms the Greek Administration has not made them part of it. The respondents consider the reform as top-down (63,90%) and more than 80% of the sample believe that they are not adequately informed. Similar believes are shared among Spanish senior executives (Alonso and Clifton, 2013); they believe that reforms are top-down (56,20%) and driven by politicians (59,60%).

As far as the planning of the reforms and its objectives Greek public employees believe that there is no strategy (90,00%), reforms are crisis driven (68,40%) and about cost cutting (81,50%). Spanish senior executives also believe that reforms are for the crisis (64,90%) and about cost-cutting and savings (65.2%) (Alonso and Clifton, 2013).

According to Spanish senior executives public servants' motivation towards work has deteriorated (30,60%) a fact that can be considered as an HRM deterioration. The present research findings indicate that Greek public employees feel that during the last six years HRM has deteriorated (83,10%). Although percentages vary wildly it must be taken into account that the Spanish research was conducted in 2013 while the present after three more years under the severe on-going crisis.

9 - CONCLUSIONS AND LIMITATIONS

9.1 Conclusion

The international financial crisis had various impacts on each country depending

to their weaknesses. However a common characteristic across countries is that it has caused a debate about public spending cuts and rationalization of public services (Ladi, 2013). The financial crisis exposed the weaknesses of the Greek Administration and the large budget deficits. Under these financial conditions HRM poses as a major challenge for the Greek Administration.

Numerous attempts have been made in the past by the Greek Administration towards reforming

ISSN 2076-9202

HRM; however they were sporadic, uncoordinated and without monitoring. Since 2010 Greece was obligated, due to the first memorandum, to proceed to reforms linked to measurable quantitative goals and strict timetable. The urgent need for financial rationalization resulted to reforms aiming at cost reduction and not at modernization of HRM.

The current study contributes to the literature in two ways. First, it presents past HRM reforms and how crisis has shifted the reform agenda. Second, public employees' perceptions and views regarding the ongoing reform are analyzed.

According to the inferential analysis employees share common beliefs that are not particularly affected by demographical features. The descriptive statistics have shown that employees believe that HRM needs reforming. However they believe that the current reform is about cost-cutting and not about the quality of services. Furthermore they believe that the reform is crisis driven, top-down, not strategically planned and it lacks of substance. The majority of the employees have observed a clear deterioration of HRM the last six years. They consider that two are the main reasons causing the deterioration; workforce reduction and salary cuts.

The financial crisis presented to the Greek Administration a critical juncture for advancing reforms. However, at the same time austerity measures block reforms that are not directly linked to quantitative fiscal goals (Pollitt and Bouckaert, 2011). In the case of Greece, long term reform goals are undermined in favor of short term ones that aim in cost reductions. It remains to be seen if this strategy is sustainable or a shift in the reform agenda will be mandatory.

9.2 Limitations

The basic limitations of this research include the sample and time. The sample size was 130 public employees, although the size is not large it can be considered representative. However the main issue regarding the sample was that the questionnaire was distributed via internet and it was self-administrated on line, therefore the participation of employees that lack computer skills was limited. Time was another restrictive factor; if the period of survey implementation was larger a greater sample could be gathered.

Furthermore, there were two additional limitations. First HRM reform is a developing issue with ongoing changes. Secondly HRM reforms is a research area that has not been investigated.

9.3 Directions for Future Research

As mentioned previously, the present research is based in a limited sample, a larger sample size could offer more trustworthy results. Furthermore a comparative research among different public organizations could be conducted in order to investigate any differentiations.

ISSN 2076-9202

REFERENCES - BIBLIOGRAPHY

1) **ADEDY, 2014.** Court notice to strike - abstinence during the "assessment" (in Greek). Available at: adedy.gr/ejwdikoajiologisi/ (date of last access 03 May 2016).
2) **Alonso J. and Clifton J., 2013** COCOPS Public Sector Reform in Spain: Views and Experiences from Senior Executives. Available at: http://www.cocops.eu/wp-content/uploads/2013/06/Spain_WP3-Country-Report.pdf (date of last access 03 May 2016).
3) **Armstrong M. and Taylor S., 2014.** Armstrong's Handbook of Human Resource Management Practice (13th Ed.). London: Kogan Page.
4) **Armstrong M., 2006.** A Handbook of Human Resource Management Practice (10th Ed.). London: Kogan Page.
5) **Aspridis G., 2012.** The Evaluation of Human Resources in Modern Public Management in the Countries of South East Europe, *Journal of Modern Accounting and Auditing,* 8 (1): 136-146.
6) **Bach S. and Bordogna L., 2011.** Varieties of new public management or alternative models? The reform of public service employment relations in industrialized democracies. *The International Journal of Human Resource Management,* 22 (11): 2281- 2294.
7) **bath.ac.uk.** Questionnaire design. Available at: www.bath.ac.uk/students/support/academic/projects/Questionnaire.pdf (date of last access 03 May 2016).
8) **Benfield J. and Szlemko W., 2006.** Internet-Based Data Collection: Promises and Realities. . *Journal of Research Practice*, 2 (2).
9) **Boin A., 't Hart P. and McConnell A., 2009.** Crisis Exploitation: Political and Policy Impacts of Framing Contests. *Journal of European Public Policy*, 16 (1): 1-18.
10) **Boyne G., Poole M. and Jenkins G., 1999.** Human Resource Management in the Public and Private Sectors: An Empirical Comparison, *Public Administration,* 77 (2): 407–20.
11) **Boyne G., Poole M. and Jenkins G., 1999.** Public and Private Management: What‟s the Difference?. *Journal of Management Studies,* 39 (1): 97–122.
12) **Brown K.,** 2004. Human resource management in the public sector. *Public Management Review,* 6 (3), 303–309.
13) **Burke R., Noblet A. and Cooper C., 2013.** Human Resource Management in the Public Sector. Cheltenham: Edward Elgar Publishing.
14) **Christensen T. and Laegred P., 2007.** Transcending New Public Management. Aldershot: Ashgate Publishing.
15) **Dessler G., 2014.** Fundamentals of Human Resource Management (3rd Ed.). Essex: Pearson Education Limited.
16) **Di Mascio F. and Natalini A., 2015.** Fiscal Retrenchment in Southern Europe: Changing patterns of public management in Greece, Italy, Portugal and Spain. *Public Management Review*, 17 (1): 129-148.

ISSN 2076-9202

17) **Di Mascio F., Galli D., Natalini A., Ongaro E and Stolfi F., 2016.** Learning-Shaping Crises: A Longitudinal Comparison of Public Personnel Reforms in Italy, 1992–2014. *Journal of Comparative Policy Analysis: Research and Practice*.

18) **Di Mascio F., Natalini A. and Stolfi F., 2013.** The ghost of crises past: analyzing reform sequences to understand Italy‟s response to the global crisis. *Public Administration,* 91 (1): 17-31.

19) **Eagle C., 2011.** Quantitative analysis (Eds.), *Research in Conservation: Social Science Methods and Practice*: 257-305, London: Routledge.

20) **European Commission, 2010.** The Economic Adjustment Programme for Greece. Available at: minfin.gr/sites/default/files/COMMISSION_SECOND%2BREVIEW.pdf (date of last access 03 May 2016).

21) **Gamarra O., Araujo J. and Alvarez E, 2014.** Crisis and Civil Servants: A comparative analysis of Portugal and Spain. In proceedings of the conference *ECPR General Conference*, Glasgow, 3-6 September 2014.

22) **Hammerschmid G., Meyer R. and Demmke C., 2007.** Part 6. "Public Administration Modernization: Common Reform Trends or Different Paths and National Understandings in the EU Countries". In Schedler K. and Proeller I. (Eds.), *Cultural Aspects of Public Management Reform*: 145-169, Amsterdam: Elsevier Ltd.

23) **Hammerschmid G., Oprisor A. and Stimac V., 2013** COCOPS Executive Survey on Public Sector Reform in Europe Research Report. Available at: www.cocops.eu/wp-content/uploads/2013/10/COCOPS-WP3-Research-Report.pdf (date of last access 03 May 2016).

24) **Hammerschmid G. et al, 2013** Public Administration Reform in Europe – Views and Experiences from Senior Executives in 10 Countries. Available at: http://www.cocops.eu/wp-content/uploads/2013/09/WP3-Comparative-Report.pdf (date of last access 03 May 2016).

25) **Hox J.; Boeije, H, 2005.** Data collection, primary versus secondary (Eds), *Encyclopedia of social measurement.* 593-599.

26) **International Monetary Fund (IMF), 2016.** Greece and the IMF. Available at: www.imf.org/external/country/grc/index.htm?type=23 (date of last access 03 May 2016).

27) **Ladi S., (2014).** Austerity politics and administrative reform: The Eurozone crisis and its impact upon Greek public administration. *Comparative European Politics* 12 (2): 184– 208.

28) **Ministry of Administrative Reform & e-Governance (2011).** White Paper on Governance (in Greek). Available at: www.opengov.gr/minreform/wp-content/uploads/downloads/2012/01/lefki_vivlos.pdf (date of last access 03 May 2016).

29) **Ministry of Administrative Reform & e-Governance, 2016.** Analysis of tenure employees in the Public Administration (in Greek). Available at: minadmin.gov.gr/wp-content/uploads/20160318_analisi_metabolon_taktikou_prosopikou2015.pdf (date of last access 03 May 2016).

30) **Ministry of Administrative Reform & e-Governance, 2016.** Payroll cost of Greek Public

ISSN 2076-9202

Sector (in Greek). Available at: www.minadmin.gov.gr/wp- content/uploads/20160511_dt_seb.pdf (date of last access 03 May 2016).

31) **Morgan P. and Allington N., 2002.** Has the Public Sector Retained its Model Employer Status? *Public Money and Management,* 22 (1): 35–42.

32) **Nankervis A., Compton R., Baird M. and Coffey J., 2011.** Human Resource Management Strategy and Practice (7th Ed.). Melbourne: Cengage Learning Australia.

33) **National Centre of Public Administration and Local Government (EKDDA), 2015.** Brochure (in Greek). Available at: www.ekdd.gr/ekdda/images/dioikitika/2015_Fylladio_Provolis_GR.pdf (date of last access 03 May 2016).

34) **Nelen S. and Hondeghem A., 2000.** Equality Oriented Personnel Policy in the Public Sector. Amsterdam: IOS Press.

35) **Newing H., 2011.** Conducting Research in Conservation: Social Science Methods and Practice. London: Routledge.

36) **Noe R., Hollenbeck J., Gerhart B. and Wright P., 2011.** Human Resource Management (4th Ed.). New York: Mc Graw-Hill Irwin.

37) **Ongaro E., 2009.** Public Management Reform and Modernization. Cheltenham: Edward Elgar.

38) **Organisation for Economic Co-operation and Development (OECD), 1996.**

Integrating People Management into Public Service Reform. Paris: OECD Publishing.

39) **Organisation for Economic Co-operation and Development (OECD), 2011.** Trends in HRM Policies in OECD Countries: An Analysis of the Results of the OECD Survey on Strategic HRM. Paris: OECD.

40) **Organisation for Economic Co-operation and Development (OECD), 2011.** Greece: Review of the Central Administration. Paris: OECD Publishing.

41) **Organisation for Economic Co-operation and Development (OECD), 2011.** Public Sector Compensation in times of austerity. Paris: OECD Publishing.

42) **Organisation for Economic Co-operation and Development (OECD), 2012.** Human Resources Management Country Profiles: Portugal. Available at: www.oecd.org/gov/pem/OECD%20HRM%20Profile%20-%20Portugal.pdf (date of last access 03 May 2016).

43) **Organisation for Economic Co-operation and Development (OECD), 2012.** Human Resources Management Country Profiles: Spain. Available at: www.oecd.org/gov/pem/OECD%20HRM%20Profile%20-%20Spain.pdf (date of last access 03 May 2016).

44) **Organisation for Economic Co-operation and Development (OECD), 2012.** Human Resources Management Country Profiles: Italy. Available at:

ISSN 2076-9202

www.oecd.org/gov/pem/OECD%20HRM%20Profile%20-%20Italy.pdf (date of last access 03 May 2016).

45) **Papadimitriou K., 2008.** The Greek Public Administration facing Contemporary Challenges (in Greek). Available at: www.dee.gr/mediaupload/publications/DHMOSIA%20DIOIKISI_2008.doc (date of last access 03 May 2016).

46) **Pollitt C. and Bouckaert G., 2013.** Public Management Reform: A Comparative Analysis (3rd Ed.). Oxford: Oxford University Press.

47) **Pollitt C., 2013.** What do we know about public management reform? concepts, models and some approximate guidelines. In proceedings of the conference and workshop *Towards a Comprehensive Reform of Public Governance*, Lisbon, 28-30 January 2013.

48) **research-methodology.net, 2016.** Research Approach. Available at: research-methodology.net/research-methodology/research-approach/ (date of last access 03 May 2016).

49) **Sotirakou T. and Zeppou M., 2005.** How to align Greek Civil Service with European Union public sector management policies. *International Journal of Public Sector Management,* 18 (1): 54-82.

50) **Spanou C., 2008.** State reform in Greece: responding to old and new challenges.

International Journal of Public Sector Management, 21 (2): 150-173.

51) **Spanou C., 2013.** The Quandary of Administrative Reform. In Kalyvas S., Pagoulatos G. and Tsoukas H. (Eds.), *From Stagnation to Forced Adjustment: Reforms in Greece, 1974- 2010*: 171-194, London: C Hurst & Co Publishers Ltd.

52) **Spanou C., 2014.** Administrative elites and the crisis: what lies ahead for the senior civil service in Greece?, *International Journal of Administrative Sciences,* 80 (4): 709-725.

53) **Spanou C., 2015.** Administrative Reform and Policy Conditionality in Greece,

Administration and Public Employment Review, 1 (1): 31-54.

54) **stat-athens.aueb.gr.** Analysis of Variance - ANOVA (in Greek). Available at: http://stat-athens.aueb.gr/~jbn/courses/spps_sem/spss4.pdf (date of last access 23 June 2016).

55) **Truss C., 2008.** Continuity and Change: The Role of the HR Function in the Modern Public Sector. *Public Administration,* 86 (4), 1071–88.

56) **Waxin M-F., Bateman, R., 2009.** Part 3. "HRM Reform in the Public Sector: Is it Enough?" In Wallis J. and Goldfish S. (Eds.), *International Handbook of Public Management Reform*: 103-161, Cheltenham: Edward Elgar.

57) **Worldbank.org, 2000.** Four Main Administrative Traditions. Available at:

ISSN 2076-9202

web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPUBLICSECTORANDGOVERNANCE/0,,contentMDK:20134002~pagePK:210058~piPK:210062~theSitePK:286305, 00.html (date of last access 03 May 2016).

ISSN 2076-9202

CIRCULAR ECONOMY: POTENTIAL AND CHALLENGES

Ljubomir DRAKULEVSKI, PhD
Professor and Dean at Faculty of Economics
University "Ss.Kiril and Methodius" – Skopje, Macedonia
E-mail: drakul@eccf.ukim.edu.mk

Tatjana BOSHKOV,PhD
Professor at Faculty of Tourism and Business Logistics,
University "Goce Delcev", Stip, Macedonia
E-mail: tatjana.boskov@ugd.edu.mk; tatjana.boshkov@gmail.com

Abstract:
This paper argues that increasing resource efficiency through growth in circular economy can help address structural mismatch in European labour markets. A circular economy creates economic value with more labour and fewer resources, therefore growth in circular economy can potentially deliver economic benefits such as employment creation and lower structural unemployment by offering a good geographical spread of job opportunities. Higher unemployment regions can benefit from remanufacturing employment at or near to existing manufacturing industry. Growth in recycling, re-use, repair activities (and remanufacturing) also offer the potential to create jobs suitable for employees displaced from traditional manufacturing. Through expanding circular economy activity there's a reasonable potential to reduce regional and/or occupational mismatch and a strong chance that net jobs can be created with sustained reductions in unemployment.
Key words: circular economy, job, growth, resource efficiency.

1. Introduction

The circular economy is a fundamental change in the traditional economic model, and an important way to change economic growth pattern and achieve the balance among economy, resources and 467 environments. Circular economy through eco-design, waste prevention and increased reuse and recycling of products, provides that value of products, materials and resources is maintained in the economy for as long as possible.

The most used definition for circular economy is that *"it is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extracting the maximum value from them whilst in use, then recovering and reusing products and materials. Examples of circular business models include designing products to last longer, which can lead to greater reuse and greater ability to repair/refurbish and re-sell products to support growth in the remanufacturing industry; and*

ISSN 2076-9202

allow for easy recovery of materials when a product is eventually recycled. Service models, which could include product maintenance and take back schemes as well as rent/lease and peer-to-peer sharing models, also hold much potential" (Beasley et al.,2014).

Having in mind this definition, here are the reasons why a circular economy is important.

As well as creating new opportunities for growth, a more circular economy will enhance to (DEFRA, 2011):

- reduce the waste
- drive greater resource productivity
- deliver a more competitive national economy.
- position the host country to better address emerging resource security/scarcity issues in the future.
- help to reduce the environmental impacts of host production and consumption (in both - the host country and abroad).

2. Resource efficiency and circular economy: current strategies and efforts in EU

Europe 2020 strategy emphasises the policy objectives of sustainable development and is focused to resource efficiency and EU competitiveness. In end of 2015, the European Commission adopted a Circular Economy Package that seems to be a crucial turning point for further implementation of ecodesign concept into various economy sectors and will contribute to "closing the loop" of product life cycles through greater recycling and reuse. EU Action Plan for the Circular Economy establishes a concrete targets and measures for waste management and resource efficiency by 2030 (DEFRA , 2015). Therefore, circular economy development initiatives create new challenges and draw up the new perspectives. At the base of circular economy is life cycle thinking. Life cycle thinking means recognizing the various impacts that occur at all points along the life cycle of the product or material. It also means recognizing how certain choices – materials used, manufacturing process, energy sources, distribution channels, disposal possibilities – influence those impacts. In practice, life cycle thinking means evaluating the potential influences as part of the decision making process (UNEP, 2007). Life cycle thinking is a broad concept that facilitates an integrated assessment of the benefits and the burdens in terms of environmental, social, and economic aspects, for specific products and regions, etc. The application of life cycle thinking requires specific methodologies. Therefore, circular economy is a very complex issue, involving resource extraction, transportation, production, consumption, distribution, waste management, social norms, biological and technological cycles etc. For developing of circular economy is necessary to explore the theory of circular economy and possible practical implementation, but to drive broader changes it is critical to collect and share data, spread best practice, invest in innovation and encourage consumers with adequate green product information. The purpose of the each country is to investigate basic principles and nature of circular economy, problems for the transition to a circular economy and to propose relevant policies, possible solutions and constructive mechanism of promoting circular economy

ISSN 2076-9202

(EMF, 2015). The results of the research show that circular economy implementation milestones are: legal framework, administrative conditions, economic instruments and public education and awareness.

3. Circular economy in Europe: an economic approach

Growing circular economy offers substantial potential to create jobs through lowering structural mismatch in high unemployment regions in Europe. Development of a circular economy involves a major industrial transformation. Past industrial transitions and the focus on labour productivity have often involved using less labour, creating high unemployment in some regions and countries or for some categories of workers. By contrast, the growth of the circular economy can involve using more labour and fewer resources to increase the efficiency of economic activity (Fischer et al.,2011). Therefore, integrating the labour market impacts of a growing circular economy into the overall labour market is important as it also allows a distinction between net or additional job creation and gross jobs where vacancies are filled by people moving from existing posts. The report also discusses developing metrics that measure economic productivity relative to material inputs, rather than solely focussing on labour or energy, so that circular economy principles are more likely to become embedded in business thinking (Eurostat, 2018).

Europe faces substantial economic and environmental challenges in its use of labour and scarce natural resources. In 2014, unemployment had risen in every single European country apart from Germany compared to 2008 when the financial crisis began (Fischer et al.,2011). There are signs that employment is recovering and unemployment is starting to show signs of stabilisation (or is falling in some countries across Europe), but unemployment remains sharply higher in many countries, particularly for certain occupational types and age groups. Linking increasing resource efficiency and growth in circular economy offers a potential for the creation of net jobs that can reduce unemployment and offer long lasting benefits to the performance of labour markets in Europe.

A circular economy create economic value with more labour and fewer resources, therefore growth in circular economy can potentially deliver economic benefits such as (Melece, 2016):

- employment creation,
- lower structural unemployment and
- increased materials productivity.

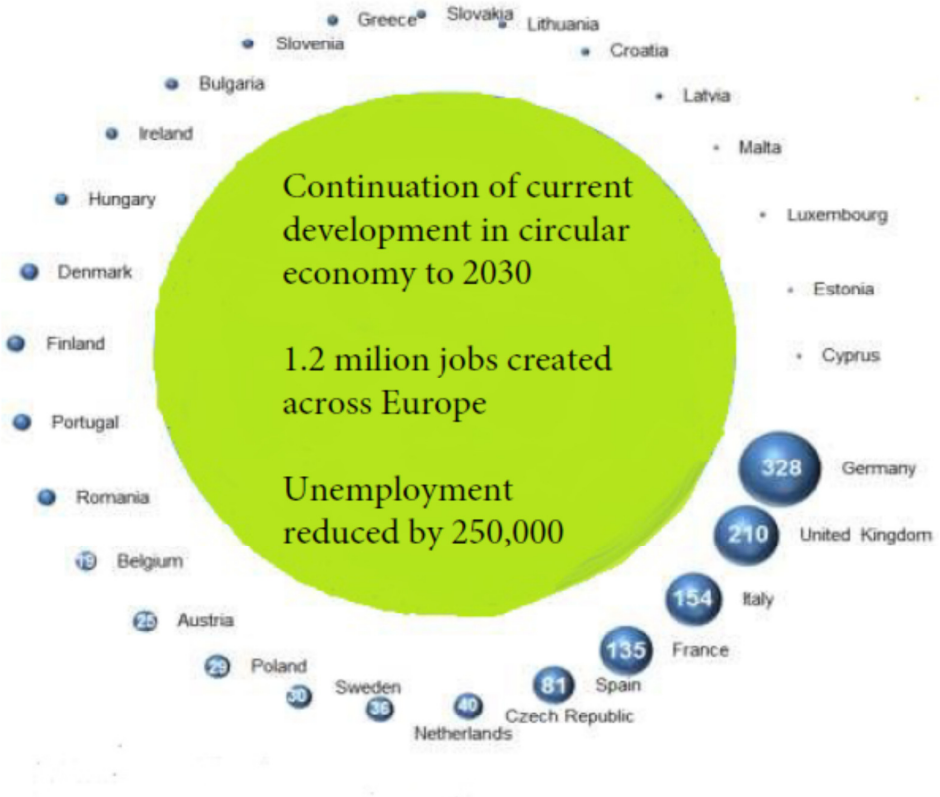
Growing circular economies create economic value using more labour and fewer resources thereby increasing the efficiency of resource use and economic activity. Integrating the labour requirements of a growing circular economy into the overall labour market is important; it also allows a distinction to be made between net or additional job creation and gross jobs creation where vacancies are filled by people moving from existing posts. Current employment in Europe in circular economy activities (in the repair, waste and recycling, rental & leasing sectors) is estimated to be at

ISSN 2076-9202

least 3.4 million (Eurostat, 2018). Of this total 1.2 million jobs are in repair of machinery & equipment, 400,000 jobs are in repair of computers, personal and other household goods, 700,000 jobs are in waste collection, treatment & disposal activities, 300,000 are employed in the recovery of sorted materials and the wholesale of waste and scrap, 100,000 jobs are in in-store retail of second hand goods and 600,000 people are employed in rental & leasing activities. An expansion in circular economy activity appears to offer the potential to create jobs across Europe through reducing cross country differences in unemployment: indicators of current employment in circular economy activities are broadly in line with the distribution of total employment across Europe and other measures of the propensity for countries to specialise in "circular economy" activities together with patterns in the geographical distribution of these activities illustrate a reasonable potential for European countries to benefit from expansion in circular economy (Hobson, 2016). And, there is a strong potential for an expansion in circular economy in Europe to offer jobs in mid-level occupations where there has been a decline in the number of posts offered (EC, 2018). As an illustration of this potential, an indicative quantification from the analysis in this report, which envisages a continuation of the current development path towards circular economy in Europe, shows that the potential labour market impact in Europe by 2030 is to create 1.2 million jobs with a reduction in unemployment in Europe by around 250,000 (Figure 1). Inevitably there are considerable uncertainties around such estimates; in particular future advancements in technology could substantially change this picture (WRAP, 2018).

ISSN 2076-9202

Figure 1. Potential jobs created in Europe through expansion in circular economy activity to 2030



Source: WRAP, 2018.

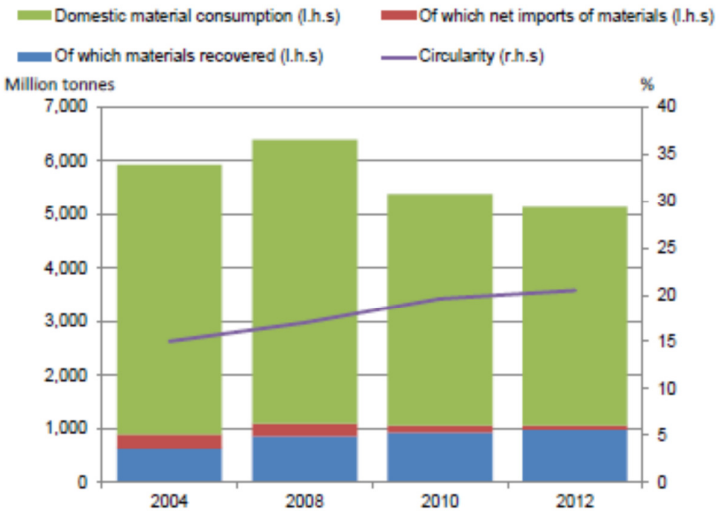
4. Evolution of resource efficiency

The proportion of recovered materials (biomass, metals & minerals but excluding fossil fuels) in use in the European economy has been increasing over time. Between 2004 and 2012 material consumption reduced by around 800 million tonnes (biomass, metals & minerals and excluding fossil fuels), the amount of material recycled increased by 163 million tonnes and net imports of materials reduced. Over the same period the economy expanded by 8% and the population grew by around 3% (OSCE, 2017). Figure 2 suggests that while domestic material consumption and net imports have fallen since 2008, the proportion of materials recovered from waste in total has increased. An indicator of circularity (the amount of materials recovered from all waste streams relative to the domestic consumption of materials) suggests that Europe is currently around 20% 'circular' in its materials use compared to 15% in 2004. A similar trend is also apparent in measures of raw material consumption (Eurostat ,2014).

ISSN 2076-9202

There's a growing evidence base documenting the evolution of resource efficiency and recycling in Europe and the associated expansion of jobs in the recycling sector as recycling rates have increased. The economy has become more circular as it has expanded, it is using fewer extracted or imported resources and more resources from materials recovered from its waste streams. Fischer et al (2011) discuss the extent to which the increase in recycling has led to the creation of permanent jobs across the European economy. In 2007 there were 301,000 people in Europe employed in the recycling sector compared with 177,000 in 2000 - an increase of 70% - and which equates to an annual increase of 8% with many of the jobs created being for people with relatively low skills (EEA, 2016).

Figure 2. Domestic material consumption and an indicator of circularity for the EU



Source: Eurostat, 2014.

5. Prospects for benefits from circular economy

As circular economy activity expands its labour needs are likely to be recruited from the existing stock of unemployed for occupations where unemployment is higher. In other words if you want to hire a low skilled worker, there is a greater chance that you could find someone who is currently unemployed than would be the case for hiring an experienced professional.

The key points arising from the mapping of current employment patterns in circular economy activities are as follows (EMF, 2015):

1. Employment in these circular economy activities is distributed across Europe and broadly in line with the distribution of total employent
2. The circular economy activities in scope for this analysis would appear to offer the potential to create jobs across Europe by reducing regional mismatches in unemployment
3. There are currently an estimated 3.4 million people employed in the repair, waste & recycling and rental & leasing sectors across Europe
4. Measures of the propensity to specialise in 'circular economy' activities and patterns in

ISSN 2076-9202

the geographical distribution of broad circular economy activities illustrate a reasonable potential for all countries in Europe to benefit from an expansion in circular economy.

Facts for using the opportunity of the potential for an expansion in circular economy are (Jackson, 2009):

- A growing circular economy can offer geographically dispersed employment a range of occupations.
- Reuse and open loop recycling activities are likely to be the least geographically concentrated, requiring activity at a local and regional level across countries with remanufacturing activity likely to be relatively more concentrated and located near existing OEM manufacturing facilities.
- For both open/closed loop recycling and reuse activities there's a strong potential to offer some lower skilled jobs with remanufacturing and recycling activities requiring a greater proportion of mid-level skilled jobs.

6. Conclusion

This analysis argues that increasing resource efficiency through growth in circular economy can help address structural mismatch in European labour markets. A circular economy creates economic value with more labour and fewer resources, therefore growth in circular economy can potentially deliver economic benefits such as employment creation and lower structural unemployment by offering a good geographical spread of job opportunities. Higher unemployment regions can benefit from remanufacturing employment at or near to existing manufacturing industry. Growth in recycling, re-use, repair activities (and remanufacturing) also offer the potential to create jobs suitable for employees displaced from traditional manufacturing. Through expanding circular economy activity there's a reasonable potential to reduce regional and/or occupational mismatch and a strong chance that net jobs can be created with sustained reductions in unemployment.

So there's a reasonable chance that a growing circular economy in Europe will offer opportunities for a range of occupations across regions and countries. The exploitation of the growth potential of a more circular economy requires use of indicators which will recognise its contribution. Focussing solely on labour productivity indicators and excluding other indicators of materials or resource productivity may not fully reflect the economic potential of moving towards a more circular economy. Indicators of material productivity alongside other indicators would better recognise the potential of a range of more circular business models which have the potential to make both significant contributions to economic growth, employment and social wellbeing.

7. Reference

ISSN 2076-9202

Beasley J., Georgeson R., Arditi S., Barczak P. Advancing Resource Efficiency in Europe: Indicators and waste policy scenarios to deliver a resource efficient and sustainable Europe. Brussels: European Environmental Bureau (EEB), 2014. 50 p.

Best H., Kneip T. The impact of attitudes and behavioral costs on environmental behavior: A natural experiment on household waste recycling. Social Science Research, vol. 40(3), 2011, pp. 917-930.

DEFRA (2011) The Further Benefits of Resource Efficiency
http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More

DEFRA (2015) Digest of Waste and Resource Statistics DEFRA UK
https://www.gov.uk/government/statistics/digest-of-waste-and- resource-statistics-2015-edition

Directive 2008/98/EC of the European Parliament and the Council of 19 November 2008 on Waste and repealing certain Directives. [online] [27.09.2017]. Available at: http://eurlex.europa.eu/

EC. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Closing the loop – An EU action plan for the Circular Economy COM(2015) 614 final, Brussels, 2.12.2015. [online] [17.12.2017]. Available at: https://eur-lex.europa.eu/

EC. Progress Report on the Roadmap to a Resource Efficient Europe. SWD/2014/0206 final/2. [online] [27.09.2017]. Available at: https://eur-lex.europa.eu/

EC. Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/98/EC on waste. COM(2015) 595 final. [online] [12.12.2017]. Available at: http://eurlex.europa.eu/legal-content

EMF (2015) "Growth Within: A Circular Economy Vision for a Competitive Europe", EMF, SUN, McKinsey Center for Business and Environment

European Commission (2010) Directive 2010/75/EU on industrial emissions http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0075 European Parliament resolution of 9 July 2015 on resource efficiency: moving towards a circular economy (2014/2208(INI)). [online] [12.12.2017]. Available at: http:// europarl.europa.eu

Eurostat. Database. [online] [08.01.2018]. Available at: http://ec.europa.eu/eurostat/data/database.

Eurostat. Environmental economy – employment and growth. [online] [17.01.2018]. Available at: http://ec.europa.eu/eurostat/statistics-explained/

Fischer et al (2011) Green economy and recycling in Europe, ETC/SCP working paper 5/2011, Christian Fischer, Ioannis Bakas, Anders Bjørn, Naoko Tojo and Christian Löwe

Hobson K. Closing the loop or squaring the circle? Locating generative spaces for the circular economy. Progress in Human Geography, vol. 40(1), 2016, pp. 88-104.

Jackson, T (2009) Prosperity Without Growth? The transition to a sustainable economy, Sustainable Development Commission, UK

Melece L. Challenges and Opportunities of Circular Economy and Green Economy. Engineering for Rural Development, 2016, pp. 1162-1169.

Seadon J. K. Sustainable waste management systems. Journal of Cleaner Production, 2010, vol. 18(16-17), 2010, pp. 1639-1651.

WRAP/GA (2015a) Employment and the circular economy – job creation in a more resource efficient Britain, Julian Morgan (Green Alliance) and Peter Mitchell (WRAP)

ISSN 2076-9202

NEW FRAMEWORK FOR JOB CREATION: CIRCULAR ECONOMY ACTIVITIES

Ljubomir DRAKULEVSKI, PhD
Professor and Dean at Faculty of Economics
University "Ss.Kiril and Methodius" – Skopje, Macedonia
E-mail: drakul@eccf.ukim.edu.mk

Tatjana BOSHKOV,PhD
Professor at Faculty of Tourism and Business Logistics,
University "Goce Delcev", Stip, Macedonia
E-mail: tatjana.boskov@ugd.edu.mk; tatjana.boshkov@gmail.com

Abstract:

In the time of competitiveness, circular economy is a way to change economic growth pattern and achieve the balance among economy, resources and environments. World trends show that circular economy is an excellent way to create jobs and thus increase economic growth. This implies employment in the retail of second hand goods sector, employment in repair activities by employment in the repair of machinery and equipment sectors and the repair of electronic and household products sector. This paper argues that employment in circular economic activities creates opportunities for economic growth and a visible increase in the level of employment. Of course, this also depends from the policy and strategy of any government. Taking into account what economic activities encompass the circular economy, it simply represents a necessity for every society and its well-being.

Key words:

jobs, employment, circular economy, Europe, growth.

1. Introduction

In the time of competitiveness, circular economy could be a solution for jobs creation through its activities. For example, many analyses show that Europe has skill mismatch. As a result there are worse labour market performance. As a reference is taken Non Accelerating Inflation Rate of Unemployment or NAIRU. This means that if unemployment is above NAIRU, than there is positive prospect that the sector help speed the adjustment towards it through creating

ISSN 2076-9202

additional jobs. Short term job creation may offer significant benefits for a substantial period of time and in the long run, a growing sector can permanently create more jobs is if it can lower the NAIRU itself.

The term successful economy means prosper in the industry. This is the reason to think that companies should be prepared for volatility which is characteristic for emerging markets, especially the year - 2016. According this, 2015 ended with the beginning of a tightening monetary policy of US (Frankel, 2015). 2015 and 2016 are specific for regulatory tightening (Evenett and Fritz, 2015). For example, EU forces insurer to bolster their solvency, while Europe and US will report on banking stress tests. The part where regulators are using their powers is environmental protection—particularly following the climate change deal (Jackson, 2009). In energy sector there is a range of measures, enabling companies to raise their energy efficiency.

Without a doubt, the financial crisis of 2008 left the consequences for the employment rate and the difficult circumstances to create jobs.

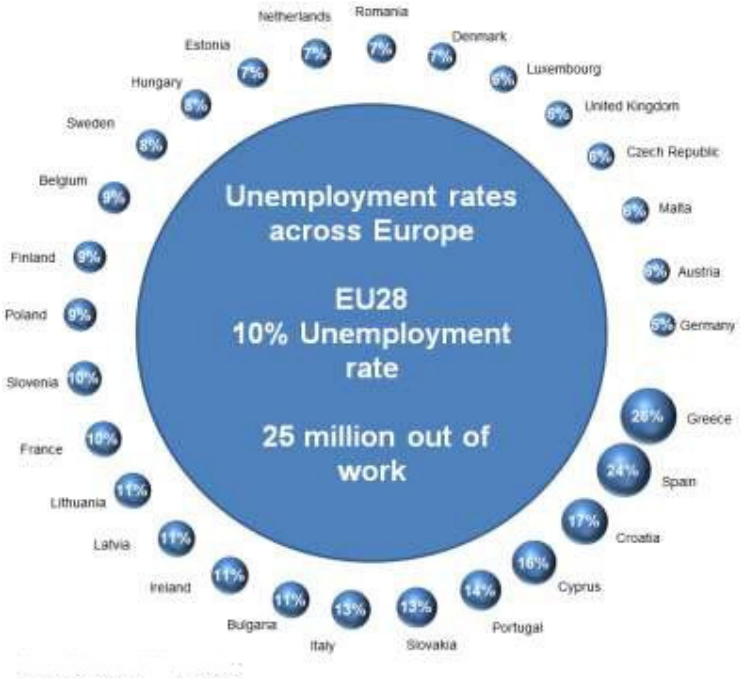
2. Overview of labour market activity in Europe

Analyzes for 2018 show that the unemployment rate in Europe is 10%, or 25 million people are unemployed. If you make a comparison, we will find that job creation is most difficult across Europe because of the financial crisis that hit all countries of this continent. An exception to all of this is Germany, where the unemployment rate is even below the level of unemployment in 2008. More specifically, Germany is a country that employs work force from all over Europe and all created jobs can be filled.

According to Eurostat, Figure 1 and Table 1 show countries across Europe and their percentage of unemployment. From the figure 2 could be seen that the highest unemployment rates are in Greece (26%) and the countries with the lowest unemployment rates are Germany (5%), Austria (6%), Malta (6%), the Czech Republic (6%), and the United Kingdom (6%).

ISSN 2076-9202

Figure 1. Dispersion of unemployment rates across Europe



Source:Eurostat

Table 1. Dispersion of labour market activity employment and unemployment by European nation, 2014

Country	Economically active		Employment		Unemployment		Economically	
	000s		000s					
Austria	4,357	76.8	4,113	72.5	245	6%	1,318	23.2
Belgium	4,967	68.4	4,544	62.5	423	9%	2,299	31.6
Bulgaria	3,366	70.2	2,981	62.2	385	11%	1,430	29.8
Croatia	1,893	67	1,566	55.4	327	17%	933	33
Cyprus	435	75.7	365	63.5	70	16%	140	24.3
Czech Republic	5,298	74.8	4,974	70.2	324	6%	1,783	25.2
Denmark	2,906	80.1	2,714	74.8	192	7%	720	19.9
Estonia	675	78.3	625	72.5	50	7%	187	21.7
Finland	2,680	77.2	2,447	70.5	232	9%	792	22.8
France	28,784	72.4	25,769	64.8	3,015	10%	10,954	27.6

ISSN 2076-9202

Germany	41,969	79.6	39,879	75.6	2,090	5%	10,769	20.4
Greece	4,809	68.3	3,536	50.2	1,273	26%	2,231	31.7
Hungary	4,444	67.5	4,101	62.2	343	8%	2,144	32.5
Ireland	2,157	71.7	1,914	63.6	243	11%	850	28.3
Italy	25,515	65.2	22,279	56.9	3,236	13%	13,646	34.8
Latvia	992	76.6	885	68.3	108	11%	303	23.4
Lithuania	1,477	75.3	1,319	67.3	158	11%	484	24.7
Luxembourg	261	71.7	246	67.4	16	6%	103	28.3
Malta	192	67.5	181	63.7	11	6%	93	32.5
Netherlands	8,978	81.8	8,318	75.8	660	7%	2,003	18.2
Poland	17,428	68.9	15,862	62.7	1,567	9%	7,850	31.1
Portugal	5,226	76.9	4,500	66.2	726	14%	1,569	23.1
Romania	9,242	68.3	8,614	63.7	629	7%	4,285	31.7
Slovakia	2,722	70.6	2,363	61.3	359	13%	1,131	29.4
Slovenia	1,015	72.6	917	65.6	98	10%	382	27.4
Spain	22,955	74.6	17,344	56.4	5,611	24%	7,795	25.4
Sweden	5,183	84.4	4,772	77.7	411	8%	958	15.6
United Kingdom	32,637	79.5	30,642	74.6	1,996	6%	8,436	20.5
EU28	242,562	73.9	217,768	66.4	24,794	10%	85,587	26.1

Source: Eurostat Labour Force Survey

3. Perspectives for circular economy activities in Europe

In recent years, we are increasingly witnessing the meaning of the term circular economy. World trends show that circular economy is an excellent way to create jobs and thus increase economic growth. This implies employment in the retail of second hand goods sector, employment in repair activities by employment in the repair of machinery and equipment sectors and the repair of electronic and household products sector, closed & open loop recycling activity is proxied by employment in the wholesale of waste and scrap sectors and the waste and recycling sector, and for circular economy activity relating to servitisation jobs are proxied by employment in the rental & leasing sectors (EMF, 2015).

According WRAP, circular economy successfully create jobs in businesses that operate in sectors with a high propensity towards circular economy activities, namely the repair, reuse, remanufacturing, recycling and rental & leasing sectors (Table 2).

ISSN 2076-9202

Table 2. Mapping employment in circular economy activities to official data

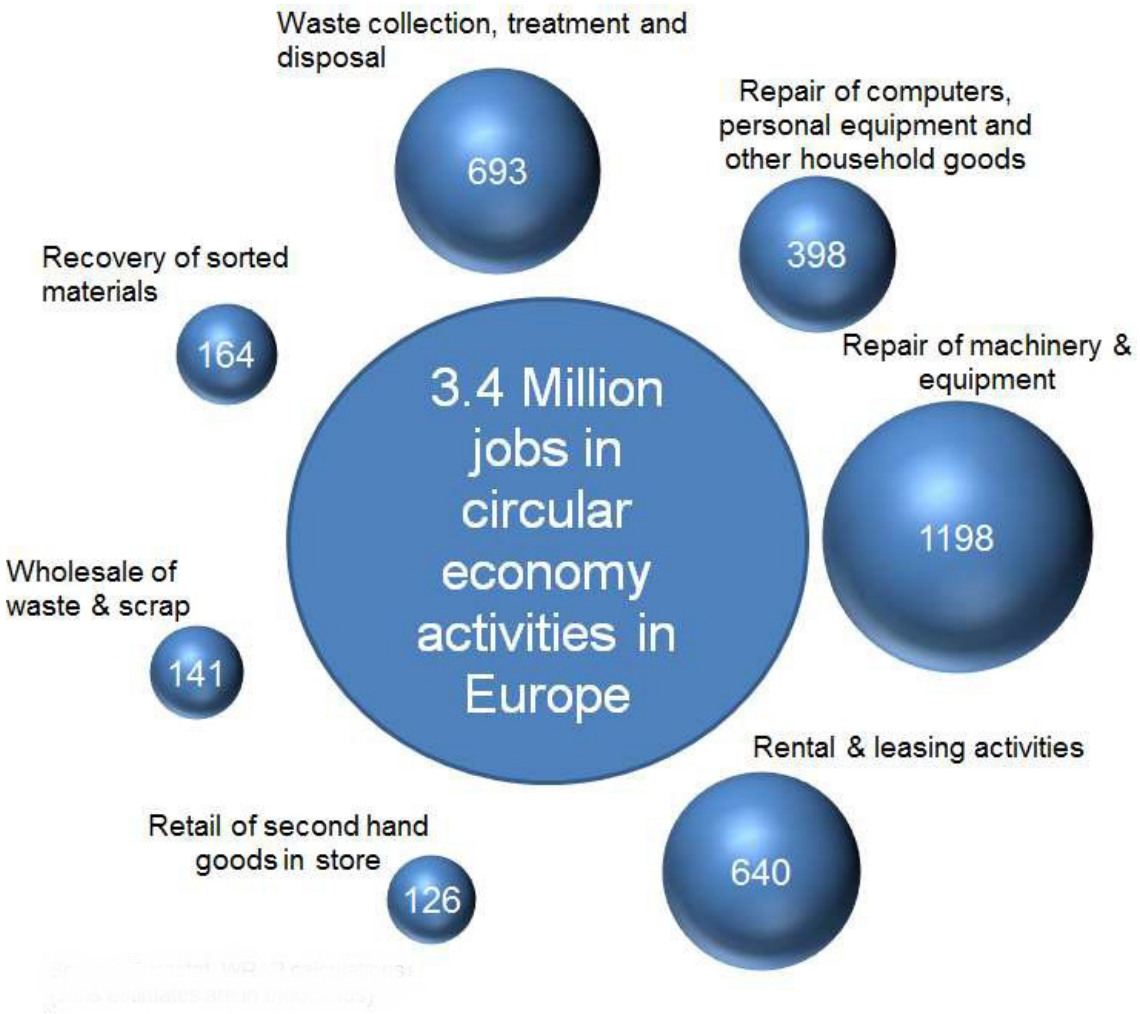
Circular economy activity	Sector proxies in official
Closed and open loop recycling – processes that create new products from waste without changing the inherent properties of the material. For example recovering PET from bottles for use in other PET applications. Open loop recycling – also referred to as downcycling, is where recovered materials	Wholesale of waste & scrap Waste & recycling
Aggregate	
Repair/remanufacturing - where products need repair or reconditioning before going back into use remanufacturing preserves most value.	Repair of machinery & equipment Repair of electronics &
Reuse - examples included are electrical & electronic goods and textiles. These products are worth more than the raw materials they are made up from. A re-used iPhone retains around 48 per cent of its original value compared to just 0.24 per cent of its original value as recyclate.	In-store retail of second hand goods
Servitisation – examples are systems and business models that make more effective use of assets including include leasing of products and provision of products as services thereby deferring consumption of new assets. Many examples are B2B (business to business) such as Xerox and Ricoh leasing photocopiers and printers, Interface's carpet business or Philips 'pay per Lux' but there are B2C (business to consumer) and C2C (customer to customer) examples such as Airbnb or Streetcar.	Renting & leasing activities

Source: WRAP/GA (2015a)

ISSN 2076-9202

Eurostat and WRAP calculate the level of average employment in each country in Europe, that is, employments that as economic activities belong to the circular economy (WRAP/GA, 2015a). Figure 2 gives an overview of the created jobs in repair, waste and recycling and rental & leasing activities.

Figure 2. Estimates of current jobs in circular economy activities across Europe

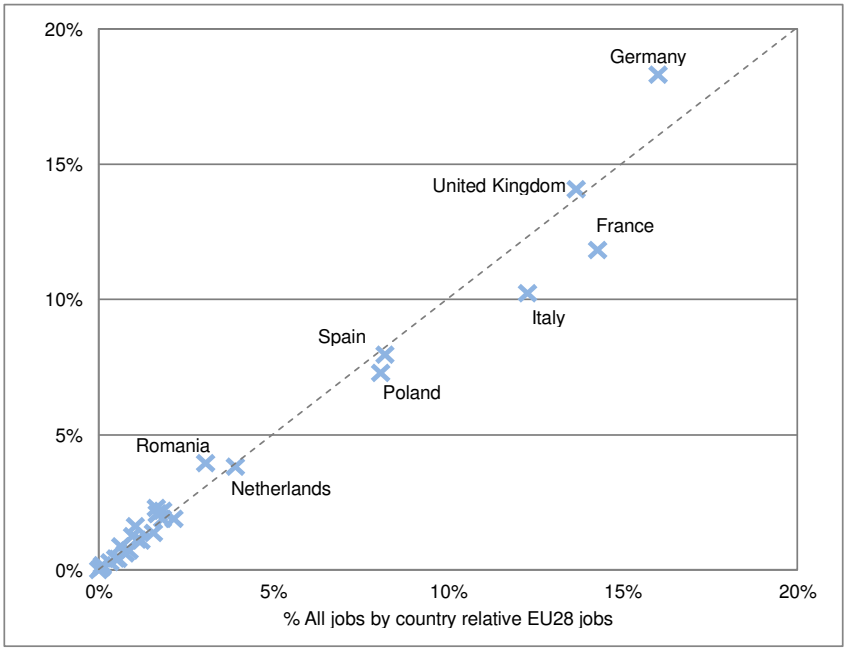


Source:Eurostat;WRAP.

Analyzes show that employment in circular economic activities creates opportunities for economic growth and a visible increase in the level of employment (DEFRA, 2015). Of course, this also depends on the policy and strategy of any government. Taking into account what economic activities encompass the circular economy, it simply represents a necessity for every society and its well-being (Figure 3).

ISSN 2076-9202

Figure 3. Distribution of jobs in circular economy activities and total jobs by country



Source:Eurostat

Also, Eurostat made a calculation that for waste collection, treatment and disposal activities Bulgaria, Croatia, Czech Republic, Italy & Romania have the highest proportions of employment. Austria, Estonia, Finland, Slovakia, Sweden, Czech Republic, France, Hungary, Lithuania and Spain have the highest proportions of employment in repair activities (repair of machinery & equipment and repair of computers, personal and other household goods). In store retail of second hand goods is proportionately the highest in Estonia, Hungary, Latvia, Lithuania and the United Kingdom. For recovery of sorted materials France, Lithuania, Luxembourg, Romania & Slovenia have comparatively higher proportions of their populations employed while for wholesale of waste and scrap the top 5 countries are Bulgaria, Latvia, Lithuania, Poland and Spain.

Countries for which rental and leasing activities have the highest proportion per 10,000 population are Ireland, Luxembourg, Malta, the Netherlands and the United Kingdom (Eurostat, 2018).

4. Conclusion

A circular economy creates economic value with more labour resources, and deliver economic benefits like job creation and lower structural unemployment.. Higher unemployment regions can benefit from remanufacturing employment. Growth in recycling, re-use, repair activities offer potential for job creation suitable for employees displaced from traditional manufacturing. Analyzes show that employment in circular economic activities creates opportunities for economic growth and a visible increase in the level of employment. Of course, this also depends

ISSN 2076-9202

on the policy and strategy of any government. Taking into account what economic activities encompass the circular economy, it simply represents a necessity for every society and its well-being.

In the time of competitiveness, circular economy is a way to change economic growth pattern and achieve the balance among economy, resources and environments. World trends show that circular economy is an excellent way to create jobs and thus increase economic growth. This implies employment in the retail of second hand goods sector, employment in repair activities by employment in the repair of machinery and equipment sectors and the repair of electronic and household products sector. This paper argues that employment in circular economic activities creates opportunities for economic growth and a visible increase in the level of employment. Of course, this also depends from the policy and strategy of any government. Taking into account what economic activities encompass the circular economy, it simply represents a necessity for every society and its well-being. So there's a reasonable chance that a growing circular economy in Europe will offer opportunities for a range of occupations across regions and countries.

5. Reference

Beasley J., Georgeson R., Arditi S., Barczak P. Advancing Resource Efficiency in Europe: Indicators and waste policy scenarios to deliver a resource efficient and sustainable Europe. Brussels: European Environmental Bureau (EEB), 2014. 50 p.

Best H., Kneip T. The impact of attitudes and behavioral costs on environmental behavior: A natural experiment on household waste recycling. Social Science Research, vol. 40(3), 2011, pp. 917-930.

DEFRA (2011) The Further Benefits of Resource Efficiency http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More

DEFRA (2015) Digest of Waste and Resource Statistics DEFRA UK https://www.gov.uk/government/statistics/digest-of-waste-and- resource-statistics-2015-edition

Directive 2008/98/EC of the European Parliament and the Council of 19 November 2008 on Waste and repealing certain Directives. [online] [27.09.2017]. Available at: http://eurlex.europa.eu/

EC. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Closing the loop – An EU action plan for the Circular Economy COM(2015) 614 final, Brussels, 2.12.2015. [online] [17.12.2017]. Available at: https://eur-lex.europa.eu/

EC. Progress Report on the Roadmap to a Resource Efficient Europe. SWD/2014/0206 final/2. [online] [27.09.2017]. Available at: https://eur-lex.europa.eu/

EC. Proposal for a Directive of the European Parliament and of the Council amending Directive 2008/98/EC on waste. COM(2015) 595 final. [online] [12.12.2017]. Available at: http://eurlex.europa.eu/legal-content

EMF (2015) "Growth Within: A Circular Economy Vision for a Competitive Europe", EMF, SUN, McKinsey Center for

ISSN 2076-9202

Business and Environment

European Commission (2010) Directive 2010/75/EU on industrial emissions http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0075 European Parliament resolution of 9 July 2015 on resource efficiency: moving towards a circular economy (2014/2208(INI)). [online] [12.12.2017]. Available at: http:// europarl.europa.eu

Eurostat. Database. [online] [08.01.2018]. Available at: http://ec.europa.eu/eurostat/data/database.

Eurostat. Environmental economy – employment and growth. [online] [17.01.2018]. Available at: http://ec.europa.eu/eurostat/statistics-explained/

Fischer et al (2011) Green economy and recycling in Europe, ETC/SCP working paper 5/2011, Christian Fischer, Ioannis Bakas, Anders Bjørn, Naoko Tojo and Christian Löwe

Hobson K. Closing the loop or squaring the circle? Locating generative spaces for the circular economy. Progress in Human Geography, vol. 40(1), 2016, pp. 88-104.

Jackson, T (2009) Prosperity Without Growth? The transition to a sustainable economy, Sustainable Development Commission, UK

Melece L. Challenges and Opportunities of Circular Economy and Green Economy. Engineering for Rural Development, 2016, pp. 1162-1169.

Seadon J. K. Sustainable waste management systems. Journal of Cleaner Production, 2010, vol. 18(16-17), 2010, pp. 1639-1651.

WRAP/GA (2015a) Employment and the circular economy – job creation in a more resource efficient Britain, Julian Morgan (Green Alliance) and Peter Mitchell (WRAP)

ISSN 2076-9202

RELATIONSHIP BETWEEN FIRM SIZE AND PROFITABILITY: INVESTIGATION FROM TEXTILE SECTOR OF PAKISTAN

Kaukab Abid Azhar
Lecturer,
Department of Business Administration,
Barrett Hodgson University, Karachi
923343825298
kaukababidazhar@gmail.com

Nawaz Ahmed,
Assistant Professor and Research Consultant,
Institute of Business Management (IoBM), Karachi

Abstract:
Relationship between firm size and profitability has been studied in many different contexts; however, limited research is found in emerging countries. The purpose of this study is to investigate the relationship between firm size and profitability by studying the textile listed firms in Pakistan. In this study, data from top 10 listed textile firms on Pakistan Stock Exchange from 2012 to 2016 was used. Net profit ratio and return on assets have been used as firm profitability while firm size has been determined through total sales and total assets. Empirical analysis was conducted using correlation methods and regression analysis. The findings revealed that no indicative relationship can be formed in case of textile firms of Pakistan. Additionally, findings showed a negative relationship between firm profitability and total assets which are in contradiction to many studies conducted in other sectors.
Keywords: Firm size, firm profitability, textile sector, PSX

Introduction:

A substantial amount of scholarly work has been conducted in the field of finance, strategic management, economics, and marketing to study the sources of profitability for firms. Firm size plays a vital part in directing the relationship that an organization enjoys with external environment as well as within the organization. Larger firms can exercise a greater influence on other stakeholders. With the rise of globalization, in the contemporary global economy, large size firms are having more influence in the corporate environment (Peng, 2016). According to Bhayani (2010), growth in the size of the organizations is an aspect of economic growth which makes it interesting to study that how growth and profitability can be related to the size of the firm.

The size of the firm includes the capability and capacity of a firm in the context of the variety and amount of the production capacity that a firm can offer to its clients simultaneously. Probably the biggest advantage for a firm of having a large size is the opportunity to meet economies of scale. In the modern global era, larger firms can take advantage of this phenomenon and get a long-term competitive edge over small-sized companies by maintaining a high market share and producing at a lower cost. Firms are willing to expand their scale and size of operations; however, the rate of expansion is dependent on a

ISSN 2076-9202

number of internal and external factors, such as judicial and political situation of the country. The difference in the economic system of developing and developed countries is one of the major reasons for the varying advantages and disadvantages of firm size (Todaro, 2014).

Profitability, in an organizational context, is the amount of profit or money a firm is able to generate within its limited resources. In majority of the cases, organizations exist to increase profitability. All the efforts of management and planning are directed towards improving profitability (Best, 2012). Theoretically, firms that are more profitable can expand their size of operation easily through internal financing. However, the whole financing process is not as simple as it looks. Firms need to be careful in selecting modes of financing as it has a direct relation with share price and market standing. If they go for debt financing, they put their organization on certain risk and many of the investors might get detracted (Seitz & Ellison, 1998).

In today's context, scholars and researchers are exploring different dimensions that determine firm's profitability. Theoretically, there is strong evidence that a firm can meet economies of scale if it has a large size (Grover, 2013). Large size firms are considered to have more competitive power in comparison to small firms. The large resources of large firms allow them the opportunity to work in areas where there is a requirement for high capital rates which makes them even more profitable with less competition (AlGhusin, 2015). The firm size also results in a decrease in bankruptcy costs as size of a firm has a positive correlation with the capacity of borrowing, on the other hand, smaller firms have difficulties in borrowing as the amount becomes a significant sum against the bankruptcy costs (Osborn, 2014). Therefore, larger firms get a significant edge by raising funds in term of long-term debts while meeting economies of scale which cannot be availed by the smaller size firms. Large firms' economies of scale also allow them to negotiate prices and quantities in a more proficient manner because of the bulk purchases they can make which makes a direct impact on the sales and profitability (Asimakopoulos, Samitas, & Papadogonas, 2009).

Size of the firm has been used as a predictor of profitability in different contexts; however, the results have varied which calls for further investigation of the relationship. In our study, we aim to make a contribution to the existing literature through empirical evidence of five-year data from 2011-2016 of the textile firms listed in PSX (Pakistan Stock Exchange). This study can be applied to other industries and countries with similar sort of characteristics. This paper is aimed at making a significant contribution to literature on the nature and direction of relationship between firm size and its profitability in context of an emerging country.

Research Objectives:

The main goal of the study is to investigate the relationship of firm size on profitability of textile companies (composite) listed on PSX (Pakistan Stock Exchange). Moreover, the study is aimed to assess the strength of association between firm size and firm profitability in context to textile companies (composite) listed on PSX (Pakistan Stock Exchange).

Scope:

The focus of the study is on Pakistan's listed textile companies (composite). The rationale behind choosing this particular sector is that it is the backbone of the country's economy. It contributes to 8.5%

ISSN 2076-9202

of the overall GDP. It also comprises of around 45% of the overall manufacturing firms in Pakistan (Alvi & Shahid, 2016).

Problem Statement:

A number of attempts have been made by researchers to investigate the relationship between firm size and profitability; however, findings have varied for different countries and industries. Studies on the relationship in emerging countries are very limited. Our research addresses the gap by conducting an empirical study of the relationship in context of textile firms of Pakistan.

Research Questions:

- Is there an impact of firm size on profitability in textile companies (composite) listed on PSX (Pakistan Stock Exchange)?
- Is there a significant relationship between firm size and profitability in textile companies (composite) listed on PSX (Pakistan Stock Exchange)?

Hypotheses:

- H_1: Firm size impacts firm profitability in listed textile firms (composite) on PSX (Pakistan Stock Exchange).
- H_2: Relationship between firm size and profitability is significant in textile companies (composite) listed on PSX (Pakistan Stock Exchange).

Literature Review:

A substantial amount of scholarly work is done on studying the relationship between firm profitability and firm size (Babalola, 2013; Doğan, 2013; Niresh & Thirunavukkarasu, 2014). The most significant early work on studying this relationship was conducted by Gupta in 1969, in which he discovered that size of a firm influences capital structure decisions and determines firm's profitability in an evident manner. Dogan (2013) concluded that most of the studies carried out on examining the relationship have found a positive correlation between the two variables; however, there is a need to further explore the relationship with strong evidence from varying data sets.

There have been mixed results when the relationship is studied in different countries. Serrasqueiro and Nunes (2008) examined the relationship by contrasting large-scale firms with small-scale firm of Portugal. The data of five years from 1999-2003 showed a significant positive relationship. Vijayakumar and Tamizhselvan (2010) conducted a study in South India in which they measured size and profitability and found a strong positive correlation. Shubita and Alsawalhah (2012) examined the relationship in Jordanian industries by analyzing the effect of capital structure from 2004 – 2009 which revealed that firm size had an impact on profitability and sales growth. Similar results were observed from a study conducted in Turkey, Dogan (2013) analyzed the relationship in context of manufacturing sector from 2008 – 2013. Babalola (2013) investigated the relationship by studying Nigerian stock exchange from 2000-2009. Findings indicated a positive association between firm size and profitability. The same relationship was studied in Iran when Ghafoorifard et al. (2014) examined listed companies on TSE (Tehran Stock Exchange) by analyzing their financial performance which found a substantial effect of firm age and size on the overall performance of the firm.

ISSN 2076-9202

On the contrary, there have been some studies indicating no relationship or even a negative relationship between the size of a firm and its profitability. Becker-Blease et al. (2012) studied US manufacturing industry and concluded that the relationship is industry specific as in large-scale manufacturing industry of US there was an inverse relationship of firm performance and size. This is in complete contrast to the early study conducted by Lee (2009) in the US, he found a remarkably strong relationship after analyzing more than seven thousand publicly held firm in the US. Similarly, Banchuenvit (2012) found a negative correlation between firm size and ROA in listed companies of Vietnam. Niresh & Velnampy (2013) conducted a study in Srilankan manufacturing firms and found no relationship, the study was supported by another study by Velnampy (2013) in which 28 manufacturing firms were studied and no relationship was formed between corporate governance and firm profitability. Although both the studies were in contradiction to the study conducted earlier by Velnampy and Nimalathasan in 2010 in which they studied the performance of banking industry over a period from 1997 – 2006 and observed a positive correlation between firm profitability and size.

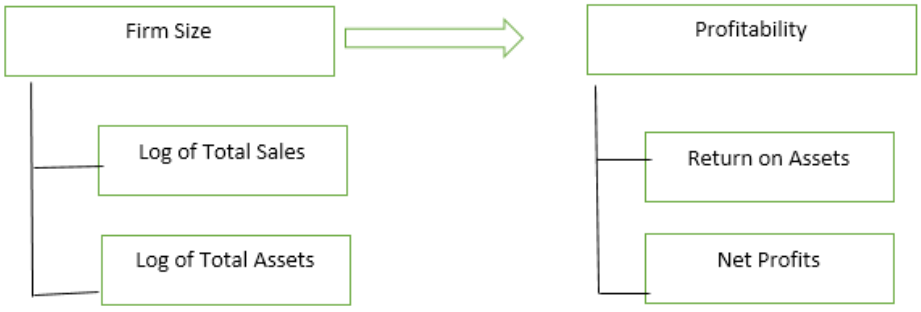
In Pakistan's context, studies on assessing this relationship have been limited. There have been attempts to study the profitability of firms with different dimensions of working capital (Shah, Hijazi, & Javed, 2004, Farooq, 2016; Hamid, Ahmad, Haider, & Rehman, 2017); however, researchers have called for further empirical work from key sectors to gain better knowledge of the nature of the relationship

The contradictory nature of findings calls for more academic work and empirical investigation to understand the true nature of the relationship between firm size and its performance.

Theoretical Framework:

There are many different methods that can be used to measure firm performance. We have used the most widely accepted and common method to measure profitability i.e. profitability ratios. The profitability ratios are used to determine the profitability of textile firms (composite) listed on Pakistan Stock Exchange. The extent of size is hard to measure as it is determined by the ability of a firm and variety of production operational capacity to provide a range of services and products simultaneously to its customers.

Figure 1



The above figure explains the theoretical framework of the research. The same framework was used by Niresh & Velnampy (2014) to assess the same relationship in a different context in Sri Lanka for manufacturing firms.

ISSN 2076-9202

Methodology:

For our study, we have used a deductive approach in which we are using empirical data of top 10 listed textile firms on Pakistan Stock Exchange (PSX). The top 10 companies were chosen on the basis of market capitalization.

Data:

Secondary data were obtained from the audited annual reports of the firms that are under study. The data was collected from top ten listed on PSX under the category of Textile Composite. Top 10 companies (Azgard Nine, Nishat Mills, Gul Ahmed, Nishat Chunian, and Artistic Denim Mills, Crescent Textiles, Kohinoor Textile Mills, Sapphire Textiles, Redco Textiles and Masood Textiles) were selected on the basis of market capitalization after reviewing of annual reports of listed textile firms. The data is collected for a five year period from 2012 – 2016.

Variables:

The independent variables are the variables that indicate the size of the firm. For our study, we have used total sales and total assets as indicators of firm size. Return on assets and net profit ratio are the two dependent variables in our study that are used to measure the profitability of the firm. In order to address the issue of multicollinearity, we have adopted two models:

$$NP = \beta 0 + \beta 1X1 + \beta 2X2 + \varepsilon \quad \text{(Model I)}$$

$$ROA = \beta 0 + \beta 1X1 + \beta 2X2 + \varepsilon \quad \text{(Model II)}$$

Where,

Log of Total Assets = X1

Log of Total Sales = X2

Net Profits = NP

Return on Assets = ROA

Constant = β0

Error term = E

The table below gives a better understanding of the variables under study:

Table 1

Summary of variables

Variables	**Description**
Independent Variable	
Firm Size (Total Assets)	Log of Total Assets
Firm Size (Total Sales)	Log of Total Sales
Dependent Variable	
NP (Net Profit Ratio)	Ratio of profits to sales
ROA (Return on Assets)	EBIT x 100 divided by total assets

3.3

ISSN 2076-9202

Statistical Tools:

For the purpose of empirical analysis correlation and multiple regression methods are used.

Results and Discussion:

Descriptive Statistics:

The mean log of total assets is 10.13; whereas, it ranged from 9.20 to 11.03. The mean of log of total sales is 10.13; whereas, it ranged from 9.22 to 10.74. The mean of net profit ratio is 0.02; whereas, it ranged from - 0.53 to 0.18. The mean of return on assets is 0.03; whereas, it ranged from - 0.18 to 0.18.

Table 1.1
Descriptive Statistics

	Log of Total Assets	Log of Total Sales	Net Profit Ratio	ROA
Mean	10.13	10.13	0.02	0.03
Median	10.20	10.20	0.04	0.04
Maximum	11.03	10.74	0.18	0.18
Minimum	9.20	9.22	-0.53	-0.18
Std. Dev.	0.46	0.40	0.10	0.06
Skewness	- 0.33	-0.71	-3.18	-0.80
Kurtosis	2.92	2.76	16.37	5.46
Jarque-Bera	0.96	4.29	457.07	18.02
Probability	0.61	0.11	0.00	0.00
Sum	506.75	506.60	1.31	1.87
Sum sq. Dev.	10.37	8.07	0.57	0.22

Correlations:

Table 1.2 represents the correlation of net profit ratio with independent variables. The correlation of net profit ratio is insignificant with log of total assets ($p > .05$) and log of total sales ($p > .05$).

Table 1.2: Correlation (Net Profit Ratio)

	Net Profit Ratio	Log of Total Assets	Log of Total Sales
Net Profit Ratio	1		
Log of Total Assets	- 0.04 0.76	1	

ISSN 2076-9202

Log of Total Sales	0.09	0.94	1
	0.52	0.00	

Table 1.3 represents the correlation of return on assets with independent variables. The correlation of return on assets is insignificant with log of total assets ($p > .05$) and log of total sales ($p > .05$).

Table 1.3: *Correlation (ROA)*

	ROA	Log of Total Assets	Log of Total Sales
ROA	1		
Log of Total Assets	-.08	1	
	.57		
Log of Total Sales	-.06	.94	1
	.70	.00	

Regression:

Regressing net profit ratio on log of total assets and log of total sales gives: (Table 1.4)

Net profit ratio = -0.30 - 0.40lntotalassets + 0.44lntotalsales

The above equations say that log of total assets and log of total sales, as a group explains about 56% of variation in net profit ratio ($R^2 = 0.56$). The overall model is significant as $F = 6.65$ and $p = 0.00$. Relationship between log of total assets and net profit ratio is significant as $t = -2.74$ and $p = .00$; hence 1% change in total assets leads to -.40 unit change in net profit ratio. Relationship between log of total sales and net profit ratio is insignificant as $t = 1.98$ and $p = .05$.

ISSN 2076-9202

Table 1.4

Regression (Net Profit Ratio)

Dependent Variable: NETPROFITRATIO
Method: Panel Least Squares
Date: 12/17/17 Time: 19:13
Sample: 2012 2016
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.306492	2.156897	-0.142099	0.8878
LNTOTALASSETS	-0.407540	0.148239	-2.749208	0.0091
LNTOTALSALES	0.440496	0.221531	1.988416	0.0540

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.658234	Mean dependent var	0.026200
Adjusted R-squared	0.559301	S.D. dependent var	0.107796
S.E. of regression	0.071560	Akaike info criterion	-2.230985
Sum squared resid	0.194594	Schwarz criterion	-1.772099
Log likelihood	67.77461	Hannan-Quinn criter.	-2.056238
F-statistic	6.653369	Durbin-Watson stat	2.425182
Prob(F-statistic)	0.000005		

Regressing net profit ratio on log of total assets and log of total sales gives: (Table 1.4)

Return on assets = 0.18 - 0.20lntotalassets + 0.18lntotalsales

The above equations say that log of total assets and log of total sales, as a group explains about 61% of variation in net profit ratio ($R^2 = 0.61$). The overall model is significant as F = 8.20 and p = 0.00. Relationship between log of total assets and return on assets is significant as t = -2.30 and p = .02; hence 1% change in total assets leads to -.20 unit change in return on assets. Relationship between log of total sales and return on assets is insignificant as t = 1.43 and p = .16.

ISSN 2076-9202

Table 1.5:

Regression (Return on Assets)

Dependent Variable: ROA
Method: Panel Least Squares
Date: 12/17/17 Time: 19:15
Sample: 2012 2016
Periods included: 5
Cross-sections included: 10
Total panel (balanced) observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.187827	1.258157	0.149287	0.8821
LNTOTALASSETS	-0.199746	0.086470	-2.309988	0.0264
LNTOTALSALES	0.184958	0.129223	1.431308	0.1605

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.703564	Mean dependent var	0.037400
Adjusted R-squared	0.617753	S.D. dependent var	0.067516
S.E. of regression	0.041743	Akaike info criterion	-3.309030
Sum squared resid	0.066213	Schwarz criterion	-2.850144
Log likelihood	94.72575	Hannan-Quinn criter.	-3.134284
F-statistic	8.199033	Durbin-Watson stat	2.220742
Prob(F-statistic)	0.000000		

Conclusion

We have studied the relationship between firm size and profitability by empirically testing two models on data of textile industry of Pakistan. In this study, 10 companies were chosen after analyzing the best market capitalization from PSX, data was collected from audited annual reports from 2012 to 2016. Data were then analyzed using correlation methods and multiple regression on Eviews. The results of the analysis showed contradictor inconclusive findings. Below is the summary of all the findings:

1) There is a negative and significant relationship between log of total assets and net profit ratio.
2) The relationship between net profit ratio and log of total sales is insignificant.
3) The combined model, which has two variables (log of total assets and log of total sales) and one dependent variable (net profit ratio), the relationship is negative and significant.
4) There is a negative and significant relationship between log of total assets and return on assets.
5) The relationship between return on assets and log of total sales is insignificant.
6) The combined model, which has two independent variables (log of total assets and log of total sales) and one dependent variable (return on assets), the relationship is significant and positive.

On the basis of the above statements, we can conclude that there is no indicative relationship between firm size and firm profitability. The two models developed on the basis of our analysis show some common findings; however, the results are not conclusive to establish a clear relationship. The above findings reveal that there is a negative correlation between total assets and firm profitability as both the model show a negative relationship. Furthermore, R^2 values from both the models (0.56 and 0.61) denote that 56% and 61% of the variation in net profit ratio and return on assets, respectively, were explained by

ISSN 2076-9202

the independent variables i.e. log of total assets and log of total sales. Remaining 44% and 39% of the variations are related to variables that have not been included in the model. Hence, the inclusion of other factors might lead to a better understanding of profitability.

Findings of our study are similar to the study conducted in Sri Lanka, in which 15 listed companies on Colombo Stock Exchange were studied from 2008 to 2012. Similar to our findings, no indicative relationship could be formed between firm size and profitability (Niresh & Thirunavukkarasu, 2014). Another study, with the same sort of findings, was conducted for Indian automobile industry (Kumar, 2016). Study of data from 16 years showed mixed results as cross-sectional analysis showed that there was no relationship; however, time-series analysis showed a strong positive correlation between firm size and profitability in the automobile sector.

On the contrary, there have been some studies which have exhibited different results. A study conducted in Turkey on 200 companies of ISE (Istanbul Stock Exchange) on the basis of three years data showed strong evidence of a positive correlation between profitability and firm size indicators (Doğan, 2013). The same findings were found in a study in Nigeria in which total assets and total sales were positively correlated with the profitability of listed firms (Babalola, 2013). Therefore it can be concluded that the nature of the problem is as such that many previous studies have found conflicting findings which are also backed up by the inconclusive results of our research.

Limitation and Future Research:

Our research is based on a small sample size. Future research can get conclusive findings by increasing the sample size. For our research, only two performance variable were used (return on assets and net profit ratio). Other studies may include other performance variables, such as ROE, to study if the same findings are applicable or not. The empirical literature suggests that most of the studies have been conducted on large scale businesses; therefore, studies on small-scale companies might reveal some interesting findings. A comparative study can also be conducted comparing findings from emerging and developed countries. Future studies can also compare and contrast results from different industries of the same country to assess if the nature of the industry has a role in determination of the significance and direction of the relationships.

References:

AlGhusin, N. A. S. (2015). The Impact of Financial Leverage, Growth, and Size on Profitability of Jordanian Industrial Listed Companies. *Research Journal of Finance and Accounting*, *6*(16), 86–93.

Alvi, A. A., & Shahid, U. (2016). Textile Industry Crisis in Pakistan. *Bulletin of Business and Economics (BBE)*, *5*(2), 109–115.

Asimakopoulos, I., Samitas, A., & Papadogonas, T. (2009). Firm-specific and economy wide determinants of firm profitability: Greek evidence using panel data. *Managerial Finance*, *35*(11), 930–939. https://doi.org/10.1108/03074350910993818

Babalola, Y. A. (2013). The Effect of Firm Size on Firms Profitability in Nigeria. *Journal of Economics and Sustainable Development*, *4*(5), 90–94.

Balasundaram, D. N. (n.d.). Firm Size on Profitability: A Comparative Study of Bank of Ceylon and Commercial Bank of Ceylon

ISSN 2076-9202

Ltd in Srilanka. *Global Journal of Management And …*. Retrieved from http://www.academia.edu/2501577/Firm_Size_on_Profitability_A_Comparative_Study_of_Bank_of_Ceylon_and_Commercial_Bank_of_Ceylon_Ltd_in_Srilanka

Becker-Blease, J., Kaen, F., Etebari, A., & Baumann, H. (2010). Employees, Firm Size, and Profitability in U.S. Manufacturing Industries. *Investment Management and Financial Innovations*, *7*(2), 7–23.

Bhayani, S. J. (2010). Determinant of Profitability in Indian Cement Industry: An Economic Analysis. *South Asian Journal of Management*, *17*(4), 6.

Çiftçi, C. (2014). Türkiye İmalat Sanayiinde Ölçek Bazında Kârlılık ve Temel Giderler İlişkisi: 1998- 2009 Dönemi. *Sosyoekonomi*, *22*(22). https://doi.org/10.17233/se.59619

Development, I. J. of S. M. and. (n.d.). Assessing the Relationship between Firm Size, Age and Financial Performance In Listed Companies on Tehran Stock Exchange. *International Journal of Scientific Management and Development*. Retrieved from http://www.academia.edu/9810020/Assessing_the_Relationship_between_Firm_Size_Age_and_Financial_Performance_In_Listed_Companies_on_Tehran_Stock_Exchang

Doğan, M. (2013). Does Firm Size Affect The Firm Profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*, *4*, 53–59.

Farooq, U. (2016). Liquidity Risk, Performance and working capital relationship of cash conversion cycle: an empirical study of the firms in Pakistan. *International Journal of Information Research and Review*, *Vol. 03*, 1946–1951.

Gupta, M. C. (1969). The Effect of Size, Growth, and Industry on the Financial Structure of Manufacturing Companies*. *The Journal of Finance*, *24*(3), 517–529. https://doi.org/10.1111/j.1540-6261.1969.tb00370.x

Hamid, M., Ahmad, S., Haider, Z., & Rehman, S. (2017). *Relationship between Working Capital Management and Profitability: A Case Study from Textile Sector of Pakistan* (SSRN Scholarly Paper No. ID 2907661). Rochester, NY: Social Science Research Network. Retrieved from https://papers.ssrn.com/abstract=2907661

Khatab, H., Masood, M., Zaman, K., Saleem, S., & Saeed, B. (2011). Corporate Governance and Firm Performance: A Case study of Karachi Stock Market. *International Journal of Trade, Economics and Finance*, *2*, 39–43. https://doi.org/10.7763/IJTEF.2011.V2.76

Kumar, N. (2016). Firm Size and Profitability in Indian Automobile Industry: An Analysis. *Pacific Business Review International*, *8*, 69–78.

Lee, J. (2009). Does Size Matter in Firm Performance? Evidence from US Public Firms. *International Journal of the Economics of Business*, *16*(2), 189–203. https://doi.org/10.1080/13571510902917400

Niresh, A., & Thirunavukkarasu, V. (2014). *Firm Size and Profitability: A Study of Listed Manufacturing Firms in Sri Lanka* (SSRN Scholarly Paper No. ID 2422441). Rochester, NY: Social Science Research Network. Retrieved from https://papers.ssrn.com/abstract=2422441

Osborn, R. A. (2014). *Bankruptcy: Embarrassment • Surviving • Thriving*. CreateSpace Independent Publishing Platform.

ISSN 2076-9202

Peng, M. W. (2016). *Global Business* (4 edition). Mason, OH: South-Western College Pub.

Serrasqueiro, Z. S., & Nunes, P. M. (2008). Performance and size: empirical evidence from Portuguese SMEs. *Small Business Economics*, *31*(2), 195–217. https://doi.org/10.1007/s11187-007-9092-8

Velnampy, T. (2013). Corporate Governance and Firm Performance: A Study of Sri Lankan Manufacturing Companies. *Journal of Economics and Sustainable Development*, *04*, 228–235.

Vijayakumar, A., & Tamizhselvan, P. (2010). Corporate Size and Profitability: An Empirical Analysis. College Sadhana-Journal for Bloomers of Research, 3(1), 44–53.

West, G. (2018). *Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies* (Reprint edition). S.l.: Penguin Books.

ISSN 2076-9202

"WORKING SMART AND NOT HARD" KEY TO MAXIMIZE EMPLOYEE EFFICIENCY?

Dr. Evangelia Fragouli (University of Dundee, UK), Irini Ilia (MBA, HOU)

Abstract

Due to globalization and financial crisis nowadays, businesses have been pushing to reduce their costs in order to survive in the highly competitive environment. This creates more pressure on workers who are called upon to increase their efficiency in order to compete on the global labor market. It is true that people with the same intellectual background operating under the same working conditions perform differently. The aim of this study is to define the concept of "smart work", by identifying techniques that can lead to increased employee efficiency. It is also examined whether only smart work is enough to produce better results and finally it is attempted to list the techniques and tools that will help both employees and businesses to increase their efficiency. An empirical research based on data collected from anonymous questionnaires that were distributed to employees of a private company working on the same product took place. The findings of the study could be useful in the HR department of every organization, providing suggestions on how to increase the efficiency of their employees.

Keywords: *employee efficiency, smart work, hard work*

1: Introduction

The last decades we experienced a rapidly changed technological environment. The technological achievements forced the companies to change the way they operate in order to survive in the new environment that is characterized by high competition. At the same time, the organizations are operating in a global environment with many competitors who are equally good, making more difficult to differentiate and have a competitive advantage over them (Gopalakrishnan, 2012). One significant objective for every

ISSN 2076-9202

organization is to increase its productivity, produce more with the same or less effort and this can be achieved mainly by increasing the employee efficiency.

1.1 Research problem

In some countries (mainly in the developed) the working hours, defined by the legislation, are less than those in other countries (like the developing), and their productivity is the same if not more. Besides, it is well known that for the same task people, that operate in similar environment and with similar know-how, need more time than others to accomplish it. Are they better workers or are some employees prepared to work more hours than others (McGovern, 2010)? The key is the efficiency; employees might work smart and complete their tasks in less time than others producing more output with the same effort. However there are several concerns regarding their performance outcomes (quality of produced work, appropriate allocation of sources such as time, etc.). In fact hard work isn't always the same as good work. Being able to make the difference is the key for an employee to increase his efficiency. Working smart doesn't necessarily mean working long hours. It means taking time to plan, budgeting time and taking breaks to maximize efficiency. Besides the fact of individual differences regarding how people perform, the needs of the workplace environment nowadays require people to perform effectively and in smart way.

1.2 Research objectives

The aim of this Study is to study the factors that increase the employee efficiency and provide those techniques that an employee can adopt and those strategies that an organization should follow to help its employees to become smart workers. Factors, like the external environment, the industry, the market, etc. that an organization has little or no control over them, are out of the scope of this study.

At the completion of this study, the following objectives will be achieved:

a) What means to work smart, according to the respondents' answers.

b) Does indeed working smart is enough for employees to increase their efficiency?

c) Does the technology help employees on working smart?

d) What tools can assist towards this direction?

ISSN 2076-9202

The review of the existing literature reveals several studies which investigate the factors that might influence the employee efficiency. A significant number of studies examine the impact of technology, training and workplace environment, while others are focusing on the influence of the leadership style on the employee efficiency. This study contributes to the literature through the combined research of the techniques and tools that will help employees to increase their efficiency according to the smart work approach.

By identifying the root cause of the performance efficiency problem the human resources can modify the mode of operation of the company and provide to its employees the tools to train themselves and become more productive by working smart and not hard. In other words the human resource department can adopt a framework that will bridge the gap between what someone can do (maximum performance) and what actually does as it is the definition of typical performance (Klehe & Anderson, 2007).

1.3 Methodology and approach

This study uses data collected from questionnaires from an adequate sample of employees operating in the private sector. The questionnaire was distributed through internet to a large number of employees. An adequate sample was gathered and the data thoroughly analyzed. The survey research and the analysis of the collected data between different groups of employees, created the framework with the techniques and tools and gave hints on how to be modified, depending on the target group, to be more effective and help the employees to increase their efficiency.

1.4 Structure of the study

This study is divided in seven parts. The first part is introductory and contains information regarding the research problem, the objectives of the study and the methodology that was followed. In part two a literature review of the factors to improve the employee efficiency is presented. Part 3 contains the definition of both hard and smart work and an approach on how to become smart worker according to the existing literature. The research design and the methodology followed are analyzed in Part 4. The next part,

ISSN 2076-9202

Part 5, presents the findings, a short analysis of the demographic characteristics of the sample and the analysis of the collected data. Part 6 contains the discussion of the findings, a description of the working smart approach and the tools that will help employees to work more efficiently. Finally, the last part, the seventh, contains the outcomes of the data analysis, the limitations and the recommendations for further research.

2: Literature review on employee efficiency

In a global environment, characterized by intensive competition, every company that desires to maintain and improve its market position should take the necessary actions to differentiate itself from the competition. This can be achieved by acting proactively and taking all the necessary actions that will ensure sustainability and profitability. The challenge for every organization, today more than ever, is to maximize the skills and competencies of its employees in the most efficient and effective way in order to increase their efficiency and productivity (Gopalakrishnan, 2012).

Efficiency is related to the quality of the produced work; accomplish tasks with fewer resources or with less wasted time. Efficient employees complete their tasks in the least amount of time and resources by adopting several time-saving techniques. By increasing the employee efficiency, time might be saved for other tasks resulting in increased employee productivity as well. Nowadays the environment is highly competitive and forces employees to work more efficiently by adopting time-saving techniques or changing the way they work according to what the technology imposes (Holland & Bardoel, 2016). In general, several factors might increase the employee efficiency; some of them require actions from the organizations, like changes in the workplace environment or the leadership style, while others are related to the individuals claiming actions from them. In both cases the technology with its achievements is a significant partner towards the direction of improving the employee efficiency.

2.1 The impact of technology on employee efficiency

During the last years there was significant progress in new technologies (databases, big data

ISSN 2076-9202

analytics, cloud technology) and in knowledge related to the information processing (Holland & Bardoel, 2016). Every organization that aims to have a competitive advantage in the global competition and to acquire workforce that uses its abilities in the most efficient way, should have a virtual workplace that will contain all the necessary information that an employee needs in his every day working life (McGover, 2010) and use technologies that are state-of-the-art. Employees that are highly qualified may leave the organization or even the country in order to find jobs with better salary or work to industries that will use all their capabilities. Today the challenge is to keep the skilled employees within the organization (Sirichoti, 2013).

Nowadays with the capabilities that technology gives, almost every organization has knowledge bases and is aware of the exact competence of its workforce (Kontic et al., 2009). With that in hand and using custom software for enterprise resource planning, employee productivity will be improved. In fact each employee can be assigned with the tasks that are in coherence with his capabilities resulting in an increase of his efficiency since he can use his skills at the maximum and with the same effort might accomplish more tasks (Sirichoti, 2013).The technology explores and finally introduces new ways of working with the goal to help employees to become more efficient. The recent trend is the usage of social media, which is very important especially for the younger employees (Holland et. al, 2016). The generation Y employees (who were born at early 1980 to 2000) are not unionized and it seems that they use the social media as a way to discuss and debate issues that are related to their workplace (Morrison, 2014). Holland et. al (2016) found that the usage of social media as employee voice might increase the job satisfaction, reduce the employee turnover and increase the labor productivity. However, we don't know much about the impact of social media and their usage, in an organization, by its employees (Charoensukmongkol, 2014). But in general the use of social media during the working hours has affected in a positive way the job performance and employee productivity (Shepherd, 2011).

Most of the organizations that have their personnel physically dispersed have introduced and promoted the usage of custom software that will connect all the employees (McGover, 2010). Such platforms except for communication might support file transfer, group chats, desktop sharing and many

ISSN 2076-9202

other features bringing people closer and eliminating physical boundaries. Collaboration between the employees become more effective and tasks that need coordination can be accomplished with less effort. Employees have the ability to multi-communicate, interact with more experienced people one-on-one or in group chats, discuss their tasks, get hints, and do brainstorming on how to complete their tasks more effectively (Turner et. al, 2007). This open communication makes the employees quickly address their questions to the right persons, not losing time reinventing the wheel and accomplish their job in less time (Aral et. al , 2007).

2.2 Employee efficiency in the era of competitiveness

In information-intensive industries, multitasking might be a way to increase the productivity. Multitasking might be considered as the task-switching, as psychologists call, between two or more tasks which are contingent. This kind of task-switching might be positive since the worker can switch from one task to another when he feels that has reached a dead end and go back later with clear mind (Buser et. al, 2012). Additionally there are many tasks, mainly computer-based, that might be simple in their implementation but also time consuming. By multitasking, employees can reduce their completion time and increase their efficiency. The asynchronous technology like communication via email, supports multitasking while the communication via phone is direct and more demanding (Aral et. al, 2007). In case of routine tasks or tasks that are not complicated or demanding, multitasking can increase the employee efficiency when the working time is allocated properly (Adler et. al, 2012). However, it seems that there is an inverted-U relationship between multitasking and employee productivity (Adler et. al, 2012). As Aral et. al (2007) state in their study, multitasking beyond a certain point has negative effect on employee efficiency since high level of multitasking is linked with higher task error rates. In high levels of multitasking loss of efficiency is observed. Complicated tasks cannot be performed in parallel with other tasks in order to avoid errors and don't make discounts in the quality of the produced work (Buser et. al, 2012).

In a global environment, where competition is intensive almost in every industry, the

ISSN 2076-9202

organizations should invest on the training and development of their personnel in order to retain their profitability and viability. Employees should always be competent both socially and technically and this can be achieved through continuous and systematic training. A training framework should be designed based on the needs that were identified (performance gaps, additional skills and knowledge). Participating in such courses and acquiring new skills, leverages employees' ability to perform their tasks in different way resulting in increased efficiency (Asfaw et. al, 2015). Nowadays, knowledge quickly becomes outdated which means that it is important to train and develop new skills on a regular basis. The acquired know-how should be used in order to design and produce services with higher added value (Gopalakrishnan, 2012). Innovation is the key for success. By designing and implementing innovative products and services, the organization enforces its presence in the market. Companies that are characterized by team spirit, ability to respond very fast to changes and their employees are eager to share their knowledge and generate ideas over brainstorming, are creative.

Incorporating in the personal development plan of each employee a minimum number of trainings that he should participate, forces the personnel to acquire new skills or refresh some of the existing. The combination of experience and advanced know-how is an ideal scenario and makes the employee to take advantage of all of his capabilities and perform his tasks more efficiently (Eneh et. al, 2015).The human capital of a company is very significant for its profitability. For this reason, organizations invest on the competence development of their employees. The employees with good know-how on the processes and their tasks are more important than those with social skills. Sharing the procedural information, employees can handle recurrent problems in more efficient way (Aral et. al, 2007). Managers should promote knowledge sharing, through internal trainings and pair-work, to acquire, all the employees, a minimum level of know-how (Kontic et. al, 2009). In general, experienced employees can make the appropriate prioritization in their tasks, and since they know the processes can decide or ask for advice on how to bypass the constraints that might delay the completion of their tasks (Rapp et. al, 2006). Experienced workers usually have built a network of people, can easily request help from the proper person and delegate tasks, if it is necessary, to the right person (McGover, 2010).

ISSN 2076-9202

Summarizing, the experience is the secret of the success, it might help the employees to explore how to work smart and improve their efficiency by reducing tasks completion time (Rapp et. al, 2006).

2.3 The influence of the leadership style on the employee efficiency

The main objective of each organization is to meet the customer needs and increase its perceived customer value. To achieve this goal, the employees should be aware of the company's values and get inspired to be part of its success (Abdul et. al, 2012). It is crucial for each organization, to develop leaders that follow the empowering behavior and inspire everyone to work more efficiently (The Ken Blanchard Companies, 2009). Employees that are provided with all the necessary tools, resources and the proper direction perform at higher levels, since they are aware of the current priorities, can bypass obstacles, and complete their tasks in the proper way. It is important for workers to have clear direction on their job, in order to avoid working on tasks of low importance and not in other more critical just because they are not aware of the priorities. Leaders that promote the participation in the decision making process and remove possible bureaucratic restrictions make the employees feel accountable and be more effective and efficient (Rapp et. al, 2006).

Additionally the leadership style that is adopted by the managers might affect the labor productivity. Umaru et. al (2014), at their research found that democratic groups show higher efficiency because of their effective cooperation while the attitudes that are met in autocratic groups might reduce the employee productivity due to higher labor turnover. The existence of high employee turnover indicates that the employees are not satisfied by their job and it affects in negative way the employee and the overall efficiency of the organization (Ramzan, 2013). Having in mind that high turnover rates reduce the workforce of the organization and increase the workload of the remaining employees and the organizations' incentive to provide training programs is reduced, at the same time, the outcome is lower employee efficiency and productivity. Being in an environment where people feel uncomfortable employees are working with less output efficiency (Abdul et. al, 2012).

ISSN 2076-9202

2.4 The impact of the workplace on the employee efficiency

The working environment, through its infrastructure, might help employees to work more efficiently. For this reason it should be designed in such manner that it will satisfy the needs of the employees for natural light, ventilation and climate control, by providing good working conditions and serve, at the same time, the work processes in the most appropriate way (Petrova, 2011). There are several studies (Haynes, 2008, Petrova, 2011) examining the impact of the "flexible" or "smart" working environment, not only in terms of flexible office layout but also in terms of time flexibility and locational mobility, on both employee efficiency and productivity.

Depending on the employees' daily tasks and the work processes, four working patterns were identified: Hive, Cell, Den and Club (Haynes, 2008). Hive is suitable for work based on individual autonomy with no need for interaction, while cell is more suitable for work that needs concentration. Den is ideal for group work where cooperation is the key and finally club, where the individual autonomy is increased and there is also need for brainstorming (Haynes, 2008). In smart workplaces there is a mix of the four aforementioned workspace types (Petrova, 2011) with both open space offices and rooms provided for privacy and concentration, resulting in the coexistence of the individual and team based work (Haynes,2008). The face-to-face interaction is promoted through the open space offices increasing the collaboration of the employees, which is very crucial especially when projects are undertaken by teams with many members where coordination is needed, the problem solving becomes easier due to the open communication and possible brainstorming, and consequently the tasks can be accomplished in less time improving the employee efficiency (Hammed et. al, 2009).

Being flexible in the working hours means that the employees have the opportunity to perform their tasks at the most appropriate time, especially when they have to collaborate with colleagues or customers in other countries, where time difference exists. This flexibility is supported by the advances of the technology, which brings the people closer even on a remote location, distance is eliminated, and makes them work more efficiently individually or in virtual teams (Petrova, 2011). The employees that are allowed to control their starting and finishing time, distribute their workdays over the working week

ISSN 2076-9202

and set their breaks according to their needs can use their time efficiently and accomplish their tasks with less effort (Beckmann et. al, 2017). By adopting the idea of flexible working time or self-managed working time, employees can decide about the duration or the location of their work, from office, home, café or airport (Attkinson & Hall, 2011) eliminating possible "work to family" conflicts. The organizations that develop the idea of work-life balance, mainly by removing possible time-based or strain-based conflicts (Myilswamy & Gayatri, 2015), help their employees to have less stress and become more efficient since they are happier, highly motivated and able to focus on meeting their deadlines and producing work of high quality (Humbert, 2010).

3: Smart work vs Hard work: the debate, influential factors, strategies

The last years we experience a global financial crisis threatening the organizations around the world and made them reconsider their strategies (McConnell, 2011). The working environment became highly unstable and competitive. The economic crisis caused high unemployment rates, suppressed the wages and made employees feel threatened (Judge & Kammeyer-Muller, 2012). Due to reductions in the workforce employees are getting more responsibilities and they have to work harder, sacrificing many hours, in order to cope with their new duties (Feldman, 2002). On the other hand, workers are forced to work smart and respond to the pressure of the competition maintaining a healthy psychology, without influencing their work-life balance (Donnelly, 2006).

3.1 Smart work vs hard work

3.1.1 Views about working hard

For many decades, the hard worker was considered as a value asset for the organization and the workaholics, people who are used to work many hours, were viewed positively, recognized and rewarded (Douglas & Morris, 2006). The result was the creation of a trend towards work for long hours due to consumerism, or due to the peoples need for recognition (Kuhn, 2007). Additionally the aforementioned trend is maintained in many nations because the culture influences the way people perceive the meaning

ISSN 2076-9202

of hard work (Fang et. al, 2004). However it seems that nowadays there are employers recognizing that working for many hours does not necessarily means that the employee is more productive (CIPD, 2008). By devoting long working hours in a daily basis, the employee has less time for everything else affecting in this way the quality of his life (Hassan 2016). The human needs and wants can be satisfied by her/his work, and by working too many hours the need for socializing and deep communication cannot be accomplished leading to work-life imbalance (Myilswamy & Gayatri, 2015).

3.1.2 Approaches towards working smart

The globalization forced a lot of changes to the nature of work, for example, full time employment was replaced by part-time or outsourcing, the new workforce is temporary since the employees can be replaced easily (Kazi, 2011). In this highly competitive environment the only way to succeed is by working smart. The term "smart work" is not something new and it is not easy to give a clear definition for it. Smart work is what makes the difference, an approach to organize work in order to improve the employee efficiency and achieve high outcomes (CIPD, 2008).

Working smart is the way to achieve the maximum value for the invested time and effort, all these elements that each employee should implement in his strategy in order to be more productive without spending long hours in work (CIPD, 2008). Another approach of smart work is the practice that is characterized by flexibility in working location and time, supported by the tools that technology offers and in general provides the best working conditions to the employees to accomplish their tasks (Raguseo et al., 2016).

3.1.3 But is it enough just to work hard or smart?

As Khan (2016) states, traditionally, working hard is considered to be the cornerstone of achievement. From our childhood, we are taught that we should work hard in order to succeed (Fang et. Al, 2004). However, many people do not achieve their goal even if they have worked hard on it. So, what was wrong in their strategy? The key is to work smart, make smart choices or get the right decision. Work smart to make the difference. Smart people move up the ladder real fast (Khan, 2016). However, working

ISSN 2076-9202

smart is not the panacea; it is only half way to success (Moroney, 2013). Working hard or smart cannot be separated from each other, even if someone works hard he has to make smart choices. People have to work smart in order to plan their goals and then work hard to achieve them (Khan, 2016). Working hard gives you the desired results but working both hard and smart gives you the best results (Moroney, 2013).

3.2 Influential factors – Strategies

The globalization integrated the world. The barriers were removed, taxes were reduced if not removed and the free market became a fact. The goods and services of each company went out of the country's borders and entered the global market, which is characterized by intensive competition (Aspray et. Al, 2006). Firms were impelled to suppress their costs and increase their productivity in order to survive in the new environment. Moving to this direction, an objective of each organization is to boost the efficiency of its employee and attract talented employees from the global market due to the existence of free labor movement (McMillan & Rodrik, 2014). Summarizing the challenge for every employee that is competing in the global environment is to make the difference, become talent by adopting the practices and acquiring new skills that will help him to increase his efficiency with the same effort, in other words to work smart (Raguseo et. al, 2016).

3.2.1 Employee time is the most precious resource

Everything is a matter of time and through the appropriate time allocation, worker can accomplish more tasks. By teaching the people how to make a daily plan with the ongoing tasks, prioritize and handle the incoming tasks that were not scheduled, employees will operate more efficient (Claessens et. al, 2007). Every employee can make his schedule for the next days and have an idea on what comes next (Dillard, 2012). By having clear requirements for every single task, time is saved for other activities.

By making the appropriate prioritization, the employee knows which are the most important tasks and can start his day with those, since the most productive hours are in the morning when he has clear mind. In case he comes to a dead end, smart worker has no problem to ask for help and through the

ISSN 2076-9202

network he has established can address his questions to the most appropriate person (Dillard, 2012). Most of the employees are asked to undertake multiple tasks in parallel. Switching between tasks might be exhaustive for some workers but might also be a way to refresh their mind when they get stuck and come back with a fresh eye (Madjar & Shalley, 2008). Working in multiple tasks is a smart strategy that gives the opportunity to reallocate the time between the tasks during their execution (Buser & Peter, 2012). Multitasking is not appropriate for complex tasks while it is most suitable for routine or time consuming tasks that are simpler in their implementation (Madjar & Shalley, 2008).

3.2.2 Be the talent that every company seeks for

According to Garllando et. al (2013), talent is a special ability that someone has, and when he uses it, makes the difference and comes above the rest of team members. Consequently, the talented employee is usually considered as high performer in the specific area (Garllando et. al, 2013). As talented is considered the person that has an innate ability in a specific field (Tansley, 2011). However, Pfeffer & Sutton (2006) state that a talent can be acquired with the combination of training, experience and hard work.

Personal development is the only weapon that the employees have in order to become talents, respond to pressure and stay ahead of the competition (Donelly, 2006). Highly educated workers, eager to work for long hours with low wages, are available in the labor market and clamp both employees and organizations (Aspray et. Al, 2006). Individuals through trainings can enrich their skills, acquire new that can be used to become more productive or enable them for future job requirements (Milhem et. al, 2014). By investing in their personal development employees can perceive higher job security and have better control over their career (Lee & Bruvold, 2003). The key to success is flexibility, meaning that the employee should be fast learner and adapt quickly to every situation in order to survive in the rapidly changed environment where the knowledge becomes obsolete with fast pace. Knowledge is the most highly valued asset that gives a competitive advantage both to employees and organization (O'Neill & Adya, 2007). Becoming expert in a field, the employee works more efficiently, produces work of high

ISSN 2076-9202

quality and finds the way to accomplish his tasks with less effort and time (Garllando et. al, 2013).

Knowledge is strength for employees and competitive resource for the organizations (O'neil & Adva, 2007). Knowledge sharing is a sending and receiving process that each employee should adopt since only good things can gain (Foss et. al, 2009). In this way, the employee can create a good network and ask for help from the right person every time it is necessary (McGovern, 2010). It takes less time to implement a task when you ask for help from an expert in the field when you get stuck; there is no need to re-invent the wheel.

Through the knowledge–sharing process new innovative ideas might be generated resulting either in the designing of new tools that will alter the way the employees work (Umashankar, 2011), or in the generation of new products and services improving the competitiveness of the organization (Sadikoglu & Zehir, 2010). Most of the organizations nowadays consider the innovation activity as something mandatory for their wellbeing. The companies seek for employees passionate with innovation since it might result in increased productivity (Osman et. al, 2015).

3.2.3 Flexibility is the key word

Workplace flexibility is considered the ability of employees to choose where they will work, when and for how long (Hassan, 2016). In this way the workers can adjust their working hours in the most appropriate way (Golden, 2012), by making possible the communication and collaboration of employees located in different time zones, promoting the existence of virtual teams with members from different sites (CIPD, 2008). Employees can take breaks, clear their mind and come back more productive (Feldman, 2002).

The employees that work remotely from home, through the technology can communicate with their co-workers in real-time as if they were close to them. The workers should be aware of the information technology, the available tools, have agile skills and be adaptable to change (Hassan, 2016). The idea of working smart helps people to maintain their work-life balance since their responsibilities in professional life will not conflict with those of their personal life (Myilswamy & Gayatri, 2015).

ISSN 2076-9202

Additionally, the organization should have the knowledge available for all the employees in a common place, make the necessary alliances and agreements that will improve the knowledge sharing process and provide computer-based training or platforms that operate as learning centers (Yuliani-Suseno, 2006). Each employee should be able to access easily the information he wants. Through the use of the existing and new technologies the technological innovation can be achieved affecting in a positive way the employee performance (Dasgupta et. al, 2011). The routine tasks can be performed through automation or clearly defined process saving a lot of working time.

4: Methodology

In this part the approach that was followed for gathering data and analysis is presented. The basis for developing the research methodology of this study was the findings from the literature review. The next sections describe the research method and the design of this study. Additionally, in this part is also included an analysis of the demographic characteristics of this study's sample.

4.1 Research's method

The objective of the scientific research is to build scientific knowledge by finding laws and creating theories that can explain natural or social phenomena. So the science, in general, is based on theories and observations, therefore the scientific research consist of the theoretical and the empirical level. The theoretical level develops abstract ideas about a phenomenon and builds theories by finding possible relationships between concepts while the empirical level investigates the theoretical concepts and relationships to figure out how well the theory reflects the reality with the goal to improve the existing theories. Therefore both theory and observations are significant for the scientific research (Bhattacherjee, 2012).

The qualitative analysis is an exploratory research, used to understand the underlying reasons, opinions and motivations, describe the problem or develop ideas or hypotheses for eventual quantitative research. The qualitative data is text data collected from interview transcripts. On the other hand the

ISSN 2076-9202

quantitative research is used to quantify the problem by using numerical data that can be transformed into useful statistics. It is used to quantify opinions, behaviors, attitudes etc. and extract results from a large sample population. It uses measurable data to describe facts and reveal possible patterns. The quantitative analysis is driven by statistics and independent on the researcher while qualitative analysis depends on the researcher's skills and knowledge.

The various research methods were examined and the author decided to use only quantitative methods in order to examine the main objective of the study; namely the most important factors that are necessary for an employee to work smart. The quantitative approach that was selected is the most appropriate based on the research questions that are investigated: a) the definition of the term "working smart", b) if working smart is enough in order to increase the employee efficiency, c) whether the technology helps employees on working smart and d) which factors are important in order to become smart worker

The author is interested in exploring whether the definition of the smart work, the feeling on what is necessary today and the factors that lead someone to become smart worker differ between: a) men and women b) different age groups c) different working experience d) different job positions e) different educational levels f) people working different number of hours. The main objective of the research is to record the factors necessary to increase the employee efficiency and provide the corresponding framework containing all the tools that will help the organizations to promote and adopt the approach of smart work, and the individuals to increase their efficiency. By analyzing the collected data from different perspectives, the needs of each target group are identified and recorded and therefore, organizations are able to modify easily the provided framework and use it more efficiently.

4.2. Data Collection

Date can be classified in many ways however the most common classification is based on who collected the data. As primary data are considered the data collected by the researcher for a specific purpose, gathered mainly through questionnaires, interviews, etc. On the other hand, the secondary data

ISSN 2076-9202

are collected by someone else for another purpose but is used by the researcher, are usually found in books, articles, reports etc.

In this study the author uses both data types; the literature is used in order to collect information relevant to the topic of the study while primary data collection performed through short questionnaire. The author through the review of the existing literature collects the key concepts and issues that are related to the scope of the study to create the base in order to start her study. The main sources for the secondary data collection are google scholars and internet journals. Since the base of the study is created, the author proceeds with the collection of the primary data using a properly designed questionnaire. The main advantage of the primary data is that the data are collected from the researcher specifically for the purpose of the study, thus data are recent.

4.3 Survey research

The survey research is a research method that uses questionnaires or interviews to collect data about people, their thoughts, feelings, preferences and behaviors. This method is a very popular method in social sciences and used in quantitative research especially when the studies involve individuals as the unit of analysis. The reasons that helped the author to select and use the specific method are the following: The survey research is ideally suited for measuring unobservable data, like people's preferences, thoughts, feelings, attitudes and behaviors. Also, the sample of the research is geographically dispersed in three different countries with significant time difference between them, thus a survey sent by e-mail can easily reach them. This method is preferred by some respondents since it assures the anonymity and people feel that they can be expressed freely. At last, the survey research is economical by means of researcher's time, effort and cost. However this method is subject to a number of biases, like sampling bias, social desirability bias, non-response bias and recall bias (Bhattacherjee, 2012).

4.4 Questionnaire design

The survey research was performed through a structured questionnaire. The questionnaire is a way to gather data in sample surveys. This tool was selected due to its advantages. It is the quickest way to

ISSN 2076-9202

collect the required data, it can be distributed to a large number of participants at the same time and the participants have the time to think and answer the required questions at their time.

A structured questionnaire was designed based on the needs of this study and the review of the existing literature, and distributed by e-mails to a large number of employees of a large organization. The author used a questionnaire short in length, clear and to the point. She decided to focus on thirteen questions in total, that could be answered easily and were categorized in two sections. The first section contains the demographic information such as gender, age, educational background, job position and working experience.

The second section includes all the questions that are necessary to answer the research problem. The main questions are the definitions of smart and hard work, the impact of the technology on smart work, whether it is adequate just to work smart today and the factors that are important in order to adopt a smart work approach. Moreover there are one or two questions that were repeated, rephrased, in order to check the validity of the answers.

Type of the questions

The questionnaire includes the following types of questions: 1) Close–ended questions, 2) Open–ended questions, 3) Multiple choice question ,4) Question with an answering scale (5-point Likert scale with 1='not important' and 5='very important'

Inform the participants

The author had informed the teams and their members about the study and that they will receive an email on the upcoming days requesting their participation. The questionnaire was distributed through email to all the employees of a specific project in one software development company in the ICT industry. It was also clarified that the survey is anonymous and the received answers will be used only for the purposes of the specific study.

Questionnaire's distribution

The questionnaire was running on Google docs. The research link was sent to the author's colleagues through an email. The distribution list contained engineers (developers or testers), managers and top level managers who are working in the same project. After a period of one month a reminder was

ISSN 2076-9202

sent to the participants.

4.5 The sample of the study

The sample is the group of people that participate in the research, called participants, and were selected from the population through the sampling process. In this study the participants were selected through convenience sampling. The criteria used for the selection of the sample were that the participants should be occupied in a specific industry (ICT) to ensure that they operate in similar environment and the time limitation. Thus the researcher selected the participants using the convenience sampling technique which is a non-probability sampling technique where the sample is selected mainly because it is easily accessed.

The target initially was to collect at least 200 participants living in different countries, working in different projects but all members of the same business line of a large organization. The specific organization was chosen in order to have a sample with the same experiences (working environment, culture, values, processes, etc.) but working in different positions. The responsible people from two projects were contacted to be asked for their contribution to the research however the people from the one project could not help during this time period due to their workload and strict deadlines. So the researcher contacted 200 employees of an organization, working in the same project and living in different countries, however only 111 individuals responded. The number of the participants was a surprise for the author since unfortunately, it was under her expectations. The researcher faced a strange negativism on filling the questionnaire even if the people were informed that the survey was anonymous and only for academic purposes. The survey was open for a period of 2 months (from March 2017 to May 2017) and out of 200 who hit the survey link only 111 answered all the questions. Thus, the response rate was 55.5% which can be considered as adequate for analysis, since response rates of at least 50%, for questionnaire surveys, is adequate (Rubin & Babbie, 2009).

ISSN 2076-9202

5: Research findings and analysis

In this part are presented, in short, the demographic characteristics and the research findings. The author describes the collected data in order to have a first indication about their characteristics. The collected data is analyzed through six different perspectives in order to identify possible relationships between the variables. The goal is to create a framework that both the individuals and organization can adopt in order to achieve better efficiency. For this reason all possible target groups are investigated to identify possible differences in the responses. All related tables and figures can be found in the Appendix II.

5.1 Demographic characteristics

The sample was consisted of 111 employees, 65 (58.6%) men and the remaining 46 (41.4%) were women. A significant objective was both genders, if it is possible, to be equally represented and it seems that this was achieved. Furthermore it is shown that most of the respondents were between 30 and 40 years old (60.4%), while the groups below 30 years old and between 41 and 50 years are equally represented (18%) and the rest of the respondents (3.6%) are over 51 years old. The majority of the participants, almost 62%, have been working for 5-15 years. A significant amount of respondents (21.6%) have working experience less than 5 years and the rest of them are distributed in the two other categories, 10.8% have been working for 16-20 years and the remaining 5,4% over 21 years. Additionally most of the participants are engineers (73%) and the rest of them are either managers (23.4%) or top level managers (2.7%).

Regarding the educational background of the respondents it seems that all the categories had sufficient participation except for the category “High School” which had only one participant (0.9%). The majority of the participants (64.9%) had MSc while 25.2% had BSc and the rest 9% had PhD. Only one out of three employees works for 40 hours per week. The rest of the respondents indicate that they perform overtimes in a regular basis .Moreover, it seems that the employees that work for long hours, have the flexibility to work remotely . Almost half of the participants believe that they are both smart and

ISSN 2076-9202

hard workers as time dictates This is verified by the fact that most of them devote a lot of personal time in order to accomplish their tasks. Summarizing, most of the participants were between 30 and 40 years old, engineers, with higher education (bachelor's and master's degree), working more than 40 hours and with working experience between 5 and 15 years. In general, it is a representative sample of the workforce in the software development industry of Greece since it is a sector that was developed mainly the last decades.

5.2 Definition of smart and hard work

The majority of the participants, almost 90%, agree that by the term working smart we refer to the way people organize their tasks in a more efficient way, in other words means better time management.

What is the meaning of "smart work"?	Count	Percentage
make good decisions	4	3,6%
organize your work in more efficient way	99	89,2%
work fast	0	0,0%
use up-to-date tools	4	3,6%
easy and global collaboration	3	2,7%
Other	1	0,9%

Table 5.2: Definition of smart work

On the other hand, it seems that the 70% of the people believe that making sacrifices in order to achieve your goal, is the definition of hard work. While the 24% states that working hard is synonym to work for long hours (Table 5.2.2). Both views are consistent with the literature since by working for long hours every day, the employee has less time for everything else causing work-life imbalance.

ISSN 2076-9202

5.3 What is necessary today for better employee efficiency

Almost 2 out of 3 participants state that through smart work employees can achieve better efficiency and the rest of them believe that their efficiency might be increased with both smart and hard work (Table 5.3). In the question on what is important in order to improve the competitiveness, the answers were distributed almost equally between the smart work and both smart and hard work . The participants have also indicated that in situations which stress the people, like the financial crisis we face the last years, it is important to work smart, make the difference, and increase the employee productivity . However, half of the respondents believe that it is necessary to work hard as well, implying that working both smart and hard employees will get the best results, which is close with what Moroney (2013) stated. Additionally the respondents believe that today it is expected to work both smart and hard in order to achieve the expected results due to the increased workload. This is the feeling of the employees who believe at 61% that their employers expect them to work both smart and hard . The given answers, to the questions related to what is necessary today in order to improve the employee efficiency, indicate that through working smart employee productivity can be improved resulting in increased competitiveness (CIPD, 2008).

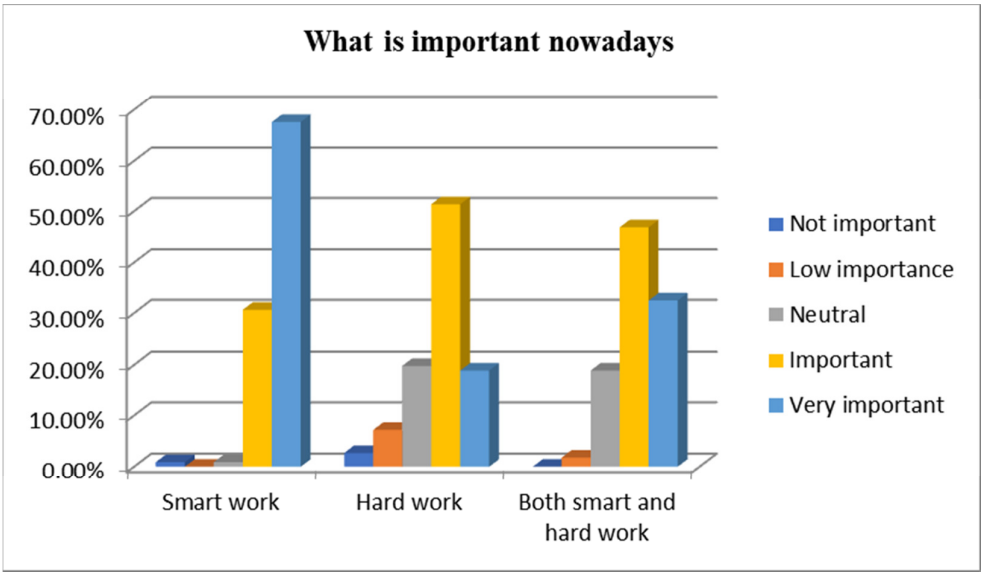


Figure 5.3: what is important nowadays to improve the employee efficiency

ISSN 2076-9202

5.4 Technology and other important factors contributing to smart work

Evidently, the technology is responsible for most of the changes in the way people work. The breakthrough technology achievements provide the tools that are necessary to adopt the working smart approach. Almost all of the respondents (94%) agree that technology is their ally and unfolds the means to organize their work in a more flexible and efficient way (Table 5.4.1). By identifying the most important factors that increase employee efficiency, the tools aiding employees to become smart workers are also revealed. So the participants were asked to indicate which are the factors (based on the existing literature) that improve employee efficiency and indicate their importance. It seems that the 78% of the employees (Table 5.4.2a) indicate that through the personal development process (acquire new skills and knowledge) they can work smarter and increase their productivity. The next factor is time management with 63%, indicating that the way people organize their work is very significant if they want to work smart and save time for other tasks.

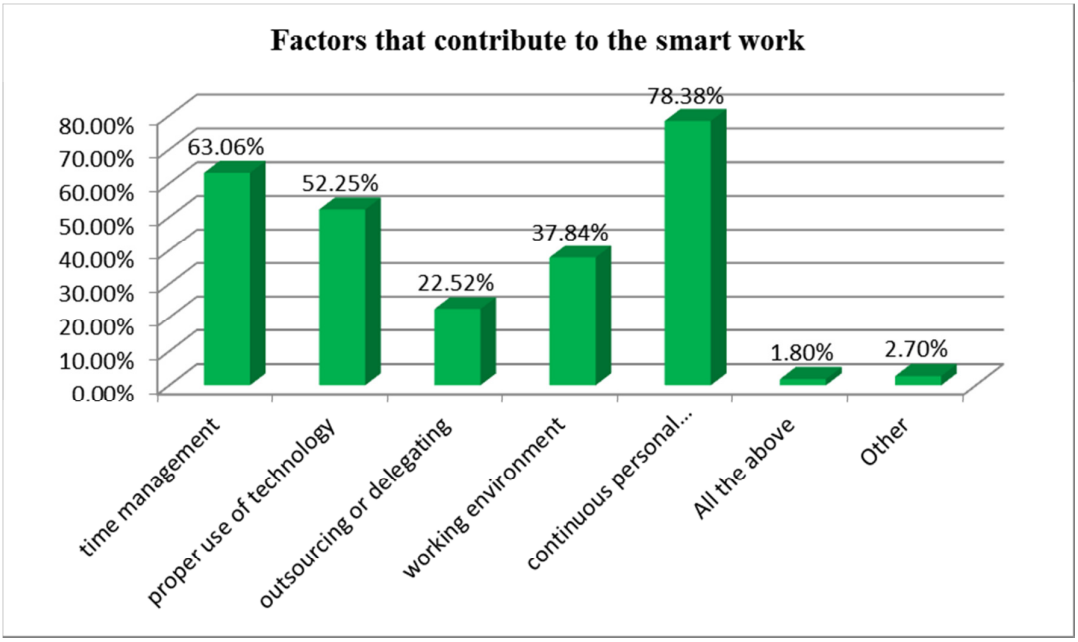


Figure 5.4.1: Factors contributing to smart work

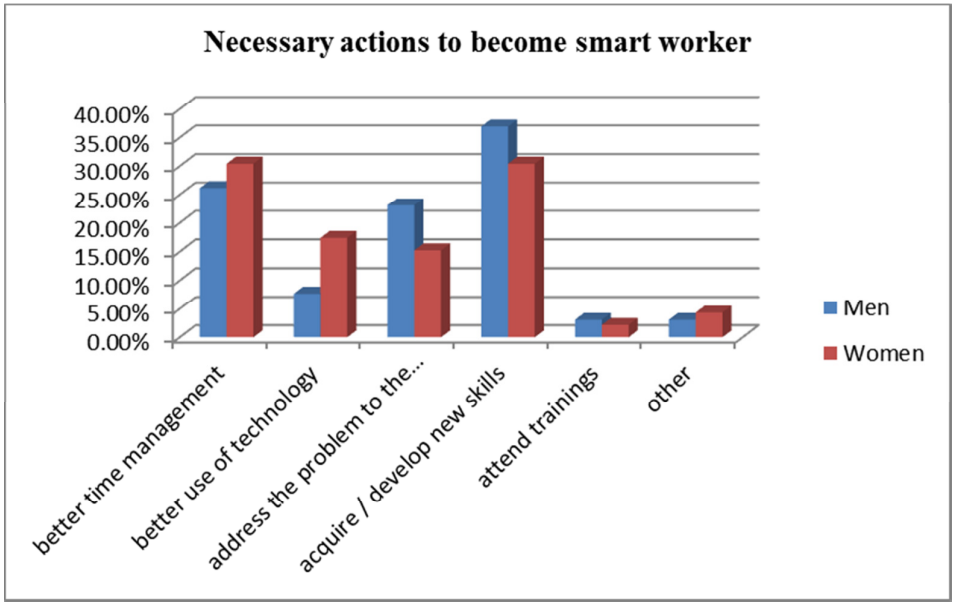
As the following figure indicates, all the factors are important in order to adopt the approach of

ISSN 2076-9202

working smart .The highest ranked factors are time management, proper use of technology and continuous personal development. Additionally, participants were asked to indicate what they feel is necessary to become smart workers. This question is used to check the validity of the answers since it is similar to the question about the factors that are important in order to work smart. The respondents answered as it was expected, indicating that the development of new skills and the proper time management are crucial for working smart and might improve their efficiency .

5.5 Analysis per gender

The collected data was examined from the gender point of view. It seems that both genders respond similarly in almost all of the questions. However, we have to point out the trend of men to work for long hours .This might be explained by the fact that women have to work a "second shift" at home (Feldman, 2002). Another observation is that the actions that are necessary in order to increase the employee efficiency and work smart depend on the gender. The correlation is weak . However, it seems that the majority of men believe that through the development of new skills their efficiency will increase while women think that both better time management and development of new skills is equally important .



ISSN 2076-9202

Figure 5.5.2: What is needed to become smart worker

5.6 Analysis per age and working experience

In general all the age groups (below 30 years, 30-40 years, 41-50 years and over 51 years old), responded in the same manner. But some interesting things appeared. Most of the people below 30 years, with experience less than 5 years, believe that the definition of hard work is to make sacrifices to achieve your goals. As people grow, thus their working experience accumulates, they believe that working for long hours can be considered as hard work as well.

All the respondents recognize the importance of smart work in order to increase their efficiency and competitiveness; however it seems that as people become elder they realize the importance of hard work in order to achieve their goals. Almost all the participants believe that today it is necessary to work both smart and hard, in order to survive in the highly competitive environment . Almost all of the participants believe that through better time management and development of new skills and acquiring new techniques on how to accomplish their tasks, will improve their efficiency. As experience is increased, people identify the need for delegation, since by addressing the right task or problem to the right person the completion time of the task might be decreased.

ISSN 2076-9202

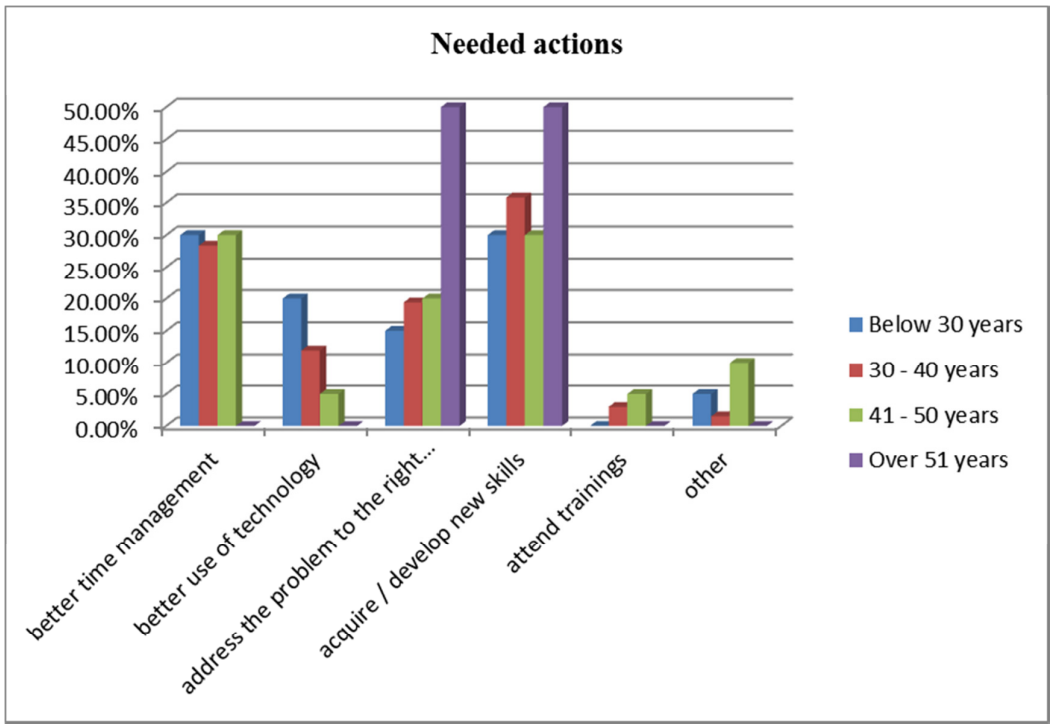


Figure 5.6.1: Necessary actions to increase the productivity

The analysis between groups with different working experience did not revealed something new. Actually the findings, as it was expected, are similar to those of the previous paragraph since the working experience is related to the age of the employee. However the author decided to perform this analysis, even if the outcome was expected, as a way to test the reliability of the sample .

5.7 Analysis per job position

Two groups were examined, the engineers with 81 members and the managers with 30 members (the last group contains two top level managers). It is interesting that mainly the managers recognize the conveniences that technology offers and indicate the use of up-to-date tools as a way to increase their efficiency .

Some engineers believe that the lack of cooperation, working in silos, isolated without the ability to exchange ideas, share thoughts and do brainstorming is actually the definition of hard work (Table 5.7.3), by means of spending a lot of time to solve problems that would be solved faster through the effective cooperation between the employees. Additionally both groups recognized the need for both hard

ISSN 2076-9202

and smart work, having managers to be closer to this approach. It seems that managers tend to work for long hours (Table 5.7.1) since they have more responsibilities and should be the example for the rest employees (Feldman, 2002).

All the employees have common understanding on what actions should be performed to improve their efficiency which makes sense since they operate in the same working environment and in the same project. It is interesting that managers recognize the significance of time management in higher degree than the engineers.

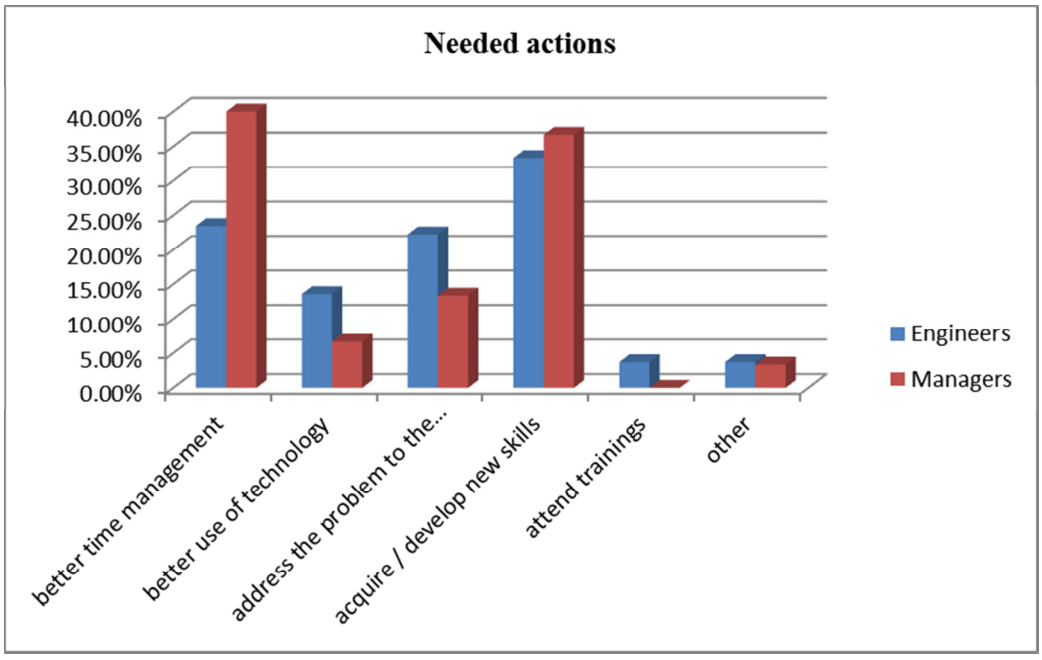


Figure 5.7.1: What is needed for improved employee efficiency

5.8 Analysis per educational background and working hours

As it was expected the majority of the employees, in all groups, indicate that the way work is organized might improve the employee efficiency. However there are some employees, mainly with PhD, that recognize the importance of easy collaboration and the knowledge sharing between employees as a way to accomplish their tasks and save valuable time.

Apparently there is a weak correlation (Table 5.8.1) between the educational level and what is needed to achieve the expected outcomes. As the educational level increases the need for both smart and

ISSN 2076-9202

hard work is increased as well. The ANOVA showed that the perception on how to accomplish successfully their tasks depends on the educational level of the employees. In order to verify that the ANOVA's result is correct, due to small sample, the author performed t-tests between all the groups . Another observation is that while the educational level increases, the employees become more hard workers by means of working for long hours. Additionally it is interesting the fact that each category characterizes itself differently. Employees with BSc characterize themselves as hard workers while only half of them work overtime. Participants with MSc seem to be smart workers even if most of them work for long hours. And finally employees with PhD are considered as both smart and hard workers while the majority of them work overtime. This trend can be explained by the fact that employees with PhD are younger, have less working experience and less confidence to their judgement, and now they are building their carrier, so it make sense to work more hours . Another interesting observation is that employees of different educational background have different opinions about what is necessary to increase their productivity. It seems that people with PhD recognize the need to delegate the work to the proper person and not spend time to tasks that are not under their expertise.

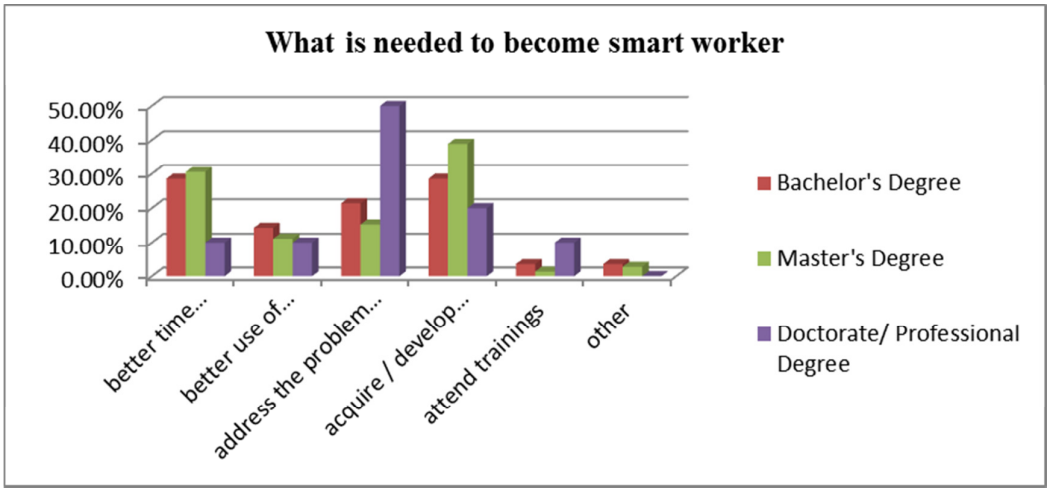


Figure 5.8.1: Needed actions for improved efficiency

The author performed ANOVA even if the correlation was very weak however the p-value was greater than the significance level, which means that there is not enough evidence to reject the null hypoStudy (all the groups have almost equal means). Indeed the sample is not big enough to make safe

ISSN 2076-9202

conclusions since only 9% of the sample has PhD.

The analysis using groups of people that work different number of hours, have demonstrated similar behavior (the results were the same as in the previous paragraph), except the one with the biggest amount of working time. However this group had only two participants and we cannot export any safe conclusion. Interestingly enough, there are some people who believe that by making good decisions or through the collaboration can increase their efficiency. It seems that is necessary for employees to have the right directions from the management in order to make the right decisions at the right time .

6: Discussion of findings

In the previous parts the author attempted to identify mainly how the employees can be assisted in order to increase their efficiency, by identifying their needs. What people mean with the term "smart work" and if only by working smart employees can increase their efficiency nowadays. The following paragraphs will give a description of the working smart approach and the tools that will help employees to work more efficiently.

It is very common for the same task people might give different effort estimation and completion time even if they have the same educational background and operate in similar environment (McGovern, 2010). It seems that some people are more efficient than others. Employees might work smart and complete their tasks in less time than others producing more output with the same effort. Besides, employees and managers are often inefficient just because they either do not know how to be efficient or do not have the necessary tools to perform their tasks with less effort (Sirichoti, 2013).

6.1 Working smart, is it enough?

But what means to work smart? According to the research's findings, as smart work can be considered the way to organize work to save time for other tasks. It is a matter of better time management. On the other hand, the literature implies that smart work is the way to achieve high outcomes with less effort. All those techniques assist employees to become more efficient (CIPD, 2008). It's the way to

ISSN 2076-9202

organize work in a better mode, make good decisions, proper prioritization, effective cooperation, do not hesitate to ask for help and delegate when it is needed, being agile and adaptable. In general the smart worker has adopted all those techniques that will help him to accomplish his tasks saving time for other tasks.

Both the globalization and the financial crisis, influenced in a high degree the working life of the employees. The work is intensified, jobs are insecure, the ability of free movement and the available highly educated labor in the global market forced employees to become more competitive (Kazi, 2011). Therefore every employee that wants to succeed and achieve his goals, should modify his personal strategy and include those techniques that will differentiate himself. But is it enough for the individual, nowadays, just to work smart to increase his efficiency? Nowadays, the work is intensified due to workforce reductions, the workload is increased and employees are forced to work both smart and hard in order to accomplish much more tasks, ideally in the same time. Therefore the participants indicate that by working smart their efficiency will be increased but if someone wants to be competitive he has to work hard as well. According to Moroney (2013), both are needed. Work smart to save time and work hard to make even more time to accomplish much more tasks.

6.2 How the employees can be assisted to increase their efficiency?

So what is necessary in order to become smart worker? The author has analyzed the received data from six different perspectives in order to create a framework that will be used by individuals to increase their efficiency and organizations, to design their actions depending on each group of employees and their needs. It is more than obvious that training is the most significant tool in order to adopt the approach of smart work. Each organization should promote personal development since this way employees can assess their skills and knowledge and set goals, in a regular basis, to maximize their potential. For this reason a training process should be implemented.

The performed analysis indicated that most of the employees recognized the need for better time management. By attending in related trainings, internal or external, employees can learn those

ISSN 2076-9202

time-saving techniques that will help them to organize and plan their work in a more efficient way. External trainings might be provided for specific target groups, for example in the previous part the author has identified, that a group of people recognized that through the usage of up-to-date tools will increase their efficiency. This demand might be fulfilled by both incorporating state-of-the-art tools and in parallel, train the employees, through external trainings, on how to use them in the most efficient way. Another important tool is the internal trainings, which is a good way to promote the knowledge sharing process, also proved to be very important. Additionally the job rotation might be a good technique since the best way to learn something is by training on the job. As the employee becomes more experienced, identifies more easily possible side effects of his decisions and becomes "smarter", makes smart choices, takes good decisions (Khan, 2016). Besides, the training and development activities in which employees participated, brings new potentials of employees in performing tasks more and makes them more effective and efficient (Asfaw et. al, 2015).

Organizations and individuals should take advantage of technology and use all the available tools that were designed especially for this purpose, to improve the employee efficiency and thus also the labor productivity. The communication becomes immediate through the several platforms, which apart from communication provide the ability to share screens, exchange files, make group chats, etc., and make cooperation more effective. According to McGorvern (2010), the organizations that enable their employees to find, quickly and easily, the right people, will have a major competitive advantage. Moreover, technology provides tools, commercial or not, to automate some processes, simplify the work and helps employees to organize their work more efficiently. By making easier and faster the way employees do their work, their efficiency is increased, they feel satisfied and become more productive (McGovern, 2010). In general technology is the best partner.

Additionally, the workplace culture should be changed and promote the smart working approach. The performance criteria might be reevaluated and modified in order to follow this approach, and not count the employees performance with hard work terms. The management should adopt a democratic leadership style and give the employees the freedom to make decisions when it is necessary, have clear

ISSN 2076-9202

directions to prioritize properly their tasks and promote the effective cooperation and the idea of knowledge sharing (Umaru et. al, 2014).

A competence database might be useful in order to delegate properly the tasks to the employees with the appropriate expertise, resulting in the accomplishment of the tasks or project in less time. It seems that only the employees with large working experience, recognize the importance of the delegation. The organization should promote the delegation when it is needed. Time will be saved when problems address the right person (Kontic et al., 2009). Moreover, it is very important for each organization to have a clear picture of the employee competencies in order to perform the proper actions, make the appropriate project planning, design a training framework, curriculums depending on the group he/her belongs to, achieve the desired level of knowledge and be ahead of the competition.

Finally, the working environment is very significant, should be smart and able to improve the employees' daily work, create and maintain relationships between them, increase their motivation, boost the effective cooperation between individuals, offer work-life balance and help them to develop their skills in the most appropriate way.

7: Conclusions, Limitations – Recommendations for further research

The last years we face a global financial crisis with many consequences for both employees and organizations. Businesses experience bankruptcy, unemployment has increased, wages are suppressed and in general the working conditions became worse. At the same time globalization has imposed intensive competition, due to the free market, for both organizations and individuals. The organizations struggle to survive and the only way to achieve this objective is by increasing their productivity (Kazi, 2011). On this direction, human resources departments are trying to find the proper way to increase the employee efficiency. Besides, it is well known that for the same task people with same educational background need more time than others to accomplish it.

Due to the free labor market, a big highly educated workforce is available, and in parallel the organizations demand people to perform effectively and in smart way, creating more pressure to their

ISSN 2076-9202

employees. This study makes an attempt to give the definition of smart work, examine whether it is enough to work smart or not in order to achieve better results and identifies the tools that will drive employees to higher efficiency levels.

For the purpose of this study a questionnaire was distributed to the employees of a large organization in the ICT industry operating in the private sector. The data were collected from employees that were working in the same working environment, the same project but in different job positions and countries. Participants were called to report their thoughts on what is the smart or hard work, what is needed today and how they can achieve higher productivity levels.

7.1 Conclusion

Everybody agrees that nowadays, more than ever, employees have to work smart in order to be competitive and increase their efficiency. But what actually is "smart work"? It is not easy to give a clear and straight definition. It is the combination of many things, all those strategies that individuals can adopt in order to differ from the others. It's the way to organize the work in a better mode, saving time for other tasks, make good decisions, prioritize properly, increase cooperation, do not hesitate to ask for help and delegate when it is needed. According to Dillard (2012), smart work is "an approach to organize the work that aims to drive greater efficiency and effectiveness in achieving job outcomes through the combination of flexibility, autonomy and collaboration, in parallel with optimizing tools and working environments for employees".

Many organizations reduced their workforce in order to suppress their operating costs and as a consequence the remaining employees have undertaken new responsibilities and their work load has been increased. It is unavoidable that in such periods employees are expected to work hard. But in such times that nobody has extra time and everybody needs time for his personal life, only through working smart employees can maintain their work-life balance. Consequently both are needed. Actually, hard work is the building block of smart work. Hard work is required to master your basics so that you can work smart (Khan, 2015). Work smart to organize better the work and save time and then work hard to gain more

ISSN 2076-9202

time and complete bigger part of work. According to Moroney (2013), by working hard employees have the desired results but by working both hard and smart they will achieve the best results.

Everybody knows how to work hard, actually most of the employees are working hard today. But what is it necessary to work smart? In the previous part, the author described a framework that will aim individuals and organizations to improve their efficiency. The workplace culture is very important towards this direction. The performance criteria should be modified accordingly to follow the approach of working smart, the leadership style should be more democratic and the managers should empower employees to take decisions (reduce the bureaucracy) when it is necessary without losing time.

The technology is a significant partner. Processes or tasks can be automated through the use of state-of-the-art tools, reducing the time needed for their accomplishment. Through the available training platforms the employees have access to a big amount of trainings and they can refresh their current skills and acquire new whenever they feel that is necessary.

7.2. Limitations – Suggestions for further research

There are some limitations related to this study. One first limitation comes from the sample. The questionnaire was distributed to the employees of only one organization and the number of the participants, unfortunately, was under the author's expectations, the participants were only 111. The second limitation is referred to the time. The survey was open only for a limited time period of two months. Another limitation is that data were collected by employees of one organization that worked under the same project. They are operating in the same working environment, management and have almost the same experiences.

Finally, further research could be done in a wider scale. The sample could be larger including participants operating in different organizations. Moreover the research could be applied in more industries and have cross-industrial results. The sample could be examined in more parameters by adding more questions related to the quality of the produced work, the allocation of the resources, income level, etc. The culture characteristics could be also taken into consideration in order to identify whether culture

ISSN 2076-9202

influences the way people operate, how they define smart and hard work and what might increase their efficiency. At last, case studies and personal interviews could be conducted and provide useful information and more validated outcome.

References

1. Abdul, R., Malik, A., (2012), *The effect of socialization on employees efficiency: moderating role of perceived organizational support*, Hyderabad
2. Adler, F.A., Benbunan-Fich, R., (2012), Juggling on a high wire: Multitasking effects on performance, *International Journal of Human-Computer Studies*, 70 (2), 156-168
3. Aral, S., Brynjolfsson, E., Van, Alstyne, M., (2007), *Information, technology and information worker productivity: Task level evidence*, Cambridge, Massachusetts
4. Asfaw, M.A., Argaw, D., M., Bayissa, L., (2015), The impact of training and development on employee performance and effectiveness: A case study of district five administration office, Bole Sub-City, Addis Ababa, Ethiopia, *Journal of Human Resource and Sustainability Studies*, 3 (4), 188-202
5. Aspray, W., Mayadas, F., Vardi, Y., M., (2006), Globalization and offshoring of software, USA, http://usacm.acm.org/images/documents/full_final1.pdf (date of last access 15 June 2017)
6. Attkinson, C., Hall, L., (2011), Flexible working and happiness in the NHS, *Employee Relations*, 33 (2), 88-105
7. Bryman, A., Bell, E., (2011), *Business Research Methods (3rd ed.),* Oxford, Oxford University Press. E-book available at: https://books.google.gr/books?id=VRcIngEACAAJ&dq=business+research+methods+Bry+man&hl=en&sa=X&ei=CV2oU9OEJ-am0AWuvYDIBQ&redir_esc=y (date of last access 15 June 2017)
8. Buser, T., Peter, N., (2012), Multitasking, *Experimental Economics*, 15 (4), 641-655
9. Charoensukmongkol, P., (2014), Effects of support and job demands on social media use and work outcomes, *Computers in Human Behavior*, 36, 340-349

   Chartered Institute of Personnel and Development (CIPD), (2008), Smart working, London, http://www2.cipd.co.uk/nr/rdonlyres/64a02358-8993-4185-beeb-9812a9175383/0/smartworking.pdf (date of last access 15 June 2017)
10. Claessens, J.C.B., van Eerde, W., Rutte, G.C., Roe, A.R., (2007),"A review of the time management literature", *Personnel Review*, 36 (2), 255-276
11. Dillard, S., (2012), "Work smart, not hard", http://www.sharonjustsayin.com/2012/07/work-smart-not-hard/ date of last access 15 June 2017)
12. Donnelly, R., (2006), How free is the free worker? An investigation into the working arrangements available to knowledge workers, *Personnel Review*, 35 (1), 78-97
13. Douglas, J.E., Morris, J.R., (2006),"Workaholic, or just hard worker?", *Career Development International*, 11 (5), 394-417
14. Eneh, I.S., Inyang, J.B., Ekpe, O.E., (2015), The effect of job training on worker's efficiency and productivity: A study of pamol Nigeria Limited, Calabar, *International Journal of Managerial Studies and Research*, 3 (1), 57-65

ISSN 2076-9202

15. Fang, E., Palmatier, W.R., Evans, R.K., (2004), "Goal-setting paradoxes? Trade-offs between working hard and working smart: The United States versus China", *Journal of the Academy of Marketing Science*, 32 (2), 188-202
16. Feldman, C.D., (2002), Managers' propensity to work longer hours. A multilevel analysis, *Human Resource Management Review*, 12, 339 – 357
17. Foss, J.N., Minbaeva, B.F., Pedersen, T., Reinholt, M., (2009), "Encouraging knowledge sharing among employees: How job design matters", *Human Resource Management*, 48 (6), 871-893
18. Gallardo, E., Dries, N., Gonzalez-Cruz, T., (2013), What is the meaning of 'talent' in the world of work?, *Human Resource Management Review*, 23 (4), 290-300
19. Golden, L., (2012), "The effects of working time on productivity and firm performance: a research synStudy paper", *Conditions of Work and employment*, 33, ILO http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_187307.pdf (date of last access 15 June 2017)
20. Gopalakrishnan, G., (2012), Issues that influences the effectiveness and efficiency of human resource management in and organization, *International Journal of Economics and Management Sciences*, 1 (6), 65-70
21. Hameed, A., Amjad, S., (2009), "Impact of office design on employees productivity: a case study of banking organizations of Abbottabad, Pakistan", *Journal of Public Affairs, Administration and Management*, 3 (1), 1-13
22. Hassan, G.A.S., (2016), "*Smart work and efficiency at the work place*", American university in Cairo, Cairo
23. Hassanain, M.A., (2006), Factors affecting the development of flexible workplace facilities. *Journal of Corporate Real Estate , 8* (4), 213-220
24. Haynes, P.B., (2008), The impact of office layout on productivity, *Journal of Facilities Management, 6* (3) , 189-201
25. Holland, P., Cooper, K.B., Hecker, R., (2016), Use of social media at work: a new form of employee voice?, *The International Journal of Human Resource Management*, 27 (21), 2621-2634
26. Holland, P., Bardoel, A., (2016), The impact of technology on work in the twenty-first century: exploring the smart and dark side, *The international Journal of Human Resource Management*, 27 (21), 2579-2581
27. Humbert, S., (2010),"Discourse or reality? "Work-life balance", flexible working policies and the gendered organization", *Equality, Diversity and Inclusion: An International Journal*, 29 (3), 239 – 254
28. Judge, T.A., Kammeyer – Mueller, J.D., (2012), Job attitudes, *Annual Review of Psychology,* 63, 341-367
29. Kazi, T.B., (2011), "Effects of Globalization on work and organizations: Exploring post-Industrialism, Post-Fordism, work and management in the global era", *Inquiries Journal*, 3 (12), Retrieved from https://www.inquiriesjournal.com/a?id=601

    Khan I., (2016), Work Hard or Work Smart? The Debate Finally Ends Here, http://www.huffingtonpost.com/ian-khan/work-hard-or-smart---the_b_8156326.html (date of last access 15 June 2017)
30. Klehe, U., Anderson, N., (2007), Working hard and working smart: Motivation and ability during typical and maximum performance, *Journal of Applied Psychology*, 92 (4), 978-992
31. Kontic, L., Cabrilo, S., (2009), A strategic model for measuring Intellectual Capital in Serbian industrial enterprises, *Economics Annals*, 54 (183), 89-117
32. Kuhn, P., (2007), *The Expanding Workweek? Understanding Trends in Long Work Hours Among U.S. Men*, University of California, Santa Barbara, USA

ISSN 2076-9202

33. Lee, H.C., Bruvold, T.N., (2003), Creating value for employees: investment in employee development, *The International Journal of Human Resource Management*, 14 (6), 981-1000
34. Madjar, N., Shalley, E.C., (2008), "Multiple tasks' and multiple goals' effect on creativity: Forced incubation or just a distraction?", *Journal of Management*, 34 (4), 786-805
35. McConnell, A., (2011), Success? Failure? Something in-between? A framework for evaluating crisis management, *Policy and Society,* 30 (2), 63–76

    McGovern Gerry, (2010), Increasing employee productivity in a networked world, http://www.customercarewords.com/increasing-productivity-network-world.pdf (date of last access 15 June 2017)
36. McMillan, M., Rodrik, D., (2014), Globalization, structural change and productivity growth, with an update on Africa, *World Development*, 63, 11-32
37. Milhem, W., Abushamsieh, K., Arostegui, P.M.N., (2014), "Training strategies, Theories and Types", *Journal of Accounting – Business & Management*, 21 (1), 12-26
38. Moroney, M., (2013), The Myth of Working Hard vs. Working Smart, https://www.entrepreneur.com/article/230527 (date of last access 15 June 2017)
39. Morrison, E.W., (2014), Employee voice and silence, *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 173-197
40. Myilswamy, P.N., Gayatri, R., (2015), "Work-life balance: The role of stress and consequences for employee and employer", International Journal of Emerging Research in Management & Technology, 4 (8), 22
41. O'Neill, S.B., Adya, M., (2007) "Knowledge sharing and the psychological contract: Managing knowledge workers across different stages of employment", *Journal of Managerial Psychology*, 22 (4), 411-436
42. Osman, S., Shariff, H.S., Lajin, N.A.M., (2015), Does innovation contribute to employee performance?, *Procedia – Social and Behavioral Sciences*, 219, 571-579
43. Petrova, N., (2011), *Flexible working as an effective tool of organizational productivity increasing: perspectives of property and staff in Alcatel-Lucent Pte.* Stockholm
44. Pfeffer, J., Sutton, R.I., (2006), *Hard facts, dangerous half-truths, and total nonsense: Profiting from evidence-based management*, Boston, Harvard Business School Press
45. Raguseo, E., Gastaldi, L., Neirotti, P., (2016), Smart work: Supporting employees' flexibility through ICT, HR practices and office layout, *Evidence-based HRM: A Global Forum for Empirical Scholarship*, 4 (3), 240-256.
46. Ramzan, M., Tariq, N.M., Riaz, A., (2013), The impact of employee turnover on the efficiency of the organization, Interdisciplinary Journal Of Contemporary Research In Business, 4 (9), 700-711
47. Rapp, A., Ahearne, M., Mathieu, J., Schillewaert, N., (2006), The impact of knowledge and empowerment on working smart and working hard: The moderating role of experience, *International Journal of Research in Marketing*, 23 (3), 279-293
48. Rubin, A., Babbie, E. (2009), *Essential Research Methods for Social Work*, 2nd ed., Belmont, USA: Cengage Learning.
49. Sadikoglu, E., Zehir, C. (2010), Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms, *International Journal of Production Economics*,127 (1), 13-26
50. Shepherd, C., (2011), Does social media have a place in workplace learning?, *Strategic Direction*, 27, 3-4
51. Sirichoti, A. (2013), Optimising employee productivity and efficiency with custom software, *Stamford Journal*, 5 (1)

ISSN 2076-9202

52. Tansley, C., (2011), What do we mean by the term "talent" in talent management? *Industrial and Commercial Trai*ning, 43 (5), 266–274
53. The Ken Blanchard Companies, (2009), *The High Cost of Doing Nothing*, USA
54. Turner, W.J., Reinsch, L.N., (2007), The business communicator as presence allocator: Multicommunicating, equivocality, and status at Work, *International Journal of Business Communication*, 44 (1), 36-58
55. Umaru, D.M., Munirat, O.Y., Sanni, M.I., Ifeyinwa, N.T., Bature, U.N., Kazeem, O.A., (2014), The relationship between leadership styles and employees' performance in organizations (A study of selected business organizations in Federal Capital Territory, Abuja Nigeria), *European Journal of Business and Management*, 6 (22), 1-11)
56. Umashankar, N., Srinivasan, R., Hindman, D., (2011), Developing customer service innovations for service employees: The effects of NSD characteristics on internal innovation magnitude, *Journal of Service Research*, 14 (2), 164-179
57. Yuliani-Suseno, R.V., (2006), Knowledge development, social capital and alliance learning, *International Journal of Educational Management*, 20 (1), 60-72

ISSN 2076-9202

IDENTIFYING CONCEPTUAL VARIABLES FROM THE LITERATURE FOR PROPOSING A PERFORMANCE MANAGEMENT FRAMEWORK

Reno Renaldi Tibyan
School of Business and Management, Institut Teknologi Bandung
Bandung, Indonesia
reno.renaldi@sbm-itb.ac.id

Dermawan Wibisono
School of Business and Management, Institut Teknologi Bandung
Bandung, Indonesia
and
Universitas Pertamina
Jakarta, Indonesia
dwibisono@sbm-itb.ac.id

Mursyid Hasan Basri
School of Business and Management, Institut Teknologi Bandung
Bandung, Indonesia
mursyid@sbm-itb.ac.id

Corresponding email: reno.renaldi@sbm-itb.ac.id

Abstract

This paper aims to identify conceptual variables for proposing a performance management framework. Businesses in the healthcare sector have been facing competition and complexity. Another factor that is critical for managing today's business environment and useful to support performance management is the analytical method. Different categories of performance management framework can be found in the literature, including frameworks that are commonly adopted by healthcare organizations. Findings of this study provide fourteen conceptual variables that are used for comparing and contrasting the reviewed frameworks. One of the compared aspects is identified to fulfill the gap. The proposed framework can help a healthcare organization to effectively manage its performance management processes and provide the analytical capability to dynamically analyze performance data at different levels. However, the proposed framework only identifies conceptual variables that need to be transformed into a more conceptual framework and to follow theoretical verification in further study.

Keywords: Analytical method, Conceptual variables, Healthcare organization, Performance management framework

1. Introduction

ISSN 2076-9202

Businesses in the healthcare sector have been facing competition (de Korne et al., 2010; Enthoven and Tollen, 2005; Marcinko and Hetico, 2013; Scanlon et al., 2008) and complexity (Marcinko and Hetico, 2013; Neely et al., 2002) that have affected the way they measure their performance. The complexity is related to the dynamics of the business environment, such as the growing diversity in healthcare, patients healthcare purchase decision, patient care delivery (Marcinko and Hetico, 2013), the rise of need in stakeholder relationship management, and performance measures selection (Neely et al., 2002). These factors can greatly change the way the healthcare organizations manage their organizational performance. The organizations that can effectively and consistently use performance management (PM) to monitor and evaluate their organizational performance will lead to the achievement of competitive advantage.

Another factor that is critical for managing today's business environment is the understanding of analytical skills and techniques (Evans, 2015). The data analysis is central to the process of decision making in all business activities (Năstase and Stoica, 2010). There has been a dominant trend in reporting and data analysis techniques that can support PM system in the way to automatically collecting, reporting, and analyzing metrics at all levels of an organization (Shobhik et al., 2010). Davenport (2008) claimed that more than 40 percent of participated organizations are shifting in a more analytical direction on PM. Performance management needs to be supported by an analytical method to provide a better decision making (Schläfke et al., 2013). The business analytics can be applied to support PM in the healthcare sector (Acito and Khatri, 2014). Thus this method is useful for PM system implementation.

It is more appropriate for a healthcare organization to apply a PM framework to support its PM system implementation. Therefore, a PM framework can be proposed to help healthcare organizations manage their organizational performance. The latest development of the PM framework can be recognized from previous studies. The Balanced Scorecard is the most popular framework that has been widely applied and further developed by many organizations (Perkins et al., 2014; Rausch and Stumpf, 2013; Yadav et al., 2013). Different categories of PM framework can be found in a study on performance measurement and management (PMM) frameworks, which include classical and dominant frameworks, holistic and integrated PMM frameworks, frameworks updating BSC approach, context-specific PMM frameworks,

ISSN 2076-9202

and recently developed PMM (Yadav et al., 2013).

The above facts strongly support the need to undertake a literature review on PM framework. The study aims to identify relevant conceptual variables for proposing a performance management framework in the context of the healthcare organizations. The conceptual variables are considered as the basis for further developing an appropriate PM framework for the healthcare organizations.

2. Performance Management Framework

The purpose of this literature review is to get an in-depth understanding of the performance management concept and to give a critical review on PM frameworks commonly adopted by the healthcare organizations.

2.1 Performance measurement and management

This literature review focuses on the performance management concept. However, the development of performance management concept cannot be separated as such from the performance measurement concept. Ghalayini and Noble (1996) explained that the literature about performance measurement was divided into two periods. The first period was until the late 1980s, at which financial measures were being primary concerns. The second period was started after that by accommodating non-financial measures.

Long before the performance management term is popularized, the performance measurement concept was initially introduced by Simon in 1937 by introducing the technique of measurement, which was specially intended to measure and evaluate the governmental performances and activities (Lee 2003). Furthermore, in order to have better decision making, Skinner (1969) promoted the idea to use performance measures and the linkage between company strategy and manufacturing function tasks in the manufacturing sector. Meanwhile, McIntyre et al. (2001) have divided a chronological development of performance measurement, that influence the introduction of performance management concept in the healthcare sector, in four stages which are early attempts at performance measurement (1750-1910), birth of the modern era and new delivery systems (1910-1950), golden years (1950-1980), and age of information and consumerism (1980-2000).

ISSN 2076-9202

Having understood the above explanations, the review needs to identify the theoretical definition of performance management. Although performance measurement and performance management have a different focus on processes, both of them are closely related in the organizational context (Lebas, 1995). Performance measurement is an information system that enables the effective and efficient process of performance management (Bititci et al., 1997). Amaratunga and Baldry (2002) argued the importance of a set of good practices to handle the generation of performance information, which can support the transformation of performance measurement to performance management. Cokins (2009) asserted that PM reaches out the complete cycle of management planning and control.

Various PM definitions can be found in the literature. However, there is no clear definition of performance management (Kemper et al., 2013). PM is the process to manage the implementation of an organization's strategy (Cokins, 2004). PM is about how to use performance measurement systems to administer an organization's performance (Bititci, 2015). In the healthcare sector, the Regulation and Quality Improvement Authority (RQIA) of Northern Ireland (in Atkinson, 2012) has defined that PM is the use of performance measurement information to find out what matters, manage the organization, and drive sustainable improvement.

Therefore, performance management has a broader concept than performance measurement, in the context of the management process. However, it must be well understood that, in this paper, the performance management concept is about organizational performance management. Thus it distinguishes from the people-centered performance management (Biron et al., 2011; Broadbent and Laughlin, 2009; Clardy, 2013) which covers a discussion topic of performance appraisals in human resources and public sector fields.

2.2 Performance Management Frameworks

This part of the literature review is to understand the PM framework. A PM framework can be used by an organization for guiding an implementation of the PM system. This is borrowing from the arguments of Folan and Browne (2005), who stated that a performance measurement framework supports the

ISSN 2076-9202

development process of performance measurement system, and Medori and Steeple (2000), who concluded that a framework is a useful method for assessing companies' performance measurement systems. Newcomer and Caudle (2011) argued that a framework is similar to a program logic which simply describes the linkages of the factors that compose a performance management. They stated that the most important aspect of the framework is to make clear of the factors significant to the use of the information resulted in a PM system.

A broad variety of PM frameworks can be found in the literature. Some PM frameworks that are commonly adopted by healthcare organizations to manage their organizational performance are Malcolm Baldrige National Quality Award (Baldrige Performance Excellence Program), the European Foundation for Quality Management Excellence Model (EFQM Leading Excellence), the Balanced Scorecard (Kaplan and Norton, 1992), Regulation and Quality Improvement Authority Performance Management Framework (Atkinson, 2012), and Public Health Performance Management Framework (DeAngelo et al., 2014).

2.2.1 Malcolm Baldrige National Quality Award

Malcolm Baldrige National Quality Award has been established since 1987 to encourage American organizations improving their quality management practice in the provision of their products or services (Baldrige Performance Excellence Program). The award is very prestigious to strengthen the competitiveness of various companies. The Baldrige criteria cover the following roles for business organizations (Brown, 2008):

1. Improving organizational performance practices;
2. Facilitating information sharing of best practices;
3. Serving as a working tool to understand and manage business performance.

The Baldrige criteria include important concept of ensuring company performance meets stakeholders' needs (communicating performance with stakeholders). The stakeholders comprise owner, shareholders, employees, and customers. Since the early 2000s, Baldrige award has included healthcare organizations (Brown, 2008). The criteria determine performance excellence for organizations. The performance

ISSN 2076-9202

excellence framework consists of the organizational profile, performance system categories and system foundation (integrated systems perspective). The performance system comprises six categories, which are leadership, strategic planning, customers (leadership triad), workforce, operations and results (results triad). System foundation consists of measurement, analysis, and knowledge management. Organizational knowledge constructed from various data sources. The MBNQA encourages to perform reporting on organizational performance results. It considers performance benchmarking to continuous improvement and the use of data and information to support fact-based decisions (Baldrige Performance Excellence Program, 2016; DeGroff et al., 2010). The Baldrige approach helps an organization recognize its strengths and opportunities for improvement. It is also used for assessing organizational operations using the evaluation factor approach (Baldrige for Organizational Excellence).

Although many organizations have adopted this non-prescriptive framework (Baldrige Performance Excellence Program, 2016; DeAngelo et al., 2014), but it does not provide practical guidance for organizations to implement their PM processes, such as how to define performance indicators and measure them, how to handle data quality issues, and how to provide data analysis and integrated information for management reporting to support fact-based decisions. The Baldrige criteria are closer to total quality management (TQM) practice, such as the need for documentation and improvement of key work processes.

2.2.2 European Foundation for Quality Management

As described in EFQM Excellence Model (2016), the European Foundation for Quality Management Excellence Model, which was founded in 1989, provides a comprehensive tool for assessing how effective an organization in developing and delivering a stakeholder focused strategy. The model consists of a set of three integrated components, i.e., the fundamental concepts of excellence (underlying principles), the criteria (the framework to practicing the model), and the radar (tool for driving improvement). The framework determines a cause and effect process to show an organizational effort and its impact on the business result, which covers enablers (leadership, people, strategy, partnerships and resources, and processes., products and services) and results (people results, customer results, society

ISSN 2076-9202

results, and business results).

Thus in the framework, there are four result areas that focus on what is important to the key stakeholder groups (business, customer, people, and society). EFQM uses a means to monitor and analyze the achieved results. The results need to be communicated to the stakeholders through the provided reports. EFQM also supports the review of organizational performance. The framework is non-prescriptive and considers a number of different concepts, i.e., adding value for customers and developing organizational capability, as well as supports the need of data quality management (EFQM Excellence Model, 2016; Jackson, 1999).

EFQM is claimed to be used by over 30,000 organizations in Europe (EFQM Leading Excellence, 2016). However, it is less popular worldwide compared to MBNQA. It still considers the TQM approach to integrating into normal operations (Jackson, 1999). It is easy to apply EFQM for general practice (Jackson and Bircher, 2002), but not for specific business practice. It is not clear that EFQM considers an integrated information for management reporting and data analysis capability to support business decisions.

2.2.3 The Balanced Scorecard

The Balanced Scorecard that was introduced in 1992 presents the drivers of the coming financial performance (Kaplan and Norton, 1996). The BSC provides performance information in four different perspectives to communicate and help to implement the strategy. The BSC is designed to minimize the use of a number of measures (Kaplan and Norton, 1992). The BSC is recognized as a largely accepted performance measurement and management framework which has been implemented in different types of healthcare organizations (Yap et al., 2005). Kaplan and Norton (1996) have formulated the BSC to translate an organization's mission and strategy into a wide-ranging set of performance measures that supplies the framework for a strategic measurement and management system. The BSC measures organizational performance over four balanced perspectives, i.e., financial, customers, internal business processes, and learning and growth. It covers both financial and non-financial measures. It considers the

ISSN 2076-9202

importance of the execution of organizational strategies. It provides a useful mechanism to translate the strategies into specific objectives, measures, and targets, and monitors the implementation of the strategies over the following periods. It provides the linkage between the defined strategic objectives and performance measures. The benefit of using the Balanced Scorecard takes place when organizations perform regular strategic reviews, not just operational reviews (Kaplan and Norton, 1996).

The BSC does not provide practical guidelines for implementing it (Taticchi, 2012), especially for the actual selection and implementation of selected measures (Medori and Steeple, 2000) and for maintaining the defined measures (Pun and White, 2005). It has no clear causal relationship among measures from the four perspectives. The claim of cause-and-effect relationships is problematic (Nørreklit, 2000). The BSC measurements have not worked effectively at the operations level (Gupta, 2004). The stakeholder perspective needs a wider consideration (Brignall and Ballantine, 2004). The BSC is only focusing on communicating the outcomes with customer, employee, and shareholder, but it has a lack of dealing with other stakeholders' needs on performance related information. The BSC lacks performance improvement after its implementation (Perkins et al., 2014). It does not consider the need for data analysis and integrated information for management reporting to support business decisions, as well as the necessity to provide the required quality of business data.

2.2.4 RQIA Performance Management Framework

The RQIAPMF comprises elements from planning activities, such as vision, strategy map, and strategic objectives, to control activities, such as review, corrective action, and change (evaluation). The planning also includes the design of performance measures and targets. It uses the plan-do-review-revise cycle that integrates planning, action or execution, and monitoring of performance (Atkinson, 2012). It includes performance measurement to collect and report the performance data. It accommodates other important factors for the management of organizational performance, such as leadership and commitment, continuous improvement and learning, and engagement and consultation (communication) with stakeholders (Atkinson, 2012). It also considers a means to streamline the collection and analysis of performance data. The development of a framework needs to identify critical success factors and key

ISSN 2076-9202

performance indicators (Atkinson, 2012).

Although the RQIAPMF includes performance measurement in the PM framework, it is only for monitoring and reporting performance. There is no indication that it also manages the refinement of indicators and their linkages to strategy.

2.2.5 Public Health Performance Management Framework

The PHPMF consists of performance standards, performance measurement, reporting of progress, and quality improvement (core components). The performance measurement covers develop data systems and collect data (data sourcing), as well as refine indicators and define measures. Reporting of progress includes analyze data and regular reporting cycle. This is for monitoring process. The framework has the fifth component which is visible leadership. This component includes transparency, strategic alignment (strategic planning and PM system), quality culture, and customer focus as subcomponents. The leadership is associated with the commitment of senior management in the organization (DeAngelo et al., 2014).

The PHPMF only concentrates on the customer to communicate the performance information. It is better to extend that function to wider stakeholders.

2.2.6 Analytical Concept for Performance Management Framework

As explained in the introduction, an analytical method is critical for managing today's business environment. In practice, business analytics is an analytical method to support decision making. The business analytics can be integrated into PM framework (Klatt et al., 2011; Schläfke et al., 2013). Business analytics has been applied to support business performance management in the healthcare sector (Acito and Khatri, 2014). By definition, analytics is the processing of enormous amounts of data by using statistical and quantitative analyses, explanatory and predictive models, and fact-based management to support decisions (Davenport and Harris, 2007). Analytics is part of recent management innovations (Kaplan and Norton, 2008).

3. Methodology

ISSN 2076-9202

3.1 Systematic Approach

The literature review used a systematic approach suggested by Garrard (2011) that covered the following processes:

1. Define the purpose of the review;
2. Literature search that includes conducting searches of academic papers on reference databases (for empirical studies) and searches of reference books (for underlying theories);
3. Select and review the collected reference materials for the study;
4. Write the critical review of the literature and synthesize.

3.2 Literature Search

The primary sources to obtain literature to be reviewed were reference databases containing electronic journal (e-journal). The reference databases (RD) include Elsevier ScienceDirect, Proquest, EBSCOhost, GALE-CENGAGE Learning, and Springer. These databases provide the subscribed downloadable e-journals. Another source was The National Center for Biotechnology Information (NCBI) as a reference database. Two citation databases (CD), as additional sources, were also used in this literature review process (i.e., Scopus, Web of Science from Thomson Reuters).

The literature searches for obtaining relevant academic papers were performed by using some search criteria applied to the reference and citation databases mentioned above. The searches identified the recent development of performance management research. The identification process was narrowed down to the context of “health” or “hospital” and ended up with the identification of PM frameworks applied in this context. Therefore, the authors initiated a general search for the articles addressing “performance management” topic in both types of database. The complete results of the main literature searches are summarized in Table 1.

ISSN 2076-9202

Table 1. Literature searches results

Databases	Searches Criteria (use logical AND)			Databases		
	"Performance Management"	"Health" OR "Hospital"	Framework Selection* ↓	Elsevier	Proquest	NCBI
Elsevier	6,695	3,128	"MBNQA"	43	548	10
Proquest	33,964	17,600	"EFQM"	41	232	6
EBSCOhost	12,290	5,990	"BSC"	368	2,358	65
GALE	5,673	1,829	"RQIAPMF"	0	1	0
Springer	14,690	5,312	"PHPMF"	0	0	1
NCBI	1,637	1,258				
Scopus	7,970	951				
Web of Science	7,373	498				

Note: MBNQA = Malcolm Baldrige National Quality Award; EFQM = European Foundation for Quality Management; BSC = the Balanced Scorecard; RQIAPMF = Regulation and Quality Improvement Authority Performance Management Framework; PHPMF = Public Health Performance Management Framework

*) only one framework is selected for each search

The consideration to present Elsevier, Proquest, and NCBI in the table above is because some important reviewed articles are referenced from those databases.

4. Proposing a Performance Management Framework

4.1 Conceptual Variables

Some conceptual variables were identified from the literature, which are leadership, planning, execution, monitoring, communication, evaluation, improvement, strategic linkage, financial measures, non-financial measures, data sourcing, data and information quality, management reporting, and analytical capability. These variables are for further use in proposing a performance management framework.

4.1.1 Leadership

The leadership variable is derived from MBNQA, EFQM, RQIAPMF, and PHPMF frameworks. Leadership means that senior management in an organization must provide clear direction, commitment,

ISSN 2076-9202

and support to the processes of performance management. The lack of leadership can become a problem in the implementation of the PM system.

4.1.2 Planning

The planning variable is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Planning is the management effort to set an organization's strategic direction that defines vision, mission, and resources needed to achieve the defined strategic objectives. Besides that, critical success factors, key performance indicators, and performance targets can be defined in the planning stage.

4.1.3 Execution

The execution variable is derived from the MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Execution refers to the PM process to ensure that the determined business activities are done to achieve organizational strategic objectives. A good strategy without execution is worthless. Thus the execution of strategy is required to effectively measure the organizational performance. The execution is closely related to the performance measurement process.

4.1.4 Monitoring

The monitoring variable is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Monitoring indicates the process to keep track of the achievement of the performance target. Performance monitoring collects information through various means to know how an organization performs. It covers a regular reporting of key performance indicators. The monitoring is closely related to the performance measurement process.

4.1.5 Communication

The communication variable is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Communication refers to the process of delivering the required performance information to the stakeholders. It is for internally (employee, medical staff) and externally (patient, society, business partner, government) communicating the performance information. A regular communication is important to ensure that the organizational performance meets the stakeholders' expectations or needs.

ISSN 2076-9202

4.1.6 Evaluation

The evaluation variable is derived from MBNQA, EFQM, the BSC, and RQIAPMF frameworks. Evaluation means the process to review and ensure the achievement of the performance target and organizational strategic objectives. The performance evaluation compares the actual performance with the performance target and identifies factors that contribute to the success or failure of achieving the defined performance target. The evaluation results are important for executing performance improvement activities.

4.1.7 Improvement

Improvement variable is derived from MBNQA, EFQM, RQIAPMF, and PHPMF frameworks. Improvement refers to the need for providing better performance. It is the process of making performance management better. The performance improvement activities can be focused on increasing business outputs, such as the number of patient attendance, and improving efficiency for certain business process, such as reducing the waiting time of outpatient pharmacy.

4.1.8 Strategic and Operational Linkage

The variable of strategic and operational linkage is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. The linkage indicates the relationship between strategic objectives and performance measures. The linkage can show how a selected number of measures in a specific category or perspective support the achievement of a defined strategic objective. For example, “provide world-class healthcare services” as the defined strategic objective can be supported by “level of patient satisfaction” and “average response time to patient complaints” as the selected measures.

4.1.9 Financial Measures

The variable of financial measures is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Financial measures are commonly used to measure the money based business performance. This variable can encompass commonly used measures, such as return on equity and return on assets, and specific measures known in the healthcare sector, such as labor costs per surgical case and surgical supply costs per case.

ISSN 2076-9202

4.1.10 Non-Financial Measures

The variable of non-financial measures is derived from MBNQA, EFQM, the BSC, RQIAPMF, and PHPMF frameworks. Non-financial measures are used to measure the non-money based business performance, such as customer satisfaction score or rate of service delivery. Specific measures known in the healthcare sector can comprise waiting time in outpatient pharmacy, number of canceled days of operation, number of admission per day, or number of research and development.

4.1.11 Data Sourcing

The data sourcing variable is derived from MBNQA, EFQM, RQIAPMF, and PHPMF frameworks. Data sourcing is the process of identifying the data source and collecting the required performance data. The data source can be from various business areas, such as finance, medical treatment, medical services, and human resources. The identification of the data source can ensure the availability, adequacy, accessibility, and timeliness of the required performance data. Furthermore, the obtained data need a unified process to provide an integrated performance information.

4.1.12 Data and Information Quality

The variable of data and information quality is derived from MBNQA and EFQM frameworks. Data quality refers to the level of data usability and validity to support the delivery of reliable performance information. The data and information quality covers accuracy, validity, consistency, and completeness aspects.

4.1.13 Management Reporting

The management reporting variable is derived from MBNQA, EFQM, RQIAPMF, and PHPMF frameworks. Management reporting refers to the ability of the performance measurement process to provide the required performance information for particular users. It provides information about actual performance against the performance target. The reporting mechanism can use a visualization method to provide the look-and-feel of information presentation.

4.1.14 Analytical Capability

ISSN 2076-9202

Although RQIAPMF and PHPMF frameworks give attention to the analysis of performance data, it is not clear how the analysis of data will perform. However, this data analysis concept can be extended by using the concept of analytical capability derived from business analytics. The variable of analytical capability indicates the ability to provide a means for analyzing performance information, such as performing descriptive, prescriptive, predictive, and other information analyses.

4.2 Comparing and Contrasting the Performance Management Frameworks

The study aims to give a significant contribution to the performance management literature by showing a synthesis of some concepts derived from the reviewed PM frameworks. In this paper, the identified conceptual variables are used for comparing and contrasting the reviewed PM frameworks, as summarized in Table 2. The comparing and contrasting method is used to identify the contributions and limitations of the existing frameworks (Wibisono and Khan, 2010; Yadav et al., 2013). This method aims to identify the research gaps in the PM frameworks for the healthcare organizations. The method is also important to identify new insights to propose an appropriate PM framework since the choice of a suitable framework is one of the major challenges in this changing business environment (Yadav et al., 2013).

Table 2. Comparing and contrasting the performance management frameworks

Frameworks / Aspects	MBNQA	EFQM	BSC	RQIAPMF	PHPMF	Proposed Framework
Leadership	√	√		√	√	√
Planning	√	√	√	√	√	√
Execution	√	√	√	√	√	√
Monitoring	√	√	√	√	√	√
Communication with Stakeholders	√	√	√	√	√	√
Evaluation	√	√	√	√		√
Improvement	√	√		√	√	√
Strategic and operational linkage	√	√	√	√	√	√
Financial measures	√	√	√	√	√	√
Non-financial measures	√	√	√	√	√	√

ISSN 2076-9202

Frameworks / Aspects	MBNQA	EFQM	BSC	RQIAPMF	PHPMF	Proposed Framework
Data sourcing	√	√		√	√	√
Data and information quality	√	√				√
Management reporting	√	√		√	√	√
Analytical capability						√

As indicated in the compare and contrast table above, there is one identified gap that can be fulfilled by a proposed framework to distinguish it from the other frameworks, which is covering analytical capability.

5. Conclusion and Further Work

To identify conceptual variables for a performance management framework, a systematic literature review needs to be undertaken. Fourteen conceptual variables for a PM framework are identified. The synthesis or comparing-and-contrasting method needs to be used to identify gaps among the reviewed PM frameworks. The proposed framework covers fourteen aspects to consider an appropriate PM framework for the healthcare organizations. One of those aspects is fulfilling the identified gap.

The proposed framework can help a healthcare organization to effectively manage the faced business competition and complexity through the performance management processes that encompass planning, execution, performance measurement (data collection, refinement of strategic linkage and performance measures, data and information quality, reporting, and analytical capability), monitoring, communication, evaluation, and improvement. In particular, a healthcare organization can apply the analytical capability in its performance management system to dynamically analyze performance data at different levels. Although the proposed framework is based on the comparison of PM frameworks adopted by the healthcare sector, it is applicable to any organization, regardless of size, type, and activity.

In this paper, the proposed framework only identifies important aspects that need to be transformed into a more conceptual framework. Furthermore, in order to have a robust conceptual PM framework, a theoretical verification of the identified conceptual variables will be undertaken in practice. Further research will be done in a selected hospital organization.

ISSN 2076-9202

References

Acito F and Khatri V (2014). Business analytics: Why now and what next?. *Business Horizons* 57: 565–570.

Amaratunga, D. and Baldry, D., (2002). Moving from performance measurement to performance management. *Facilities* 20(5/6): 217–223.

Atkinson M (2012). Developing and using a performance management framework: a case study. *Measuring Business Excellence* 16(3): 47–56.

Baldrige Performance Excellence Program. https://www.nist.gov/baldrige, accessed 15 December 2016.

Baldrige for Organizational Excellence (2015). The metrology of organizational performance: how baldrige standards have become the common language for organizational excellence around the world. https://www.nist.gov/sites/default/files/documents/baldrige/The-Metrology-of-Organizational-Performance-World-Standards-Day-Paper-July-6-(2015).pdf, accessed 15 December 2016.

Biron M, Farndale E and Paauwe J (2011). Performance management effectiveness: lessons from world–leading firms. *The International Journal of Human Resource Management* 22(6): 1294–1311.

Bititci U S, Carrie A S and McDevitt L (1997). Performance management: a business process view. *Working conference on modelling techniques for business process re–engineering and benchmarking* 1997. Doumeingts G and Brown J (eds). Chapman Hall Publications, pp 284–297.

Bititci U S (2015). *Managing business performance: the science and the art*. West Sussex: John Wiley & Sons, Ltd.

Brignall S and Ballantine J (2004). Strategic enterprise management systems: New directions for research. *Management Accounting Research* 15: 225–240.

Broadbent J and Laughlin R (2009). Performance management systems: a conceptual model. *Management Accounting Research* 20: 283–295.

Clardy A (2013). A general framework for performance management systems: structure, design, and analysis. *Performance Improvement* 52(2): 5–15.

Cokins G (2004). *Performance Management: Finding the Missing Pieces (to close the intelligence gap)*. John Wiley & Sons, Ltd: Hoboken, NJ.

Cokins G (2009). *Performance Management: Integrating Strategy Execution, Methodologies, Risk, and Analytics*. John Wiley & Sons, Ltd: Hoboken, NJ.

Davenport T H and Harris J G (2007). *Competing on Analytics: The Science of Winning*. Harvard Business School Publishing: Boston, MA.

Davenport T H (2008). The rise of analytical performance management. https://www.researchgate.net/publication/255645874_The_Rise_of_Analytical_Performance_Management, accessed 6 August 2017.

ISSN 2076-9202

DeAngelo J W, Beitsch L M, Beaudry M L, Corso L C, Estes L J and Bialek R G (2014). Turning point revisited: launching the next generation of performance management in public health. *Journal of Public Health Management and Practice* 20(5): 463–471.

Degroff A, Schooley M, Chapel T and Poister T H (2010). Challenges and strategies in applying performance measurement to federal public health programs. *Evaluation and Program Planning* 33(4): 365–372.

de Korne D F, Sol K, van Wijngaarden J D H, van Vliet E J, Custers T, Cubbon M, Spileers W, Ygge J, Ang C L and Klazinga N S (2010). Evaluation of an international benchmarking initiative in nine eye hospitals. *Health Care Management Review* January–March: 23–35.

EFQM Excellence Model. https://www.efqm.org, accessed 15 December 2016.

EFQM Leading Excellence. An overview of the EFQM excellence model. http://www.efqm.org/sites/default/files/overview_efqm_2013_v1.1.pdf, accessed 15 December 2016.

Enthoven A C and Tollen L A (2005). Competition in health care: it takes systems to pursue quality and efficiency. *Health Affairs* September: 420–433.

Evans J R (2015). Modern analytics and the future of quality and performance excellence. *The Quality Management Journal* 22(4): 6–17.

Folan P and Browne J (2005). A review of performance measurement: towards performance management. *Computers in Industry* 56: 663–680.

Garrard J (2011). *Health Sciences Literature Review Made Easy: The Matrix Method*. Jones & Bartlett Learning: USA.

Ghalayini A M and Noble J S (1996). The changing basis of performance measurement. *International Journal of Operations & Production Management* 16(8): 63–80.

Gupta P (2004). *Six Sigma Business Scorecard: Ensuring Performance for Profit*. McGraw – Hill: USA.

Jackson S (1999). Exploring the possible reasons why the UK Government commended the EFQM excellence model as the framework for delivering governance in the new NHS. *International Journal of Health Care Quality Assurance* 12(6): 244–253.

Jackson S and Bircher R (2002). Transforming a run down general practice into a leading edge primary. *International Journal of Health Care Quality Assurance* 15(6/7): 255–267.

Kaplan R S and Norton D P (1992). The balanced scorecard: measures that drive performance. *Harvard Business Review* January – February: 71–79.

Kaplan R S and Norton D P (1996). *The Balanced Scorecard: Translating Strategy into Action.* Harvard Business School Press: Boston, MA.

Kaplan R S and Norton D P (2008). *The Execution Premium: Linking Strategy to Operations for Competitive Advantage.* Harvard Business School Press: Boston, MA.

ISSN 2076-9202

Kemper H G, Rausch P and Baars H (2013). Business intelligence and performance management: introduction. In: Rausch P, Sheta A F and Ayesh A (eds). *Business Intelligence and Performance Management*: *Theory, Systems and Industrial Applications* 2013. Springer: London, pp 3–10.

Klatt T, Schlaefke M and Moeller K (2011). Integrating business analytics into strategic planning for better performance. *Journal of Business Strategy* 32(6): 30–39.

Lebas M J (1995). Performance measurement and performance management. *Int. J. Production Economics* 41: 23–35.

Lee M (2003). Is there anything new under the sun? Herbert Simon's contributions in the late 1930s to performance measurement and public reporting of performance results. *Public Voices* VI(2-3): 73-82.

Marcinko D E and Hetico H R (2013). Tracking medical procedures with outcomes reporting: techniques of benchmarking and improvement. In: Marcinko D E and Hetico H R (eds). *Hospitals & Health Care Organizations: Management Strategies, Operational Techniques, Tools, Templates, and Case Studies* 2013. CRC Press: Boca Raton, FL, pp 3–26.

McIntyre D, Rogers L and Heier E J (2001). Overview, history, and objectives of performance measurement. *Health Care Financing Review* 22(3): 7–21.

Medori D and Steeple D (2000). A framework for auditing and enhancing performance management systems. *International Journal of Operations and Production Management* 20(5): 520–533.

Năstase P and Stoica D (2010). A new business dimension – business analytics –. *Accounting and Management Information Systems* 9(4): 603–618.

Neely A, Adams C and Kennerly M (2002). *The Performance Prism: The Scorecard for Measuring and Managing Business Success*. Prentice Hall: London.

Newcomer K and Caudle S (2011). Public performance management systems embedding practices for improved success. *Public Performance & Management Review* 35(1): 108–132.

Nørreklit H (2000). The balance on the balanced scorecard—a critical analysis of some of its assumptions. *Management Accounting Research* 11: 65 – 88.

Perkins M, Grey A and Remmers H (2014). What do we really mean by "balanced scorecard"?. *International Journal of Productivity and Performance Management* 63(2): 148–169.

Pun K F and White A S (2005). A performance measurement paradigm for integrating strategy formulation: A review of systems and framework. *International Journal of Management Reviews* 7(1): 49–71.

Rausch P and Stumpf M (2013). Linking the operational, tactical and strategic levels by means of cpm: an example in the construction industry. In: Rausch P, Sheta A F and Ayesh A (eds). *Business Intelligence and Performance Management*: *Theory, Systems and Industrial Applications* 2013. Springer: London, pp 27–42.

Scanlon D P, Swaminathan S, Lee W and Chernew M (2008). Does competition improve health care quality?. *HSR: Health Services Research* 43(6): 1932–1951.

Schläfke M, Silvi R and Möller K (2013). A framework for business analytics in performance management. *International*

ISSN 2076-9202

Journal of Productivity and Performance Management 62(1): 110–122.

Shobhik C, Joseph S, Shiva V, Jeff L and John M (2010). The metrics reference model: a jumpstart for business intelligence initiatives. *Cost Management* 24(5): 110–122.

Skinner W (1969). Manufacturing: missing link in corporate strategy. *Harvard Business Review* May: 136–145.

Taticchi P, Balachandran K and Tonelli F (2012). Performance measurement and management systems: state of the art, guidelines for design and challenges. *Measuring Business Excellence* 16(2): 41–54.

Wibisono D and Khan M (2010). The conceptual framework of a knowledge–based performance management system. *Gadjah Mada International Journal of Business* 12(3): 393–414.

Yadav N, Sushil and Sagar M (2013). Performance measurement and management frameworks research trends of the last two decades. *Business Process Management Journal* 19(6): 947–970.

Yap C, Siu E, Baker G R and Brown A D (2005). A Comparison of systemwide and hospital – specific measurement tools. *Journal of Healthcare Management* 50(4): 251 – 262.

ISSN 2076-9202

ON THE EFFECT OF THE ONLINE REPORTING OF ACCOUNTING INFORMATION ON INVESTMENT DECISION-MAKING PROCESS IN SAUDI ARABIA

Nizar Alshowaiman *

College of Business and Economics, Qassim University, Qassim, Saudi Arabia

Abstract:

The aim of this study is to achieve three aims. First, it is oriented to explore the extent of online reporting of accounting information among companies listed in the Saudi Stock Market. Second, it investigates companies' concerns on online reporting of accounting information. Finally, it discusses the effect of using online reporting of accounting information on improving investment decision-making. A questionnaire was developed on the basis of a literature review in order to collect the required data from a sample consisted of 30 broker companies. A total of 150 questionnaires were distributed to the participants and 122 questionnaires were used for analysis purposes. The results found that companies listed in the Saudi Stock Market have a moderate degree of using online reporting of accounting information with numerous concerns related to numerous aspects. The original value of this paper emerged from its contribution to online reporting of financial and non-financial information by identify the extent and concerns of online reporting and highlighting that companies practices of online reporting play an important role in investment decisions made investors. The study recommended companies to increase their degrees of online reporting due to its preferable outcomes and recommend future researchers to consider limitations face by this study and to investigate obstacles that hinder companies to using online reporting of information.

Keywords: popularity of online reporting; concerns of online reporting; investment decision-making process; Saudi Stock Market.

JEL Classification: M40, M48.

1. Introduction

Internet expanded benefits includes dissemination of corporate information. One of the most important advantages of using the Internet by corporations to report accounting information is related to the reduction of risks among investors (Ojah and Mokoaleli-Mokoteli, 2012). Timeliness and efficiency of using corporate financial information, as well as, helping investors to make their personal economic decisions were reported by Khan and Ismail (2012) as key benefits of using Internet-based accounting reporting. According to Hindi and Rich (2010), as cited in Abdul Halim et al. (2015), investors use the Internet as the main source of accounting information.

The Internet technology use, as an effective tool for the online reporting of accounting information, was described using numerous terms like Web-based business reporting (Beattie and Pratt, 2003), corporate reporting on the Internet (Marston and Polei, 2004), Internet-based disclosure (Xiao et al., 2004), Internet financial reporting (Smith and Pierce, 2005), online business reporting (Williams et al., 2006), Web-based financial reporting (Momany and Al-Shorman, 2006),

ISSN 2076-9202

Web-based corporate reporting (Dutta and Bose, 2007), corporate Internet reporting (Ezat and El-Masry, 2008), online corporate reporting (Rowbottom and Lymer, 2009), e-disclosure (Serrano-Cinca et al., 2009), online reporting of accounting information (García and García-García, 2010), corporate online reporting (Al-Htaybat et al., 2011), e-financial reporting (Khan and Ismail, 2012), Internet financial disclosure (Alshowaiman, 2013 and Basuony and Mohamed, 2014), Internet-based disclosure (Gajewski and Li, 2015), online financial reporting (Hellmann, 2016), electronic financial reporting (Scherr and Ditter, 2017) and digital reporting (Alkhatib et al., 2017).

For the current study, online reporting of accounting information (ORAI) was used to describe accounting information disclosure via electronic means such as websites, links to the company's annual reports and links to the capital market. We follow Ashbaugh et al. (1999) who suggested three conditions to describe an organization as using ORAI: the company's financial statements are available on its website, presence of a link of the annual report of the company on the Internet, or a link to security and exchange system of electronic data collection.

The practical use of ORAI expanded among companies since 1990s (AdulHalim et al., 2015). In the academic vein, many studies have undertaken by researchers in different countries to explore extent, determinants and relationships of ORAI with other variables. Using a sample selected from 22 countries, Debreceny et al. (2002) investigated the determinants of ORAI. Holm (2000) explored the extent of ORAI among listed companies In Denmark. Ismail (2002) examined the relationship between company characteristics, size, leverage, as well as profitability and company's voluntary use of ORAI by companies in the Gulf Cooperation Council (GCC) countries. The association between ORAI and company characteristics such as firm size using a sample of Portuguese companies was predicted by Rodrigues and Menezes (2003). The impact of company's characteristics and corporate governance in the context of Egyptian companies was studied Elsayed et al. (2010). The quality of ORAI using a sample of Malaysian companies was examined by Abdul Aziz et al. (2011). Relevance of digital information for financial institutions in Taiwan was studied by Chou et al. (2011). Concurrently, Al-Htaybat et al. (2011), explored the perceptions of users of ORAI in the Jordanian context. The aim of Sharma (2013) study was to explore both extent and determinants of ORAI in commercial banks in Nepal. Momany and Pillai (2013) investigated the extent of ORAI among listed companies in The United Arab Emirates. Andrikopoulos et al. (2013) explored the effect of Internet disclosure on corporate performance using a sample of international companies listed in London, Singapore and Oslo stock exchange markets. Alshowaiman (2013) analyzed the extent of ORAI among Saudi companies as well as factors that affect the adoption of ORAI by these companies. Çalişkan and Güler (2014) examined factors that have an influence on ORAI among listed Turkish companies. Alam and Rashid (2014) conducted a survey of websites of Pakistani companies in order to investigate the status of ORAI among these companies. AdulHalim et al. (2015) measured the extent of investors' relations on the basis of web-based accounting reporting in Malaysia. Kamalluarifin (2016) examined the impact of three mechanisms of corporate governance namely, the board independence, the experience and the duality) and three firm's characteristics (firm size, the leverage level, and the firm profitability) on timeliness of ORAI among listed companies in Malaysia. Bin-Ghanem and Ariff (2016) examined the influence of the effectiveness of board of directors and audit committee in GCC countries.

Despite the great attention paid by academic researchers and practitioners to explore ORAI related issues (Dull et al., 2003), little studies have been carried out using a sample of companies listed in the Saudi Stock Market to examine popularity, concerns and the effect of ORAI on investors decisions. On the other hand, the results of studies conducted in western setting cannot be generalized to Saudi Arabia firms due to the difference of business environments. Hence, this

ISSN 2076-9202

study contributes to the literature of ORAI knowledge through achieving three fold aims which were investigation the extent to which Saudi listed companies use ORAI, exploring their concerns about ORAI related issues and examining the role that ORAI plays in improving investors' decision-making process.

2. Literature review and hypotheses development

Using the Internet as a practical tool to disclose corporate information, either financial or non-financial information, was one aspect of internet technology employed by companies in different countries. A review of the appropriate literature revealed that research on ORAI can be classified in numerous veins. First, the impact of different variables on ORAI such as corporate governance (Parlakkaya et al., 2015; Sanad and Al-Sartawi, 2016; Kamalluarifin, 2016), board characteristics (Razak and Zarei, 2015), firm characteristics such as size, age, ownership and audit quality (Ismail, 2002; Rodrigues and Menezes, 2003; Agyei-Mensah, 2012; Abdullah et al., 2017), corporate performance (Andrikopoulos et al., 2013). Second, determinants of ORAI (Debreceny et al., 2002; Oyelere et al., 2003; Laswad et al., 2005; AbuGhazaleh et al., 2012; Ojah and Mokoaleli-Mokoteli, 2012; Khan and Ismail, 2014; Çalişkan and Göler, 2014; Al-Sartawi, 2017b; Yassin, 2017). Third, aspects and practices of ORAI such as financial transparency and presentation of updated information (Ettredge et al., 2002; Ezat and El-Masry, 2008; Khan and Ismail, 2012; Alali and Romero, 2012; Kuruppu et al., 2015; Oyelere and Zanella, 2017). Fourth, extent of ORAI popularity among companies (Ghani and Said, 2010; Abdul Aziz et al., 2011; Alqudsi-ghabra et al., 2011; Momany and Pillai, 2013; Pozniak, 2013; Basuony et al., 2014; Brown, 2018). Fifth, the impact of ORAI on other variables such as market value added and competitive advantage (Hunter and Murphy, 2010; Al-Sartawi, 2017a). Sixth, ORAI as a source of information for decision makers like investors (Bonson-Ponte and Escobar-Rodriguez, 2002; Chang et al., 2008; Pinsker and Wheeler, 2009; Turel, 2010; Kelton and Pennington, 2012; Esterhuyse and Wingard, 2016). Based on these veins of research, the current study considered three major aspects of ORAI, which were popular of ORAI, different concerns of ORAI and the impact of using ORAI on investment decision-making process. The following sections highlight dimensions of each of these aspects on which study hypotheses were developed, tested, and interpreted.

2.1 Popularity of ORAI practice among companies

Reviewing the literature of ORAI revealed, in general, five themes of ORAI popularity among companies as shown in Table (1). The first one refers to website maintaining (Brennan and Hourigan, 2000 and Salawu, 2013). Outside demand for ORAI was a considerable theme of adopting ORAI by companies (Khan et al., 2008, Aly et al., 2010 and AdulHalim et al., 2015). Other studies described voluntary online reporting of financial and non-financial information as key dimensions of ORAI popularity (Ettredge et al., 2002, Xiao et al., 2004, Prabowo and Tambotoh, 2005, Turel, 2010; Salawu, 2013 and AdulHalim et al., 2015). In fact, companies prefer the online reporting in response to stakeholders' demand of ORAI and investors increased interest in using ORAI (Brennan and Hourigan, 2000 and Serrano-Cinca et al., 2009). Finally, companies tend to trade their stocks (Agarwal et al., 2015). Percentages of using ORAI mentioned in the previous studies were dismissed in the current study due to the fact that those studies were published in previous studies.

Table 1:

Dimensions of ORAI popularity among companies

Dimensions	Authors
Maintaining a website	Brennan and Hourigan (2000); Salawu (2013);

ISSN 2076-9202

Increased demand for ORAI	Brennan and Hourigan (2000), Khan et al. (2008), Serrano-Cinca et al. (2009).Aly et al. (2010), AdulHalim et al. (2015)
Voluntary adoption of ORAI	Ettredge et al. (2002), Xiao et al. (2004), Prabowo and Tambotoh (2005); Turel (2010); Salawu (2013); AdulHalim et al. (2015).
Investors increased interest to use ORAI	Geerings et al. (2003); Kamalluarifin (2016)
Online trading of stocks	Agarwal et al. (2015)

Following previous studies, this study used the dimensions as reported in Table 1 in order to explore popularity of using ORAI among Saudi companies. Hence, the following hypothesis was suggested:

H_{01}: There is no popularity of ORAI among companies listed in the Saudi Stock Market.

2.2 Companies' concerns about ORAI

Many benefits of using ORAI have been reported in previous studies. Examples of these benefits include ORAI (Spanos and Mylonakis, 2006, Khan et al., 2008, AdulHalim et al., 2015), decreased costs of disclosure (Debreceny et al., 2002), disclosure of suitable content of ROAI (Marston, 2003, Spanos and Mylonakis, 2006, Khan et al., 2008, AdulHalim et al., 2015), improved timeliness and transparency reporting (Kelton and Yang, 2008, Serrano-Cinca et al., 2009, Aly et al., 2010 and AdulHalim et al., 2015), , providing easy access to information (AbuGhazaleh et al., 2012). Another benefit of ORAI related to provide stakeholders with a background about the company, share price and ratio analysis (Hamid, 2005).

Table 2:

Dimensions of companies' concerns about ORAI

Dimensions	Authors
- Presentation of ORAI	Spanos and Mylonakis (2006), Khan et al. (2008), AdulHalim et al. (2015).
- Decreased cost of disclosure.	Debreceny et al. (2002),
- Wider reach and speed.	
- Disclosure of suitable content of ORAI	Marston (2003), Spanos and Mylonakis (2006), Khan et al. (2008), AdulHalim et al. (2015).
- Improved disclosure transparency	Kelton and Yang (2008); Serrano-Cinca et al. (2009); Aly et al. (2010); AdulHalim et al. (2015)
- Timeliness; real-time reporting; periodical reporting of information	AbuGhazaleh et al. (2012); AdulHalim et al. (2015); Kamalluarifin (2016).
- Decreased disclosure cost	AbuGhazaleh et al. (2012)
- Easy access to information	AbuGhazaleh et al. (2012)
- Background of the company	Hamid (2005); Ezat and El-Masry (2008)

ISSN 2076-9202

- Share price data
- Ratio analysis

Referring to dimensions of companies' concerns about ORAI and in order to investigate these concerns among Saudi companies, the following hypothesis was suggested:

H_{02}: There are no concerns about ORAI among companies listed in the Saudi Stock Market.

2.3 Improving investment decision-making process based on ORAI

Examining the relationship between corporate governance and ORAI, Kelton and Yang (2008) found an effect of corporate governance on company's behaviour of Internet information disclosure due to information asymmetry problems between firms' managers and their investors. Esterhuyse and Wingard (2016) defined information asymmetry as a condition in which one party has an access to better information than other parties.

Table 3:

Dimensions of using ORAI to improve investment decisions

Dimensions	Authors
Forecasting and Future Plan	Khan et al. (2008); Ezat and El-Masry (2008).
Reduced information asymmetry	Debreceny et al. (2002); Ettredge et al. (2002); Kelton and Yang (2008); Chang et al. (2008); Esterhuyse and Wingard (2016)
Information on management analysis	Esterhuyse and Wingard (2016)
Financial and nonfinancial information	Spanos and Mylonakis (2006), Salawu (2013); AdulHalim et al. (2015).
Reporting on corporate risks	Domínguez and Gámez (2014)
Efficiency and effectiveness of stock market	Ragab and Omran (2006)

According ot Aly et al. (2010), one of the effective uses of ORAI is to enhance decision-making process of stakeholders. Other uses of ORAI is to ensure effective communication with investors (Bollen et al., 2006). Regarding the relationship between ORAI and investment decision-making process, Domínguez and Gámez (2014) indicated that corporate reporting on risks plays a significant role in decisions-making process and on firm evaluation. Regarding the previous development, we can advance the next hypothesis:

H_{03}: there is no influenceof ORAI on improving investment decision-making in the Saudi Stock Market.

3. Methodology

3.1 The sample, instrument and data collection

Due to the difficulty in locating individual investors who are trading on stocks in the Saudi Stock Market, the number of participants was limited to 30 broker companies which are trading stocks on behalf of individual investors and have sufficient knowledge and experience about the Saudi Stock Market. A questionnaire was developed based on previous studies using Likert-five point scale, where (1) describes strongly disagree and (5) refers to strongly agree. It was

ISSN 2076-9202

structured into four main parts: Part one refers to popularity of ORAI among companies. Part two aimed at exploring concerns about ORAI among companies listed in the Saudi Stock Market. Part three included items related to using ORAI to enhance investors' decision-making process. A total of 150 questionnaires were distributed to participants in the period between March till September 2017. Only 129 questionnaires were returned. Out of them, 7 questionnaires were excluded due to incomplete data. Therefore, the final number of questionnaires used in this study was 122 questionnaires with a response rate of 80%.

Validity and reliability Validity of the questionnaire used in the current study was explored using a panel of academic and practitioner experts comprised six experts to review the relevance of items of the questionnaire. Based on their suggestions, three items were deleted and four items were modified. Reliability, on the other hand, was measured using Cronbach's alpha. Table 4 shows variables, dimensions of items as well as results of Cronbach's alpha of the questionnaire. The results confirmed that Cronbach's alpha each item is acceptable, ORAI popularity ($\alpha = 0.827$), ORAI concerns ($\alpha = 0.949$), ORAI use in decision-making ($\alpha = 0.941$), investors' dimensions ($\alpha = 0.0.921$). The overall Cronbach's alpha value of questionnaire was ($\alpha = 0.966$). According to George and Mallery (2003), a value of alpha greater than 0.90 indicates an excellent level of internal consistency while a value of alpha greater than 0.80 suggests a good level of internal consistency. Therefore, the instrument used in this study was accepted with due to its high level of reliability. Schmitt (1996) added that correlations among measures of variables should be presented in addition to Cronbach's alpha values. The results of inter-item correlation matrix indicated a positive medium to high correlations among variables.

Table 4:

Variables, dimensions, items and Cronbach's alpha of the questionnaire

Variables	Dimensions		No. of Items	Alpha
ORAI popularity	Maintaining a website	POP1	3	0.827
	Increased demand for ORAI	POP2	3	
	Voluntary adoption of ORAI	POP3	3	
	Investors increased interest in ORAI	POP4	3	
	Online trading of stocks	POP5	3	
ORAI concerns	Presentation of ORAI	CON1	4	0.949
	Decreased cost of disclosure.	CON2	3	
	Suitable content of ORAI	CON3	3	
	Improved disclosure transparency	CON4	3	
	Timeliness; real-time and periodical reporting of information	CON5	3	
	Easy access to information	CON6	3	
	Company background and analysis	CON7	3	
ORAI use in decision-making	Forecasting and Future Plan	DEC1	3	0.941
	Reduced information asymmetry	DEC2	4	
	Information on management analysis	DEC3	3	

ISSN 2076-9202

	Financial and nonfinancial information	DEC4	3	
	Reporting on corporate risks	DEC5	3	
	Efficiency and effectiveness of stock market	DEC6	4	
	Total		60	0.966

3.2 Correlation matrix

The results of correlation among variables shown in Table (5) indicated that variables used in this study were positively correlated. ORAI is significantly and positively correlated to ORAI concerns (r = 0.722, P-value = 0.000) and investors use of ORAI in decision-making (r = 0.667, P-value = 0.000). These results suggest a strong linear relationship among variables. Multicollinearity was also evaluated in order to ensure the absence of collinearity problem.

Values of tolerance and variance inflation factors confirmed that none of the variables depended on any of other variables behaviours.

Table 5:

Correlation matrix results

Variables	A	B	C	Tolerance	VIF
A	-			0.478	2.92
B	0.722**	-		0.478	2.92
C	0.667**	0.718**	-	-	-

A: ORAI popularity, B: ORAI concerns, C: ORAI use in decision-making, Tolerance > 0.1, VIF: variance inflation factor < 5.

** Correlation is significant at the 0.01 level (2-tailed).

4. Hypotheses testing

Hypothesis 1 suggested that there is no popularity of ORAI among companies listed in the Saudi Stock Market. Means, standard deviations and t-values were used to assess ranks and relative importance of items for participants' perceptions as can be seen in Table 6.

Table 6:

Means and standard deviations of popularity of ORAI items

No.	Items	Means	SDs	Rank	Importance	t-value	Sig.
5	POP3	3.85	1.34	1	High	6.53	0.000
2	POP2	3.46	1.26	2	Moderate	3.77	0.000
1	POP1	3.39	1.31	3	Moderate	3.44	0.001
4	POP4	3.25	1.31	4	Moderate	2.51	0.003
3	POP5	3.18	0.98	5	Moderate	2.04	0.046
-	-	3.43	1.03	-	Moderate	4.57	0.000

The results in Table 6 designated a moderate overall level of ORAI popularity among companies (mean = 3.43, SD = 1.03, t = 4.57, Sig. = 0.000). Voluntary adoption of ORAI was the item that ranked first with a high degree of importance (mean

ISSN 2076-9202

= 3.85, SD = 1.34, t = 6.53, Sig. = 0.000), while online trading of stocks was the last item with a moderate degree of importance (mean = 3.18, SD = 0.98, t = 2.04, Sig. = 0.046). Based on these results, it was approved that there is an evidence of ORAI popularity among companies listed in the Saudi Stock Market. Consequently, hypothesis 1 was rejected and the alternative hypothesis was supported. Hypothesis 2 postulated that there are no concerns about ORAI among companies listed in the Saudi Stock Market. Means, standard deviations and t-values were used to assess ranks and relative importance of items for participants' perceptions.

Table 7:

Means, standard deviations and t-values of ORAI concerns items

No.	Items	Means	SDs	Rank	Importance	t-value	Sig.
1	CON1	3.61	1.01	1	Moderate	5.09	0.000
5	CON5	3.53	1.31	2	Moderate	4.23	0.000
6	CON6	3.50	0.94	3	Moderate	3.96	0.000
3	CON3	3.46	1.02	4	Moderate	3.48	0.001
7	CON7	3.43	1.32	5	Moderate	3.20	0.002
4	CON4	3.38	1.36	6	Moderate	3.05	0.003
2	CON2	3.18	1.34	7	Moderate	2.48	0.040
-	-	3.44	1.21	-	Moderate	3.99	0.000

The results displayed in Table 7 showed a moderate level of ORAI concerns among companies. Item 1 ranked first (presentation of ORAI) with a moderate degree of importance (mean = 3.61, SD = 1.01, t = 5.09, sig. = 0.000), followed by item 5 (Timeliness or real-time and periodical reporting of information) with a moderate degree of importance (mean = 3.53, SD = 0.94, t = 4.24, Sig. = 0.000). Item 2 rank last with a moderate degree of importance (mean = 3.18, SD = 1.34, t = 2.48, Sig. = 0.000). The results implied a moderate overall of ORAI concerns among companies (mean = 3.44, SD = 1.21, t = 3.99, Sig. = 0.000). Based on these results, hypothesis 2 was rejected and the alternative hypothesis was accepted. That is, companies listed in the Saudi Stock Market have numerous concerns about ORAI. Hypothesis 3 assumed an effect of ORAI on improving investors' decision-making.

Table 8:

Results of multiple regression analysis

Model	Model summary		ANOVA		Coefficients		
	R	R^2	F	Sig.	ß	t	Sig.
1	0.824	0.679	126.024	0.000			
A					0.160	2.14	0.035
B					0.701	9.33	0.000

Predictors: A (popularity of ORAI), B (ORAI concerns). Dependent variable: improving investors decision-making by ORAI

The results in Table 8 showed a strong positive relationship among popularity of ORAI and ORAI concerns and improving investors decision-making by ORAI (r = 0.824). In fact, these factors can explain about 68% of the variance in

ISSN 2076-9202

improving investors decision-making by ORAI. F-value with a significant level at $\alpha \leq 0.05$ (F = 126.024, Sig. = 0.000) emphasized a goof fit model in which independent variables are able to predict the dependent variable. The results indicated also that the degree of effect of ORAI popularity on improving investors decision-making by ORAI (ß = 0.160, t = 2.14, Sig. = 0.035) was less that the degree of effect of ORAI concerns on improving investors decision-making by ORAI (ß = 0.701, t = 9.33, Sig. = 0.000). Consequently, hypothesis 3 was rejected and instead the alternative hypothesis was supported which stated that both popularity of ORAI and ORAI concerns and improving investors decision-making by ORAI have a significant effect on improving investors decision-making. Table 9 presented the results of hypotheses testing.

Table 9:

Summary of hypotheses testing

No.	Hypotheses	Results
H01	There is no popularity of ORAI among companies listed in the Saudi Stock Market.	Supported
H02	There are no concerns about ORAI among companies listed in the Saudi Stock Market.	Supported
H03	There is no effect of ORAI on improving investment decision-making in the Saudi Stock Market.	Supported

5. Discussion and conclusion

Threefold aims were established in this study. First, to investigate the popularity of ORAI among companies listed in the Saudi Stock Market. Second, to explore concerns that the same companies have on ORAI. Third, to examine the effect of using ORAI by Saudi companies on improving investment decision-making process. The results based on data that collected form broker companies confirmed a good level of ORAI popularity among those companies. For participants in this study, the popularity level of ORAI was approved since these companies have a good degree of voluntary adoption of ORAI in the existence of an increased demand from for ORAI from stakeholders particularly investors.

This was in line with previous studies that indicated an outside demand for ORAI by companies (Khan et al., 2008, Aly et al., 2010 and AdulHalim et al., 2015), website maintaining (Brennan and Hourigan, 2000 and Salawu, 2013) as well as increased interest for ORAI by investors (Brennan and Hourigan, 2000 and Serrano-Cinca et al., 2009) and trading stocks using online means (Agarwal et al., 2015). On the other hand, the results accepted that companies have numerous concerns relating to ORAI. Examples of these concerns found by the current study with agreement of previous studies covered presentation of ORAI (Spanos and Mylonakis, 2006, Khan et al., 2008, AdulHalim et al., 2015), decreased cost of disclosure of accounting information (Debreceny et al., 2002), providing a periodical and real-time updated information along with transparency reporting (Kelton and Yang, 2008, Serrano-Cinca et al., 2009, Aly et al., 2010 and AdulHalim et al., 2015), providing suitable content of information when suing online reporting (Marston, 2003, Spanos and Mylonakis, 2006, Khan et al., 2008, AdulHalim et al., 2015) using easy access to this information (AbuGhazaleh et al., 2012) and to disclosure a background on the company, share prices and ratio analysis (Hamid, 2005).

Finally, the results pointed out a significant effect of using ORAI on improving investors' decision-making process. The same result was echoed in Epping and Wilder (2011) who found a positive relationship between web-based reporting of accounting information and enhancement of investment decisions. On the other hand, AdulHalim et al. (2015) also

ISSN 2076-9202

showed an influence of non-financial information on investors' decisions. According to Esterhuyse and Wingard (2016), companies that seek to increase investors' certainty proceed to voluntary disclosure. Geerings et al. (2003) highlighted an influence of non-financial information on investors' decision-making process. Kamalluarifin (2016) found that companies provide investors with easy access to information in order to make decisions possible. It was concluded based on these results that companies listed in the Saudi Stock Market use online reporting of their financial and non-financial information.

The majority of these companies voluntary chose ORAI in response to the increased demand from stakeholders for using ORAI and to provide a good image of the company in the eyes of investors by adopting several significant practices such as updating their information presented via the Internet, decreasing information asymmetry, achieving information transparency, reporting corporate risks, helping investors through furnishing information on management analysis, future planning and predictions, financial and non-financial information, and efficiency and effectiveness of stock market.

6. Contribution, limitations and recommendations

Many studies have been carried out to investigate online reporting of accounting information in different countries. However, the current study provided a main contribution to the body of the literature through investigating both popularity and concerns of ORAI among companies listed in the Saudi Stock Market in addition to highlighting that using ORAI plays a critical in the enhancement of investment decision-making process. Despite the results of this study, generalization of these results should be considered with caution due limitations of the study related to the small size of the sample, difficulty to reach more investors as well as the cross-sectional design adopted in this study. Future studies, therefore, are called to pay great attention to these limitations.

Bibliography

Abdul Aziz, A., Ariffin, N. and Mohamed, I. (2011). Internet financial reporting in Malaysia. International Conference on Machine Learning and Computing, IPCSIT, 3, IACSIT Press, Singapore.

Abdullah, M. D. F., Ardiansah, M. N., & Hamidah, N. (2017). The Effect of Company Size, Company Age, Public Ownership and Audit Quality on Internet Financial Reporting. Sriwijaya International Journal of Dynamic Economics and Business, 1(2), 153-166.

AbuGhazaleh, N., Qasim, A. and Robert, C. (2012). The determinants of Web-based investor relations activities by companies operating in emerging economics: The case of Jordan. Journal of Applied Business Research, 28(2), 209-226.

AdulHalim, N., Basiruddin, R. and Ali, N. (2015). Measuring the extent of investor relations on the web: A multi-dimensional approach. Procedia Economics and Finance, 31, 714-721.

Agarwal, V., Taffler, R., Bellotti, X. and Nash, E. (2015). Investor relations, information asymmetry and market value. Accounting and Business Research, 46(1), 31-50.

Agyei-Mensah, B. (2012). Corporate financial reporting: Firm characteristics and the use of internet as a medium of communication by listed firms in Ghana. African Journal of Business Management, 6 (6), 2299-2309.

Alali, F. and Romero, S. (2012). The use of the Internet for corporate reporting in the Mercosur (Southern common market): The Argentina case. Advances in Accounting, 28(1), 157-167.

Alam, Z. and Rashid, K. (2014). Corporate Financial Reporting on the Internet: A Survey of Websites of Listed Companies in Pakistan. The IUP Journal of Corporate Governance, XIII(3), 17-39.

Al-Htaybat, K., (2011). Users' perceptions on Internet financial reporting practices in emerging markets: Evidence from Jordan. International Journal of Business and Management, 6 (9), 170-182.

Alkhatib, Esra'a and Collis, Jill and Ojala, Hannu, Digital Reporting by Small Private Companies: Evidence from the UK (June

ISSN 2076-9202

1, 2017). Available at SSRN: https://ssrn.com/abstract=2978512 or http://dx.doi.org/10.2139/ssrn.2978512

Alqudsi-ghabra, T., Al-Bannai, T. and Al-Bahrani, M. (2011). The Internet in the Arab Gulf Cooperation Council (AGCC): Vehicle of change. International Journal of Internet Science, 6 (1), 44-67.

Al-Sartawi, A. (2017a). The Effect of the Electronic Financial Reporting on the Market Value Added of the Islamic banks in Gulf Cooperation Council Countries, 8th Global Islamic Marketing Conference. 4-6 May. International Islamic Marketing Association, Turkey

Al-Sartawi, A. (2017b). The Level of Disclosing Intellectual Capital in the Gulf Cooperation Council Countries. International Research Journal of Finance and Economics, 159, 90-99.

Alshowaiman, N. (2013). The internet financial reporting by listed Saudi companies on tadawul website:(between 2004 and 2005). Journal of Administrative and Economic Sciences, 6 (2), 13-43.

Aly, D., Simon, J. and Hussainey, K. (2010). Determinants of corporate internet reporting: evidence from Egypt. Managerial Auditing Journal, 25 (2), 182-202.

Andrikopoulos, A., Merika, A., Triantafyllou, A. and Merikas, A. (2013). Internet disclosure and corporate performance: A case study of the international shipping industry. transportation research Part A, 47, 141-152.

Ashbaugh, H., Johnstone, K. and Warfield, T. (1999). Corporate reporting on the Internet. Accounting Horizons: 13 (3), 241-257.

Basuony, M. and Mohamed, E. (2014). Determinants of internet financial disclosure in GCC countries. Asian Journal of Finance & Accounting, 6 (1), 70.

Beattie, V. and Pratt, K. (2003). Issues concerning web-based business reporting: an analysis of the views of interested parties. The British Accounting Review, 35 (2), 155-187.

Bin-Ghanem, H. and Ariff, A. (2016). The effect of board of directors and audit committee effectiveness on internet financial reporting: Evidence from gulf co-operation council countries. Journal of Accounting in Emerging Economies, 6 (4), 429-448.

Bollen, L., Hassink, H. and Bozic, G. (2006). Measuring and explaining the quality of Internet investor relations activities: A multinational empirical analysis. International Journal of Accounting Information Systems, 7 (4), 273-298.

Bonson-Ponte, E. and Escobar-Rodriguez, T. (2002), "A survey on voluntary disclosure on the internet: empirical evidence from 300 European Union companies", The International Journal of Digital Accounting Research, Vol. 2 No. 3, pp. 27-52.

Brennan, N. and Hourigan, D. (2000). Corporate reporting on the internet by Irish companies. Irish Accounting Review, 7, 107-35.

Brown, A. (2018). The financial reporting of the National Fisheries Corporation of Tuvalu: The case for alternative indigenous reporting mechanisms. Marine Policy, 88, 93-100.

Çalişkan and Göler (2014). Corporate reporting on the Internet: An investigation on Turkish listed companies. Marmara University Journal of Economic & Administrative Sciences, 36 (2), 251-274.

Chang, M., D'Anna, G., Watson, I., & Wee, M. (2008). Does disclosure quality via investor relations affect information asymmetry?. Australian Journal of management, 33(2), 375-390.

Chou, S., Yen, T. and Kuo, Y. (2011). Internet information relevance of financial institutions: Evidence from Taiwan. Review of Pacific Basin Financial Markets and Policies, 14(04), 647-670.

Debreceny, R., Gray, G. and Rahman, A. (2002). The determinants of Internet financial reporting. Journal of Accounting and Public policy, 21 (4-5), 371-394.

Domínguez, L., and Gámez, L. (2014). Corporate reporting on risks: Evidence from Spanish companies. Revista de Contabilidad, 17 (2), 116-129.

Dull, R., Graham, A. and Baldwin, A. (2003). Web-based financial statements: hypertext links to footnotes and their effect on decisions. International Journal of Accounting Information Systems, 4 (3), 185-203.

Dutta, P. and Bose, S. (2007). Web-based corporate environmental reporting in Bangladesh: An exploratory study. Cost and

ISSN 2076-9202

Management, 35 (6), 29-45.

Elsayed, A., El-Masry, A. and Elbeltagi, I. (2010). Corporate governance, firm characteristics, and Internet financial reporting: Evidence from Egyptian Listed companies. Corporate Ownership & Control, 7 (4), 396-426.

Epping, L. and Wilder, L. (2011). Factors impacting the credibility of websites disclosure. Journal of Financial Reporting and Accounting, 9 (1), 27-46.

Esterhuyse, L. and Wingard, C. (2016). An exploration of the online investor relations (IR) practices of companies listed on the Johannesburg Stock Exchange (JSE). South African Journal of Economic and Management Sciences, 19 (2), 215-231.

Ettredge, M., Richardson, V. and Scholz, S. (2002). Dissemination of information for investors at corporate Web sites. Journal of Accounting and Public Policy, 21 (4-5), 357-369.

Ezat, A. and El-Masry, A. (2008). The impact of corporate governance on the timeliness of corporate internet reporting by Egyptian listed companies. Managerial finance, 34 (12), 848-867.

Gajewski, J. and Li, L. (2015). Can Internet-based disclosure reduce information asymmetry?. Advances in Accounting, 31 (1), 115-124.

García, A. and Garcia-Garcia, J. (2010). Determinants of online reporting of accounting information by Spanish LGAs. Local Government Studies, 36 (5), 679-695.

Geerings, J., Bollen, K. and Hassink, H. (2003). Investor relations on the Internet: A survey of the Euronext Zone. European Accounting Review, 13(3), 567-579.

George, D. and Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference. Boston: Allyn & Bacon.

Ghani, E. and Said, J. (2010). Digital reporting practices among Malaysian local authorities. Electronic Journal of e-Government, 8 (1), 33-44.

Hamid, F. (2005). Malaysian companies' use of the Internet for investor relations. Corporate Governance, 5 (1), 5-14.

Hellmann, A. (2016). The role of accounting in behavioral finance. Journal of Behavioral and Experimental Finance, 9, 39-42.

Holm, C. (2000). Financial reporting on the Internet - An examination across industries and company size. The 23rd Annual Congress of the European Accounting Association, Munich, Germany, March 29-31, 2000.

Hunter, Shirley A. and Smith, L. Murphy. 2010. Impact of Internet Financial Reporting on Emerging Markets. Journal of International Business Research. 8 (2): 21- 40.

Ismail , T. (2002). An empirical investigation of factors influencing voluntary disclosure of financial information on the Internet in the GCC countries. Available at https://ssrn.com/abstract=420700 or http://dx.doi.org/10.2139/ssrn.420700.

Kamalluarifin, W. (2016). The influence of corporate governance and firm characteristics on the timeliness of corporate Internet reporting by top 95 companies in Malaysia. Procedia Economics and Finance, 35, 156-165.

Kelton, A. and Pennington, R. (2012). Internet financial reporting: The effects of information presentation format and content differences on investor decision making. Computers in Human Behavior, 28(4), 1178-1185.

Kelton, A. and Yang, Y. (2008). The impact of corporate governance on Internet financial reporting. Journal of accounting and Public Policy, 27 (1), 62-87.

Khan, M. and Ismail, N. (2012). Bank officers' views of Internet financial reporting in Malaysia. Procedia - Social and Behavioral Sciences, 57, 75-84.

Khan, M. and Ismail, N. (2014). Determinants of web based financial reporting in Malaysia. GIABR Journal of Business, 1 (1), 83-102.

Khan, M., Muzaffar, A. and Nazmul, A. (2008). Corporate financial reporting on Internet: Global developments and an appraisal of practices in Bangladesh. Working Paper No. AIUB-BUS-ECON2008-25. American International University-Bangladesh. Available at: http://orp.aiub.edu/WorkingPaper/WorkingPaper.aspx?year=2008.

Kuruppu, N., Oyelere, P. and Al Jabri, H. (2015). Internet financial reporting and disclosure practices of publicly traded corporations: Evidence from Sri Lanka. Accounting & Taxation, 7 (1), 75-91.

ISSN 2076-9202

Laswad, F., Fisher, R. and Oyelere, P. (2005). Determinants of Voluntary Internet Financial Reporting by Local Government Authorities. Journal of Accounting and Public Policy, 24, 101-121.

Marston, C. (2003). Financial reporting on the internet by leading Japanese companies. Corporate communications: An international journal, 8 (1), 23-34.

Marston, C. and Polei, A. (2004). Corporate reporting on the Internet by German companies. International Journal of Accounting Information Systems, 5 (3), 285-311.

Momany and Pillai (2013). Internet financial reporting in UAE: Analysis and implications. Global Review of Accounting and Finance, 4 (2), 142-160.

Momany, M. and Al-Shorman, S. (2006). Web-based voluntary financial reporting of Jordanian companies. International Review of Business Research Papers, 2, 127-39.

Ojah, K. and Mokoaleli-Mokoteli, T. (2012). Internet financial reporting, infrastructures and corporate governance: An international analysis. Review of Development Finance, 2 (2), 69-83.

Oyelere, P. and Zanella, F. (2017). Regulation and Transparency: The Case of Corporate Governance Disclosure on the Internet in the United Arab Emirates. World Academy of Science, Engineering and Technology, International Journal of Economics and Management Engineering, 11(12).

Oyelere, P., Laswad, F. and Fisher, R. (2003). Determinants of Internet financial reporting by New Zealand companies. Journal of International Financial Management and Accounting, 14 (1), 26-63.

Parlakkaya, R., Kahraman, U. and Cetin, H. (2015). The effects of the corporate governance on the level of Internet financial reporting: Evidence from Turkish companies. International Journal of Economics and Management Engineering, 9 (3), 920-924.

Pinsker, R. and Wheeler, P. (2009). Nonprofessional investors' perceptions of the efficiency and effectiveness of XBRL-enabled financial statement analysis and of firms providing XBRL-formatted information. International Journal of Disclosure and Governance, 6(3), 241-261.

Prabowo, R. and Tambotoh, J. (2005). Internet financial reporting as a voluntary disclosure practice: An empirical analysis of Indonesian manufacturing firms using order logistic regression. Jurnal Akuntansi & Bisnis,5(2), 149-160.

Ragab, A. and Omran, M. (2006). Accounting information, value relevance and investors' behavior in the Egyptian equity market. Review of Accounting and Finance, 5(3), 279-297.

Razak, R. and Zarei, K. (2015). The Influence of board characteristics and ownership structure on the extent of Internet financial disclosure in Saudi Arabia. Journal of Emerging Trends in Economics and Management Sciences, 6 (2), 158-168.

Rodrigues, L. and Menezes, C. (2003). Financial reporting on the internet - The Portuguese case. RAE electron, 2 (2). http://dx.doi.org/10.1590/S1676-56482003000200004.

Rowbottom, N. and Lymer, A. (2009). Exploring the use of online corporate reporting information. Journal of Emerging Technologies in Accounting, 6 (1), 27-44. https://doi.org/10.2308/jeta.2009.6.1.27.

Salawu, M. (2013). The extent and forms of voluntary disclosure of financial information on Internet in Nigeria: An exploratory study. International Journal of Financial Research, 4(1), 110-119.

Sanad, Zakeya, Al-Sartawi, Abdalmuttaleb. 2016. Investigating the Relationship between Corporate Governance and Internet Financial Reporting (IFR): Evidence from Bahrain Bourse. Jordan Journal of Business Administration, 12(1):239-269.

Scherr, E. and Ditter, D. (2017). Customization versus standardization in electronic financial reporting: Early evidence from the SEC XBRL Mandate. Journal of Information Systems: Summer, 31 (2),125-148.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. Psychological Assessment, 8(4), 350-353.

Serrano-Cinca, C., Rueda-Tomás, M. and Portillo-Tarragona, P. (2009). Factors influencing e-disclosure in local public administrations. Environment and planning C: Government and Policy, 27 (2), 355-378.

Sharma, N. (2013). Web-based disclosures and their determinants: Evidence from listed commercial banks in Nepal. Accounting and Finance Research, Accounting and Finance Research, 2 (3), 1-13.

ISSN 2076-9202

Smith, B. and Pierce, A. (2005). An investigation of the integrity of Internet financial reporting. The International Journal of Digital Accounting Research, 5 (9), 47-78.

Spanos, L. and Mylonakis, J. (2006). Internet corporate reporting in Greece. European Journal of Economics, Finance and Administrative Sciences, 7, 1-14.

Turel, A. (2010). The Expectation Gap in Internet Financial Reporting: Evidence from an Emerging Capital Market. Middle Eastern Finance and Economics, (8), 94-107.

Williams, S., Scifleet, P. and Hardy, C. (2006). Online business reporting: An information management perspective. International Journal of Information Management, 26 (2), 91-101.

Xiao, J., Yang, H. and Chow, C. (2004). The determinants and characteristics of voluntary Internet-based disclosures by listed Chinese companies. Journal of Accounting and Public Policy, 23 (3), 191-225.

Yassin, M. (2017). The determinants of internet financial reporting in Jordan: financial versus corporate governance. International Journal of Business Information Systems, 25(4), 526-556.

ISSN 2076-9202

INCREASING BUSINESS INTELLIGENCE THROUGH A CRM APPROACH: AN IMPLEMENTATION SCHEME AND APPLICATION FRAMEWORK

G. Athanasoulias
School of Social Sciences, Hellenic Open University, Parodos Aristotelous 18, 26 335, Patra, Greece,
E-mail: athanasoulias@gmail.com

P. Chountalas
School of Social Sciences, Hellenic Open University, Parodos Aristotelous 18, 26 335, Patra, Greece,
E-mail: chountalas.panagiotis@ac.eap.gr (contacting author)

Abstract

It is clear in fact that Customer Relationship Management (CRM) projects often end up in failure and it seems that companies lack guidance for appropriate implementation practice. The purpose of this paper is twofold: (i) to present an efficient CRM implementation scheme and (ii) to develop an integrated application framework for a fully customized software system that integrates various day-to-day operations and provides CRM capabilities. The framework is applied to a practical real-life case study of a company offering a wide range of cosmetic products, focusing on increasing customer loyalty, enhancing sales taskforce productivity, and reducing customer management costs. The importance of this study lies in that it provides a systematic, practical and efficient approach of designing and implementing a CRM system. This approach is also directly applicable to any company operating through a network of sales representatives who promote and sell products utilizing outbound telephone communication.

Keywords: Customer Relationship Management; Business Information Systems; business intelligence; implementation scheme; application framework; cosmetic industry.

ISSN 2076-9202

1. Introduction

Back in the old days, retailers, banks, insurance companies, and card dealers had a close relationship with their customers. They often knew them in person, understood what they wanted, and were in a position to satisfy their needs and meet their expectations through personal customized service. As a result, they earned loyalty and a substantial share of their customers' wallet. This, however, came at a cost, since customers effectively subsidized this relationship by paying higher prices (Peppard, 2000). Over the years, through mass marketing and increased consumerism, distinguishing individual consumers became far too difficult. Companies began designing standardized products and services to deliver to segmented customer populations. Since serving the needs of individual customers was expensive and customer-level data was not available, the importance of the habits and preferences of individual customers was inevitably downgraded (Kumar and Reinartz, 2012).

Nowadays, leaps in information and communications technology and the ubiquity of the Internet, offering customers variety, lower prices, and personalized service has become the key dimension on which companies forge their competitive advantage. Companies are practicing elements of an approach to marketing that uses continuously refined information about current and potential customers to anticipate and respond gracefully to their needs, namely Customer Relationship Management or CRM (Peppard, 2000). According to McKim and Hughes (2000), *"CRM was invented because customers differ in their preferences and purchasing habits. If all customers were alike, there would be little need for it"*.

The term CRM emerged in the information technology (IT) vendor community by the mid-nineties and it is used to describe software packages that are intended to integrate and manage all aspects of customer interaction. More broadly, however, it involves combining a business and marketing strategy to integrate people, processes, business activities, and technology. Under this perspective, CRM can be seen as a sales- and service-related business strategy that enables companies to improve their business-customer

ISSN 2076-9202

relationship by focusing on consumer needs and demands, thus resulting in increased customer satisfaction and company profitability. From the above, it is evident that this approach effectively incorporates the quality management philosophy (Havlíček et al., 2013). It is also obvious that CRM relies heavily on technological advances since Computer Science and the Web help companies to collect and efficiently manage data about their customers.

CRM benefits are already well documented: (i) it provides better sales/marketing information such as personal details, background, habits, and preferences; (ii) it improves targeting to segments and individual customers; (iii) it enables customer value assessment (iv) it improves productivity by shortening the sales cycle, providing rapid access to inventory availability and reducing the number of cold leads; and (v) it enhances customer care, as it reduces the administrative workload, and highlights and resolves customer service problems more efficiently (for a further discussion on CRM benefits see also Abdul-Muhmin, 2012; Athanasoulias and Chountalas, 2017; Chen and Popovich, 2003; El Essawi and El Aziz, 2012; Goldenberg, 2008). Thus, it comes as no surprise that especially high-growth companies see CRM as a "critical way of life" (LaValle, 2013).

However, CRM projects are characterized by a high failure rate and it seems that a more appropriate implementation practice is needed (King and Burgess, 2008). Addressing this challenge, some recent studies have proposed various conceptual models and frameworks (see Moalagh and Ravasan, 2013; Nour, 2012; Schniederjans and Yadav, 2013), although much additional work needs to be done at a more practical level. In this context, several critical success factors for CRM implementation should be considered from a people, process, and technology perspective (Meyliana et al., 2016).

This paper aims at providing further practical guidance in this field, focusing on the technology perspective, by presenting an efficient CRM implementation scheme and an integrated application framework for a fully customized CRM software system. As a practical case project, a web-based software system is developed – namely Web Cosmetic Sales (referred hereafter as WCS) – that integrates

ISSN 2076-9202

various day-to-day customer-related operations and provides CRM capabilities to a company offering a wide range of cosmetic products. The company operates through a network of home-based sales representatives who promote and sell products, utilizing outbound telephone communication. The primary focus of the company is mainly set on increasing customer loyalty, enhancing sales taskforce productivity, and reducing customer management costs. The application is based on cutting-edge technologies (i.e. Java EE, the Hibernate Object Relational Model and the open-source framework GWT) and incorporates features such as customer database, customer loyalty and referral reward schemes, automated e-mail notifications to customers, customer preferences, sales force automation, sales force productivity, electronic submission of orders, order history, data analysis of orders, and visualisation.

The remainder of this paper is organized as follows: section 2 reviews the modules and features of a CRM Software System; section 3 offers a breakdown of the WCS implementation process by outlining the requirements' analysis, design, coding, and testing phases; section 4 describes and depicts the functionality and application features of WCS; section 5 discusses the way WCS increases business intelligence; the final section of the paper draws some conclusions on the CRM implementation process and suggests a number of possible improvements and extensions to WCS.

2. CRM Software System Modules and Features

This section presents the modules and features of a typical CRM Software System, that formed the basis of the distinct WCS components, categorized as follows: (i) Customer Database; (ii) Sales Force Automation / Operational CRM; (iii) Loyalty Reward Programs; and (iv) Referral Management.

2.1 Customer Database

Companies have been capturing and storing volumes of information for a number of years. This mass infusion of data creates unlimited opportunities for building relationships with customers. Data

ISSN 2076-9202

management is a key CRM enabler. Creating a single, accurate, and consolidated view of a customer establishes a foundation that supports all CRM efforts.

When considering the overall CRM objective, the most important data management requirements that must be met are the following (Baran et al., 2008):

- all customer data needed must be delivered in a time frame appropriate to the needs of each point of interaction.
- customer data delivered must consistently and accurately represent a given consumer entity.
- the distribution of customer data from its source to all points of interaction must be managed through a single point of reference.
- all points of customer and business unit interaction must have access to relevant customer data.

The above requirements are met by enabling technology components, such as a referential database. The data managed by a customer database is categorized into primary and secondary. Primary data is acquired directly from the original source, as for instance is the case of personal information, whereas secondary data is information created from other data, such as analysis of spending patterns and preferences. A CRM database usually holds both primary and secondary data on the customer. It is thus considered an invaluable asset for any company.

Marketers typically use customer databases to identify and profile the most valuable customers and communicate with them in ways likely to elicit a customer response. In general, the following information is included in customer databases (Kumar and Reinartz, 2012):

- Basic information: name, address, ZIP code, and telephone number.
- Demographic information: age, gender, marital status, education, number of people in household, income, and so on.
- Psychographic information: values, activities, interests, preferences.

ISSN 2076-9202

- Transaction history: the transactions a customer has conducted; how frequently she/he purchases goods; how much she/he spends; how she/he was acquired.
- Other information: inquiries and referrals, satisfaction, loyalty.

Customer databases can be categorized, according to their underlying technology, as follows: Hierarchical Database; Inverted Database; Object Database; Document Database; and Relational Database (for an in-depth discussion for each database type, see Geetha and Sreenath, 2012; Harrington, 2009; Joo and Lee, 2005; Kostenetskiy and Sokolinsky, 2007; Loganantharaj and Narayan, 2006; Sabău 2007).

As time goes by, some portion of the customer data becomes out-of-date or less important from a CRM perspective. At the same time, the inflow of vast amounts of data has a deteriorating effect on the customer database. CRM data archiving is the process of moving data that is still important and necessary for future reference or regulatory compliance, but is no longer actively used to a separate data storage device for long-term retention.

2.2 Sales Force Automation / Operational CRM

The sales force, with its close customer contact, is in a position to take a lead role in the collection and dissemination of market information and the creation of valuable customer relationships. Before implementing Sales Force Automation (SFA) tools, companies experienced poor distribution of sales-related information, inconsistent sales practices, and poor communication between customers and internal marketing groups (Bush et al., 2005). Application of technology to the selling function in the form of SFA has allowed the sales force to operate in a more efficient manner.

ISSN 2076-9202

Sales Force Automation (SFA), or Operational CRM, occurs when companies computerize and standardize various routine tasks and activities. Companies that utilize SFA systems to form superior market-sensing and customer-linking capabilities are in a position to inform and guide the internal processes of the company that are responsible for creating customer value. The potential rewards for these enhanced capabilities are reduced costs, enhanced productivity, increased closing rates, better information flow within the company, elimination of duplicate databases, better collaboration between the sales force and production units, more flexibility with customer services, ability to share best practices, ability to reassign leads that have not been acted on, and more effective management of the sales force. It can also improve the sales process by creating cross-selling, up-selling, and push-selling opportunities (Barker et al., 2009).

The SFA ecosystem nowadays consists of SFA solution providers, hardware and infrastructure vendors, and service providers (Buttle, 2009):

- SFA solution providers: they are classified in SFA specialists that offer solutions focused on particular areas of functionality within SFA and enterprise suite vendors that offer enterprise CRM suites that include SFA modules.
- Hardware and infrastructure vendors: SFA applications create significant challenges for the hardware infrastructure. Vendors are required to provide solutions based on considerations, such as the number of communication channels that need to be integrated with the SFA application (e.g. web, e-mail or telephone) and the data processing overhead involved.
- Services: service providers can contribute significantly to the overall project expenditure and the deployment success. They may offer services in areas such as sales process re-engineering and sales personnel training.

SFA applications offer a range of functionality, including: Account Management; Activity Management; Contact Management; Order Management; Contract Management; Document Management; Event Management; Incentive Management; Lead Management; Opportunity Management; Pipeline

ISSN 2076-9202

Management; Product Encyclopedias; Proposal Generation; Quotation Management; Sales Forecasting; Territory management; and Workflow Engineering (for a further discussion of SFA application features see also Boujena et al., 2009; Buttle et al., 2006; Honeycutt et al., 2005; Puri and Ranjan, 2011; Schillewaert et al., 2005). However, only a few solutions provide the full complement of features (Buttle, 2009).

Apart from this generic set of activities, SFA vendors often design context-specific solutions applicable in industries ranging from insurance to pharmaceuticals. Also, most SFA applications can generate a wide range of standard and customizable reports useful to the sales force and managers. These reports mainly deliver charts and texts and are useful for identifying misconfigurations in the sales process.

2.3 Loyalty Reward Programs

According to Engel and Blackwell (1982), loyalty is the preferential attitudinal and behavioral response toward one or more brands in a product category expressed over a period of time by a consumer. Typically, researchers measure five types of behaviour during certain time intervals to define loyalty in a competitive market: (i) the percentage of customers buying a brand; (ii) the number of purchases per buyer; (iii) the percentage of customers who continue to buy the brand; (iv) the percentage of customers who are 100% loyal; and (v) the percentage of customers who also buy other brands – duplicate buyers (Hu et al., 2010).

Loyal customers offer businesses a steady customer base, more frequent purchase cycles, and higher profit margins (Rigby et al., 2002). For these reasons, academics have spent considerable effort attempting to explain the mechanisms that affect consumers' loyalty, while practitioners have developed and applied numerous strategies focused on developing a loyal customer base (McCall and Voorhees, 2010).

ISSN 2076-9202

Loyalty programs are structured marketing efforts that aim to enhance customers' loyalty and increase a company's long-term profitability by rewarding their repeat purchase behavior (Hu et al., 2010). Loyalty programs have become a mainstay in several industries. Virtually all airlines, hotels, restaurants, and retailers now provide some type of incentive for customers to encourage loyalty (Hoffman and Lowitt, 2008). Meyer-Waarden and Benavent (2009) report that more than 60% of European and American consumers belong to at least one grocery store loyalty program and that memberships have experienced double-digit annual growth rates.

According to Kumar and Reinartz (2012), the main loyalty programs objectives are as follows:

- Building true loyalty: Customers tend to exhibit behavioral loyalty, that is to transact more with the company for a number of reasons including convenience, price, and a sense of loyalty. A loyalty program aims to invoke greater customer commitment by building loyalty.
- Efficiency profits: Loyalty programs can induce a change in customer's buying pattern that can, in turn, lead to efficiency profits. This change is measurable in several ways, such as basket size, the purchase frequency acceleration, price sensitivity, share of wallet, retention, and lifetime duration.
- Effectiveness profit: The term refers to the medium-to-long term profit realized by using the loyalty program to gather information about individuals and their behavior and preferences. This process of learning allows the company to provide a better-tailored value proposition through effective product offerings.
- Value alignment: If a company pursues value alignment, it simply attempts to match the cost incurred to serve a particular customer with the profit that person brings to the company.

O'Brien and Jones (1995) suggest that five elements of a loyalty program determine its value: (i) the cash value of the redemption rewards (e.g. the ratio of the cost of an airline ticket to the dollar purchases necessary to accumulate frequent-flyer points); (ii) the range of choice of these rewards (e.g. choice of flight destinations); (iii) the aspirational value of the rewards (e.g. exotic free travel is more desirable than

ISSN 2076-9202

a cash-back offer); (iv) the perceived likelihood of achieving the rewards (e.g. how many points are required to qualify for a flight); and (v) the schemes ease of use. Buttle (2009) also argues that the main drivers of loyalty program effectiveness are the alignment of the program design with the desired goals, and the attainability and relevance of rewards.

2.4 Referral Management

The concept of relationship marketing as a set of marketing activities aiming at establishing, developing, and maintaining exchange relationships has dominated the marketing discourse during the last decades (Morgan and Hunt, 1994). In industrial marketing, the philosophy of relationship marketing can be taken to the extreme in the form of reference utilization, where existing customer relationships have a key role in the supplier's marketing activities (Salminen and Möller, 2006).

In the process of customer reference utilization, existing customers typically work as important advocates and “enthusiasts” for the supplier company (Osarenkhoe and Bennani, 2007), by giving testimonials, hosting reference visits, and providing information about the delivered solutions and their performance. These kinds of reference customers are generally considered as powerful marketing tools for reducing the perceived risk of a potential buyer and increasing the supplier's credibility. American Express, British Telecom, and many phone companies offer discounts and other rewards to customers who help them sign up new subscribers to their services (Biyalogorsky et al., 2001). Large IT companies such as Microsoft, Dell, IBM, SAP, and Sun Microsystems have coordinated customer reference programs designed to encourage their business customers to participate in various reference activities, ranging from being interviewed for a customer case or video testimonial to hosting a reference visit or talking at an industry event (Jalkala and Salminen, 2010). Eismann, the German frozen food manufacturer estimates that 30% of its new customers are recruited by referrals from satisfied customers (Buttle, 2009). Despite, however, of naturally-occurring referrals, companies still choose to develop a Customer Referral Scheme (CRS).

ISSN 2076-9202

CRFs are also known as Member-Get-Member (MGM) and Recommend-A-Friend (RAF) schemes.

Customer reference marketing, as a phenomenon, needs to be distinguished from word-of-mouth (WOM) communications (Trusov et al., 2009). Although some authors use the concepts of WOM and referencing interchangeably (Olaru et al., 2008), it is important to make a distinction between them. While WOM is typically described as an informal interaction between customers, and thus may be characterized as a market-level phenomenon, largely beyond the control of marketers, customer reference marketing concerns supplier-initiated activities undertaken in order to leverage customer relationships and previous deliveries (Jalkala and Salminen, 2010).

CRFs are a very cost-effective method of customer acquisition. They cost little to operate – much less than advertising – and the customers derived by these strategies tend to be more loyal and spend more (Buttle, 2009). According to a study conducted by Schmitt (2010), referred customers have a higher contribution margin, a higher retention rate and are more valuable (at least 16%) than non-referred customers with similar demographics.

According to Johnson et al. (2003), the following are the factors that contribute to a customer's willingness to refer:

- Relationship appraisal with the salesperson: Referrals result from the salesperson and customer having a good relationship. An empirical study that examined referrals found that high levels of relationship quality with the salesperson are associated with customer likelihood of referring business to the salesperson (Boles et al., 1997).
- Perceived relationship continuity: The easiest referrals come from clients with whom the salesperson has an ongoing relationship (Washburn, 1996).
- Satisfaction: Customers who have higher levels of satisfaction within the buyer-salesperson relationship are more likely to have positive appraisals of their relationship with their salesperson (Biyalogorsky et al., 2001).

ISSN 2076-9202

- Conflict: The buyer's perceived tension with the salesperson may have a negative outcome on the buyer-seller relationship unless it is effectively managed (Weitz and Bradford, 1999).
- Trust: Trust is defined as having confidence that the salesperson can be relied upon to behave in a manner that serves the long-term interest of the customer (Wilson, 1995). Customers' assessment of the degree of trust they have in their salesperson will influence their overall evaluation of the buyer-seller relationship.

3. WCS implementation scheme

This section outlines the system development methodology employed during this study. WCS realization was based on the Waterfall model. This is a sequential approach, described by Royce (1970), in which development is seen as flowing steadily downwards, like a waterfall, through the phases of: (i) requirements analysis; (ii) design; (iii) coding; (iv) testing; and (v) maintenance (the analysis of the latter stage is out of this paper's scope).

3.1 Requirements Analysis

This phase establishes the user expectations for the new product as well as the system constraints. Requirements must be quantifiable, relevant and detailed and they relate to how well the system will work in its intended environment. A common categorization of requirements includes Customer Requirements, Functional Requirements, and Performance Requirements. Constraints are conditions that exist because of limitations imposed by external interfaces, project support, and technology.

Requirements Analysis is an iterative process of inquiry and resolution. In the WCS case project, it involves interviewing the stakeholders such as sales representatives, the assistant sales manager, and the sales manager with the intent of collecting requirements from the user perspective, and then critically analyzing and refining the customer-defined features, in order to come up with a commonly approved set

ISSN 2076-9202

of expected results.

3.2 Design

This phase is carried out in two distinct levels: (i) Application Design; and (ii) Database Design.

3.2.1 Application Design

WCS was designed using the Unified Modeling Language (UML), which is the de-facto standard for designing Object-Oriented software. UML is a framework used to visualize, specify and document the artifacts, business processes and various components of a software system. There are several types of UML diagrams available, such as Class Diagrams, Package Diagrams and Use Case Diagrams.

Class diagrams are arguably the backbone of every object-oriented solution. They show the static structure of the designed system, subsystems and components in the form of related classes and interfaces, with their associations, generalizations, and dependencies. Due to space limitations, only a sample of the WCS class diagram is shown in Figure 1, as a typical example.

ISSN 2076-9202

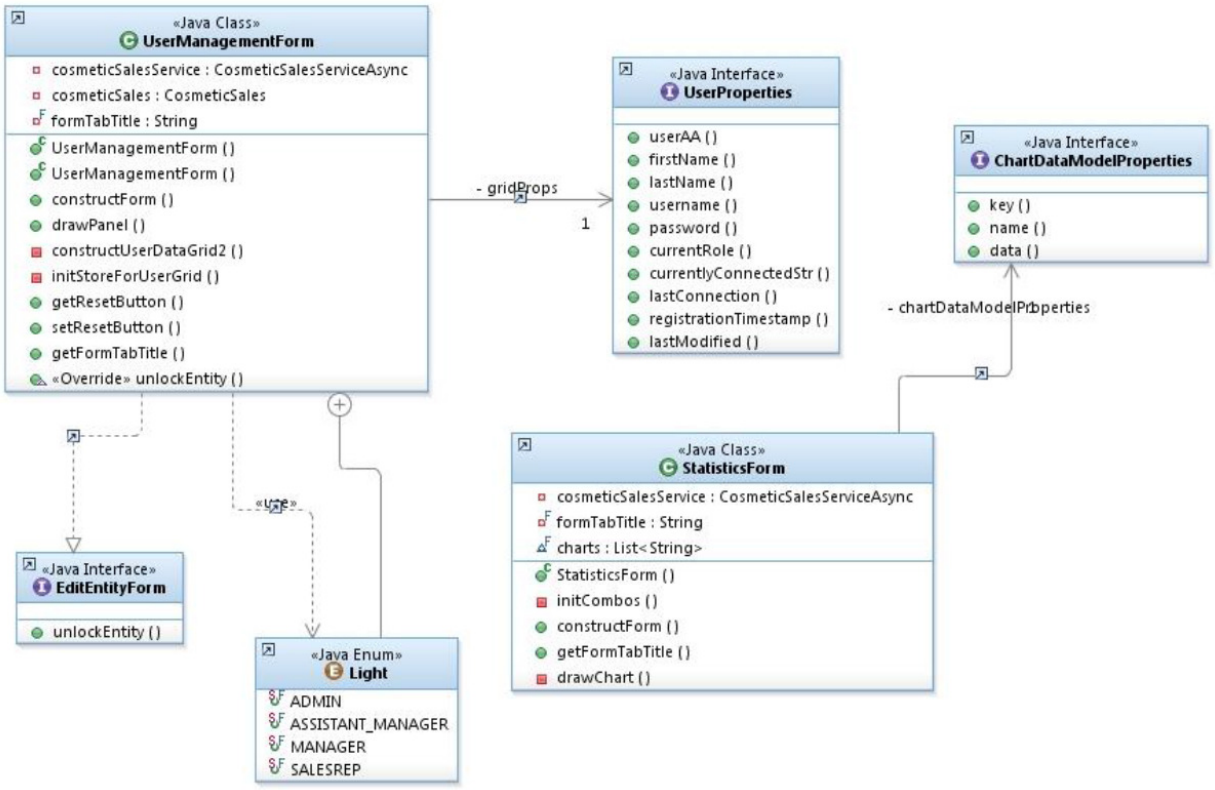


Figure 1: WCS Class Diagram (sample).

Package diagrams are essentially a compile-time grouping mechanism. Packages are UML constructs that enable the designer to organize model elements into related groups, thus minimizing dependencies among them, and making the system architecture simpler and easier to understand. The WCS package diagram is shown in Figure 2.

ISSN 2076-9202

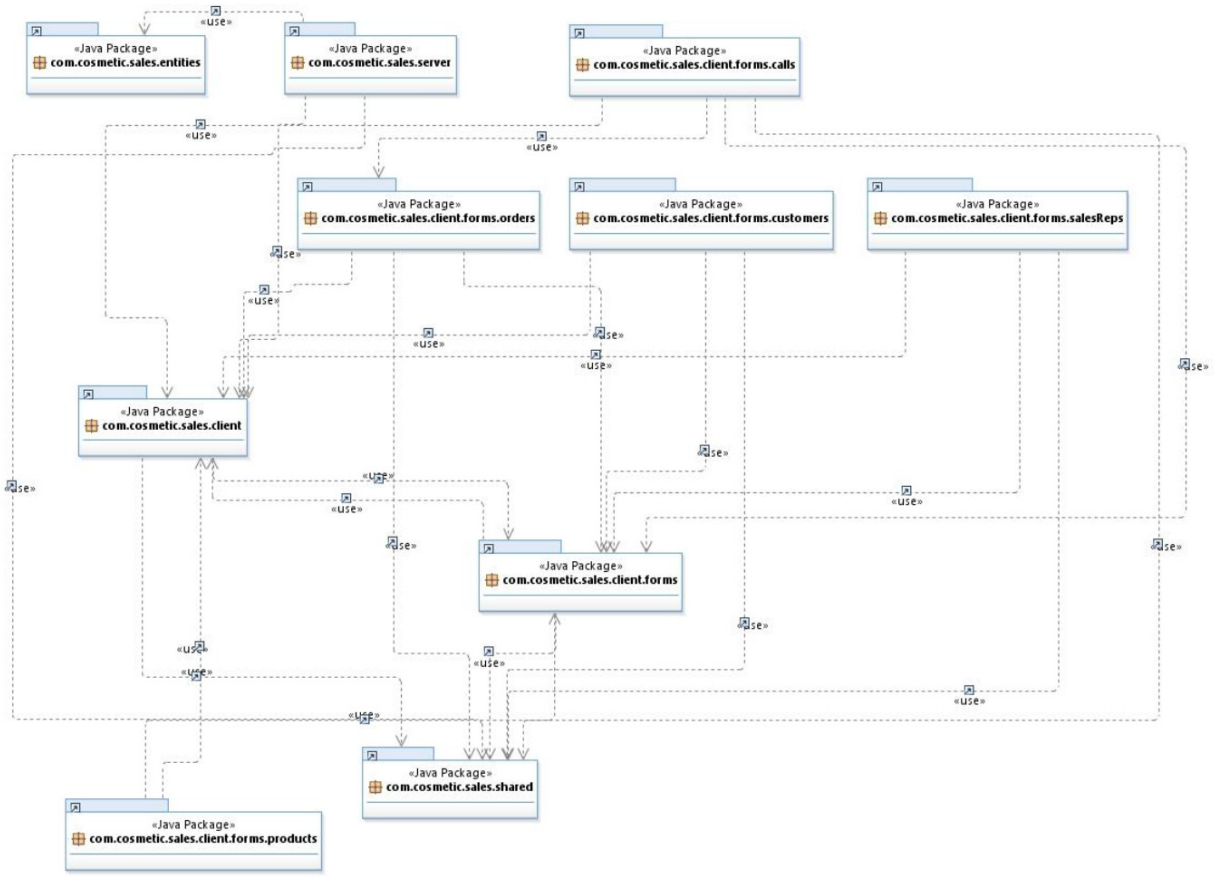


Figure 2: WCS Package Diagram.

Use cases are services or features provided by the system to its users. A Use Case diagram describes a set of actions (use cases) that the system can perform in collaboration with one or more external users of the system (actors) to provide some observable and valuable results to the actors or other stakeholders of the system. Figure 3 represents the distinct roles and use cases of WCS.

ISSN 2076-9202

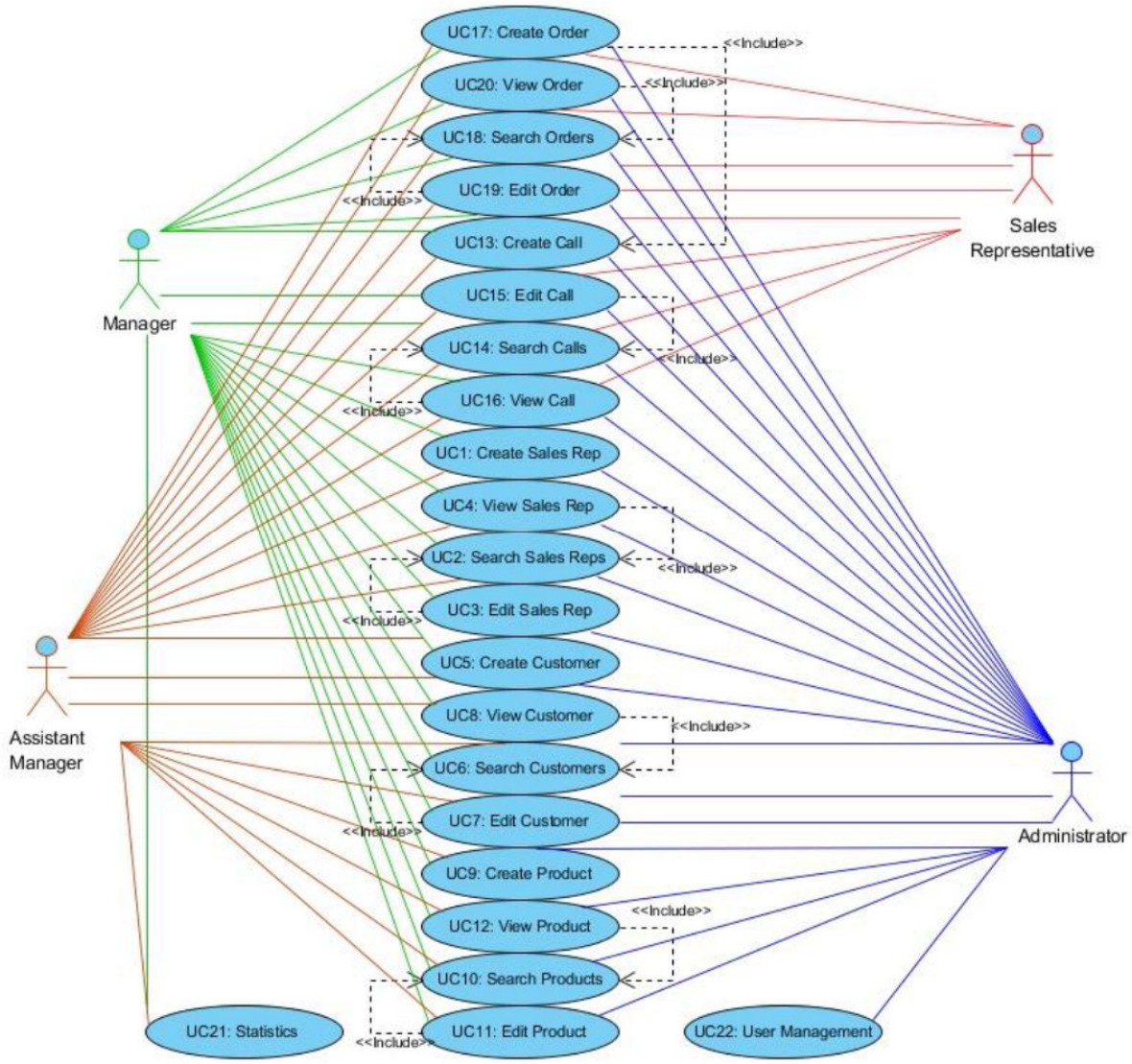


Figure 3: WCS Use Case Diagram.

3.2.2 Database Design

The relational database design process consists of the following steps: (i) all of the types of information that we want to store in the database are recorded; (ii) the information items are organised into major entities; (iii) each table's primary or composite key is defined; (iv) the relation between the data in one table and the data in other tables is decided; (v) data normalization rules are applied in order to optimize

ISSN 2076-9202

database structure. A relational database is more suitably graphically modeled by means of Entity-Relationship Diagrams. An Entity-Relationship Diagram consists of the entity types (tables), attributes (columns) and relationships among tables. Figure 4 presents the Entity-Relationship Diagram that models the WCS database.

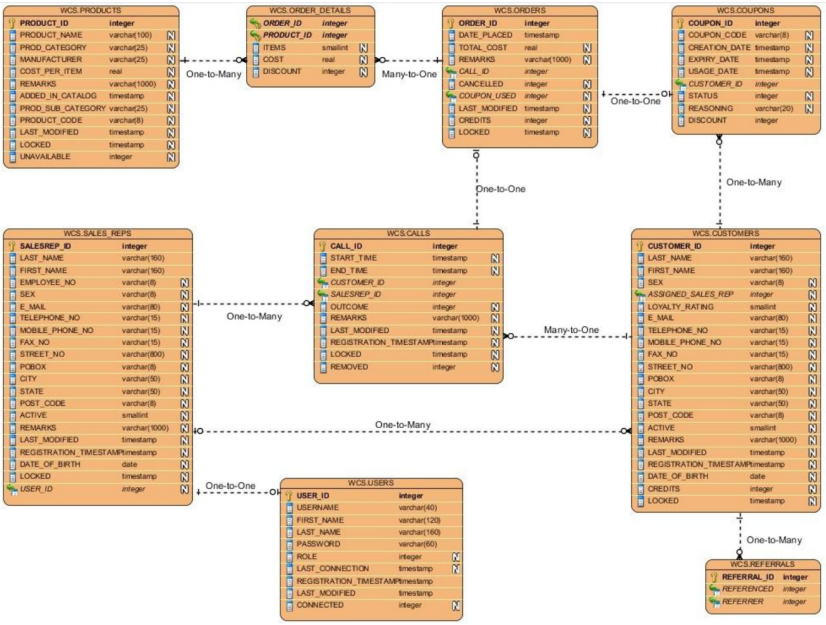


Figure 4: WCS Entity-Relationship Diagram.

3.3 Coding

Coding is actually the most complex and time-consuming stage of the development process. WCS was coded using Java as the main programming language and object-orientation as the programming paradigm. The coding productivity is maximized by using an Integrated Development Environment (IDE). In the present case project, Eclipse was the IDE of choice. In object-oriented coding, implementation is organized in objects rather than actions and data rather than logic. This allows for data abstraction, encapsulation, and reusability. In order to manage changes in code, a configuration management process

ISSN 2076-9202

was applied. This process performs systematic control of changes in artifacts that are used to construct the software system for the purpose of maintaining software integrity and traceability throughout the software coding phase. Subversion, often abbreviated SVN, is the software revision control system used in conjunction with Assembla, a free online repository hoster.

3.4 Testing

No matter how well structured the implementation process, and how efficient and competent software engineers are, there are always bugs to catch in a software, and this is what makes testing such a critical element of the cycle. The testing strategy employed in the WCS case project accommodated the following techniques:

- Unit testing: Short code fragments were written and executed to verify completeness and correctness of each use case and integral algorithmic procedure.
- Usability testing: Checks were performed to verify that: the application complies with globally accepted conventions and standards; the system is user-friendly for all types of users, from novice to expert; the look-and-feel is consistent throughout the application; the content is not over-crowded; and error and warning messages are explanatory.
- Performance testing: Tests were conducted to check the application behavior under circumstances with a heavy load.
- Interface testing: Performed to verify data flow across different layers (client, server and database), and that the exposed interfaces are extensible.
- Compatibility testing: The application performance was checked on different browsers (Mozilla, Chrome, Internet Explorer), and different operating systems (Windows, Unix).
- User acceptance testing: Users were asked to execute distinct scenarios to verify that the application behaves according to their expectations and that requirements are met.

ISSN 2076-9202

4. WCS application framework

This section describes the WCS application features and the actions available to the user through the user interface. It is essentially a walkthrough of the system. The WCS Graphical User Interface (GUI), as shown in Figure 5, consists of the following elements:

- Main Menu: Enables access to the different screens.
- Tabbed Panel: Contains the tabs opened by the user.
- Action Log Panel: Includes logs of the actions completed.
- Status Bar: Displays the user currently connected, her/his role, and the timestamp of the connection to the server.

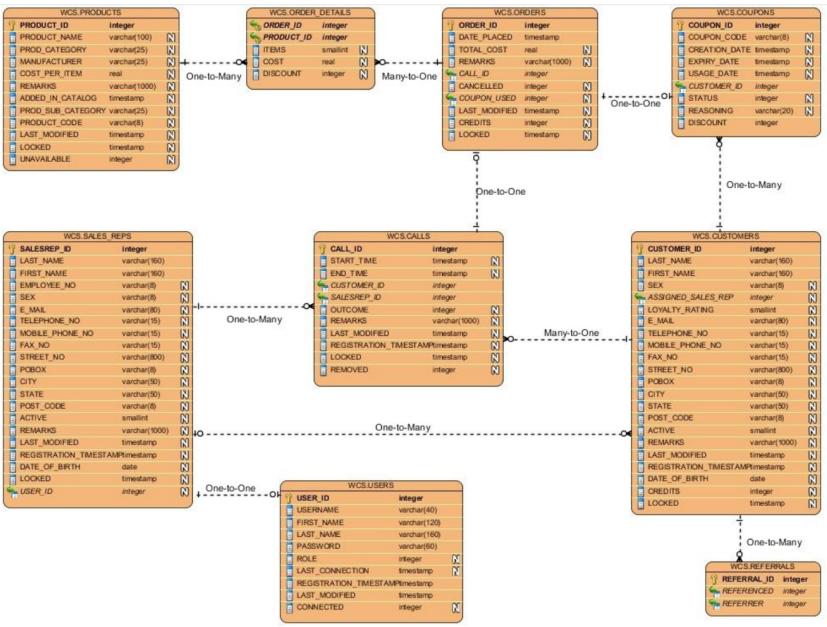


Figure 4: WCS Entity-Relationship Diagram.

ISSN 2076-9202

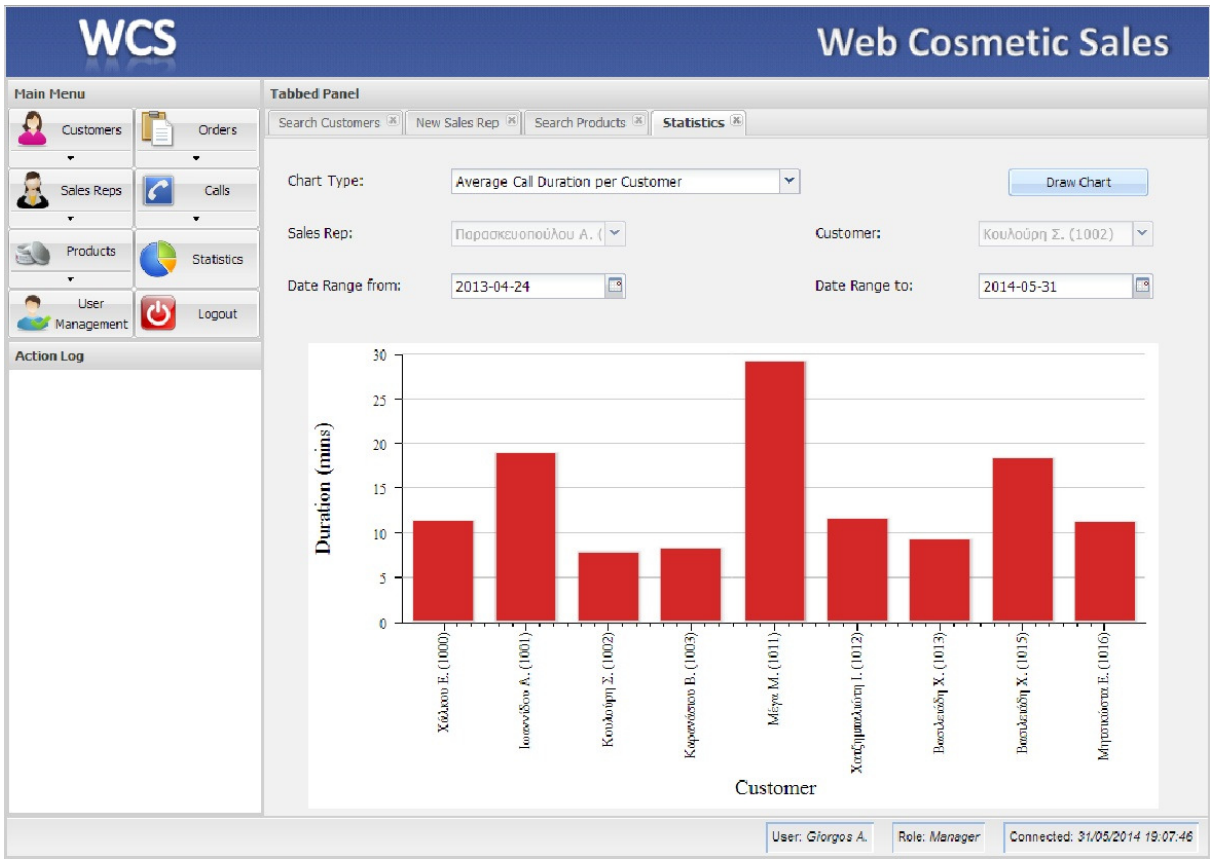


Figure 5: The WCS application window

The main WCS application features, as presented in the subsequent sections, are as follows: (i) "Customers"; (ii) "Sales Representatives"; (iii) "Products"; (iv) "Calls"; and (v) "Orders". For each one of the above features, the options of: "add new", "search", "modify" and "view" are available. "Statistics" and "User Management" are also presented below as supplementary features.

Note that the "search" option acts as an input to the next two options. In other words, in order for the user to modify or view the details of a specific customer, sales representative, product, order or call, she/he must first perform a possibly filtered search. Once the search is complete, the results are displayed in the corresponding data grid. Note that inactive customers or sales representatives, canceled orders, and unavailable products are set to appear in red.

ISSN 2076-9202

Moreover, for every "add new" and "modify" screen in the system, after the user completes input, she/he must press the Save button to initiate the data validation and storage process. If there are any errors encountered during this process, the user is informed accordingly through a message box, otherwise, the successful action is added in the action log panel and the screen is reset and becomes available for the new input.

4.1 Customers

Some critical specifications of the "Customers" feature options are listed below:

(a) Add a new Customer: This option enables users to add new customers to the database. Creation fields include full name, address, several contact details, assigned sales representative, referrer customer, and other remarks (such as special preferences). If the new customer has been referenced by an already existing one, the referrer is automatically offered a discount off the next order. The latter also receives an automated e-mail notification.

(b) Search Customers: Users can search for both active and inactive customers. Various filtering criteria, such as surname, phone number etc. may be applied.

(c) Modify a Customer: This option enables editing of all new customer creation fields. Some additional non-editable fields are also available here (i.e. the Customer ID, the record creation timestamp, and the timestamp of the last update). Customers that are no longer in the sales representative's clientele may also be set to inactive by checking the corresponding checkbox. Nonetheless, the history of her/his activity, i.e. calls and orders, are not removed and are still included in the statistical calculations.

ISSN 2076-9202

(d) View a Customer Record: The final customer-related option enables users to view details, such as personal data and call/order history. The two field sets cannot be simultaneously expanded to ensure that users do not have to use the scrollbar to navigate through the page information.

4.2 Sales Representatives

Some critical specifications of the "Sales Representatives" feature options are listed below:

(a) Add a new Sales Representative: Adding Sales Representatives to the system is a fundamental use case since without sales representatives no calls and thus no orders can be fulfilled. Ideally, this action should be preceded by the addition of the corresponding user to the system so that the new sales representative can login to the system immediately after her/his details are successfully persisted in the database. Apart from the typical fields (i.e. name, contact details etc.), a unique employee number, taken from the company's personnel records, should also be assigned to each Sales Representative. This number can be used to integrate the information from this software system with personnel data recorded by other in-house applications.

(b) Search Sales Representatives: Users can search for both active and inactive sales representatives. Various filtering criteria, such as identification number, employee number etc. may be applied.

(c) Modify a Sales Representative: This option enables editing of all new sales representative creation fields. The fields that are not editable, such as the identification number or the timestamp of his entry to the system are greyed and disabled. In addition, the sales representative can be disabled by checking on the inactive flag. In this case, she/he will no longer be able to login to the system.

(d) View a Sales Representative Record: Users are also able to browse the sales representative records.

ISSN 2076-9202

This screen contains two field sets, one of them containing the basic details (i.e. name, id number etc.), and another one including her/his activity history (i.e. calls and their corresponding order). If the user wants to have further information on a specific call or order, she/he can use the call id or the order id to perform a filtered search.

4.3 Products

Some critical specifications of the "Products" feature options are listed below:

(a) Add a new Product: There are various products available in the company's catalog, hence apart from the obvious details, the goods have been properly categorized to assist both sales representatives and customers. Also, in order to assist in the processing and fulfillment of orders, it has been decided to include the product code used to identify products in the company's warehouse database.

(b) Search Products: Users can perform search operations using criteria, as for instance, the product name, the manufacturer, the product category, and the date the product was added to the catalog.

(c) Modify a Product: If a product price changes, then it can be updated through this option. Moreover, if a product is no longer offered by the company, it can be removed from the application catalog by setting the "removed" flag to true. This change is not final and the product may become available again by unsetting the flag. It should be noted that any past records related with this product remain intact irrespective of the product status.

(d) View a Product: Displaying product-related information involves retrieving both the insertable information as well as product historical information, such as the orders that included this product, the number of items ordered, the discount applied and more.

ISSN 2076-9202

4.4 Calls

Some critical specifications of the "Calls" feature options are listed below:

(a) Add a new Call: The call details of interest that should be added to the database are: the names of the sales representative and the customer; the call timestamp; and the call outcome. There are three possible outcomes for a call to a customer: (i) the customer may not respond at all (Unsuccessful); (ii) the customer may respond but decide not to order (No Order); (iii) the customer may have a new order submitted to the system (Successful). The latter outcome enables the button "New Order", which leads the user to the "Add a new Order" option.

(b) Search Calls: Searching through the calls in the system involves utilizing several criteria, as for instance, the persons involved, the call outcome, the order with which it is linked (if successful), and the duration.

(c) Modify a Call: Call editing is somewhat different from the previous edit scenarios, as in this case call cancellation is an irrevocable action. Also, if the call at hand was originally marked as successful, a subsequent removal of the corresponding order occurs automatically to enforce data integrity.

(d) View a Call: The call view screen includes all the basic call details, as mentioned earlier.

4.5 Orders

Some critical specifications of the "Orders" feature options are listed below:

ISSN 2076-9202

(a) Add a new Order: This option is enabled after a new call is successfully completed. Thus, all the call details (i.e. call id, sales representative, customer) are already filled in the database. Apart from the call details, this screen also includes an order details grid. Each row corresponds to a different product being ordered. The necessary product information is only the product code which must be known by the sales representative. Once the code has been entered, the remaining information (product description and cost per item) is fetched from the persistent storage. The user then enters the quantity requested and the total cost is automatically calculated. Discount can be applied to one or more of the products. Also, the sales representative can check whether there are any open coupons for the customer by clicking on the "Coupons" button. This action causes a modal window to appear on the screen listing the open coupons; that is coupons that have not been already used and have not expired. If the customer chooses to use a coupon, the discount column is refreshed with the discount offered by the coupon, and the item cost and total order cost are automatically recalculated. If on the other hand, the customer chooses to discard the coupon originally chosen, she/he can have the sales representative press the "Discard" button, in which case the discount column will be reset, and the product and order costs will be worked out again. Upon submission of the order, a receipt is sent to the customer's e-mail address. At the same time, the customer is awarded 1 point of loyalty for each euro spent. When her/his loyalty balance reaches 100 points, a new loyalty coupon is generated for her/him and the customer is notified accordingly by e-mail.

(b) Search Orders: There are several useful filtering criteria that can be combined to retrieve order records from the persistent storage, namely the order id, the corresponding call id, the persons involved, the cost range, the creation date range, the product ordered, and the current order status.

(c) Modify an Order: This option allows users to update products or product-related information within an order. They may even cancel an order, however, this is an action that cannot be undone. In addition, canceling an order triggers the following events: (i) a cancellation notification is automatically sent to the corresponding customer; (ii) the status of the call linked with the order is set to "No Order" so that data

ISSN 2076-9202

remains consistent.

(d) View an Order: The order view screen includes all the basic order details, as mentioned earlier.

4.6 Statistics

A number of different statistics and illustrative charts are available to managers including:

- Average Call Duration (total; per Sales Representative; per Customer).
- Average Successful Call Duration (total; per Sales Representative; per Customer).
- Average Order Amount (total; per Sales Representative; per Customer).
- Percentage of Successful Calls (total; per Sales Representative; per Customer).
- Customers per Sales Representative.
- Product Popularity (quantity-specific; revenue-specific).

The aforementioned statistics and charts provide an excellent basis for increasing business intelligence (for further details see Section 5).

4.7 User Management

All types of users must be authenticated before entering the system as a means of identifying them, verifying that they are indeed allowed to access the application but also to enter a restricted service within the application. For obvious reasons, the User Management screen is only available to Administrators. In this screen, users can be created, modified or deleted. Administrators can save all of their changes simply by pressing the "Save" button once, at the end of their session. Moreover, pressing the "Reset" button discards all unsaved changes and synchronizes the data grid with the information in the database.

ISSN 2076-9202

5. Increasing business intelligence through WCS

WCS has a wide practical utility since it provides valuable multi-level information to managers, increasing business intelligence in areas such as sales representatives' performance, customer loyalty, and product performance. Such information is mainly obtained through statistically analyzing a number of indices, as described below.

First, the "Average Call Duration" index allows managers to identify distinctive behavior (i.e. the data set outliers) exhibited by sales representatives and/or customers. In particular, it aims to draw attention to those employees and clients that consistently participate in calls with prolonged duration and help resolve whether this affects, either positively or adversely, the call outcome, the overall employee effectiveness, and the customer satisfaction. In cases where this behavior is confined to specific pairs of participants, a reassignment of the customer may be required to prevent loss of balance in the relationship between the latter and the employee.

The "Average Successful Call Duration" index is complementary to the previous one. It presents the average duration of calls that led to an order and serves as a strong indicator of employee efficiency. It can help identify essential personality traits and soft skills in the most efficient representatives that could aid the Human Resources Management division in the personnel recruitment process, as well as pinpoint best practices that could be taught and applied at a department-wide level.

The "Average Order Amount" index can be used to discover unanticipated or seasonal fluctuations that have to be acted upon, for instance by encouraging underachieving sales representatives to entice customers through special deals and offers or by luring less loyal customers with new products and free gifts. It can also help to categorize customers into groups such as premium and regular and treat each group differently.

ISSN 2076-9202

The "Percentage of Successful Calls" index can be combined with data generated by other statistics to help create customer personas and determine which buyers are suitable for cross-selling and up-selling. It can also reveal training needs for the least effective personnel and declining trends in the productivity of specific staff members that should possibly be investigated. At the same time, it can help determine which employees should be praised and rewarded for their performance, and which are potentially demotivated.

The "Customers per Sales Representatives" index acts as an input to the resource allocation plan and can reveal arising imbalances in the workload of the latter, thus allowing for a more equitable distribution of customers to sales personnel. Furthermore, it provides a measure of salesman popularity.

Finally, the "Product Popularity" index can assist the company in the supply planning and to draw decisions as to which products should be removed from the catalogue, the current trends of the market, whether the profit margins and/or prices should be readjusted, and whether the relationship and cooperation with certain manufacturers and wholesalers should be strengthened.

6. Conclusion

The CRM systems are rightly considered as an essential tool for a growing number of companies pertaining to different sectors, as they can offer a significant source of competitive advantage. Indeed, the CRM systems enable companies to effectively design, implement, monitor and improve their customer service processes. In doing so, companies reinforce their capabilities of providing services of high quality, and establish, maintain, and enhance long-term associations with customers. However, in practice, the high rate of CRM failures hinders the efforts of many companies towards this goal.

ISSN 2076-9202

This paper provides a systematic and efficient approach for designing and implementing a CRM system. In this context, both an implementation scheme and an application framework are presented, aiming at increasing the chances of CRM Projects' success. In order to demonstrate this approach, a practical real-life example is provided. This involves a company operating through a network of sales representatives who promote and sell a wide range of cosmetic products, utilizing outbound telephone communication. Note that the proposed approach could also be implemented by any company with similar customer service processes.

The implementation scheme used in this paper is based on the classical Waterfall model. In this respect, the phases of requirements analysis, design, coding, and testing are analyzed. The actual software (i.e. WCS) is implemented as a fully-featured, customized operational CRM solution that includes the following modules:

- Customer Database, including the most important customer-related data, such as personal details, activity history, loyalty, and preferences.
- Sales Force Automation, including sales functions, such as new customer data capture, customer data retrieval, call register, product catalog, and electronic submission of orders.
- Automatic Customer Notification Mechanism, i.e. the customers receive an e-mail confirming new, updated or canceled orders, as well as informing them of discount coupon availability.
- Referral Reward Scheme, i.e. for every new referral, referrers are awarded a discount coupon.
- Loyalty Reward Scheme, i.e. for a certain amount spent, customers are awarded a discount coupon.
- Statistics, including data visualization that displays information on sales representatives (workload, efficiency, productivity), customers (loyalty, preferences) and products (popularity, revenue).

As every other software product, and despite being built upon widely accepted standards, WCS is subject to further improvements. A number of extensions and enhancements, that could possibly be addressed in future research, may include the following: increase of the security level of the system by configuring the

ISSN 2076-9202

application server to use the Secure Socket Layer for communication with the clients; integrate WCS with the company's back-office payroll application to automate calculation of the commission and payment of the sales force; improve the field validation in the screens (user interface) to ensure data correctness and integrity; extend the customer notification module by realising SMS notification to customer mobile phones; implement a backup process to eliminate the possibility of loss of important operational information, such as customer records; provide images of products; enable on-demand coupon generation to compensate for the potential frustration caused to the customer at any stage of his interaction with the company; enable invoice printing thus further accelerating the order processing time; develop a report mechanism to enabling users to view information and statistics in printable format; build an extension for customers to enable them to file complaints and claims and receive feedback.

References

1. Abdul-Muhmin, A.G. (2012) 'CRM technology use and implementation benefits in an emerging market', *Journal of Database Marketing & Customer Strategy Management*, Vol.19 No.2, pp.82-97.
2. Athanasoulias, G. and Chountalas, P. (2017) 'Managing customer relationships: A comprehensive literature review and future directions', *International Journal of Decision Sciences, Risk and Management*, Vol.7 No.1/2, pp.70-87.
3. Baran, R.J., Galka, R.J. and Strunk, D.P. (2008) *Principles of Customer Relationship Management*, Thomson/South-Western, Mason, OH.
4. Barker, R.M., Gohmann, S.F., Guan, J. and Faulds, D.J. (2009) 'Why is my sales force automation system failing?', *Business Horizons*, Vol.52 No.3, pp.233-241.
5. Biyalogorsky, E., Gerstner, E. and Libai, B. (2001) 'Customer referral management: optimal reward programs', *Marketing Science*, Vol.20 No.1, pp.82-95.
6. Boles, J.S., Barksdale, H.C. and Johnson, J.T. (1997) 'Business relationships: an examination of the effects of buyer-salesperson relationships on customer retention and willingness to refer and recommend', *Journal of Business & Industrial Marketing*, Vol.12 No.3/4, pp.253-264.
7. Boujena, O., Johnston, W.J. and Merunka, D.R. (2009) 'The benefits of sales force automation: a customer's perspective', *Journal of Personal Selling & Sales Management*, Vol.29 No.2, pp.137-150.
8. Bush, A.J., Moore, J.B. and Rocco, R. (2005) 'Understanding sales force automation outcomes: a managerial perspective', *Industrial Marketing Management*, Vol.34 No.4, pp.369-377.
9. Buttle, F., Ang, L. and Iriana, R. (2006) 'Sales force automation: review, critique, research agenda', *International Journal of Management Reviews*, Vol.8 No.4, pp.213-231.

ISSN 2076-9202

10. Buttle, F. (2009) *Customer Relationship Management: Concepts and Technologies*, 2nd ed., Butterworth-Heinemann, Oxford.
11. Chen, I.J. and Popovich, K. (2003) 'Understanding customer relationship management (CRM): people, process and technology', *Business Process Management Journal*, Vol.9 No.5, pp.672-688.
12. El Essawi, N. and El Aziz, R.A. (2012) 'Determining the main dimensions that affect e-customer relationship management readiness in the Egyptian banking industry', *International Journal of Electronic Customer Relationship Management*, Vol.6 No.3-4, pp.217-234.
13. Engel, J.F. and Blackwell, R.D. (1982) *Consumer Behavior*, 4th ed., Dryden Press, New York.
14. Geetha, V. and Sreenath, N. (2012) 'High concurrency for continuously evolving OODBMS', in *Proceedings of the 9th International Conference on Distributed Computing and Internet Technology (ICDCIT)*, Bhubaneswar, India, pp.94-105.
15. Goldenberg, B.J. (2008) *CRM in Real Time: Empowering Customer Relationships*, Information Today, New Jersey.
16. Harrington, J.L. (2009) *Relational Database Design and Implementation: Clearly Explained*, 3rd ed., Morgan Kaufmann, Burlington, MA.
17. Havlíček, K., Břečková, P. and Zampeta, V. (2013) 'Quality management as a part of CRM', *European Research Studies Journal*, Vol.16 No.4, pp.15-28.
18. Hoffman, J.L. and Lowitt, E.M. (2008) 'A better way to design loyalty programs', *Strategy & Leadership*, Vol.36 No.4, pp.44-47.
19. Honeycutt, E.D., Thelen, T., Thelen, S.T. and Hodge, S.K. (2005) 'Impediments to sales force automation', *Industrial Marketing Management*, Vol.34 No.4, pp.313-322.
20. Hu, H.H., Huang, C.T. and Chen, P.T. (2010) 'Do reward programs truly build loyalty for lodging industry?', *International Journal of Hospitality Management*, Vol.29 No.1, pp.128-135.
21. Jalkala, A. and Salminen, R.T. (2010) 'Practices and functions of customer reference marketing: leveraging customer references as marketing assets', *Industrial Marketing Management*, Vol.39 No.6, pp.975-985.
22. Johnson, J.T., Barksdale, H.C. and Boles, J.S. (2003) 'Factors associated with customer willingness to refer leads to salespeople', *Journal of Business Research*, Vol.56 No.4, pp.257-263.
23. Joo, K.H. and Lee, W.S. (2005) 'An incremental document clustering for the large document database', in *Proceedings of the 2nd Asia Information Retrieval Symposium*, Jeju Island, Korea, pp.374-387
24. King, S.F. and Burgess, T.F. (2008) 'Understanding success and failure in customer relationship management', *Industrial Marketing Management*, Vol.37 No.4, pp.421-431.
25. Kostenetskiy, P.S. and Sokolinsky, L.B. (2007) 'Analysis of Hierarchical Multiprocessor Database Systems', in *Proceedings of the 21st International Conference on High Performance Computing, Networking and Communication Systems (HPCNCS)*, Orlando, Florida, pp. 245-251.
26. Kumar, V. and Reinartz, W. (2012) *Customer Relationship Management: Concept, Strategy, and Tools*, 2nd ed., Springer, Heidelberg.
27. LaValle S. (2013) *Customer-centric transformation: five keys to leading successful change*, Merkle Thought Leadership Series.

ISSN 2076-9202

http://www.merkleinc.com/sites/default/files/whitepapers/Customer-Centric-Transformation_WEB_0.pdf (Accessed October 20, 2016).

28. Loganantharaj, R. and Narayan, V.B. (2006) 'Sempub: an ontology based semantic literature retrieval system', in *19th IEEE International Symposium on Computer-Based Medical Systems (CBMS)*, Salt Lake City, Utah, pp. 875-880.
29. McCall, M. and Voorhees, C. (2010) 'The drivers of loyalty program success an organizing framework and research agenda', *Cornell Hospitality Quarterly*, Vol.51 No.1, pp.35-52.
30. Mckim, B. and Hughes, A. (2000) 'How to measure CRM success', *Target Marketing*, Vol.23 No.10, pp.138-149.
31. Meyer-Waarden, L. and Benavent, C. (2009) 'Grocery retail loyalty program effects: self-selection or purchase behavior change?', *Journal of the Academy of Marketing Science*, Vol.37 No.3, pp.345-358.
32. Meyliana, Hidayanto, A.N. and Budiardjo, E.K. (2016) 'The critical success factors for customer relationship management implementation: a systematic literature review', *International Journal of Business Information Systems*, Vol.23 No.2, pp.131-174.
33. Moalagh, M. and Ravasan, A.Z. (2013) 'Developing a practical framework for assessing ERP post-implementation success using fuzzy analytic network process', *International Journal of Production Research*, Vol.51 No.4, pp.1236-1257.
34. Morgan, R.M. and Hunt, S.D. (1994) 'The commitment-trust theory of relationship marketing', *Journal of Marketing*, Vol.58 No.3, pp.20-38.
35. Nour, M.A. (2012) 'An integrative framework for customer relationship management: towards a systems view', *International Journal of Business Information Systems*, Vol.9 No.1, pp.26-50.
36. O'Brien, L. and Jones, C. (1995) 'Do rewards really create loyalty?', *Harvard Business Review*, Vol.73 No.3, pp.75-82.
37. Olaru, D., Purchase, S. and Peterson, N. (2008) 'From customer value to repurchase intentions and recommendations', *Journal of Business & Industrial Marketing*, Vol.23 No.8, pp.554-565.
38. Osarenkhoe, A. and Bennani, A.E. (2007) 'An exploratory study of implementation of customer relationship management strategy', *Business Process Management Journal*, Vol.13 No.1, pp.139-164.
39. Peppard, J. (2000) 'Customer relationship management (CRM) in financial services', *European Management Journal*, Vol.18 No.3, pp.312-327.
40. Puri, S. and Ranjan, J. (2011) 'Value drivers for technology enabled sales force automation', *International Journal of Electronic Customer Relationship Management*, Vol.5 No.3-4, pp.259-271.
41. Rigby, D.K., Reichheld, F.F. and Schefter, P. (2002) 'Avoid the four perils of CRM', *Harvard Business Review*, Vol.80 No.2, pp.101-109.
42. Royce, W.W. (1970) 'Managing the development of large software systems', in *Proceedings of IEEE Western Electronic Show and Convention*, Los Angeles, CA, pp.1-9.
43. Sabău, G. (2007) 'Comparison of RDBMS, OODBMS and ORDBMS', *Informatica Economica*, Vol.11, pp.83-85.
44. Salminen, R.T. and Möller, K. (2006) 'Role of references in business marketing: towards a normative theory of referencing', *Journal of Business-to-Business Marketing*, Vol.13 No.1, pp.1-51.

ISSN 2076-9202

45. Schillewaert, N., Ahearne, M.J., Frambach, R.T. and Moenaert, R.K. (2005) 'The adoption of information technology in the sales force', *Industrial Marketing Management*, Vol.34 No.4, pp.323-336.
46. Schniederjans, D. and Yadav, S. (2013) 'Successful ERP implementation: an integrative model', *Business Process Management Journal*, Vol.19 No.2, pp.364-398.
47. Schmitt, B.H. (2010) *Customer Experience Management: A Revolutionary Approach to Connecting with your Customers*. John Wiley & Sons, New York.
48. Trusov, M., Bucklin, R.E. and Pauwels, K. (2009) 'Effects of word-of-mouth versus traditional marketing: findings from an internet social networking site', *Journal of Marketing*, Vol.73 No.5, pp.90-102.
49. Washburn, S.A. (1996) 'The many ways to lure prospective clients', *Journal of Management Consulting*, Vol.9 No.2, pp.27-33.
50. Weitz, B.A. and Bradford, K.D. (1999) 'Personal selling and sales management: a relationship marketing perspective', *Journal of the Academy of Marketing Science*, Vol.27 No.2, pp.241-254.
51. Wilson, D.T. (1995) 'An integrated model of buyer-seller relationships', *Journal of the Academy of Marketing Science*, Vol.23 No.4, pp.335-345.

ISSN 2076-9202

THE EFFECTS OF TRAINING AND MOTIVATING EMPLOYEES ON IMPROVING PERFORMANCE OF CONSTRUCTION COMPANIES: THE CASE OF JORDAN

Rateb J Sweis[1], Razan Ghalion[2], Mohammad El- Mashaleh[3], Israa Amayreh[4], Al- Sayed Niveen[5], Wasiim Al Balkhi[6]

[1] Professor, Dep. of Business Administration, The University of Jordan, Amman, Jordan, E-mail: rateb.sweis@gmail.com
[2]Dep. of Civil Engineering, The University of Jordan, Amman, Jordan, E-mail: razan_ghalyoon@hotmail.com
[3] Professor of Civil Engineering, Hashimite University. Email: mashaleh@hu.edu.jo
[4] MBA, Department of Business Administration, The University of Jordan. Email: es_alamayreh87@yahoo.com
[5] Instructor, Department of Business Administration, The University of Jordan. Email:n.alsayed@ju.edu.jo
[6] Wassim Al Balkhi, Department of Civil Engineering, The University of Jordan. Email: wassim.albalkhy@gmail.com

Abstract

The objectives of this study are to identify and rank factors of training and development, and motivation in construction companies in Jordan and to determine the impact of these practices on the performance of these companies. The data was collected using questionnaire. Per Jordanian construction contractors' association (JCAA), there are (375) companies classified as (1st and 2nd) under (building, highways, water sewage and electromechanical works). The questionnaire was targeting these categories. 90 questionnaires were distributed with 81 questionnaires were received. The collected data was analysed through the statistical package for social science (SPSS). The findings reveal that there are strong and positive relationships between training and development, and motivation of employees and the performance of construction companies. In addition, the most important factors of training and motivation that can improve Construction Company's performance are self-directed, learning transfer, learning environment, trust, communication style and interpersonal relationship.

Key words: Training and development, T & D, motivation, performance, construction companies, Jordan.

1. Introduction

Training is one of the functions of human resource that increase knowledge, skills and changing the attitude of workers (Swanson and Holton, 2001). Scholars have confirmed that motivation is another function of human resource that engages the behaviour of workers that ultimately increase the profitability and productivity of the firms (i.e. Armstrong, 2009; Puplampu, 2013, Sweis et al, 2009; Alawneh and Sweis,2016)). Employees are motivated when they expect that the course of action is going to prompt the fulfilment of an objective and esteemed reward. Therefore, if the company needs to achieve its objectives it is important to understand how to motivate its employees (Armstrong, 2007; Sweis et al, 2013)).

ISSN 2076-9202

Different types of employees exist in construction projects such as project managers, engineers, and labor. Previous studies stated that the damages of the buildings are because of the bad quality of construction. It also might be due to the presence of unskilled labour, unsuitable supervision and low-quality materials (Odusami et al., 2003).

In construction, techniques and work processes are continually advancing, therefore employees' skill levels must always be refreshed keeping in mind that the end goal is to keep up productivity and create high quality results (Edum-Fotwe and McCaffer, 2000; Sweis, 2015; Abu Hussein, 2016)). Construction projects often suffer from a poor performance in terms of cost overruns, time delays and quality defects. Accordingly, Hamzah et al. (2011) showed that construction researchers were interested to find the causes of these problems. Unskilled workers were the main cause of the poor quality in the construction industry where many buildings were demolished (Yang et al., 2006). In order to reduce the mentioned problems, concentration on human resource practices should be required and their functions in order to enhance the performance of the construction companies. Both training and motivation in human resource strategies were deeply neglected in the construction industry literature. This research aims at showing the connection between factors associated with training and motivation on Construction Company's performance in Jordan.

To achieve objectives, this study is split into various sections, as follows: the next section provides the literature review and the formulation of the hypotheses. The next section provides the theoretical framework and the research methodology. The results of data analyses are then provided. The final section offerings the conclusion, implications, and recommendations.

2. Literature Review and Hypotheses Development

2.1 Human Resource Management (HRM)

Companies are succeeding with people and through people. Without people, companies can never exist. Therefore, people's level of contribution, cooperation and commitment can make or break the companies. Zwikael and Unger (2010) defined HRM as functions related primarily to training, job development, organizational development, and research development. While Boxall et al. (2011) defined it as "a process of acquiring, training, appraising, and compensating employees, and of attending to their labour relation, health and safety, and fairness concerns". In addition, Zhai et al. (2014) revealed that construction companies must consider organizational learning as a significant factor to enhance organizational development by supporting human resource practices.

2.2 Training and Development (T&D)

A review of the literature displayed that T&D are defined in a broad and in a narrow sense. For instance, Jackson and Schuler (2000) stated that training is the action of improving competencies required today while development refers to improving competencies for future works. Training also defined as "a learning process in which people acquire knowledge (K), skills (S), experience (E), and attitudes (A) that

ISSN 2076-9202

they need to perform their jobs well to achieve the organizational goals (Mathis and Jackson, 1998)".

Training is important because it provides employees with the chance to learn what they need to perform their jobs well (Matthews et al., 2004). Hereafter, Tai (2006) explained that if employees had the appropriate skills and they have well trained, they would gain the excellent power to perform in their jobs. Accordingly, companies must preserve a needed competence in its employees through sufficient training. However, Moshi (2011) found the challenges that face public organizations in providing training to their employees namely; unsuitable training programs, financial constraints, the absence of support from superiors, lack of professional trainers and inappropriate needs assessment. On the other hand, Pyne (2004) explained the systematic approach to effective training as the following: First, assessing needs. Then, developing objectives. Followed by, determining which techniques and methodologies should be used. There are two different methods of training construction workers: on-the-job and off-the-job training (Fuller et al., 2011). Finally, submitting the training. Finally evaluating training.

2.2.1 Factors of Training

Bhatti and Kaur (2010) explained that learning transfer is the most significant factor that affects the training effectiveness criteria. Wexley and Latham (1991) defined learning transfer as "the degree to which employee applies the knowledge, skills, and attitudes gained in training to their job." Several researchers showed that work environment factors directly or indirectly affect the transfer of training in the real workplace (Bhatti et al., 2013). However, Zehir et al. (2016) clarified that orientation connects between human resource management and company's performance (financial performance). While, Raiden and Dainty (2006) showed that learning environment seems primary for every construction company. Furthermore, several researchers stated that supplies, materials, equipment, tools and financial support could affect employees' training (Mathieu and Martineau, 1997; Tracey et al., 2001).

On the other hand, motivation can increase the readiness of the workers to attend the training courses and to transfer what they understand from the training in their jobs. Managers should use a system that rewards employees who perform their jobs well. Thus, encourage worker's participation (Leung et al., 2004). Raiden and Dainty (2006) showed that learning environment seems primary for every construction company. Furthermore, several researchers stated that supplies, materials, equipment, tools and financial support could influence employees' training (Tracey et al., 2001; Guerrero and Sire, 2001).

2.3 Motivation

Motivation is internal/external drive that promotes energy and desire in employees to be continually concerned and committed to their tasks and to exert constant effort in achieving the goals (Mathis et al., 2012). Roberts (2005) also express the term as being intentional and directional. 'Intentional' alludes to as a personal choice and effort of work, while 'directional' refers to the existence of an effective force aimed

ISSN 2076-9202

at attaining a particular goal. Therefore, a person who is motivated is always concerned of the goal to be attained and directs his/ her efforts at fulfilling that goal.

Increased motivation might lead to job satisfaction because satisfaction arises from an individual comparison and assessment of job expectations and their achievement (Tessema, 2006; Sweis et al 2017). In the construction industry, the earliest study of motivation made by Schrader (1972) which indicated that if the construction worker's physiological needs met this will attain job security and social.

2.3.1 Factors of Motivation

Ruge (2012) and Manzoor (2012) revealed that empowerment and recognition have a positive impact on employee motivation. Raghava (2009) indicated that good wages were the most important motivating factor, followed by interesting work and appreciation. In addition, they considered a performance appraisal, responsibility, trust and flexibility of working hours to be motivating factors. On the other hand, Alghazo and Al-Anazi (2017) found that there is a strong relationship between leadership style and employee motivation. Broni (2012) found that good salary, career development prospects, love for the job and healthy relations were the major responsible for the motivation of workers. Lim and Ling (2012) found that the contractors must make a satisfactory working environment. Moreover, a study by Baraka (2013) revealed that the most factors that motivate employees from different department on the job are, working conditions, pay and benefits. However, Chung (2013) revealed that good incentive system, good environmental condition, good welfare schemes and job enlargement are the factors influencing employee motivation.

2.4 Organizational Performance

Miners (2006) defined organizational performance as the degree to which an individual helps the organization reach its goals. The performance includes both financial and non-financial measures. Financial measures include economic factors such as revenue and income. While non-financial measures comprise success indicators such as market share, market effectiveness, and satisfaction. In addition, Kane and Lawler (1979) defined the performance as a record of task achievement or outcomes such as productivity, profit growth, market share, customer satisfaction and quality improvement that can be effectively achieved for a certain period. Over the last few decades, constant research efforts have continued to develop adequate metrics for evaluating project performance in the construction industry (Chan and Beatham et al., 2004; Costa et al., 2006; El-Mashaleh et al, 2007; Hwang et al., 2008;; Suk et al., 2012; Yeung et al., 2013; Sweis et al 2008; Sweis et al 2014; Saleh et al 2017)).

This study used two dimensions to measure the performance of the construction companies. The first one is the project efficiency, which is concerned about how the projects meet the schedule, budget and scope goals. Per Fortune et al. (2011) and Yaghootkar and Gil, 2012), there are three traditional items of project efficiency: time, budget, and scope. The second dimension of the performance is the impact on

ISSN 2076-9202

the customer in terms of how the projects fulfil the customer needs and achieve customer satisfaction. While Yang and Peng (2008) mentioned that when assessing customer satisfaction there are five specific dimensions that should be determined including contractor/customer relationship, cost, project management, skilled workforce, and safety. Li et al. (2013) argued that measuring satisfaction only in the final stages of the project would lead to losing important information. Customer satisfaction should be measured at the early stages of the project as well as at the end.

2.4 The Relationship between T & D and Motivation and Organizational Performance

Previous researchers showed a positive relationship between human resource management and firm performance (e.g. Kaman et al., 2001; Savrou and Brewster, 2005). Khan et al. (2011) revealed that training design has a positive effect on organizational performance. On the other hand, Thang et al. (2008) revealed that training could lead to increase in sales. Furthermore, training helps to improve the productivity of a manufacturing company. Ramazai and Jergeas (2015) discussed that training and education establishment can prepare and teach project managers for the future via evaluating project management development. Furthermore, Enshassi and Burgess (1990) clarified the significance of training for construction site managers who are engaged with multicultural workers in the Middle East. While Detsimas et al. (2016) proposed that workplace training has a significant impact on job growth.

Rui et al. (2015) explained that the performance of employees always relies on the training program given by the managers. In addition, training program can enhance the effectiveness and the productivity of the employees. Barker and Ingram (2011) showed that worker's skills are directly affecting company's performance, and allow the company to maintain its competitive edge. There are some factors that impact the performance of employees such as pay and bonuses, fringe benefits, recognition, working conditions, empowerment, employee feelings toward work, communication style, flexibility of working hours and Job enlargement (Ruge ,2012; Chung, 2013).

Gregory (2008) and Bhatt (2011) concluded that when an employee is motivated, he/she become more productive and this lead to cost savings. The motivated employee is more committed to the company and to the customer. The result of that is an effective organization performance and organization income increased. Similarly, Farhanabanana (2013) revealed that the factors of motivation play a significant role in increasing employee job satisfaction. This will lead in improving work performance. In addition, Matsie (2008) indicated that if the company needs to stay competitive it is very necessary to motivate their employees. While Lubuva (2008) stated that poor motivation, not- auxiliary working environment and low pay are the main problems that prevent the public organization work efficiently. Manzoor (2012) found a positive correlation between employee motivation and organizational effectiveness.

The successful secret of the construction companies is their wonderful workers and the utilization of training and motivation practices. (Leonard, 1998; Palmeri, 1999; Kopochinski, 2000; Krizan, 2000; Lubka and Kleiner, 2001). Therefore, to test the impact of T&D and motivation on job performance in

ISSN 2076-9202

construction companies, the following hypotheses are developed:

First main and sub hypotheses

H_{01}: There is no statistically significant impact of T&D on project performance.
$H_{01.1}$: There is no statistically significant impact of T&D on project efficiency.
$H_{01.2}$: There is no statistically significant impact of T&D on impact on the customer.

Second main and sub hypotheses
H_{02}: There is no statistically significant impact of motivation on project performance.
$H_{02.1}$: There is no statistically significant impact of motivation on project efficiency.
$H_{02.2}$: There is no statistically significant impact of motivation on impact on the customer.
To test the differences in the answers of the respondents toward training and motivation dimensions, the following hypotheses are developed:

Hypotheses related to company grade toward T&D

Ho_3: Jordanian building companies with different grades have no differences in their answers toward T&D dimensions.
Ho_4: Jordanian highways companies with different grades have no differences in their answers toward T&D dimensions.
Ho_5: Jordanian water and sewage companies with different grades have no differences in their answers toward T&D dimensions.
Ho_6: Jordanian electromechanical companies with different grades have no differences in their answers toward T&D dimensions.
Hypotheses related to company grade toward motivation.

Ho_7: Jordanian building companies with different grades have no differences in their answers toward motivation dimensions.
Ho_8: Jordanian highway companies with different grades have no differences in their answers toward motivation dimensions.
Ho_9: Jordanian water and sewage companies with different grades have no differences in their answers toward motivation dimensions.
Ho_{10}: Jordanian electromechanical companies with different grades have no differences in their answers toward motivation dimensions.
Hypotheses related to participants' experience

Ho_{11}: participants with different experience have no differences in their answers toward T&D dimensions.
Ho_{12}: participants with different experience have no differences in their answers toward motivation dimensions.
Hypotheses related to participants' job title

ISSN 2076-9202

Ho_{13}: respondents with different job titles have no differences in their answers toward T&D dimensions.

Ho_{14}: respondents with different job titles have no differences in their answers toward motivation dimensions.

3. Theoretical Frameworks and Research Methodology

Figures (1 and 2) represent the theoretical frameworks of this study. This study intended to examine the contribution of employees' T&D and motivation on the construction company's performance in Jordan. The required data were collected mainly by using questionnaires.

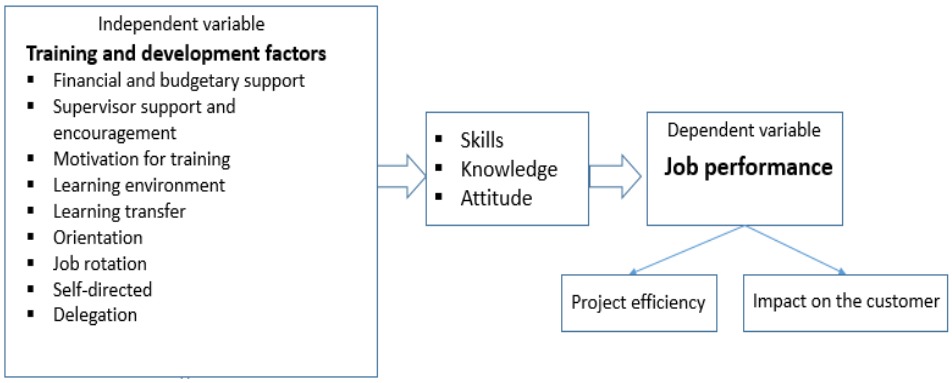


Figure (1): Graphical Illustration Systematic Training Practices and job performance.

(Source: adapted from Armstrong (2009) and Agarwala (2009) and modified by the researcher (2017))

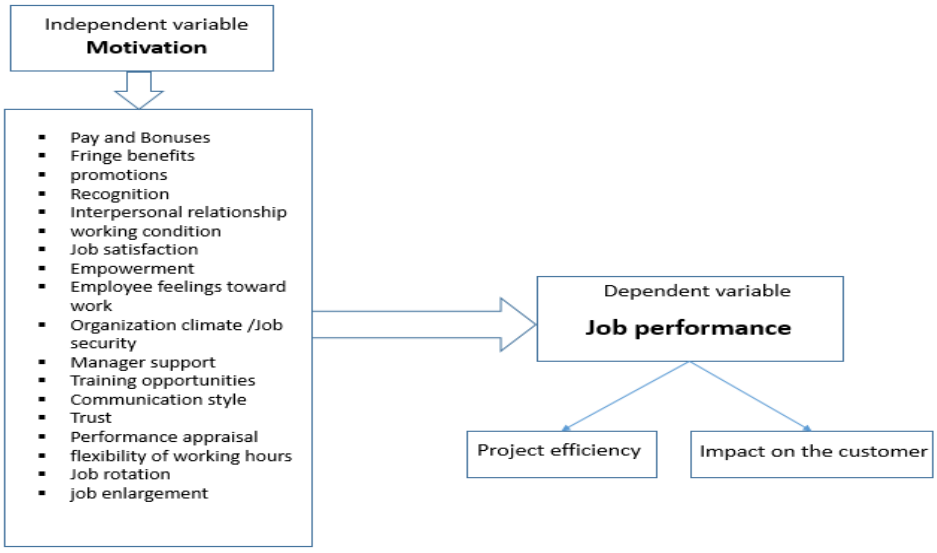


Figure (2): Graphical Illustration of Motivation and Job Performance.

The target population is the large construction companies, as these were deemed more likely to apply human resource development practices within their companies. Based on Jordanian construction contractors' association (JCCA) (2016) report, it is shown that there are (2272) classified companies

ISSN 2076-9202

under (buildings, highways, water sewage and electromechanical works). Out of these (2272) companies, there are (375) companies have classified (1st and 2nd), 193 companies in grade one and 182 companies were registered as grade two. The questionnaires were targeting these categories. Ninety questionnaires were distributed with 81 valid responses used in the analyses. The adequate size of the sample was calculated using the following equation, and then the sample size is 80 companies.

$$n = \frac{100}{1 + \left(\frac{100}{375}\right)} \cong 80$$

3.1 Reliability

Table (1) shows that Cronbach's Alpha values ranged between 0.882 and 0.999. In addition, the value of Cronbach's Alpha Coefficient for all factors was 0.983. These values were more than 0.6, indicating that the instruments of the questionnaire are reliable and consistent.

Table (3): Cronbach's Alpha Coefficient

Variable	Cronbach's Alpha Coefficient
Benefits of training	0.956
Financial and budgetary support	0.932
Supervisor support and encouragement	0.951
Motivation for training	0.999
Learning environment	0.964
Learning transfer	0.968
Orientation	0.948
Job rotation	0.934
Self-directed	0.965
Delegation	0.999
Benefits of motivation	0.999
Pay and Bonuses	0.882
fringe benefits	0.926
Promotion	0.971
Recognition	0.889
Interpersonal relationship	0.953
Working conditions	0.948
Job satisfaction	0.922
Empowerment	0.999
Employee feelings toward work	0.970
Organization climate /Job security	0.948

ISSN 2076-9202

Manager support	0.966
Training opportunities	0.920
Communication style	0.962
Trust	0.999
Performance appraisal	0.977
flexibility of working hours	0.915
Job rotation	0.999
job enlargement	0.999
Project efficiency	0.971
Impact on the customer	0.985
All variable	0.983

4. Data Analysis

4.1 Descriptive Analysis for Demographic Factors

As shown in Table (2), there is 61.7% of the respondents hold the bachelor degree, 34.6% hold masters' degree, 2.5% hold Ph.D. and only 1.2% hold other degrees. Additionally, 61.7% of the respondents have less than 5 years of experience, 23.5% have (5- 10) years of experience, 9.9% have (11- 15) years of experience and only 4.9% have more than 15 years of experience. Additionally, around 5% of the respondents are company managers, 12.3% are project managers, around 33% are site managers, around 10% are executive managers, 13.6% are site engineers, 2.5% are structure/ design engineers, 2.5% are surveying engineers and 21% hold other positions. Referring to the same table, around 30% of the respondents working in companies with number of employees less than 50, around 11% worked in companies with number of employees between 51 and 100, 34.6% worked in companies with number of employees between 101 and 300 and around 25% worked in companies with number of employees more than 300.

Table (2): Descriptive statistics based on educational background, years of experience, respondents' job title, and number of employees in the company

Category	Frequency	%
Educational background		
BSc	50	61.7%
MSc	28	34.6%
PhD	2	2.5%
Other	1	1.2%
Years of Experience		
< 5 years	50	61.7%
5-10 Years	19	23.5%
11-15 Years	8	9.9%

ISSN 2076-9202

>15 years	4	4.9%
Respondents' Job Title		
Site Manager	27	33.30%
Other	17	21.00%
Site Engineer	11	13.60%
Project Manager	10	12.30%
Executive Manager	8	9.90%
Company Manager	4	4.90%
Structure/ Design Engineer	2	2.50%
Surveying Engineer	2	2.50%
# of Employees in the company		
< 50	24	29.60%
51-100	9	11.10%
101-300	28	34.60%
>300	20	24.70%

Table (3) shows that most respondents were from building 1st class contractors, where the least participating respondents were from water and sewage 2nd class contractors.

Table (3): Company Classification

Company Classification	1st	2nd
Buildings	34	20
Highways	9	10
Water and sewage	16	6
Electromechanical	12	9
Total	71	45

4.2 Hypotheses Testing

4.2.1 Collinearity test

Table (4) shows the VIF values for each independent variable which are less than 5, with tolerance value greater than 0.2. These values indicate that there is no occurrence of any multi-collinearity problem between the independent variables.

Table (4): Collinearity test

ISSN 2076-9202

Variable	Tolerance	VIF
Benefits of training	.305	3.280
Financial and budgetary support	.349	2.861
Supervisor support and encouragement	.211	4.729
Motivation for training	.274	3.649
Learning environment	.251	3.985
Learning transfer	.211	4.735
Orientation	.194	5.148
Job rotation	.289	3.463
Self-directed	.245	4.078
Delegation	.385	2.595
Benefits of motivation	.203	4.936
Pay and Bonuses	.261	3.829
fringe benefits	.256	3.901
Promotion	.211	4.740
Recognition	.280	4.554
Interpersonal relationship	.288	4.331
Working conditions	.204	9.647
Job satisfaction	.277	5.635
Empowerment	.202	4.939
Employee feelings toward work	.201	4.889
Organization climate /Job security	.201	4.981
Manager support	.204	4.896
Training opportunities	.218	4.581
Communication style	.229	4.731
Trust	.267	4.978
Performance appraisal	.226	4.937
flexibility of working hours	.263	4.142
Job rotation	.309	3.240
job enlargement	.252	4.574

4.2.2 Testing 1st Main and Sub Hypotheses

To test hypotheses, multiple regression analysis was conducted, table (5) shows that F = 124.158 and p-value = 0.000, which is less than 0.05 level of significance. Table (6) indicates that R = 0.782 is the correlation value between T&D and project performance. The adjusted R^2 (0.606) of the explained variation in project performance can be accounted for T&D. Table (7) shows that t-value is significant at

ISSN 2076-9202

0.05 levels for T&D. This indicates that there is a significant effect of T&D on project performance. Hence, the main null hypothesis is rejected.

Table (5): ANOVA result of 1st hypothesis test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.107	1	58.107	124.158	.000b
	Residual	36.973	79	.468		
	Total	95.080	80			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), T&D						

Table (6): Model summary of 1st hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782a	.611	.606	.68411
a. Predictors: (Constant), T&D				

Table (7): Coefficients result of 1st hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.601	.256		2.347	.021
	T&D	.805	.072	.782	11.143	.000
a. Dependent Variable: Project Performance						

On the other hand, to test the two null sub hypotheses, tables (8 &12) Show that F = 108.759 and F = 82.761, and p-values = 0.000, which are less than 0.05 level of significance. Tables (9 & 11) indicate that R = 0.761 and R = 0.715 are the correlation value between T&D and project efficiency, and T&D and impact on the customer. The adjusted R^2 (0.574) and R^2 (0.505) of the explained variation in project efficiency and impact on the customer can be accounted for T&D. Tables (10 & 13) show that t-values and they are significant, the t-values are significant at 0.05 levels for T&D. This indicates that there is a significant effect of T&D on project efficiency and impact on the customer. Hence, the 1st and 2nd null sub hypothesis are rejected.

ISSN 2076-9202

Table (8): ANOVA[a] result of first sub hypothesis test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.220	1	57.220	108.759	.000[b]
	Residual	41.564	79	.526		
	Total	98.784	80			
a. Dependent Variable: Project efficiency						
b. Predictors: (Constant), Training and development						

Table (9): Model summary of 1st sub hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761a	.579	.574	.72534
a. Predictors: (Constant), T&D				

Table (10): Coefficients [a] result of 1st sub hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.604	.272		2.222	.029
	T&D	.799	.077	.761	10.429	.000
a. Dependent Variable: Project efficiency						

Table (11): Model summary of 2nd sub hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715a	.512	.505	.84434
a. Predictors: (Constant), T&D				

Table (12): ANOVA a result of 2nd sub hypothesis test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	59.001	1	59.001	82.761	.000b
	Residual	56.320	79	.713		
	Total	115.321	80			
a. Dependent Variable: Impact on the customer						
b. Predictors: (Constant), T&D						

ISSN 2076-9202

Table (13): Coefficients result of 2nd sub hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.599	.316		1.894	.062
	T&D	.811	.089	.715	9.097	.000
a. Dependent Variable: Impact on the customer						

4.2.3 Testing Second Main and Sub Hypotheses

Table (14) shows that F = 227.654 and p-value = 0.000, which is less than 0.05 level of significance. Table (15) indicates that R = 0.862 is the correlation value between motivation and project performance. The adjusted R^2 (0.739) of the explained variation in project performance can be accounted for motivation. Table (16) shows that t-value and it is significant, the t-value is significant at 0.05 levels for motivation. This indicates that there is a significant effect of motivation on project performance. Hence, the second main hypothesis is rejected.

Table (14): Model summary of 2nd main hypothesis test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	70.586	1	70.586	227.654	.000b
	Residual	24.494	79	.310		
	Total	95.080	80			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), Motivation						

Table (15): ANOVA a result of 2nd hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.242	.214		1.133	.261
	Motivation	.912	.060	.862	15.088	.000
a. Dependent Variable: Project Performance						

Table (16): Coefficients a result of 2nd hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

ISSN 2076-9202

1	.820a	.673	.669	.63939
a. Predictors: (Constant), Motivation				

To test the two sub hypotheses, table (17 & 18) show that F = 162.635 and F = 145.867 with p-values = 0.000, which is less than 0.05 level of significance. Table (19 & 20) indicate that R = 0.820 and R = 0.805 are the correlation values between motivation and project efficiency, and motivation and impact on customer. The adjusted R^2 (0.669) and R^2 (0.644) of the explained variation in project efficiency and impact on the customer can be accounted for motivation. Table (21 & 22) show that t-values and they are significant, the t-values are significant at 0.05 levels for motivation. This indicates that there is a significant effect of motivation on project efficiency and impact on the customer. Hence, the two null sub hypotheses are rejected.

Table (17): ANOVA a result of first sub hypothesis of the 2nd main hypothesis test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	66.488	1	66.488	162.635	.000b
	Residual	32.296	79	.409		
	Total	98.784	80			
a. Dependent Variable: Project efficiency						
b. Predictors: (Constant), Motivation						

Table (18): ANOVA a result of 2nd sub hypothesis of the 2nd main hypothesis test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	74.807	1	74.807	145.867	.000b
	Residual	40.514	79	.513		
	Total	115.321	80			
a. Dependent Variable: Impact on the customer						
b. Predictors: (Constant), Motivation						

Table (19): Model summary of 1st sub hypothesis of the 2nd main hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820a	.673	.669	.63939
a. Predictors: (Constant), Motivation				

Table (20): Model summary result of 2nd sub hypothesis of the 2nd main hypothesis test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805a	.649	.644	.71613

ISSN 2076-9202

a. Predictors: (Constant), Motivation

Table (21): Coefficients a result of first sub hypothesis 2nd main hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.314	.245		1.282	.204
	Motivation	.885	.069	.820	12.753	.000
a. Dependent Variable: Project efficiency						

Table (22): Coefficients a result of second sub hypothesis 2nd main hypothesis test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.170	.275		.618	.539
	Motivation	.938	.078	.805	12.078	.000
a. Dependent Variable: Impact on the customer						

4.2.4 Testing Hypothesis Related to Company Grade toward T&D

Tables (23, 25 & 26) show that F-values for all T&D dimensions are not significant at 0.05 level. This means that Jordanian building, water and sewage, and electromechanical companies with different grades (1st and 2nd) have no differences in their answers toward T&D dimensions. While table (24) shows that F-values for all T&D dimensions are not significant at 0.05 level, except learning transfer and delegation dimensions. This means that Jordanian highways companies with different grades (1st and 2nd) have differences in their answers toward learning transfer and delegation dimension.

Table (23): ANOVA Result for 3rd Hypothesis related to company grade toward T&D.

Items	F- Value	Sig.	Accept/ Reject
Benefits of training	1.417	.239	Accept
Financial and budgetary support	.070	.792	Accept
Supervisor support and encouragement	.720	.400	Accept
Motivation for training	1.982	.165	Accept
Learning environment	.061	.806	Accept
Learning transfer	.138	.712	Accept
Orientation	.274	.603	Accept
Job rotation	1.274	.264	Accept

ISSN 2076-9202

Self-directed	.316	.577	Accept
Delegation	.013	.908	Accept

Table (24): ANOVA result for 4th hypothesis related to company grade toward T&D.

Items	F- Value	Sig.	Accept/ Reject
Benefits of training	.136	.717	Accept
Financial and budgetary support	.002	.962	Accept
Supervisor support and encouragement	3.310	.087	Accept
Motivation for training	2.955	.104	Accept
Learning environment	.005	.943	Accept
Learning transfer	4.581	.047	Reject
Orientation	2.205	.156	Accept
Job rotation	2.690	.119	Accept
Self-directed	1.431	.248	Accept
Delegation	6.475	.021	Reject

Table (25): ANOVA result for 5th hypothesis related to company grade toward T&D.

Items	F- Value	Sig.	Accept/ Reject
Benefits of training	2.244	.150	Accept
Financial and budgetary support	.482	.496	Accept
Supervisor support and encouragement	.535	.473	Accept
Motivation for training	.190	.668	Accept
Learning environment	2.107	.162	Accept
Learning transfer	.360	.555	Accept
Orientation	.163	.691	Accept
Job rotation	.110	.743	Accept
Self-directed	1.008	.327	Accept
Delegation	.083	.776	Accept

Table (26): ANOVA result for 6th hypothesis related to company grade toward T&D.

Items	F- Value	Sig.	Accept/ Reject
Benefits of training	.005	.945	Accept
Financial and budgetary support	.154	.699	Accept
Supervisor support and encouragement	.000	1.000	Accept
Motivation for training	.124	.729	Accept
Learning environment	.327	.574	Accept
Learning transfer	.685	.418	Accept

ISSN 2076-9202

Orientation	.338	.568	Accept
Job rotation	.002	.961	Accept
Self-directed	.161	.693	Accept
Delegation	1.036	.322	Accept

4.2.5 Testing Hypothesis Related to Company Grade Toward Motivation.

Tables (27, 29 & 30) show that F-values for all motivation dimensions are not significant at 0.05 level. Which means that Jordanian building, water and sewage, and electromechanical companies with different grades (1st and 2nd) have no differences in their answers toward motivation dimensions. While table (28) shows that F-values for all motivation dimensions are not significant at 0.05 level, except benefits of motivation and flexibility of working hours. This means that Jordanian highway companies with different grades (1st and 2nd) have differences in their answers toward flexibility of working hours' and benefits of motivation dimensions.

Table (27): ANOVA result for 7th hypothesis related to company grade toward motivation.

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	1.369	.247	Accept
Pay and Bonuses	.206	.652	Accept
fringe benefits	1.518	.223	Accept
Promotion	.112	.739	Accept
Recognition	.126	.724	Accept
Interpersonal relationship	.326	.570	Accept
Working conditions	.048	.828	Accept
Job satisfaction	.413	.523	Accept
Empowerment	.000	.994	Accept
Employee feelings toward work	.257	.614	Accept
Organization climate /Job security	.072	.790	Accept
Manager support	.047	.830	Accept
Training opportunities	.127	.723	Accept
Communication style	.362	.550	Accept
Trust	.330	.568	Accept
Performance appraisal	.563	.456	Accept
flexibility of working hours	1.192	.280	Accept
Job rotation	.216	.644	Accept
job enlargement	.454	.503	Accept

ISSN 2076-9202

Table (28): ANOVA result for 8th hypothesis related to company grade toward motivation.

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	6.837	.018	Reject
Pay and Bonuses	.302	.590	Accept
fringe benefits	.123	.730	Accept
Promotion	.552	.468	Accept
Recognition	.408	.532	Accept
Interpersonal relationship	3.039	.099	Accept
Working conditions	2.900	.107	Accept
Job satisfaction	.000	1.000	Accept
Empowerment	1.544	.231	Accept
Employee feelings toward work	1.462	.243	Accept
Organization climate /Job security	1.365	.259	Accept
Manager support	1.437	.247	Accept
Training opportunities	2.539	.129	Accept
Communication style	3.831	.067	Accept
Trust	2.006	.175	Accept
Performance appraisal	2.066	.169	Accept
flexibility of working hours	5.227	.035	Reject
Job rotation	3.153	.094	Accept
job enlargement	1.340	.263	Accept

Table (29): ANOVA result for 9th hypothesis related to company grade toward motivation

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	1.241	.278	Accept
Pay and Bonuses	1.982	.175	Accept
fringe benefits	.662	.425	Accept
Promotion	.633	.436	Accept
Recognition	.801	.382	Accept
Interpersonal relationship	.631	.436	Accept
Working conditions	.987	.332	Accept
Job satisfaction	2.958	.101	Accept
Empowerment	1.127	.301	Accept
Employee feelings toward work	3.640	.071	Accept
Organization climate /Job security	1.011	.327	Accept
Manager support	.857	.366	Accept
Training opportunities	.651	.429	Accept

ISSN 2076-9202

Communication style	.634	.435	Accept
Trust	1.025	.323	Accept
Performance appraisal	.478	.497	Accept
flexibility of working hours	.001	.979	Accept
Job rotation	.700	.413	Accept
job enlargement	.255	.619	Accept

Table (30): ANOVA Result for 10th Hypothesis related to company grade toward motivation.

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	.000	1.000	Accept
Pay and Bonuses	.079	.782	Accept
fringe benefits	.958	.340	Accept
Promotion	.088	.770	Accept
Recognition	.015	.903	Accept
Interpersonal relationship	.002	.964	Accept
Working conditions	.025	.877	Accept
Job satisfaction	.307	.586	Accept
Empowerment	.264	.613	Accept
Employee feelings toward work	.176	.680	Accept
Organization climate /Job security	.000	1.000	Accept
Manager support	.144	.709	Accept
Training opportunities	.309	.585	Accept
Communication style	.083	.776	Accept
Trust	.264	.613	Accept
Performance appraisal	.027	.872	Accept
flexibility of working hours	.643	.433	Accept
Job rotation	.388	.541	Accept
job enlargement	.003	.957	Accept

4.2.6 Testing Hypothesis Related to Participants' Experience

Table (31) shows that F-values for all T&D dimensions are not significant at 0.05 level. This means that respondents with different experience have no differences in their answers toward T&D dimensions. Table (32) shows that F-values for all motivation dimensions are not significant at 0.05 level, except several items. This means that respondents with different experience have differences in their answers toward fringe benefits, promotion, working conditions, employee feelings toward work, organization climate /job security, performance appraisal and job rotation dimensions. By using Tukey test (table 33)

ISSN 2076-9202

for the dimensions that have significant differences, it is found that these differences tend to increase in experience more than 15 years.

Table (31): ANOVA Result for 11th Hypothesis related to participants' experience

Items	F-Value	Sig.	Accept/ Reject
Benefits of training	.521	.669	Accept
Financial and budgetary support	2.920	.059	Accept
Supervisor support & encouragement	1.344	.266	Accept
Motivation for training	2.040	.115	Accept
Learning environment	.380	.767	Accept
Learning transfer	1.006	.395	Accept
Orientation	1.384	.254	Accept
Job rotation	1.573	.203	Accept
Self-directed	1.562	.205	Accept
Delegation	1.506	.220	Accept

Table (32): ANOVA Result for 12th Hypothesis related to participants' experience

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	1.696	.175	Accept
Pay and Bonuses	2.850	.053	Accept
fringe benefits	3.891	.012	Reject
Promotion	3.045	.034	Reject
Recognition	2.633	.056	Accept
Interpersonal relationship	1.797	.155	Accept
Working conditions	4.255	.008	Reject
Job satisfaction	2.162	.099	Accept
Empowerment	3.144	.050	Accept
Employee feelings toward work	4.008	.010	Reject
Organization climate /Job security	4.984	.003	Reject
Manager support	2.905	.050	Accept
Training opportunities	3.555	.058	Accept
Communication style	2.398	.074	Accept
Trust	3.273	.056	Accept
Performance appraisal	5.640	.002	Reject
flexibility of working hours	1.929	.132	Accept
Job rotation	3.309	.024	Reject
job enlargement	1.779	.158	Accept

ISSN 2076-9202

Table 33: Tukey test

Dependent Variable	(I) Years of experience	(J) Years of experience	Mean Difference (I-J)	Std. Error	Sig.
fringe benefits	< 5 years	5-10 Years	-.69632-	.29585	.095
		11-15 Years	-1.17000-*	.41802	.032
		>15 years	.08000	.57042	.999
	5-10 Years	< 5 years	.69632	.29585	.095
		11-15 Years	-.47368-	.46267	.736
		>15 years	.77632	.60390	.575
	11-15 Years	< 5 years	1.17000*	.41802	.032
		5-10 Years	.47368	.46267	.736
		>15 years	1.25000	.67224	.254
	>15 years	< 5 years	-.08000-	.57042	.999
		5-10 Years	-.77632-	.60390	.575
		11-15 Years	-1.25000-	.67224	.254
Promotion	< 5 years	5-10 Years	-.71263-	.32595	.136
		11-15 Years	-1.09750-	.46055	.089
		>15 years	.09000	.62846	.999
	5-10 Years	< 5 years	.71263	.32595	.136
		11-15 Years	-.38487-	.50975	.874
		>15 years	.80263	.66535	.625
	11-15 Years	< 5 years	1.09750	.46055	.089
		5-10 Years	.38487	.50975	.874
		>15 years	1.18750	.74064	.383
	>15 years	< 5 years	-.09000-	.62846	.999
		5-10 Years	-.80263-	.66535	.625
		11-15 Years	-1.18750-	.74064	.383
Working conditions	< 5 years	5-10 Years	-.69632-	.29853	.100
		11-15 Years	-1.29500-*	.42180	.015
		>15 years	-.04500-	.57558	1.000
	5-10 Years	< 5 years	.69632	.29853	.100
		11-15 Years	-.59868-	.46686	.577
		>15 years	.65132	.60937	.709
	11-15 Years	< 5 years	1.29500*	.42180	.015
		5-10 Years	.59868	.46686	.577
		>15 years	1.25000	.67833	.262
	>15 years	< 5 years	.04500	.57558	1.000

ISSN 2076-9202

		5-10 Years	-.65132-	.60937	.709
		11-15 Years	-1.25000-	.67833	.262
Employee feelings toward work	< 5 years	5-10 Years	-.73123-	.29789	.075
		11-15 Years	-1.19833-*	.42090	.028
		>15 years	-.07333-	.57435	.999
	5-10 Years	< 5 years	.73123	.29789	.075
		11-15 Years	-.46711-	.46586	.748
		>15 years	.65789	.60807	.702
	11-15 Years	< 5 years	1.19833*	.42090	.028
		5-10 Years	.46711	.46586	.748
		>15 years	1.12500	.67688	.351
	>15 years	< 5 years	.07333	.57435	.999
		5-10 Years	-.65789-	.60807	.702
		11-15 Years	-1.12500-	.67688	.351
Organization climate /Job security	< 5 years	5-10 Years	-.98000-*	.30435	.010
		11-15 Years	-1.16750-*	.43002	.040
		>15 years	-.23000-	.58680	.979
	5-10 Years	< 5 years	.98000*	.30435	.010
		11-15 Years	-.18750-	.47596	.979
		>15 years	.75000	.62125	.624
	11-15 Years	< 5 years	1.16750*	.43002	.040
		5-10 Years	.18750	.47596	.979
		>15 years	.93750	.69155	.531
	>15 years	< 5 years	.23000	.58680	.979
		5-10 Years	-.75000-	.62125	.624
		11-15 Years	-.93750-	.69155	.531
Performance appraisal	< 5 years	5-10 Years	-.63789-	.29364	.140
		11-15 Years	-1.41750-*	.41490	.005
		>15 years	.64500	.56616	.667
	5-10 Years	< 5 years	.63789	.29364	.140
		11-15 Years	-.77961-	.45922	.332
		>15 years	1.28289	.59940	.150
	11-15 Years	< 5 years	1.41750*	.41490	.005
		5-10 Years	.77961	.45922	.332
		>15 years	2.06250*	.66723	.014
	>15 years	< 5 years	-.64500-	.56616	.667
		5-10 Years	-1.28289-	.59940	.150
		11-15 Years	-2.06250-*	.66723	.014

ISSN 2076-9202

Job rotation	< 5 years	5-10 Years	-.90737-*	.34147	.046
		11-15 Years	-.46000-	.48248	.776
		>15 years	.79000	.65838	.629
	5-10 Years	< 5 years	.90737*	.34147	.046
		11-15 Years	.44737	.53402	.836
		>15 years	1.69737	.69703	.079
	11-15 Years	< 5 years	.46000	.48248	.776
		5-10 Years	-.44737-	.53402	.836
		>15 years	1.25000	.77591	.379
	>15 years	< 5 years	-.79000-	.65838	.629
		5-10 Years	-1.69737-	.69703	.079
		11-15 Years	-1.25000-	.77591	.379

Tables (34 & 35) show that F values for all motivation dimensions are not significant at 0.05 level. This means that respondents with different job title have no differences in their answers toward motivation dimensions.

Table (34): ANOVA result for 13th hypothesis related to participants' job title

Items	F- Value	Sig.	Accept/ Reject
Benefits of training	.790	.598	Accept
Financial and budgetary support	.993	.443	Accept
Supervisor support and encouragement	1.030	.418	Accept
Motivation for training	.542	.800	Accept
Learning environment	.743	.637	Accept
Learning transfer	.459	.861	Accept
Orientation	1.746	.112	Accept
Job rotation	1.071	.390	Accept
Self-directed	.636	.725	Accept
Delegation	.949	.474	Accept

Table (35): ANOVA result for 14th hypothesis related to participants' job title

Items	F- Value	Sig.	Accept/ Reject
Benefits of motivation	.978	.454	Accept
Pay and Bonuses	.878	.529	Accept
fringe benefits	1.124	.358	Accept
Promotion	.911	.503	Accept
Recognition	.889	.520	Accept
Interpersonal relationship	1.017	.426	Accept

ISSN 2076-9202

Working conditions	1.133	.352	Accept
Job satisfaction	.257	.968	Accept
Empowerment	.811	.581	Accept
Employee feelings toward work	1.533	.170	Accept
Organization climate /Job security	1.342	.243	Accept
Manager support	1.119	.361	Accept
Training opportunities	.892	.517	Accept
Communication style	.914	.501	Accept
Trust	.868	.536	Accept
Performance appraisal	1.104	.370	Accept
flexibility of working hours	.653	.710	Accept
Job rotation	1.498	.181	Accept
job enlargement	1.305	.260	Accept

5. Discussion and Conclusion

It can be concluded that, the most important factors for T&D is self-directed, followed by learning transfer and then learning environment. Self-directed is a very important factor of training because it allows employees to have more autonomy. Additionally, it allows employees to make the decisions about what training should occur and how. Thus, employees who have the power to make decisions will be satisfied and creative. This result compatible with Nesan and Holt (1999). In addition, learning transfer is one of the most important factors that affect the training effectiveness criteria as it leads employees to apply what they learned in the training in their jobs. Therefore, the employees perform better than before. This result compatible with Bhatti and Kaur (2010).

Furthermore, the learning environment is essential for every company because it allows employees to feel comfortable, safe and engaged. This result compatible with Raiden and Dainty (2006). Moreover, the majority of the respondents agreed that there is a strong and positive relationship between T&D of employees and the project performance. This result supports the observation by various studies (i.e. Tabassi et al. 2011; Khan et al. 2011; Barker and Ingram, 2011; Enshassi and Burgess, 1990). Nevertheless, varies with Chang et al, (2010) who confirmed that training could be a reason of employee dissatisfaction because of the overlong training hours, which leads to additional burden on employees.

Likewise, the majority of the respondents agreed that there is a strong and positive relationship between T&D of employees and the project efficiency. This result is compatible with Caicedo (2003) and Rui et al., (2015). If employees trained correctly, they will do their jobs effectively and quickly. This will lead to finish the project within time, budget, and scope. As well, the majority of the respondents agreed that there is a strong and positive relationship between T&D of employees and impact on the customer. When employees acquire the skills, knowledge, and abilities they need in their jobs, they will do their

ISSN 2076-9202

jobs correctly and this will lead to fulfil the customer needs and achieve their satisfaction. Furthermore, the most important factor for motivation is trust, followed by communication style and then interpersonal relationship. This result confirmed that the leadership style is the most important tool that managers should be used to enhance the implementation of motivation practices. This result supports the observation by Alghazo and Al-Anazi (2017). The majority of the respondents agreed that there is a strong and positive relationship between the motivation of employees and the project performance. This result supports the observation by Gregory (2008), Tabbasi et al. (2011), Manzoor (2012), Farhanabanana (2013) and Mgimba (2014). This result was expected because the motivation of employees encourages them to make a positive contribution to achieving company's objectives. In addition, the majority of the respondents agreed that there is a strong and positive relationship between the motivation of employees and the project efficiency. This result supports the observation by Gregory (2008) and Ruge (2012).

Additionally, the majority of the respondents agreed that there is a strong and positive relationship between the motivation of employees and impact on the customer. This result supports the observation by Gregory (2008). Jordanian highways companies with different grades have differences in their answers toward delegation. This result may appear because the work in highway companies is difficult. Therefore, delegation may increase risk in the work. This can occur when an employee who is asked to be delegated does not know accurately about the work. In addition, Jordanian highways companies with different grades (first and second) have differences in their answers toward learning transfer. Usually, training other staff is not preferred because it adds new tasks to the employees without any financial return. Moreover, even if the employers give them financial return, most of the employees refuse to make implementation for the new knowledge they trained because it takes them more time and more efforts.

Jordanian highway companies with different grades (1st & 2nd) have differences in their answers toward flexibility of working hours' dimensions. This result may appear because the work in highway companies characterized by long working hours and difficult working conditions. In addition, Jordanian highway companies with different grades have differences in their answers toward benefits of motivation because the most of the highway companies may employ the engineers without a permanent contract and because of that, even if the managers give employees motivation they will not feel satisfied or relaxed. Participants with different experience have differences in their answers toward Fringe benefits, Promotion, Working conditions, Employee feelings toward work, Organization climate /Job Security, Performance Appraisal and Job rotation. Where these differences tend to increase in experience that is more than 15 years. The result was expected because the different experience employees try different companies and every company has different motivation methods and different rewarding system.

5.1 Implications

There are many studies seeking to study the impact of training and motivation of employees on the employee's performance. While there are little studies on the effect of training and motivation of employees on the construction company's performance. The findings of this study confirmed that there is a positive relationship between the training of employees and the performance of the construction

ISSN 2076-9202

companies. These findings may lead managers to identify the factors that contribute to successful implementation of training. Managers also should make educational training courses for employees to improve their performance while doing their jobs. The engineers also should participate in modern engineering workshops, which are done by the Jordan Engineers Association because it involves with engineering experts. Therefore, the employees could get the benefit of them and make implementation of what they learned while doing the engineering projects. Moreover, Managers should give the engineers an opportunity to participate in real projects in the site and get involved with labours and engineers and deal with them at every step they do their jobs.

Additionally, the findings confirmed that there is a positive relationship between the motivation of employees and the performance of construction companies. These findings may lead managers to focus more on employees' needs. Furthermore, these findings act as a guide for the managers to look for the best methods that motivate employees (monitory or non-monitory) to fulfil their needs and to improve their performance. In addition, managers should make sure that motivation needs to be given timely to gain a positive result expected. Furthermore, the study revealed the most important factors of training and motivation that can improve Construction Company's performance in Jordan. Therefore, managers should focus on these factors to be successful in the implementation of training and motivation practices.

5.2 Recommendations

It is recommended for highway top management to allow the employees to carry out specific activities and to give them the authority to make decisions. These procedures lead to have employee with greater autonomy and ultimately improve the performance of construction companies. Additionally, it is recommended for highway companies to give their employees the flexibility of working hours, because if employees feel flexible for their jobs they will feel satisfied and relaxed and this helps to achieve the goals of the company. Moreover, to find new strategies to motivate their employees by ensuring that their employees are motivated to the highest level.

It is recommended to conduct more studies for further classification of the construction companies because this study is restricted for generalization due to limited time and scope of the study. In addition, it is suggested to conduct more studies for lower grades of the contractor's companies because this study is targeted only grade one and grade two.

ISSN 2076-9202

Reference

Abu-Hussein, R, Hyassat, M, Sweis, R, Alawneh, Aand Al-Debei, M (2016). Project Management Factors affecting the Enterprose Resourse planning Projects' Performance in Jordan. Journal of Systems and Information Technoogy. Vol 18, No. 3. Pp: 230-254.

Agarwala, T (2007). Strategic Human Resource Management, Oxford University Press, India.

Alawneh, Afnan R and Sweis, Rateb. J (2016). The Relationship Between the Intelligence level and the Effectiveness of a project Manager: The Case of Jordan.International Journal of Information, Business and Management.Vol. 8, No. 3. pp: 3-18.

Alghazo, A. and Al-Anazi, M. (2017). The Impact of Leadership Style on Employee's Motivation. International Journal of Economics and Business Administration. Vol. 2, No. 5, 2016, pp. 37-44

Armstrong, M (2007). Performance Management, Key Strategies and practical guidelines.

Armstrong, M. (2009). Armstrong's Handbook of Human Resource Management Practice.

Baraka, J. (2013). The Employees' Motivation is the Key to Success. Allafrica.com. www.allafrica.com. (Accessed o 17 June 2013).

Barker, H. and Ingram, H (2011). "Addressing scarce construction skills for competitive advantage: a case study. "Training & Management Development Methods", Vol. 25 No. 4, pp. 549-559.

Beatham, S., Anumba, C., Thorpe, T., Hedges, I., (2004). KPIs: a critical appraisal of their use in construction. Benchmarking Int. J. Vol. 11, pp. 93–117.

Bhatt, B. (2011). Importance of Employee Motivation. Blognbuzz.com. www.blognbuzz.com. (Accessed on 7, July 2011.)

Bhatti, M. A., & Kaur, S. (2010). The role of individual and training design factors on training transfer. Journal of European Industrial Training, Vol. 34 No. 7, pp. 656-672.

Bhatti, M. A., Battour, M. M., Sundram, V. P. K., & Othman, A. A. (2013). Transfer of training: does it truly happen? An examination of support, instrumentality, retention and learner readiness on the transfer motivation and transfer of training. European Journal of Training and Development, Vol. 37 No. 3, pp. 273-297.

Boxall, P., Ang, S.H. and Bartram, T. (2011). 'Analysing the "black box" of HRM: uncovering HR goals, mediators and outcomes in a standardised service environment'. Journal of Management Studies, Vol. 48 No. 7, pp. 1504–1532.

Broni, A. (2012). Factors influencing Workers Motivation in a Private African University. Academic Journal. Vol. 3 No. 3, pp. 315 -340.

Caicedo, (2003). Training and Motivation: Key to a Quality and Productivity-driven Company Culture. Master degree. University of Florida.

Chan, A.P.C., Chan, A.P.L., (2004). Key performance indicators for measuring construction success. Benchmarking Int. J. Vol. 11, pp. 203–221.

Chang, C. C., Chiu, C. M., & Chen, C. A. (2010). The effect of TQM practices on employee satisfaction and loyalty in government. Total Quality Management, Vol. 21 No. 12, pp. 1299-1314.

ISSN 2076-9202

Chung, E. (2013). The relationship of training and organizational commitment in One Korean organization. (Thesis). University of Minnesota.

Costa, D.B., Formoso, C.T., Kagioglou, M., Alarcón, L.F., Caldas, C.H., (2006). Benchmarking initiatives in the construction industry: lessons learned and improvement opportunities. J. Manag. Eng. Vol. 22, pp. 158–167.

Detsimas, N., Coffey, V., Sadiqi, Z. and Li, M. (2016). Workplace training and generic and technical skill development in the Australian construction industry. Journal of Management Development, Vol. 35No. 4, pp.486-504.

Edum-Fotwe, F. T. and R. McCaffer. (2000). "Developing project management competency: perspectives from the construction industry." International Journal of Project Management, Vol. 18 No. 2, pp. 111-124.

El-Mashaleh, M. S., Edward Minchin Jr, R., & O'Brien, W. J. (2007). Management of construction firm performance using benchmarking. Journal of Management in Engineering, Vol. 23 No. 1, pp. 10-17.

Enshassi, A. and Burgess, R. (1990). Training for construction site managers involved with multicultural work teams. International Journal of Project Management, Vol. 8 No. 2, pp. 95-101.

Farhanabanana, F. (2013). Impact of Employee Motivation on Work Performance.www.studymode.com. (Accessed on 4 March 2013).

Fortune, J., White, D., Jugdev, K., Walker, D., (2011). Looking again at current practice in project management. International Journal of Managing Projects in Business, Vol. 4, pp. 553–572.

Fuller, P.A., Dainty, A.R.J., Thorpe, T. (2011). Improving project learning: a new approach to lessons learnt. International Journal of Managing Projects in Business, Vol.4, pp. 118–136.

Gregory, S. (2008). How does an employee motivation impact organization performance. www.salesvantage.com. (Accessed on 5, May 2008).

Guerrero, S., Sire, S., (2001). Motivation to train from the workers' perspective: example of French companies. International Journal of Human Resource Management, Vol. 12, pp. 988–1004.

Hamzah, N, Khoiry, M. A, Arshad, I, Tawil, N.M. (2011). Cause of construction delay-theoretical framework. Procedia Eng., 20, 490-495.

Hwang, B., Thomas, S.R., Degezelle, D., Caldas, C.H., (2008). Development of a benchmarking framework for pharmaceutical capital projects. Constr. Manag. Econ. Vol. 26, pp. 177–195.

Jackson, S.E. and Schuler, R.S. (2000). "Managing Human Resources: A Partnership Perspective" South Western College Publishing, USA.

Kaman, V., McCarthy, A. M., Gulbro, R. D., & Tucker, M. L. (2001). Bureaucratic and high commitment human resource practices in small service firms. People and Strategy, Vol. 24 No. 1, p. 33.

Kane, J. S., & Lawler, E. E. (1979). Performance appraisal effectiveness: Its assessment and determinants. Research Organizational Behavior, Vol. 1, pp.425-278.

Khan, R.A.G (2011). Impact of Training and Development on Organisation Performance, University of Lahore, Islamabad Pakistan, Global Journal of Management and Business Research, Volume II, Issue 7, Version 1.0: Available at: www.sholar.google.com, (accessed 4.10.2011).

ISSN 2076-9202

Kopochinski, L. (2000). Millennium Contractor. S.J. Amoroso interview with Paul Mason and Dana McManus. California Construction Link, 40.

Krizan, WG (2000). Award of excellence. In: Robert M. Thompson, editor. ENR (engineering news record), Vol. 244; p. 52–9.

Leonard B. (1998). What do CEOs want from HR? Human Resource Mag; Vol. 43, pp. 80–6.

Leung M.Y, Thomas S, Cheung S.O. (2004). Measuring construction project participant's satisfaction. Construction Management and Economics, Vol. 22 No. 3, pp. 319–31.

Li, T.H., Ng, S.T., Skitmore, M., (2013). Evaluating stakeholder satisfaction during public participation in major infrastructure and construction projects: a fuzzy approach. Autom. Constr. Vol. 29, pp. 123–135.

Lim, L. and Ling, F. (2012). Human resource practices of contractors that lead to job satisfaction of professional staff. Engineering, Construction and Architectural Management, Vol. 19 No. 1, pp.101-118.

Lubka, Y. and Kleiner, B. (2001). "Human resources issues in the construction industry", Management Research News, Vol. 24 Nos. 3/4, pp.101-105.

Lubuva, K. (2008). The Effect of Motivation on the Performance of Public and Private Organization in Tanzania. Master's Thesis. The Open University of Tanzania.

Manzoor, Q. (2012). Impact of Employee Motivation on Organization Effectiveness. Business Management and Strategy. Vol 3 No. 1.

Mathis, R., Jackson, J., Valentine, S. and Meglich, P. (2012). Human resource management. 1st ed.

Mathis, R.L. and Jackson, J.H. (1998). Personnel/Human Resources Management, Web Publishing Co. New York, USA.

Matsie, T. (2008). The Impact of Motivation on Employee Performance at all Level One District Hospitals. Dissertation.

Matthews, J. J., Megginson, D. and Surtees M. (2004). Human Resource Development, 3rd EditionKogan Page Publishers, New York - USA, 309p.

Mgimba, (2014). The Effectiveness of Motivation on Job Performance in Tanzania Construction sector, the case of SUMAJKT. Master degree. University of Tanzania.

Miners, S.C (2006). Emotional Intelligence, Cognitive Intelligence and Job Performance, Johnson Graduate School, Cornell University: Available at: www.scholar.google.com, (accessed on 5.10.2011).

Moshi, B.D (2011). Challenges Facing Public Organisation in Providing Training to their Employees Case of Ministry of Natural Resources and Tourism, University of Dodoma.

Nesan, L.J., and Holt, G.D. (1999). Empowerment in construction: The way forward for performance improvement. Baldock, Hertfordshire, England: Research Studies Press.

Odusami, K., Iyagba, R. and Omirin, M. (2003). The relationship between project leadership, team composition and construction project performance in Nigeria. International Journal of Project Management, Vol. 21 No. 7, pp.519-527.

Palmeri C. (1999). Home building plus. Forbes; 163(March 8):89.

ISSN 2076-9202

Puplampu, B. (2013). Employee Motivation in Africa. In T.R. Lituchy, B.J. Punnett, & B.B. Puplampu (Eds.), Management in Africa: Macro and Micro Perspectives (pp. 270–290). London: Routledge.

Pyne, J.E (2004). Human Resource Management for public and Non-Profit organization, 2nd, Jossey-Base, www.jossebass.com/go/pynshr, (accessed 10.2.2011).

Raghava, G. (2009). Motivating Hospitality Industry Employees. International Journal of Excellence in Tourism Hospitality and Catering. Vol. 2 No. 2, pp. 90-100.

Raiden, A.B., Dainty, A.R.J., (2006). Human resource development in construction organizations example of a "chaordic" learning organization? The Learning Organization, Vol. 13, pp. 63–79.

Ramazai, J. and Jergeas, G. (2015). Project managers and the journey from good to great: The benefits of investment in project management training and education. International Journal of Project Management, Vol. 33 No. 1, pp.41-52.

Roberts, (2005). Impact of Reward and Recognition Programs on Employee's Motivation and Satisfaction: An Empirical Study. International Review of Business Research Papers, Vol. 5 No. 4, pp. 270-279.

Ruge, T. (2012). Impact of Employees Motivation on organizational effectiveness. European Journal of Business and Management.studymode.com. www.studymode.com. (Accessed on 28 May 2012).

Rui, L., Ismail, S. and Hussaini, M. (2015). Professional Development of Project Management for Contractor in the Construction Project: A Review. Procedia - Social and Behavioral Sciences, Vol. 174, pp.2940-2945.

Saleh, Firas I Mahmoud, Sweis, Rateb J, Bayan Y Abdelqader, Ayman B Abdallah, Mazen Arafeh., (2017). The Effect of TQM Dimensions on the Performance of International Non-Governmental Organizations Operating in Jordan. International Journal of Productivity and Quality Management. 21, No. 4, pp: 443-459.

Schrader, CR (1972). Motivation of construction craftsmen, Journal of Construction Engineering Division, Vol. 98 No. 2, pp. 257–273.

Suk, S.J., Hwang, B.G., Dai, J., Caldas, C.H., Mulva, S.P., (2012). Performance dashboard for a pharmaceutical project benchmarking program. J. Constr. Eng. Manag. Vol. 138, pp. 864–876.

Swanson, R.A., Holton, E.F., (2001). Foundations of Human Resource Development. Berrett-Koehler, San Francisco, CA.

Sweis, Rateb J, Sharaf M Bisharat, Lorina Bisharat, Ghaleb Sweis., (2014). Factors Affecting Contractor Performance on Public Construction Projects. Life Science Journal. Vol.11, No. 4s. pp: 28-29.

Ghaleb J Sweis, Rateb J Sweis, Ayman A Abu Hammad, H Randolph Thomas., (2008). Factors Affecting Baseline Productivity in Masonry Construction: A comparative Study in the Us, Uk and Jordan. Archetectural Science Review. Vol.51, No. 2. Pp: 146-152.

Sweis Nadia J, Sweis Rateb J, Kassab Ghaith, Elfar Amr, Athammneh Diana, Sweis Ghaleb J, (2017). Demotivating factors Influencing Productivity in Jordanian Residential Construction, International Journal of Productivity and Quality Management, Vol. 20, No. 2, pp: 154-168.

ISSN 2076-9202

Sweis R.J, SweisG.J, Abu Hammad (2009). A and Abu Rumman.M 'Modeling the variability of labor productivity in masonry construction', Jordan Journal of Civil Engineering, Vol.3, No. 3, pp. 197-212.

Sweis, G, Imam,R, Kassab, G and Sweis, R, (2015)'Customer Satisfaction in Apartment Buildings: The Case of Jordan'. Life Science Journal, Vol.10, No 12s, pp: 237-245.

Sweis, R. (2015). 'An Investigation of Failure in Information Systems Projects: the Case of Jorda.' Journal of Management Research, Vol. 7, No.1.

Tabassi, A.A. and Bakar, A.H.A. (2011). 'Training, motivation, and performance: The case of human resource management in construction projects in Mashhad, Iran', International Journal of Project Management, Vol. 27 No. 5, pp. 471–480.

Tai, W.T., (2006). Effects of training framing, general self-efficacy and training motivation on trainees' training effectiveness. Personnel Review, Vol. 35, pp. 51–65.

Tessema, M. (2006). Challenges and prospects of HRM in developing countries, testing the HRM-performance link in Eritrean civil service. Int. J. Hum. Res. Manage., Vol. 17 No. 1, pp. 86-105.

Thang, N. N et.al (2008). The Impact of Training on Firm Performance, Case of Vietnam. www.scholar.google.com, (accessed 10.4.2012).

Tracey, J.B., Timothy, R., Mathieu, J.E., (2001). The influence of individual characteristics and the work environment on varying levels of training outcomes. Human Resource Development International, Vol. 12, pp. 5–23.

Wexley, K., Latham, G., (1991). Developing and Training Human Resources in Organizations. Harper Collins, New York, NY.

Yaghootkar, K., Gil, N., (2012). The effects of schedule-driven project management in multi-project environments. Int. J. Proj. Manag. Vol. 30, pp. 127–140.

Yang L.R, O'Connor J.T, Wang C.C. (2006). Technology utilization on different sizes of projects and associated impacts on composite project success. Int J Project Mana*g*, Vol. 24, pp. 96–105.

Yang, J.B., Peng, S.C., (2008). Development of a customer satisfaction evaluation model for construction project management. Build. Environ. Vol. 43, pp. 458–468.

Yeung, J.F.Y., Chan, A.P.C., Chan, D.W.M., Chiang, Y.H., Yang, H., (2013). Developing a benchmarking model for construction projects in Hong Kong. J. Constr. Eng. Manag. Vol. 139, pp. 705–716.

Zehir, C., Gurol, Y., Karaboga, T. and Kole, M. (2016). Strategic Human Resource Management and Firm Performance: The Mediating Role of Entrepreneurial Orientation. Procedia - Social and Behavioral Sciences, Vol. 235, pp. 372-381.

Zhai, X., Liu, A. and Fellows, R. (2014). Role of Human Resource Practices in Enhancing Organizational Learning in Chinese Construction Organizations. Journal of Management in Engineering, Vol. 30 No. 2, pp.194-204.

Zwikael, O., Unger-Aviram, E. (2010). HRM in project groups: the effect of project duration on team

ISSN 2076-9202

development effectiveness. International Journal of Project Management, Vol. 28, pp. 413–421.

ISSN 2076-9202

SOCIAL MEDIA AS A TOOL IN EDUCATION: A CONTENT DESCRIPTIVE ANALYSIS

SAHER MANASEER [1,*], AFNAN ALAWNEH[2], H. Almogdady [3]

[1] Dept. Of Computer Science, King Abdullah II School for Information Technology, The University of Jordan, Email: saher@ju.edu.jo.
[2]The University of Jordan, Amman, Jordan, miss.afnan@yahoo.com, a.alawneh@ju.edu.jo.
[3]Dept. Of Computer Science, King Abdullah II School for Information Technology, The University of Jordan, Email: Huthaifa.cis@gmail.com

Abstract:
In this paper a descriptive analysis is conducted to find out the extent to which Facebook as a social media tool can affect education and academic interaction between students and instructors. The sampling unit was the CS department academic members' pages at Jordan University during the years (2014-2018). Posts in the studies pages were extracted and the content was analyzed. Results shows that Facebook importance and usage as a tool in education in this faculty has declined due to many reasons such as the rise of many other applications and the automation of the teaching processes especially using the electronic gates on the domain of the University for exchanging files. On another hand it is found that the interaction is high regarding the political and entertaining posts. Which reflects the interest that followers show to know the trends of their instructors towards such issues.

Keywords: Facebook, University of Jordan, Social media, Education processes, Information Management.

1. Background:

Social media has emerged in various avenues and gain a high importance in most of our life aspects, to become one of the most effective tools in communications, marketing, News, electronic publishing… etc. In academic field social media has become one of the most essential tools to communicate between students and academic staff of the faculties. Social media and networks are known for announcements, services of advising, educational activities, marketing, personal postings, expressing opinions, News (Shiri and Rathi 2013; Madge and Coserea 2014; Joo and Lu, 2017).

Social media has turned from an entertainment communication applications into professional ones. The flexibility that it gives to users in sharing, creating discussing and the various types of files it allows to use have increased its importance in our life (Joo and Lu, 2017).

Another important use for social media, the election campaigns (khairuddin, 2016), this shows that these platforms can be powerful even in governmental events like elections. Moreover; it shows that social media has gained an important place more than being only a communication platform (Pang and Lee, 2008; khairuddin, 2016).

Many statistics are performed for daily news analysis and reports are made and reported based on the posts in social media account. In academic fields social media has become a very important tool to connect students to their lecturers (Olowe and Gaber, 2014; Kaur and Singh, 2016).

ISSN 2076-9202

This paper is an analytical study for Face book accounts of CS department academic staff at the University of Jordan, to show to what extent the accounts of the academic members are used in the education processes and how various are the posts and the attraction the academic staff get by their followers from students and friends.

2. Methods:

For the purpose of this research the face book pages academic members at the Computer science department - the University of Jordan. The time line for each one of them is covered for the period of (Jan/2014- Mar/2018), among those pages; 3622 posts were extracted. The analysis is descriptive, and all posts were taken into account.

The posts were classified into five categories: Academic, Entertainment, Religious, Social, and Political, since these five categories can cover all posts regardless their type.

2.1. Sample:

The University of Jordan is considered as one of the largest universities in the Middle East. The case study of this paper has considered the computer science department as a sample, for mostly this department was the first to merge the social and technical applications in educational processes are the IT experts, whether they are academic staff or students or even administrative.

The sample covered the CS academic staff Face book pages, counted to 25 members (24% Females, 76% males) (Sekaran and Bougie, 2009).

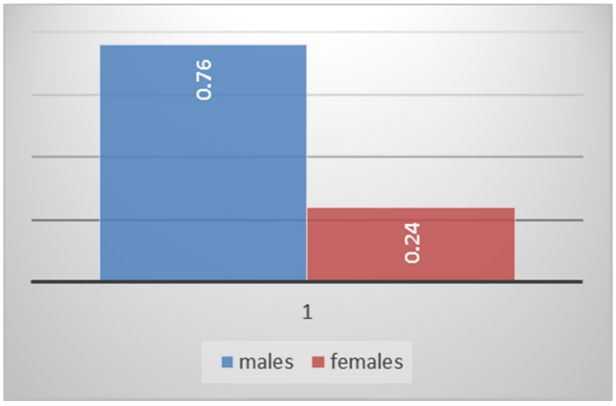


Figure 1: Academic Staff of CS dep at JU

3. Results:

The results of the analysis shows that total number of posts on studied pages, has decreased through the years of the study (2014- 2018). Figure 1 shows the decrement in the posts number.

ISSN 2076-9202

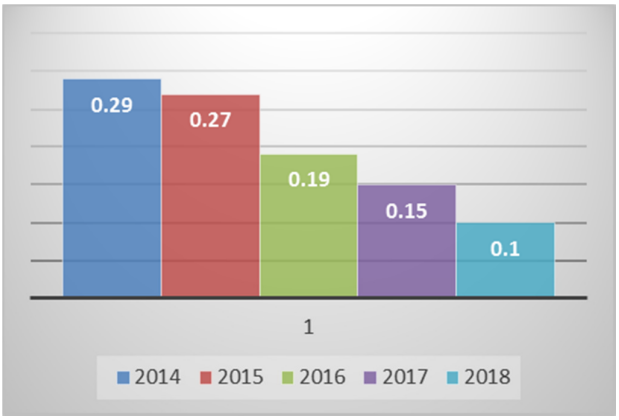


Figure 2: Percentage of posts through studied years.

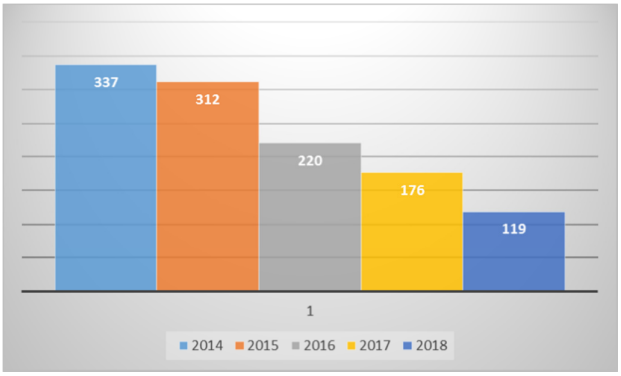


Figure 3: total posts amount through studied years.

There are many suggested reasons for this declining, other applications that came into the front like twitter and instegram, also the Whatsapp and its ability to connect groups, many find it easier to make groups for their students and send an announcement or ads by it, where many consider it easier, and faster.

Also, students tend to use other mobile applications to communicate with their instructors. Moreover, the faculty adopted an automated system to link students with their instructors for each course, such as materials, exams, semester work. This may cause a decrease in FB popularity in the field of academic communicating. Yet, many academic staff still consider it as the primary space for communicating with their students.

Regarding the categories, it is noticed from table 1 and figure 2 that the entertainment has got the highest percent, and the social in the second place, after that academic with 17% and the least are the religious and the political. This reflects that even academic members use face book to communicate with their students it's the messenger where students can send inquiries and questions for the instructor. Yet the posts are much more to be entertaining and social. Moreover, this shows that the academic posts are few in a way that the instructor doesn't post a lot regarding his/ her course, only important reminders, announcements and some important ads for students. Having the majority of the posts in the category of entertainment and social tell that academic staff tend to share their attitudes in these categories with their

ISSN 2076-9202

students and other friends on the page, religious and political posts insure that the academic member is a ware that he is reflecting his attitude toward a special issue in the society for all his followers, and the followers like to know how does their instructors at the university think and interact with the social issues. So face book is not only used for academic purposes or just communicating with students.

Table 4: Posts Categories

Category	Percent
Academic	0.17
Entertainment	0.32
Religious	0.12
Social	0.307
Political	0.083

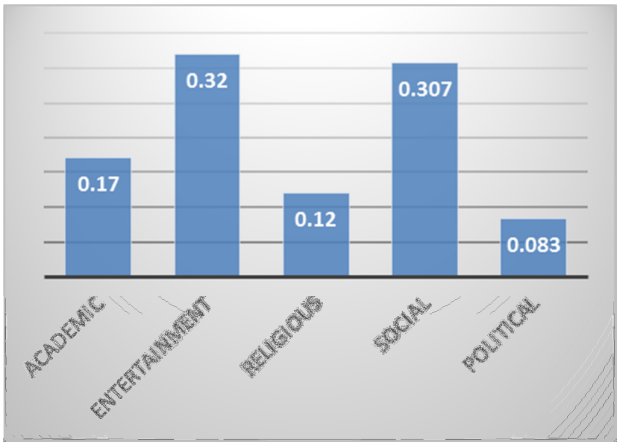


Figure 4: Posts' Categories

Regarding the types of posts; there were three main types: Videos, Images and Text. Text is the most common way to express any message, besides its easily edited. More over face book now offers the ability to change the font, font color, background and many colorful additions that the post look like a picture. As figure 3 shows the text is the most common used way for posting in Facebook by the studied sample.

ISSN 2076-9202

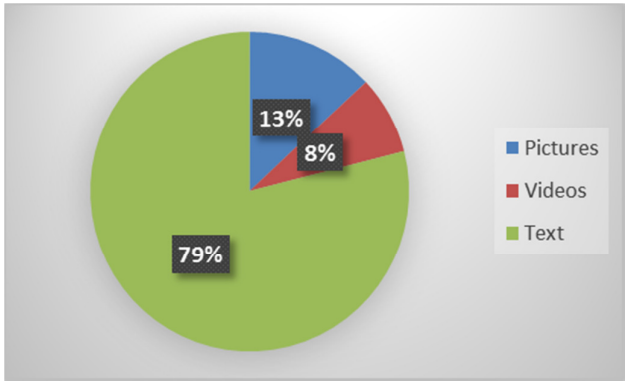


Figure 5: Types of Posts

Regarding the attention that the academic members get for their posts, which is reflected by the likes and comments they get for the post (Interactivity rate), results shows the following:

Table 5: Interactivity of the posts

Category	Likes	Comments
Academic	0.13	0.15
Entertainment	0.28	0.22
Religious	0.15	0.19
Social	0.25	0.21
Political	0.19	0.23

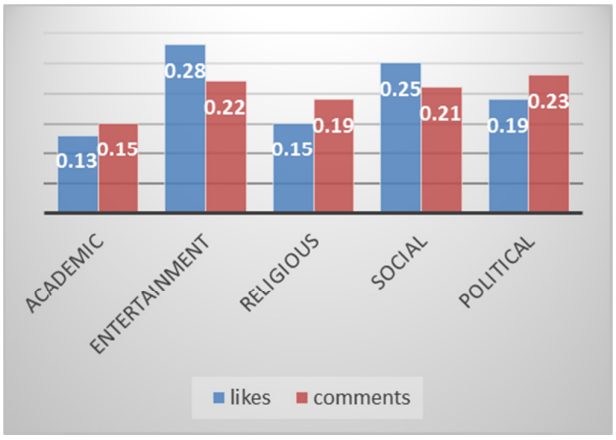


Figure 3: Likes and Comments of the posts

As figure 4 and table 2 show, the academic posts are not in the first place in terms of likes and comments, on the contrary it holds the last place in terms of likes, which indicates that even if they are the most important link between students and instructors, yet students tend to know them, and care to be only informed by its content, on the other hand it is noticed that entertainment posts got the highest number of

ISSN 2076-9202

likes and come in the second place in the number of comments. As for the number of likes social posts comes in the second place, then the religious ones. Surprisingly, the political posts got the highest comments, this shows that the interaction is higher when the posts reflects the point of view of any academic member in the current political situation. Yet the academic posts got the lowest in both likes and comments, there are many reasons for that, such as other social media applications where the student can get the answer through chatting, even face book messenger is faster than waiting to get a reply on the post. At Jordan University there is an electronic platform that is used for communicating between students and instructors for exchanging files and assignments which leads to make face book as a second tool mainly for advertising for students and keep them updated.

4. Conclusions:

Social media applications and platforms are emerging, and almost has affected every aspect of our lives. This paper focused on the academic and educational usage of social media especially Facebook accounts as an interaction tools between the academic members and their students, it is found that Facebook is not the first tool for educational purposes in Jordan University/ CS department. Yet it still have an important place for communicating and keep updated with all new regarding an instructor course.

It is recommended that this study shall be applied at the level of all faculties and next studies shall take into consideration students' perspective towards using social media in education, to get their feedback and find better ways for communicating accordingly. Moreover, it is suggested to make an educational based account to link all interested in every field and faculty and apply it as a community of practice, regardless the used platform, to study of that can enhance the educational process.

References:

[1] Joo, S., Lu, K. (2017). "Content analysis of Facebook posts in public libraries based on textual analysis", Content analysis of Facebook posts in public libraries based on textual analysis, 54 (1), Pp: 718-719.

[2] Shiri, A., & Rathi, D. (2013). Twitter content categorization: A public library perspective. Journal of Information & Knowledge Management, 12(04), 1350035.

[3] Madge, O. L., & Coserea, L. (2014). The Facebook challenge for public libraries in Romania. Studii de biblioteconomie şi ştiinţa informării, 18, 89-93.

[4] khairuddin, m. (2016) "power of posts: a quantitative analysis of facebook election campaigning interactions". Ph.D Thesis, RMIT University, 2016.

[5] Pang, B. and Lee, L.: Opinion mining and sentiment analysis; Foundations and trends in information Retrieval; Vol. 2, Nos. 1–2, 1–135, 2008.

[6] Kaur, R., Singh, S. (2016). "A survey of data mining and social network analysis based anomaly detection techniques". Egyptian Informatics Journal, 17, (2), Pp: 199-216.

[7] Olowe, M., Gaber, M., Stahl, F. (2014). "A Survey of Data Mining Techniques for Social Media Analysis", Journal of Data Mining & Digital Humanities, 2014 (June 24, 2014) jdmdh:18.

[8] Sekaran, U and Bougie, R (2009), Research Methods for Business: A Skill Building Approach, 5th edition. Wiley.

ISSN 2076-9202

Authors

Dr. Saher Manaseer has a PhD in Computer Science from the Department of Computing Science at the University of Glasgow. His main area of research is Computer Networks and Embedded Systems. Currently, Dr. Manaseer is an active researcher in the field of Mobile Ad Hoc Networks. More specifically, his research on MANETs is focused on developing MAC layer protocols. Before obtaining his PhD, He got his Masters in Computing Science from the University of Jordan where his research in that era was focused on Software Engineering. https://www.researchgate.net/profile/Saher_Manaseer

Afnan Alawneh has a Master in MBA from The Business Administration faculty/ the University of Jordan. Her B.Sc. was in Computer Information Technology. She is an active researcher in both fields. https://www.researchgate.net/profile/Afnan_Alawneh

ISSN 2076-9202

RELATIONSHIP AMONG BIG FIVE PERSONALITY TRAITS, JOB PERFORMANCE & JOB SATISFACTION: A CASE OF SCHOOL TEACHERS IN SRI LANKA

Dr. WS Chandrasekara (Ph.D.)
Senior Lecturer, Institute of Human Resource Advancement, University of Colombo, Sri Lanka

Abstract

This study aims to examine the relationships among Personality traits, Job Satisfaction and Job performance. A sample study was conducted with 150 government school teachers using a closed ended questionnaire based on Personality Traits developed by Norman and McCrae & Costa, Job Performance developed by Borman & Motowidlo's, Task Performance developed by McAllister's, Contextual Performance developed by Organ and Farh's et al., and Job Satisfaction developed by Porter & Lawler, and Organ. Face to face interview method was performed and data was analyzed using SPSS 20.0. Job satisfaction and job performance show a reciprocal significant relationship. All the personality traits significantly influence on job performance whereas the Agreeableness indicates the greatest effect. In terms of job satisfaction, Agreeableness is most influential factor, followed by Extraversion. The other three personality factors do not have effect on job satisfaction. The contribution of this study is to provide empirical support for the reciprocal effect of job performance and job satisfaction. These findings confirm the previous studies' causal relationship between these two variables.

Keywords: *Big five personality traits, Job satisfaction, Job performance, Sri Lanka*

1 Introduction

Job satisfaction of teacher's is very significant, as they need to deliver a quality work in education for future generations. The quality of education is largely influenced by job satisfaction of teachers. Many

ISSN 2076-9202

studies have been done on job performance and job satisfaction in the long history of this area. Roethlisberger and Dickson (1939) have done a study on job performance and job satisfaction in 1939. Locke (1976) has defined Job Satisfaction as an enjoyable or supportive emotional state resulting from the evaluation of individual's job experiences whereas Fritzsche & Parrish (2005) have defined it as the degree to which individuals enjoy their jobs. Job satisfaction can be described using equity theory. Equity theory discusses balancing the inputs and outputs of an employee (Adams & Freedman, 1976). According to the theory, the employee obtains intrinsic and extrinsic rewards in different forms such as, pay, bonuses, security, and pleasure. Persons become discouraged when inputs are not equally rewarded as compared to other equal jobs (Adams & Freedman, 1976). So, simply, job satisfaction is associated with how our personal anticipations of work or job are in correspondence with the actual outcomes. Job performance can be defined as "all the behaviors employees engaged at work" (Jex 2002). However, nowadays it is usually agreed that job performance consists of complex series of interrelating variables relating to job, the employee and the setting (Milkovich et al 1991).

1.1 The Big Five Personality Traits, Job Performance and Job Satisfaction

Many studies have been done on Personality Traits in the long history. The factors developed by Norman (1963) have been used widely in the literature. These factors are extraversion, emotional stability, agreeableness, conscientiousness and culture, later known as "Norman's Big Five" or "Big Five" (Barrick and Mount, 1991). Different researchers have marked the last factor differently, Norman (1963) as culture, Borgatta (1964) as intellect and McCrae and Costa (1985) as openness to experience. In this study openness to experience is used as the fifth factor. As this classification can properly identify the personality traits and it has been widely used in the research work, this study has chosen to explore the impact of Personality Traits on job performance and job satisfaction.

This study investigates the effects of personality traits by using five-factor model, on job performance and job satisfaction among School Teachers in Sri Lanka. Personality traits have specified a complete

ISSN 2076-9202

description of an individual's personality, known as the five-factor model (McCrae & Costa, 1985). The five-factor model is a categorization of personality traits in five scopes, comprising with Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (McCrae & John, 1992; McCrae & Costa, 1985; Deary & Whiteman, 2003). The basic measurements of the five factors have been shown to describe individual variances in behavior (Cribbin, 1972; Park & Deitz, 2006; McCrae & John, 1992). Therefore, five-factor model is suitable for capturing a broad picture of an individual's personality.

1.2 Hypotheses and Conceptual Framework

1.2. 1 Conscientiousness

Conscientiousness comprises with achievement emphasis, neatness, efficiency, responsibility, thoroughness, and hardworking (McCrae & John, 1992). Lounsbury et al. (2012) defined conscientiousness as a personality trait linked with reliability, consistency, honesty and inclination obey with company rules, norms and values. Individuals who posses conscientiousness have careful planning, effective organizing and time management which may lead for more achievement in carrier life. Hence, Conscientiousness is positively related to job performance & job satisfaction (Hypothesis 1).

1.2.2 Neuroticism

Neuroticism generally includes characteristics such as worry, uncertainty, defensiveness, pressure, and anxiety (Judge & Higgins, 1999; Griffin & Hesketh, 2003; Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012). According to literature, such characters may lead for more job stress, which decreases the level job satisfaction (Mercer, 1997; Stoeva, Chiu, & Greenhaus, 2002). Neurotics may also have time pressure to accomplish their work as they spend lot of time for worrying or undesirable affects. They are less efficient and effective time users. Therefore, Neuroticism is negatively related to job performance & job satisfaction (Hypothesis 2).

ISSN 2076-9202

1.2.3 Extraversion

Extraversion is a characteristic that an individual tend to be sociable, active, outgoing, assertive, energetic, extroverted, warm hearted and talkative (Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012; McCrae & John, 1992). They are more energetic, self-confident, outward-bound and dominant in public circumstances. Because of higher level of activeness and energy, extraverts may complete more duties in a given extent of time and thereby may also experience less exhaustion than others (Rusting & Larsen, 1998). Furthermore, as they focus more on positive aspects of social situations, they sense social situations as less stressful. Due to the optimistic thinking and energy of extraverts, they may have less tension and less time pressures. Hence, Extraversion is positively related to job performance & job satisfaction (Hypothesis 3).

1.2.4 Agreeableness

Agreeableness generally includes characteristics such as teamwork, friendliness, forgivingness, kindness, sympathy, and trustworthiness (McCrae & John, 1992). Agreeableness characteristics may reduce workplace conflict and stress. Individuals who hold agreeableness are more tending to be success at work and they get better emotional support from co-workers (Zellars & Perrewe, 2001). According to Yang & Hwang (2014), individuals with higher agreeableness cope with groups faster and develop interactions effortlessly. Greater support in the workplace may consequently reduce job stress and increase job performance & job satisfaction. Thus, it is predicted that Agreeableness is positively related to job performance & job satisfaction (Hypothesis 4).

1.2.5 Openness to experience

Openness to experience generally includes characteristics such as intelligence, unconventionality, creativity, curiosity, creativity, and originality (McCrae & John, 1992; Rajiv , Dant, Scott, Weaven, Brent, & Baker, 2013). Individuals who openness to experience are more tend to accept changers, and creative in finding solutions for problems. They are also more helpful to others. Hence, it is predicted that Openness

ISSN 2076-9202

to experience is positively related to job performance & job satisfaction (Hypothesis 5).

1.2.6 The Job Satisfaction

The job satisfaction is a very important subject aria of industrial psychology (Tang & Talpade, 1999). Job satisfaction has been defined in many different ways in literature. Some consider it as a happiness relating to his or her job. The “satisfaction" is defined as an expression of the pleasure and inner peace experienced by individuals themselves in general (Mercer, 1997). Workers have job expectations. Job satisfaction may be defined as the satisfaction of these job expectations (Tang & Talpade, 1999). On the other hand, Job satisfaction is the inner agreement of the workers related to their jobs (Park & Deitz, 2006). In recent years, the importance of job satisfaction is increased. Satisfaction is achievable if job expectations and the characters of the job itself are consisted with each other (Cribbin, 1972). Buitendach and Witte (2005) define job satisfaction as an individual’s opinions and assessments of a job, and this opinion is influenced by their situations, including needs, values and expectations. Individuals hence evaluate their jobs on the basis of aspects, which they contemplate as important to them. The level of involvement in decision-making and independency are influential factors in their levels of job satisfaction (Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012).

1.2.7 Job performance

Job performance could be divided into two main parts, task performance and contextual performance (Motowidlo, Borman, & Schmit, 1997). Task performance deals with the actions that provide to complete a job to make anticipated and particular outcome. Contextual performance explains the success of the workers in doing their job, which reinforced by their personal conduct, social and physiological atmosphere of the workplace. Task performance comprises with job-specific undertakings including core job tasks. According to Motowidlo et al. (1997), job performance has a stronger relationship with cognitive ability. A study done by Lent & Brown (2006) has shown that labeling a task performance as positive is assumed to influence workers’ attitude toward their work. The main parts of task performance

ISSN 2076-9202

comprise with sustaining situation awareness, operating facilities, performing control actions and communication tasks (Griffin & Hesketh, 2003). According to Van et al. (2000) when individuals use technical skills and knowledge to complete a task, they are engaging in task performance. Motowidlo et al. (1997), point out that researchers have often disregarded the aspects of contextual performance, which is very important to understand the job performance in addition to task performance. Contextual performance comprises with non-job-specific performances such as collaborating with co-workers and presenting commitment (Motowidlo, Borman, & Schmit, 1997)

1.2.8 Conceptual Framework

Lent and Brown (2006) recommend a social-cognitive model of job satisfaction, grounded on the social cognitive career theory. The social cognitive career theory provides an outline for understanding the influence of different personalities on job performance & job satisfaction. In this study, big five personality treats are functioned as independent variable (IV). It comprises with five major personality traits: Extraversion, Conscientiousness, Agreeableness, Emotional Stability and Openness to Experience. Job satisfaction and job performance are considered as the dependent variable (DV).

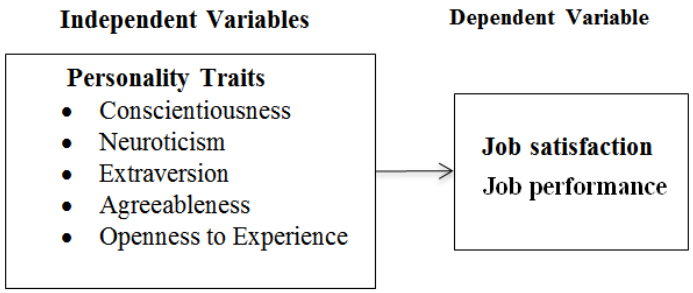


Fig. 1. Conceptual Framework

Based on the literature and the above framework, following hypothesis are postured;

H1: Conscientiousness is positively effect on job performance & job satisfaction

H2: Neuroticism is negatively effect on job performance & job satisfaction

H3: Extraversion is positively effect on job performance & job satisfaction

H4: Agreeableness is positively effect on job performance & job satisfaction

ISSN 2076-9202

H5: Openness to experience is positively effect on job performance & job satisfaction

2 Methodology

In this study, correlation between big five personality traits and job performance & job satisfaction will be investigated. Independent variables and dependent variable are given in the conceptual model.

2.1 Participants

Study sample comprised of teachers working in three public secondary schools in Western Province, Sri Lanka who agreed to join the research study. Background factors such as gender, marital status, age, and years of service were considered when select the study sample. A total of 150 teachers, 50 teachers from each school were selected. Gender of teachers; 60% of female and 40% male teachers, and 80% of married; 20% of single have been included. Of the teachers, 32% were under the age of 30; 68% were 31 years and above. Yeas of services of teachers; 1-10; 20%, 11-20; 63.3%, 21-30;10%, 31 and above; 6.7%.

2.2 Measures

2.2.1 Personality Traits

Personality was measured using Big Five Personality factors developed by Norman (1963) and McCrae & Costa, (1985) with 20 items in all. A sample item is "I see other people's point of view". The scale deals with general assessment about the Big Five personality traits. Participants were asked to select their level of agreement for each item on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The higher score, more tending towards a certain personality trait.

2.2.2 Job Performance

Job performance was measured based on Borman and Motowidlo's (1993) scale and incorporated both task performance and contextual performance. The task performance was measured based on McAllister's (1995) scale, and incorporated aspect of attendance and coordination (Fisher, 1980). A model item is "I

ISSN 2076-9202

outperform my colleagues". Contextual performance was measured using the eight items scale developed by Organ's (1988b) and Farh's et al. (1997). A model item is "I actively help my colleagues with their work". The higher scare is the better the job performance.

2.2.3 Job Satisfaction

Job satisfaction was measured using the scale developed by Porter & Lawler (1968), incorporating the concept of fairness suggested by Organ (1988a). Satisfaction is divided into two components as intrinsic satisfaction and extrinsic satisfaction with three points for each. Example item is: "My job is challenging," The higher average score is the higher level of job satisfaction.

3 Results

3.1 Reliability and validity analysis

Confirmatory Factor analysis (CFA) was conducted to measure the construct validity of each variable used in the study. It helps to identify irrelevant items and to design the measurement model. According to Karriker and Williams (2009), the value of factor loading should be less than 0.4. The factor loading values of all variables namely Personality Traits (PT), Job Performance (JP), and Job Satisfaction (JS) are well above average level. According to Hair et al., (2003), values of GFI, AGFI, CFI, NFI and TLI should be above 0.90 or closer to 1, it indicates the better fit of the model. Hence, as given in Table 01 all the values of above indexes are above the average level and closer to 1.00. Therefore, data is ideal for further analysis. The values of model fit in this study are close to 1.00 as given in the Table 01, which means a good model fit. The value of Root Mean Square Error of Approximation (RMSEA) should be less than .05, and Chi-square ($\chi 2$/ df) should be less than 4.5 for a better fit of the model (Browne and Cudeck, 1993). As given in Table 01, both RMSEA and Chi-square values are above the average level, which indicates the better fit of the model. All the measurement values are above the average level, which means a good model fit of CFA in this study.

ISSN 2076-9202

Table 01: Confirmatory Factor Analysis

Variables	Chi-square	*RMSEA*	*GFI*	*AGFI*	*CFI*	*TLI*	*NFI*	RMR	AVE	CR
PT	3.760	0.038	0.891	0.953	0.886	0.811	0.827	.016	.53	.82
JP	3.986	0.040	0.933	0.931	0.922	0.837	0.814	.031	.54	.83
JS	4.130	0.043	0.861	0.916	0.841	0.950	0.912	.024	.53	.80

Notes: PT= Personality Traits, JP= Job Performance, JS= Job Satisfaction

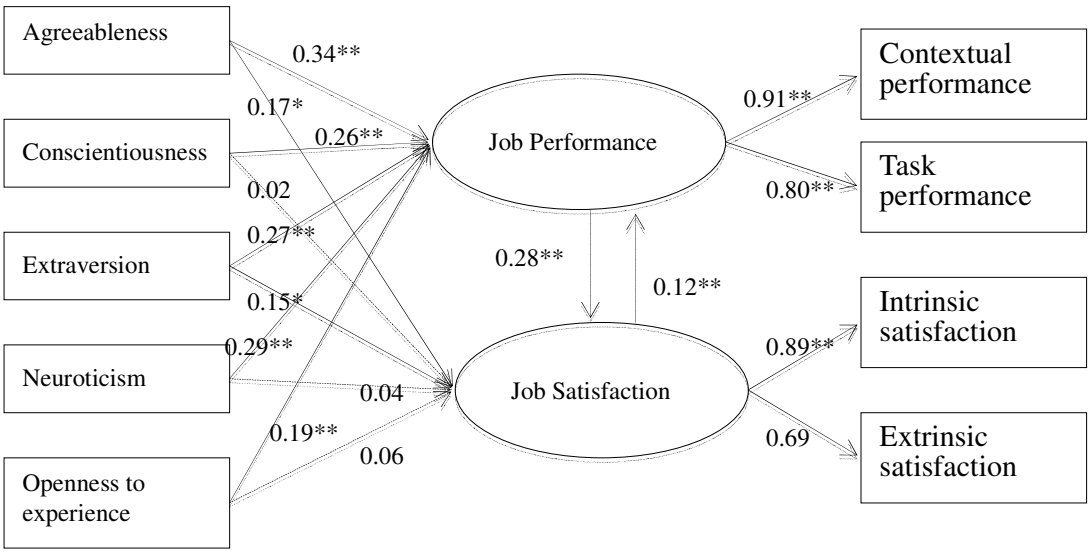
Descriptive indicators and correlations of the study variables are give in Table 02.

Table 02. Descriptive Analysis and Correlations

	Construct	Mean	SD	1	2	3	4	5	6	7	8
1	Contextual performance	3.94	0.47								
2	Task performance	3.81	0.48	0.53							
3	Intrinsic satisfaction	3.80	0.73	0.49	0.38						
4	Extrinsic satisfaction	3.44	0.68	0.40	0.30	0.50					
5	Agreeableness	4.50	0.65	0.51	0.38	0.42	0.28				
6	Conscientiousness	3.72	0.50	0.54	0.54	0.35	0.23	0.43			
7	Extraversion	4.01	0.52	0.51	0.52	0.35	0.25	0.41	0.51		
8	Neuroticism	3.03	0.65	0.60	0.53	0.36	0.24	0.40	0.47	0.52	
9	Openness to experience	3.05	0.59	0.51	0.59	0.34	0.26	0.33	0.51	0.52	0.50

Note: All correlations significant at $p< 0.01$

ISSN 2076-9202



Notes: **p<0.01, *p<0.05

Figure 1: The effect of personality traits on job performance and job satisfaction

3.2 Discussion and Recommendations

Consistent with the previous studies, this study has found that the effects of all five traits on job performance are significant, with Agreeableness being the most influential factor whereas Neuroticism being the least influential factor. In terms of job satisfaction, findings of this study show that Agreeableness is the most influential personality trait on job satisfaction whereas Extraversion is the next most influential personality trait. Other three variables do not have significant influence on job satisfaction. Those who hold agreeableness are more team workers and tend to success at work and life, therefore, they get better emotional support from colleagues. This finding consists with Zellars & Perrewe (2001). They are good at socializing and have more friends than others. Furthermore, they are committed to their job and ready to devote more time for social collaboration, which can insure a greater chance of job promotion and thereby job satisfaction. These findings also consist with previous studies (Judge & Higgins, 1999; Van Den Berg & Feij, 2003). Findings of this study reveal the importance of agreeable characters, such as being cooperative, attentive and humble to others, as well as extraverted characters, such as being intimate, active and enthusiastic. These two traits, agreeableness and extraversion have

ISSN 2076-9202

positive influence on job performance and job satisfaction.

Findings of this research indicate that there is a significant reciprocal influence between job performance and job satisfaction. This finding consists with pervious study done by Judge, Thoresen, Bono, & Patton (2001). It means the higher level of job satisfaction leads for better job performance and reciprocally, better job performance leads for higher job satisfaction. Because of the teachers who undertake their work better are more likely to be appreciated by students and their parents as well as the principal and higher authorities. On the other hand, teachers who are happier with teaching feel more enthusiastic about their work and hence they perform their job well. According to findings of this study, Job performance effect on job satisfaction. According to Vroom's (1964) Expectancy Theory, Job performance leads to rewards and, in order, those rewards are the reason for job satisfaction. On the other hand, Job satisfaction effect on job performance. Brayfield and Crockett (1955) done the first research in this regard and found a weak correlation between job satisfaction and job performance. Petty et al (1984) conducted another research and found a slightly higher relationship. The mutual causal relationship between job performance and job satisfaction could be described by the theory of expectancy. The expectancy theory explains that individuals are motivated to perform well to receive the rewards; thereby they will achieve higher level of satisfaction (Vroom , 1964; Lounsbury, Foster, Carmody, Kim, Gibson, & Dorost, 2012).

The main contribution of this study is to provide empirical support for the reciprocal effect of job performance and job satisfaction. These findings confirm the previous studies' causal relationship between these two variables. Only few studies have examined the mutual relationship between these two variables and discovered either partial support for the mutual relationship or support for a one-sided relationship. However, including a third variable, personality to this study, it was found reciprocal relationship between job performance and job satisfaction. As predicated, it was found that job performance has a positive effect on job satisfaction and job satisfaction has a positive effect on job performance. All the variables of Big Five personality traits have revealed a significant effect on job

ISSN 2076-9202

performance. However, only agreeableness and extraversion indicated a significant influence on job satisfaction whereas the other three variables did not show a significant effect.

Works Cited

Deary, I., & Whiteman, M. (2003). *Personality Traits.* Cambridge: Cambridge University Press.

Adams, J., & Freedman, S. (1976). Equity theory revisited: comments and annotated bibliography. *UNIVERSITY OF NORTH CAROLINA CHAPEL HILL. NORTH CAROLINA* , 43–90.

Barrick, M., & Mount, M. (1991). The Big Five personality dimensions and job performance: a meta-analysis. *Personnel Psychology , 44* (1), 1-26 .

Barrick, M., & Mount, M. (1991). The Big Five personality dimensions and job performance: a meta-analysis . *Personnel Psychology , 44* (1), 1-26 .

Borgatta , E. (1964). The structure of personality characteristics . *Behavioral Sciences , 9* (1), 8-17 .

Borman, W., & Motowidlo, S. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, & W. Borman , *Personnel selection in organizations* (pp. 71-98). San Francisco : Jossey-Bass Publishers .

Brayfield, A., & Crockett, W. (1955). Employee Attitudes and Employee Performance. *Psychological Bulletin , 52* (5), 396-424.

Browne, M., & Cudeck, R. (1993). Alternative ways of assessing model fit; Testing Structural Equation Models. *154*, 136–162.

Buitendach, J., & de Witte, H. (2005). Job insecurity, extrinsic and intrinsic job Satisfaction and affective organisational commitment of maintenance Workers in a parastatal. *South African of Business Management , 26* (2), 27-37.

Cribbin, J. (1972). *Effective Managerial Leadership.* New York : American Management Association .

Farh, J., Earley, P., & Lin, S. (1997). Impetus for action: a culture analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly , 42* (3), 421-444 .

Fisher, C. (1980). On the dubious wisdom of expecting job satisfaction to correlate with performance. *Academy of Management Review, , 5* (4), 607-612.

Fritzsche, B., & Parrish, T. (2005). Theories and research on job satisfaction. In S. Brown, & R. Lent , *Career development and counseling: Putting theory and research to work* (pp. 180–202). Hoboken: NJ: Wiley .

Griffin, B., & Hesketh, B. (2003). Adaptable behaviours for successful work and career adjustment. *Australian Journal of Psychology , 55*, 65- 73.

Hair, J., Anderson, R., Tatham , R., & Black, W. (2003). *Multivariate data analysis (5th ed.).* India: Pearson Education.

Jex , S. (2002). *Organizational Psychology: A Scientist-Practitioner Approach* . New York : John Wiley & Sons.

Judge, T., & Higgins, C. (1999). The Big Five personality traits, general mental ability, and career success across the lifespan. *Personal Psychology , 52*, 621-653.

Judge, T., Locke, E., Durham, C., & Kluge. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology , 83* (1), 17–34.

Judge, T., Thoresen, C., Bono, J., & Patton, G. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological Bulletin , 127* (3), 376-406.

Karriker, J., & Williams, M. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model. *Journal of Management , 35* (1), 112-124.

Klassen, R., Yerdelen, S., & Durksen, T. (2013). Measuring teacher engagement: Development of the engaged teachers scale.

ISSN 2076-9202

Frontline Learning Research , 1 (2), 33–52.

Lent, R., & Brown, S. (2006). Integrating person and situation perspectives on work satisfaction: A social-cognitive view. *Journal of Vocational Behavior , 69* (2), 236–247.

Locke, E. (1976). The nature and causes of job satisfaction. In M. Dunnette , *Handbook of industrial and organizational psychology* (pp. 1297–1349). Chicago: Rand McNally.

Lounsbury, J., Foster, N., Carmody, P., Kim, J., Gibson, L., & Dorost, A. (2012). Key personality traits and career satisfaction of CS workers . *Managing Service Quality , 22* (5), 517-536 .

McAllister, D. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal , 38* (1), 24-59 .

McCrae, R., & Costa, P. (1985). Updating norman's "adequate taxonomy": intelligence and personality dimensions in natural language and in questionnaires . *Journal of Personality and Social Psychology , 49* (3), 710-721 .

McCrae, R., & John, O. (1992). An introduction to the five-factor model and its applications . *Journal of Personality , 60*, 175–215 .

Mercer, D. (1997). Job Satisfaction and the Secondary Headteacher: the creation of a model of job satisfaction. *School Leadership & Management , 17* (1), 57-68 .

Milkovich, G., & Wigdor, A. (1991). *Pay for Performance: Evaluating Performance Appraisal and Merit Pay* . Washington : National Academy Press .

Motowidlo, S., Borman, W., & Schmit, M. (1997). A theory of individual differences in task and contex- tual performance . *Human Performance , 10*, 71–83 .

Norman, W. (1963). Toward an adequate taxonomy of personality attributes: replicated factor structure in peer nomination personality ratings . *Journal of Abnormal and Social Psychology , 66* (6), 574-583 .

Organ, D. (1988a). A restatement of satisfaction-performance hypothesis . *Journal of Management , 14* (4), 547-557 .

Organ, D. (1988b). *Organizational Citizenship Behavior –The Good Soldier Syndrome* . Lexington, MA : Lexington Books .

Park, J., & Deitz, G. (2006). The effect of working relationship quality on salesperson performance and job satisfaction: Adaptive selling behavior in Korean automobile sales representatives . *Journal of Business Research , 59* (2), 204-213 .

Peeters, M., Rutte, C., van Tuijl, H., & Reymen, I. (2006). The Big-Five personality traits and individual satisfaction with the team . *Small Group Research , 37*.

Petty, M., McGee, G., & Cavender, J. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance . *Academy of Management Review , 9* (4), 712-721 .

Porter, L., & Lawler, E. (1968). What job attitudes tell about motivation. *Harvard Business Review , 46* (1), 118-126.

Rajiv , P., Dant, Scott, K., Weaven, Brent, L., & Baker. (2013). Influence of personality traits on perceived relationship quality within a franchisee- franchisor context . *European Journal of Marketing , 47* (1), 279 – 302 .

Roethlisberger, F., & Dickson, W. (1939). *Management and the worker* . Cambridge, MA : Harvard University Press .

Rusting, C., & Larsen, R. (1998). Personality and cognitive processing of affective information . *Personality and Social Psychology Bulletin , 24*, 200–213 .

Stoeva, A., Chiu, R., & Greenhaus, J. (2002). Negative affectivity, role stress, and work–family conflict . *Journal of Vocational Behavior , 60* (1), 1–16 .

Tang, T., & Talpade, M. (1999). Sex differences in satisfaction with pay and coworkers. *Public Personnel Management , 28* (3), 345-348.

Van Den Berg, P., & Feij, J. (2003). Complex relationships among personality traits, job characteristics, and work behaviors . *International Journal of Selection and Assessment , 11* (4), 326-339 .

Vroom , V. (1964). *Work and Motivation* . New York : Wiley.

ISSN 2076-9202

Yang, L., & Hwang, M. (2014). Personality traits and simultaneous reciprocal influences between job performance and job satisfaction. *Chinese Management Studies , 8* (1), 6-26 .

Zellars, K., & Perrewe, P. (2001). Affective personality and the content of emotional social support: Coping in organizations. . *Journal of Applied Psychology , 86*, 459–467 .

ISSN 2076-9202

FACTORS INFLUENCING CONSUMERS' RESPONSE TO CRM IN THE DEMOCRATIC REPUBLIC OF CONGO: THE MEDIATING ROLE OF ATTITUDE AND MODERATING ROLE OF CRM AWARENESS

Wenze Mudiandambu Fabrice
Ph.D. student, School of Management/Huazhong University of Science and Technology
fabriwenze@hotmail.com

Abstract
Consumer's responses to cause related marketing have been investigated in the western context, showing favorable attitudes and purchase intention. In this study, we analyze consumers' responses to cause related marketing in a less developed country, where CRM is a novelty and less used by firms. Based on a sample of 642 undergraduate students, the result reveals a negative relationship between CRM campaign-attitude toward the firm, and CRM-purchase decision of CRM products. The lack of familiarity, the high level of skepticism and the negative feelings toward companies were the most influential factors. The findings' implications and study limitations are highlighted along with directions for further research.
Keywords: *cause-related marketing, consumer attitude, awareness, purchase decision, DR Congo.*

Introduction

For several decades, researchers are interested in cause-related marketing campaign and its implications in consumer buying behavior, mostly in developed countries. Various aspects of CRM have been examined up to date: factors affecting the success of CRM campaigns (Barone et al., 2000; Gray, 2000; Till and Norak, 2000; Cui et al., 2003; Babu and Mohiuddinm, 2008; Shabbir et al., 2010); other have examined the general framework of consumers' response to CRM (e.g. Webb and Mohr, 1998). Among the factors affecting CRM success, attitude has been found to be a major one. Attitude has become a key element in explaining consumer behavior. On the one hand, Longenecker et al. (2005) and Assael (as cited in Mercedes et al., 2015) stated that attitude has become a key construct in the analysis of socially responsible behavior; and Engel mentioned that consumer behavior is under the direct influence of attitudes towards specific products and marketing activities associated with the same product (as cited in Darling and Puetz, 2002). On the other hand, Dubrasca and Marija (2015) found that attitudes toward the firm and toward the campaign mediated the relationship between the CRM campaign and the purchase behavior. However, Roy and Graeff (2003) in their research related to consumer attitudes toward cause-related marketing activities in professional sport conducted in a three-county area of New York

ISSN 2076-9202

reported a positive influence of CRM on attitude toward the company, but found little influence of attitude on consumer purchase intention of CRM product. That is to say, consumers respond to CRM in different ways depending on each country or region.

Furthermore, studies related to CRM in different backgrounds do not report only favorable attitudes toward CRM campaigns; some of them also report less positive attitudes, evoking consumer skepticism toward cause-related marketing (Obermiller and Spangberg, 1998; Mohamed and Osman, 2012). Webb and Mohr (1998) discovered that majority of respondents showed a favorable attitude toward a non-profit supporting a social cause while half of them showed a high level of skepticism toward company's motives behind its action. Therefore, it can't be assumed that CRM campaign works in the same way, anytime and everywhere it is launched. There is then a need to study every specific marketplace before any attempt to implement this strategy.

Moreover, although consumers' skepticism evidences still show that CRM campaigns produce positive and beneficial results. Companies are increasingly adopting CRM, trying to show their commitment to the well-being of people around them, at the same time to increase sales. Started in the USA, the CRM technique was adopted in Europe and recently Asian countries are also taking advantage of the strategy. There are growing numbers of researches related to CRM in Asian countries such as China, Pakistan, Bangladesh, India, etc. There is missing literature about CRM in Sub-Saharan countries, where this strategy still a novelty. This study intends to fill the gap by exploring Congolese consumers' responses to CRM campaign. The study results and recommendations may serve as decision support tool for various actors, mainly business and NPOs' managers and marketers as well, in their attempt to implement CRM strategy.

The choice of the DR Congo is based mostly on its current socioeconomic and political situation after a long period of wars leaving behind millions of poor, orphans, widows, rape victims, disabled persons, etc. Indeed, DR Congo is a post conflict country where several multinationals and other types of firms are evolving, but where people's social conditions are worse than nowhere else in the world and need attention from different stakeholders (Anup, 2010; Jansson, 2010; Ryan, 2011).

Jansson (2010) urged any corporate entity operating in the DR Congo to engage in actions that appear to further social good beyond the firm's interest, since public functions to distribute the welfare generated by tax income have largely broken down after decades of mismanagement and neglect, and since poverty is prevalent with weak governance.

This study shows how consumers react to CRM campaigns in a less developed country, where business corporations are not well appreciated by people.

2. Literature review and hypotheses

Cause related marketing, attitude toward the campaign and purchase decision

Cause-related marketing (CRM), which is a subset of CSR, is defined as a type of program in which a company commits to donating an amount that depends on the sales they achieved in certain period time for a cause (Kotler and Lee, 2005). Varadarajan and Menon (1988) defined cause-related marketing as the process of formulating and implementing marketing activities that are characterized by an offer from the firm to contribute a specified amount to a designated cause when customers engage in revenue-providing

ISSN 2076-9202

exchanges that satisfy organizational and individual objectives. They argued that CRM is different from sales promotion, sponsorship, corporate Good Samaritan acts, public relations and philanthropy (Varadarajan and Menon, 1988). For Kotler and Keller (2006), cause-related marketing helps marketing specialists to stay connected with consumers' mood and wishes, as it uses more sensitive, credible and relevant instruments to society.

The dual purpose of the campaign as mentioned by Organ (2015) is to increase profitability while bettering the society. CRM campaign targets consumers and/or potential buyers, trying to persuade them and influence their attitudes and therefore their purchase behavior (Fries et al., 2009).

However, the CRM notion may be somewhat strange to consumers who don't have any previous experience of it, who have never encountered such type of campaign previously (Sheena et al., 2011). Therefore, their support of CRM may not follow as expected by firms; especially in a country such as DR Congo where companies are accused of fueling the ongoing deadly conflicts in its Eastern part.

Considering this argument, the first hypothesis is stated as follow:

H1. There is a negative relationship between CRM campaign and consumer purchase decision

H2. There is a negative relationship between CRM campaign and attitude toward the firm

Attitudes toward CRM campaign and purchase decision

Attitude is one of the most fundamental drivers of humans' behavior because they determine which stimuli humans approach or avoid (Sweldens et al., 2014) and, in consumer behavior analysis, attitude has become an unavoidable component. Sole mentioned that attitudes are now a key construct in the explanation of consumer behavior; more specifically in the analysis of socially responsible behavior (as cited in Galan et al., 2013). Longenecker et al. (2005) also stated that attitudes can provide important information since they are a summary of consumers' evaluation. They have a direct impact on behavior such as purchase decision (Assael, as cited in Mercedes et al. 2015).

Spendler (2017) defined attitude as a predisposition to evaluate an object or product positively or negatively. According to him, people form attitudes toward products and services, and these attitudes often determine whether they will purchase or not (Spendler, 2017). Engel stated that consumer behavior is under the direct influence of attitudes towards specific products and marketing activities associated with the same product (as cited in Darling and Puetz, 2002). In addition, Page and Luding (2003) highlighted that a more positive attitude towards the brand or the product leads to a more positive impact on purchase intention, depending on the strength of the attitude. Therefore according to them (2003), a positive attitude has a positive effect on purchase behavior.

However, although various studies in the western context have demonstrated that CRM campaign can positively influence consumers' attitudes and purchase intention (Hajjat, 2003; Carrie and Nora, 2006; Fries et al., 2009), consumers in countries where CRM is less established have less positive attitude toward CRM. Therefore, purchasing decision of CRM product may suffer from positive reaction (Lavack and Kropp, 2003; Singh et al. 2009). And according to other authors, CRM campaigns are not always successful (Garcia et al. 2003; Carrie and Nora (2006). Garcia et al. (2003) estimated that even well established companies can see consumer attitude toward the firm weakens after using CRM campaign for multiple reasons. Consumers tend to boycott firm activities or claims when they highlight irresponsible

ISSN 2076-9202

corporate behavior (Magdalena et al., 2011). In her research related to CRM attitudes, Debra (n.d.) suggested that a CRM alliance offers the greatest attitudinal boost to the companies and charities toward which consumers already have positive attitudes. She estimated that a company that has (previously) generated negative consumer attitudes may not enjoy the desired attitudinal boost although its cause-related marketing allies with a non-profit organization (Debra, n.d). Subsequently, it is possible for people to respond negatively to CRM campaign when they already have negative attitude toward the firm. Hence, considering the above arguments and the Congolese marketplace, a third hypothesis is produced as follows:

H3. There is a negative relationship between Consumers' attitude and purchase decision.

Furthermore, attitudes have been found as mediator in several studies (Summers et al., 2006; Matos et al., 2007; Nadia and Ying-Kai, 2013; Reto et al., 2015; Ndasi, 2017).Thus a fourth hypothesis is stated as follows:

H4. Consumers' attitude mediates the relationship between CRM campaign and purchase decision.

Customers awareness

Finally, it has been demonstrated that the level of customer awareness, participation and commitment is a crucial component of CRM (Farache et al., 2008). It is difficult to evaluate consumer understanding of cause-related marketing and/or corporate social responsibility without calling their awareness to mind. In their analysis related to CSR awareness, Smith et al. (2000) and Maignan (2001) found that the lack of awareness may become an inhibitor of consumer sensitivity to CSR and explain why CSR might not be taken into account while appraising a company and its products. And in a similar research, Lee and Shin (2010) have also denoted that the more the consumers are aware of CSR, the better they understand CSR activities; and consumers with a high level of awareness or concern of CSR are more likely to show positive attitudes to sponsoring firms and its products. Awareness has been seen as leading to positive attitudes and stronger behavioral intentions toward buying products from socially responsible firms (Sen et al., 2006; Pomering and Dolnicar, 2009; Magdalana et al., 2011).

All these results related to CSR can also be applied to cause-related marketing as well, since the latter is a subset of the former. Therefore, it can be assumed that if somebody doesn't know about what is CRM and is not interested in it, he has no attitude toward firms that do not engage in bettering the society. Such a person will still buy the product because it is cheap and good and keeps within budget like what Magdalena et al. (2011) have mentioned. Furthermore, Sheena et al. (2011) believed that consumers with less exposure to CRM are expected to be somewhat more skeptical toward it.

This study poses that Congolese consumers will respond less favorably to CRM campaign since they are less exposed to it. Lack of CRM awareness will influence their purchase decision of CRM product.

Hence, applying CSR findings to CRM context, and considering the above mentioned arguments, this study proposes the following fifth hypothesis:

H5. Awareness moderates the effect of CRM campaign on purchase decision

Methods

This study analyses the relationship between CRM campaign (as independent variable) and the purchase decision (as dependent variable) based on consumer's attitude toward the campaign (as mediator), and the effect of awareness (as moderator) on the relationship CRM-purchase decision.

Sample and site

The research was conducted in the DR Congo, at the University of Kinshasa, with 642 students. Students were preferred to other categories of respondents because of their availability on the campus. Also previous studies have proven that selecting students as sample of research was suitable if the study is exploratory and if the items on the scale are pertinent to the respondents who answer them (Ali et al.,

ISSN 2076-9202

2016). This study respondents' profile is in accordance with the above mentioned criteria. Characteristics of respondents (gender) are shown in table 1.

Table1. Respondents' gender

Respondents' gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	435	67.8	67.8	67.8
	Female	207	32.2	32.2	100.0
	Total	642	100.0	100.0	

Measures

All the constructs measures were adopted from previous studies carried out by different authors. Except for the identification part, the questionnaire includes close ended questions using a 5-point Likert scale (1 for strongly disagree to 5 strongly agree). A scenario of cause-related marketing campaign was given to respondents in order to measure their attitude and the following purchase decision. The case consisted of two fictional restaurants A and B selling Pizza and soft drinks; one of the restaurants (A) promises to donate a portion of each unit sold to a charity. The total donation will then depend on the number of items sold. The other restaurant (B) did not promise anything. Respondents were then asked their opinions about the campaign, the restaurants and their final purchase choice between the two restaurants' products.

Attitude toward the campaign was measured on a four-item scale (Cronbach's alpha= .88) adapted from Lavack and Kropp (2003). The scale was reduced to 5-point Likert scale to facilitate answers instead of 9-point used in the original scale. Awareness was measured with a single item adopted from Sheena et al. (2011); and CRM attributes used a four-item scale (Cronbach's alpha=.88) adopted from Shabbir et al. (2010). Purchase decision used four-item scale (Cronbach's alpha= .92) adopted from Hou et al. (2008) with two low factor loadings items removed. Respondents had to score their level of agreement with different statements provided (1 for totally disagree and 5 totally agree).

Statistical analysis

Based on the literature review and hypotheses, correlations and regression analyses were found suitable for this study. Correlations among variables were calculated using Pearson's correlation. To identify the mediation and moderation effects between CRM campaign and purchase decision, a moderated mediation analysis was performed through conditional process model (Hayes, 2012) using template number five of SPSS PROCESS macro developed by Hayes (2012). Results for variables correlations are disclosed in table2 and the results for conditional process model are displayed in table3. Conditional process model allows testing the direct and/or indirect effects of an independent variable X on a dependent variable Y through one or more mediators (M) to be moderated (Hayes, 2012). The evidence of moderated mediation is tested by the means of index of moderated mediation, developed by Hayes (2015). And the statistical significance of the index of moderated mediation can be tested by using various inferential methods such as bias-corrected bootstrapping (Hayes, 2015), which is preferred to Sobel test and the distribution of product test (Sobel, 1982 and MacKinnon et al. as cited in Hayes, 2012).

The main steps consisted of testing the effects of the CRM campaign on the purchase decision (H1); the effects of the CRM campaign on attitude toward the campaign (H2); the test of the relationship between

ISSN 2076-9202

attitude toward the campaign and purchase decision (H3). After these three first steps, the moderating effect of awareness on the relationship between the CRM campaign and purchase decision (H5) was tested, before checking the mediating role of attitude (H4).

Results

Table2. Descriptive Statistics

	Mean	Std. Deviation	N
Campaign attributes	2.43	.870	642
Purchase decision	2.35	.951	642
Firm attitude	2.11	.415	642

Table3. Correlation matrix

		Campaign attributes	Purchase decision	Firm attitude
Campaign attributes	Pearson Correlation	1	-.225**	-.129**
	Sig. (1-tailed)		.000	.001
	N	642	642	642
Purchase decision	Pearson Correlation	-.225**	1	.378**
	Sig. (1-tailed)	.000		.000
	N	642	642	642
Firm attitude	Pearson Correlation	-.129**	.378**	1
	Sig. (1-tailed)	.001	.000	
	N	642	642	642

Table4. Process macro result

Run MATRIX procedure:

```
***************** PROCESS Procedure for SPSS Release 2.13 ***************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2013). www.guilford.com/p/hayes3
**************************************************************************
Model = 5
    Y = DECISION
    X = CRM
```


ISSN 2076-9202

M = Firmatt

W = Awa_1

Sample size

642

****

Outcome: Firmatt

Model Summary

R	R-sq	MSE	F	df1	df2	p
.1260	.0159	.8419	10.3175	1.0000	640.0000	.0014

Model

	coeff	se	t	p	LLCI	ULCI
Constant	2.2431	.1076	20.8508	.0000	2.0319	2.4544
CRM	.1337	.0416	3.2121	.0014	.0520	.2155

****

Outcome: DECISION

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2983	.0890	.8284	15.5566	4.0000	637.0000	.0000

Model

	coeff	se	t	p	LLCI	ULCI
Constant	1.8780	.3454	5.4367	.0000	1.1997	2.5564
Firmatt	.1671	.0413	4.0451	.0001	.0860	.2482
CRM	-.0467	.1327	-.3517	.7252	-.3073	.2140
Awa_1	.2401	.1111	2.1615	.0010	.0220	.4583
int_1	.0760	.0426	1.7836	.0005	.0077	.1597

Interactions:

int_1 CRM X Awa_1

**********DIRECT AND INDIRECT EFFECTS **********

Conditional direct effect(s) of X on Y at values of the moderator(s):

Awa_1	Effect	SE	t	p	LLCI	ULCI
2.0000	-.1987	.0583	-3.4090	.0007	-.3132	-.0843
2.8349	-.2622	.0420	-6.2467	.0000	-.3446	-.1798
3.7947	-.3352	.0549	-6.1092	.0000	-.4429	-.2274

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
Firmatt	.0223	.0096	.0076	.0467

********** ANALYSIS NOTES AND WARNINGS **********

ISSN 2076-9202

Number of bootstrap samples for bias corrected bootstrap confidence intervals:
5000
Level of confidence for all confidence intervals in output:
95.00
------ END MATRIX -----

Relationship between CRM campaign, attitude and purchase decision

The correlation analysis from table 2 shows the following results: a negative significant relationship between CRM campaign and purchase decision (r=-.225, p=.000), therefore the first hypothesis was supported; a negative significant relationship between CRM campaign and firm attitude (r=-.129, p=.001), supporting the second hypothesis. However, the matrix shows a significant positive relationship between firm attitude and purchase decision (r=.378, p=.000), this leads to the rejection of H3.

In supporting these results, the outcome from process macro analysis (table3) also provides evidences that CRM campaign is a significant predictor of attitude toward the firm (b= .1337, t= 3.2121, p= .0014, 95% CI [.0520, .2155]); and attitude toward the campaign is a significant predictor of purchase decision (b=.1671, t=4.0451, p=.0001, 95% CI [.0860, .2482]). The table shows that when adding mediator in the system, the CRM is no longer significant predictor of the purchase decision (b= -.0467; t= -.3517; p= .7252; CI95% [-.3073, .2140], which is an evidence of mediation effect.

In order to check for mediation one can examine the statistical significance of the indirect effect (assuming the null hypothesis that the indirect effect coefficient equal zero). Hayes and Scharkow (2013) suggest using the non-parametric bootstrapping (with confidence intervals) for testing mediation as it does assume the indirect effect is normally distributed and yields the most accurate results. In this paper, the direct and indirect effects of the independent variable on the dependent variable were measured to examine the mediating effect of attitude toward the firm. The results show that the indirect effect of the CRM campaign on purchase decision is significantly different from zero [.0076, .0467] with 95% confidence interval (see table3). This result confirms that attitude toward the firm fully mediated the relationship between CRM campaign and consumers' purchase decision. Therefore, hypothesis H4 was supported.

As for the moderation, it was tested following Hayes (2012) and Brian (2015). First, a product term was constructed (X*Z) where Z is the moderator variable. Second step consisted to include the interaction term as a predictor in the regression model along with both X and Z as predictors. By including the product of X and Z in the equation, the regression coefficient for X should vary as a linear function of Z. If the interaction term is significantly different from zero there is evidence of moderation – that is, the effect of X on Y depends on the values of Z (Brian, 2015).

In this study, the moderating effect of awareness on the path between CRM campaign (independent variable) and purchase decision was tested. The process results show that the first model without the interaction term is significant F (1,640) =10.3175; p=.001; after adding the moderator, the CRM campaign and the interaction term Awareness x CRM campaign in the equation, the output shows that the interaction is significantly different from zero (b= .0760; t=1.7836; p= .0005; 95%CI [.0077, .1597]. The

ISSN 2076-9202

table also shows that awareness is a significant predictor of the purchase decision (b=.2401, t= 2.1615, p=.0010, 95%CI [.0220, .4583], while the CRM still not significant due to the mediation effect. Therefore, hypothesis H5 was supported.

Discussion and implications

The DR Congo is a post conflict country where large part of population are still struggling for basic needs without significant assistance from the government and local companies. It was very crucial to investigate how people react to cause-related marketing which is seen as the best way for firms, NPOs and consumers to better the society. The main focus was to investigate the relationship between CRM campaign, firm attitude (company involved in CRM) and purchase decision of consumer, adding a boundary condition (familiarity or awareness of CRM campaign) to examine how it interacts with the campaign to influence purchase decision.

Contrary to previous studies in the Western, European and Asian context, the results in table 2 provide a strong evidence of significant negative relationships between CRM and purchase decision, and between CRM and attitude toward the firm. These results contrast those found by Varadarajan and Menon (1988), Marin et al. (2007), Hou et al. (2008), Shabbir et al. (2009), Dubravka and Marija (2015), to mention just a few. However the table shows a positive relationship between attitude toward the firm and purchase decision. This can be explained by the fact that consumers hold negative attitude toward the firm (mean=2.11, see table2) leading to an ambivalent purchase decision (mean=2.35). Therefore, they are not interested in buying CRM product due to their negative attitude toward the firm. In this case, the positive relationship means that more negative attitude will lead to more negative purchase decision as well. This is in consistency with what Debra (n.d) mentioned about CRM alliances and consumers attitude. Another reason for consumers' negative attitude is the skepticism level and distrust of the firm promise. Skepticism had been studied in previous studies also and had been found as a crucial factor influencing consumers' attitudes. Obermiller & Spangenberg (1998) define skepticism toward advertising as the general tendency of disbelief about advertising claims; it represents a basic marketplace belief that varies across persons and is related to general persuasability. Hence, this study recommends companies to undertake meaningful actions to improve their behaviors and improve their reputation and enhance favorable attitude /feelings from consumers. Consumer's attitude is a crucial component in consumer behavior that needs to be well understood because of its influence on consumer behavior. Besides, attitude toward the firm has mediated the relationship between CRM campaign and purchase decision. Since purchase decision depends on attitudes, any change in consumers' attitude leads to a change in the purchase decision as well.

Furthermore, consumers' lack of interest in buying CRM product may also be due to the novelty of this technique in the DR Congo, as suggested in earlier studies. This study suggests that companies should focus on how to change consumers' attitudes and purchase decision, since they hold ambivalent responses which can be easily changed to positive attitudes. Since selling based on consumers' needs is no longer the unique way, firms have to create efficient emotional selling and share responsibilities of bettering the society with consumers (Singh, 2016). This can be done by increasing the awareness (Singh, 2016) and

ISSN 2076-9202

intensifying communication activities and public relation of the company. In addition, awareness has been seen as influencing consumer purchase decision. Companies have to increase CRM awareness among consumers, assuming that if they are aware of what CRM is and its importance for the entire society, they will have favorable intention toward buying the linked product. As noticed by Smith et al. (2000) and Maignan (2001), the lack of awareness may become an inhibitor of consumer sensitivity to CSR and explain why CSR might not be taken into account while appraising a company and its products. These statements reveal how important the awareness is for CSR and CRM activities as well, in accordance with Mohr et al. (2001) and Bhattacharya and Sen (2004), who believed that the disconnection observed between attitude and actual behavior (in CSR) can be explained by the lack of awareness and understanding of company's CSR achievement. This same situation can be applied to CRM area.

To sum up, attitude toward the firm and CRM awareness can shape and influence respondents purchase decision in the DR Congo; they are the most important factors to be taken to consideration if one intends to implement good CRM strategy. Therefore, understanding and enhancing consumer's attitude toward the CRM is a key point toward implementing an effective CRM strategy.

Limitations and directions for future research

In addition to the sampling technique limitation (not generalizable), there are still several other factors to be investigated in the Congolese marketplace context, such as education to pro-social behavior, effects of colonization on consumer purchase behavior, traditional beliefs about donation to poor, etc. The findings of this study are simply indicative and preparatory; there is a need of further researches to deepen the understanding of CRM in the DR Congo, with different methods and approaches such as qualitative, using focus group and interviews. Last but not least, CRM links three partners (for-profit, non-for-profit and consumers), this study was limited only to consumers. Further research including all the parties would be more informative.

References

Ali, Q., Azlan, A. & Mehran, N. (2016). Conceptualization and measuring consumer social responsibility: a neglected aspect of consumer research. *International Journal of Consumers Studies*, 40, 48-56.

Anup, S. (2010). The Democratic Republic Of Congo. Retrieved January 18, 2018 from http://www.globalissues.org/article/87/the-democratic-republic-of-congo

Babu, M. & Mohiuddin, M. (2008). Cause Related Marketing and its Impact on the Purchasing Behavior of the Customers of Bangladesh: An Empirical Study. *AIUB Bus Econ Working Paper Series*, No 2008-05.

Barone, M.J., Miyazaki, A.D. & Taylor, K.A., 2000. The influence of cause-related marketing on consumer choice: does one good turn deserve another? *Academy of Marketing Science*, 28(2), 248-262.

Bhattacharya, C.B. & Sen, S. (2004). Doing better at doing good: when, why, and how consumers respond to corporate social initiatives. *California management review,* vol.47, no. 1, 9-24.

Brian, K.C. (2015). An Introduction to Moderated Mediation. Retrieved January 27, 2018 from https://www.deakin.edu.au/__data/assets/pdf_file/0003/681024/Moderated-mediation.pdf

Carrie, S.T. & Nora, J.R. (2006). Consumer perceptions of compatibility in cause-related marketing messages. *Int. J. Nonprofit Volunt. Sect. Mark.* 11: 29-47

Cui Y, Trent E.S, Sullivan P.M, & Matiru G.N. (2003). Cause-Related Marketing: How Generation Y Responds. *International Journal of Retail & Distribution Management* 31(6): 310–320.

ISSN 2076-9202

Darling, J.R., & Puetz, J.E., (2002). Analysis of changes in consumer attitudes toward the products of England, France, Germany and the USA, 1975-2000. *European Business Review*, 14(3), 170-183.

Debra, Z.B. (n.d.). Cause-related Marketing Attitudes. Retrieved February 4, 2018 from http://www.uleth.ca/management/-54**.**

Dubravka, S.C. & Marija, D. (2015). Consumers' Attitudes towards Cause-Related Marketing. *Scientific Annals of the "Alexandru Ioan Cuza"* University of Iaşi Economic Sciences 62 (3), 2015, 343-356.

Fries, A.J., Gedenk, K., & Völckner, F. (2009). Success drivers of cause-related marketing. *Proceedings EMAC 2009 Conference*, Nantes (France). May, 26–29.

Galan, L., Mercedes, M., Galera, Casquet, C., Valero, A., Victor, Barroso, M., & Jesus, M. (2013). Does the Product Type Influence on Attitudes Toward Cause-Related Marketing? *Economics & Sociology*, Vol. 6, No 1, pp. 60-71.

Garcia, I, Gibaja, J-J, & Mujika, A. (2003). A study on the effect of cause-related marketing on the attitude towards the brand: the case of Pepsi in Spain. *Journal of Nonprofit and Public Sector Marketing* 11(1): 111–135.

Gray, R. (2000). Developing a Tight Fit is Crucial to CRM. *Marketing London,* 37-38.

Hajjat, M.M., 2003. Effect of Cause-Related Marketing on Attitudes and Purchase Intentions: The Moderating Role of Cause Involvement and Donation Size. *Journal of Nonprofit & Public Sector Marketing*, 11(1), 93-109.

Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological Science*, 24, 1918-1927.

Hayes, A.F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved January 3, 2018 from http://www.afhayes.com/ public/process2012.pdf

Hayes, A.F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50, 1-22.

Hou, J., Du, L., & Li, J., (2008). Cause's attribute influencing consumer's purchasing intention: empirical evidence from China. *Asia Pacific Journal of Marketing and Logistics,* 20(4), 363-380.

Jansson, J. (2010). CSR practice in the DRC's mining sector by Chinese firms. *AISA POLICY brief* No.9.

Kotler, P. & Keller, K.L., (2006). *Marketing Management*, 12th Edition. New Jersey: Pearson Prentice Hall.

Kotler, P. & Lee, N., (2005). *Corporate social responsibility: doing the most good for your company and your cause*. Hoboken: John Wiley.

Lavack, A-M. and Kropp, F. (2003), A Cross-Cultural Comparison of Consumer Attitudes Toward Cause-Related Marketing, *SMQ*, Vol. IX, No. 2 (Summer), pp. 3-16.

Lee, K.-H., & Shin, D. (2010). Consumers responses to CSR activities: The linkage between increased awareness and purchase intention. *Public Relations Review*, *36*(2), 193–195.

Longenecker J, Moore C, Palich L, & Petty J. (2005). Small Business Management. In Tip of the Week: Understanding Psychological Influences on Customers. *SBANC Newsletter,* April 5, Issue 366.

Magdalena, O. et al. (2011). Why don't consumers care about CSR? A qualitative study exploring the role of CSR in consumption decisions.

Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30(1), 57-72

Marin, L., & Ruiz, S. (2007). "I need you too!" corporate identity attractiveness for consumers and the role of social responsibility. *Journal of Business Ethics*, 77(3), 245-260

Matos, C. A., Ituassu, C. T., & Rossi, C.A.V., (2007). Consumer attitudes toward counterfeits: A review and extension. *Journal of Consumer Marketing*, 24(1), 36-47.

Mercedes, M., Clementina, G. & Jaywant, S. (2015). Understanding factors influencing consumer attitudes toward cause-related marketing. *International Journal of Nonprofit and Voluntary Sector Marketing Int. J. Nonprofit Volunt. Sect. Mark.* 20: 52–70.

ISSN 2076-9202

Mohamed, M.A. & Osman, M. (2012). Effects of Skepticism on Consumer Response toward Cause-related Marketing in Malaysia. *International Business Research*; Vol. 5, No. 9; 2012

Mohr, L.A et al. (2001). Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior. *The Journal of consumers affairs*, Volume 35, Issue 1, 45–72

Nadia, A. & Ying-Kai, L. (2013). The Mediation Roles of Brand Credibility and Attitude on the Performance of Cause-Related Marketing. *International J. Soc. Sci. & Education*, Vol.4 Issue 1.

Ndasi, W. (2017). Online Cause-Related Marketing: The Impact of Donation Amount and Congruence on Consumers' Response. Unedited thesis. Bournemouth University.

Obermiller, C., & Spangenberg, E. R. (1998). Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology*, 7(2), 159-186.

Organ, M. (2015). Cause marketing- definition. Retrieve October 18, 2017 from https://causemarketing.com/research/cause-marketing-definition/

Page, C., & Luding, Y., (2003). Bank managers direct marketing dilemmas - customers' attitudes and purchase intention. *International Journal of Bank Marketing*, 21(3), 147-163.

Pomering, A. & Dolnicar, S. (2009) Assessing the Prerequisite of Successful CSR Implementation: Are Consumers Aware of CSR Initiatives? *Journal of Business Ethics*, 85(2): 285-301.

Reto, F., Zadeh, A. & Baruca, A. (2015). Because it makes me feel good: moderation and mediation effects in cause-related marketing. *Paper presented at the Society for Marketing Advances*, San Antonio, Texas.

Roy, D.P. & Graeff, T.R. (2003). Consumer attitudes toward Cause-Related Marketing Activities in Professional Sports. *Sport Marketing*, 12 (3), 163-172.

Ryan, S. (2011). Congo Rapes, Violence Linked To Multinational Companies: Rights Group. Retrieved February 2018 4, from https://www.huffingtonpost.com/2009/07/21/congo-rapes-violence-link_n_242235.html

Sen, S., Bhattacharya, C. B. & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science*, 34(2), 158-16

Shabbir, S., Kaufmann, H.R., Israr, A. & Imran M.Q. (2010). Cause related marketing campaigns and consumer purchase intentions: The mediating role of brand awareness and corporate image. *African Journal of Business Management* Vol. 4(6), pp. 1229-1235.

Sheena, C., Sameer, D. and Debra, Z. (2011). *Influence of Fit on CRM: Moderating Effects of Collectivism and Awareness*. Asia-Pacific Advances in Consumer research, Vol.9.

Singh, M. (2016). Awareness and Influence of Cause Related Marketing: A Study on Graduate and Post Graduate Students of Varanasi.

Singh, S., Kristensen, L., & Villasenor, E. (2009). Overcoming skepticism towards cause-related claims: The case of Norway. *International Marketing Review*, 312-326.

Smith, W. & Higgins, M. (2000), "Cause-Related Marketing: Ethics and Ecstatic," *Business and Society*, 39 (3), 304-322.

Spendler, M. (2017). Attitude and persuasion. Retrieved on October 21, 2018 from https://quizlet.com/212580160/chapter-8-attitudes-and-persuasion-flash-cards/

Summers, T. A., Belleau, B. D., & Xu, Y., (2006). Predicting purchase intention of controversial luxury apparel product. *Journal of Fashion Marketing and Management: An International Journal*, 10(4), 405-419.

Sweldens, S., Corneille, O., and Yzerbyt, V. (2014). The Role of Awareness in Attitude Formation through Evaluative Conditioning. Personality and Social Psychology Review, 18 (2), 187-209.

Till, B.D. & Nowak, L.I (2000). Toward effective use of cause-related marketing alliances. *J. Prod. Brand Manage*, 9(7): 472-484.

Varadarajan, PR & Menon A. (1988). Cause-Related Marketing: A Coalignment of Marketing Strategy and Corporate

ISSN 2076-9202

Philanthropy. *Journal of Marketing* 52: 58–74.

Webb, D. J., & Mohr, L. A., (1998). A Typology of Consumer Responses to Cause-Related Marketing: From Skeptics to Socially Concerned. *Journal of Public Policy & Marketing*, 17(2), 226-238.

ISSN 2076-9202

SLEMAN SMART REGENCY: SYNERGIC AND SIMULTANEOUS BUREAUCRATION REFORM IN SLEMAN REGENCY

Akadun
STIA Sebelas April Sumedang; akadun64@gmail.com

Abstract
This study aims to describe and analyze the development of SMART City sebagai reformasi birokrasi secara sinergis dan simultan di Kabupaten Sleman. A case study in Sleman Regency with triangulation of interviews, observation, and documentation in data collection technique. Data processing procedure with display, reduction, conclusion, and triangulation. The welfare state could prosper its people when the state was able to provide quality services. Quality services required bureaucratic reform, not just the professionalism of the state civil apparatus or simply the standard operating procedure, or only on the institutional. Total bureaucratic reform in which synergy and simultaneous institutional reformation, management, and human resource development were carried out. Total bureaucracy reform could be realized when the implementation of government both central and regional use information technology and telecommunications. Smart city was a real form of bureaucratic reform by utilizing information and communication technology. Smart city could improve the competitiveness of a region in all areas including the economic field.
Keywords: service, reform, technology, institutional, management, competitiveness.

I. INTRODUCTION

In the development of the theory of state science known nachtwakersstaat or policy state and welfare state. Most countries in the world adhere to the welfare state including Indonesia. As adherents of the welfare state, the government strived to realize the welfare of its people, including the government of Sleman Regency.

The Government realized people's welfare with internal and external measures. Internal measures were carried out with effective and efficient governance. Historically, it began with the management of traditional administration carried out manually, manual typewriters, electronic typewriters, and computers and from administration, management information systems to the internet (e-government).

External measures in the form of quality and community-oriented public services. In the development of government service systems in Indonesia, it was known as the Pangreh Praja system, civil service, one-stop service system, one-stop service system, reinventing government, e-service/e-government (Ibrahim, 2008).

Internal and external steps in realizing people's welfare couldnot be separated from the administrative paradigm starting from traditional administration, new public management (new public administration), new public services (good governance), and post new public management (Dernhart, 2008). This

ISSN 2076-9202

administrative paradigm was basically the role and function of the government in managing government, especially government services.

Efforts to manage an effective and efficient administration and service to the community were realized in the form of reform. Bureaucratic reform included institutions, management, human resources (Kemenpan and RB, 2011; Dolongseda et al., 2017). Bureaucratic reform towards good governance where proportional institutions, effective and efficient management, professional human resources so that quality public services. Comprehensive and integral bureaucratic reform was realized in the form of e-government.

Bureaucratic reform in the form of e-government needs to be done because the condition of government bureaucracy services has shown (1) that it tends to be slow, rigid, overweight and low productivity; (2) is feudal, patrimonial and traditional; (3) tend to smell collusion, corruption and nepotism and various forms of abuse of authority; (4) low service quality; (5) service procedures are still complicated; (6) the working mechanism is less effective and efficient (Akadun, 2005).

The Indonesian Ombudsman Prevention and Research Research and Development Team (2015) categorized Districts / Cities from observations, as much as 65.79% or 75 Districts / Cities included in the red zone, which means low levels of compliance in the implementation of Law 25 of 2009 concerning Public Services. 28.95% or 33 Regencies / Cities included in the yellow zone, which means the level of compliance in the implementation of Law 25 of 2009 concerning Public Services. And 5.26% or 6 Regencies / Cities are included in the green zone, which means high levels of compliance in the implementation of Law 25 of 2009 concerning Public Services.

Some local governments tried to improve the quality of public services by implementing e-government. This was because e-government could improve equitable public services and sustainable development (United Nation, 2018). However, there were obstacles in the implementation of e-government both from the dimensions of development and application in Pati Regency and Semarang City had not run optimally because of the absence of polical will from the government, various limitations both from financial resources, information technology infrastructure and e-Gov management resources (Sri Purwandani et al., 2018; Prasetyo et al., 2018). The results of Novita's (2014) study concluded that the inhibiting factors in the development of e-Government in the city of Palembang were the factors of human resources, infrastructure and organization, especially weak leadership, the pace of human resources, lack of coordination, digital inequality and weak regulation. As for Sosiawan (2008) stated that the obstacle of e-government implementation was the initiative and meaning of the implementation of e-government by the autonomous regional governments were still individually; implementation through the regional website had not been supported by an effective management system and work process due to the readiness of regulations, procedures and limitations of human resources; many local governments had identified e-government implementation as merely creating a local government website (web presence) so that the implementation of e-government only stops at the maturation stage of the four stages that must be passed.

More and more local governments were trying to develop and apply e-government, but many results were less satisfactory so the quality of local government services was still low. However, Sleman Regency in Yogyakarta province provided a success story in implementing e-government by developing Sleman Smart Regency.

ISSN 2076-9202

This study aims to describe and analyze SMART Regency as a synergistic and simultaneous bureaucratic reform in Sleman Regency both from the institutional, infrastructure, and application dimensions and planning and its impact on economic competitiveness.

II. SMART CITY

The study of e-government began in the late 1990s. E-government research was a multidisciplinary research. As a multidisciplinary study, according to Molnar et.al (2015), there were at least 13 theories that study e-government. The thirteenth theory had its own perspective on e-government. The thirteen theories according to Molnar et. al (2015) were contrarian theory, coordination theory, gatekeeping theory, Inter-Organizational Networks, Socio-Technical Systems Theory, The Science of Muddling Through, motivation theory; Theories from Political Science, Public value, Small world theory, Stakeholder Theory, (12) Theories proposed by Barry Bozeman and Stuart Bretschneider, Theories of Structuration and Emergent Behavior.

The thirteen theories contributed greatly to the development of e-government research. According to Molnar et. al (2015), contrarian theory said e-government as a model of governance that was different from traditional models; Coordination theory considers e-government as a study that combined computer science theory, organizational theory, operations research, economics, linguistics, and psychology; whereas gatekeeping theory viewed e-government with information and telecommunication technology as being able to filter information in government administration. As for inter-organizational Networks, according to Molnar (2015), providing an understanding of e-government from the point of view of an organizational network; socio-technical systems theory provided a basic idea of e-government from a technical and social perspective; The Science of Muddling Through looked at e-government from the speed of decision making.

Motivation theory examined the reasons people accept or reject e-government; theory from political science looked more at how power played a role in e-government implementation; while the public value viewed values as beneficial to society if the government uses e-government; Small world theory viewed e-government as an increase in community participation; Stakeholders Theory said the importance of the role of stakeholders in e-government development; Barry Bozeman and Stuart Bretschneider considered the importance of influencing organizational aspects and aspects of technology; and Theories of Structural and Emergent Behavior examined organizational dynamics in e-government development.

Research on e-government in Indonesia, according to Masyhur (2017) examined the issue of institutional dimensions such as the research of Karis and Tyas Catur (2011), Resta (2013), Silalahi et al., (2015); issues of Infrastructure dimension such as the research of Hijrih and Prasetyo (2015), the issue of application dimensions such as the research of Fuadi and Maron (2016), Noviana et al. (2015), Suwitri et al. (2012), Aulia Rahma and Puspitasari, Nugroho (2015); issues of planning dimension such as Mardahayati (2012), Slamet (2013), Alusi and Sensuse (2014), Nugroho et al. (2015), Faurizabadi, Erizal (2015), Bhaskara (2016).

Conceptually, e-government would create friendly, comfortable, transparent and inexpensive interactions between government and society (G2C), government and business (G2B), intergovernmental relations (G2G), and relations between government and employees (G2E) (Akadun, 2009). A regency or

ISSN 2076-9202

city government implemented integral e-government in both G2C, G2B, G2G, and G2E were known SMART City or SMART Regency especially facing increasingly complex environmental problems.

SMART city was originally understood as cities that had new breakthroughs in solving problems in their cities and were successful in improving the performance of their cities; to the utilization of information and communication technology by the city government in carrying out its services (Cohen and Zarowin, 2010; Sudaryono, 2014; Insani, 2017).

Smart regency is a smart city concept in developing and managing various resources effectively and efficiently by utilizing the advancement of information and communication technology. This concept was developed from Smart City, which was interpreted as a city that used digital technology to improve its performance, reduce costs and consumption, and engaged more actively and effectively with its citizens. There were at least three Smart City parameters, namely intelligent economy, social smart, and environmentally intelligent (Kedaulatan Rakyat, 5/15/2017).

Cohen and Zarowin (2010) stated that smart cities were identified in 6 (six) main dimensions, namely smart government, smart economy, smart society (smart social life), smart mobility, smart environment (intelligent environment), and quality of live.

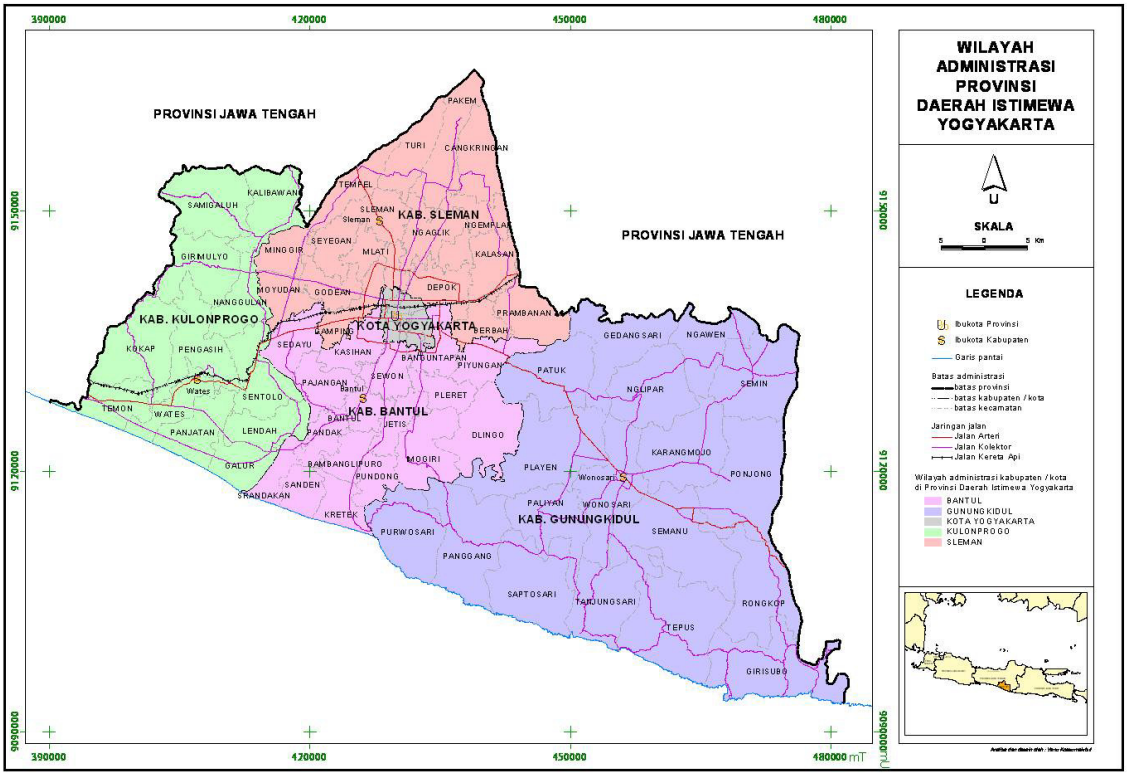
The implementation of e-government was very important for governance because basically e-government would realize a better, more responsible, effective and efficient government, reduced practices of corruption, collusion and nepotism, better quality government services and community expectations, improved source management power, as well as systematized information structures and organizations (Akadun, 2009).

III. METHOD

This study used the constructivism paradigm in Sleman Regency. Sleman Regency was one of the regencies in the province of Yogyakarta Special Region. Sleman Regency had an area of 57,482 Ha or 574.82 Km2 or about 18% of the area of the Special Province of Yogyakarta. Sleman Regency consists of 17 sub-districts, 86 villages, and 1,212 hamlets. Sleman Regency was bordered by Boyolali Regency (Central Java Province) in the north, Klaten Regency (Central Java Province) in the east, Kulon Progo Regency (DIY Province) and Magelang District (Central Java Province) and the south bordering Yogyakarta City, Bantul Regency and Gunung Kidul Regency, Yogyakarta Province.

As a buffer zone of Yogyakarta City, it had many environmental problems and regional development. Namely: (1) high conversion of agricultural land to non-agriculture; (2) the uncontrolled construction of residential housing, apartments, hotels and shopping centers is not controlled by many residents. (3) Regulation of land control and inadequate use of space. Then (4) there had been no enforcement and control against violations of spatial use. (5) The intensity of floods due to increasing rainwater runoff and (6) the reduction in water catchment zones which has an impact on the decreasing groundwater level in Sleman and Yogyakarta City (Sutaryono, 2017).

ISSN 2076-9202



Picture 1
Map of Yogyakarta Province

In addition to facing the above problems, Sleman Regency had excellent potential both in the potential of agricultural commodities, industry, tourism, investment. Potential commodities include Salak Pondoh, Mendong, beef cattle, goats / sheep. catfish. Industrial potential such as leather gloves, wood furniture, wood crafts. Tourism potential such as village tourism, cultural tourism, educational tourism, historical tourism, temple tours, nature tourism, agro tourism, museum tours, monument tours. Investment potential such as agriculture (agrp industry), industry (garment, leather gloves, wood and rattan furniture industry, publishing and printing, food and beverage, plastic and packaging industries); trade and services (land transportation, supermarket, dept store, export-import, consultant, property rununawa); tourism (hoel, apartment, tour, travel, café, restaurant).

All potentials will be of no benefit to the progress and welfare of the community when the potential is not managed, developed and utilized by development actors in Sleman Regency. In managing, developing, and promoting this potential, collaboration, cooperation, synergy between development actors in Sleman Regency are required from government, private sector, and NGOs or the community. Means to develop collaboration, collaboration, synergy between development actors in Sleman Regency, namely by developing Sleman Smart Regency...

Data collection techniques used tringulation techniques that combine interview techniques, documentation and observation. Qualitative research on Sleman Smart Regency as an integral and

ISSN 2076-9202

simultaneous bureaucratic reform with the target of the social situation (activities, people, place) of Sleman Regency in building Smart Regency starting from preparation, implementation and control both institutionally, management and human resource development. The informants of this study were the Regent of Sleman, the Head of the Information and Communication Service.

Primary data were collected by using interview and observation technique while secondary data was collected through documentation study, especially the legislation. Data is processed by data reduction procedures, data presentation, conclusions. The technique of examination of data harmony with triangulation both triangulation between data source and trigger data collection technique. Qualitative analysis is used to analyze the data obtained.

IV. RESULT AND DISCUSSION

4.1 Preparation of Sleman Smart Regency

Strategic steps of Sleman Regency in preparing Sleman Smart Regency, namely:

a. Building institutions, by making the Sleman Smart Regency strategic plan. This Strategic Plan was the Sleman District 2016-2021 Regional Medium Term Development Plan (RPJMD). This RPJMD was equipped with Sleman Regency's Smart Regency Development Roadmap, Master Plan and e-Government Blueprint, Sleman Regency; Sleman Regent Regulation Number 87 of 2016 concerning Position, Organizational Structure, Duties and Functions, and Work Procedures of the Office of Communication and Information, Sleman Regent Regulation Number 3 of 2016 concerning Management of Websites in Sleman Regency Government Regulations, Sleman Regent Regulation Number 17 of 2017 concerning Management Electronic Letter Account, Sleman Regent Circular Number 333/00239 concerning Information System Application Coordination Appeal.
b. Inventory of HR in the field of Communication and Information Technology (ICT) in Each Unit of Regional Device Organization.
c. Inventory of Facilities and Infrastructure in the Field of ICT in Each Unit of Regional Device Organization.
d. Inventory of the application system owned by the Unit of Regional, Private and Community Device Organizations.
e. Inventory of application systems needed by each Unit of Regional Device Organization for quality service.
f. Inventory of potential owned by the government, community and private sector in running Sleman Smart Regency.

Preparation of Sleman Smart Regency was triggered by the vision of the Regent of Sleman 2016-2020, namely the realization of the Sleman community which was more prosperous, independent, cultured, and integrated E-government system towards the Smart Regency (Smart Regency). This vision encouraged that service to the community requires a better service system which was a blend of regulatory systems, policies, attitudes and behavior, which was supported by modern information technology that was able to provide high response and effectiveness in realizing good governance.

ISSN 2076-9202

One mission that was breaking down the mission was directly related to sleman smart regency was the mission of "Improving good governance through improving the quality of responsive bureaucracy and implementing integrated e-Government in providing services to the community". The target was to increase e-gove implementation, with a strategy to increased the use of information technology in the process and dissemination of development and service to the community so that the direction of the policy strategy was the use of electronic mail, integrated management information systems and activation of sub domains in each local government agency.

Preparation of Sleman Regency Government as mentioned above to anticipate and overcome various obstacles and obstacles in implementing e-government in several regions such as Pati Regency and Semarang City which were constrained by the absence of polical would from the government, various limitations both from financial resources, technological infrastructure information and resources of e-Gov managers (Sri Purwandani et al., 2018; Prasetyo et al., 2018); The city of Palembang was hampered by human resources, infrastructure and organizations, especially weak leadership, human resources steps, lack of coordination, digital inequality and weak regulation (Novita, 2014).

The implementation of Sleman Smart Regency was effective because there was a strong commitment of the Regional Head to develop e-Government in governance and public services, the human resources of the Sleman Regency civil apparatus in managing ICT, able to integrate ICT facilities and infrastructure owned by the government, the public and the private sector, capitalize on the participation of the community, the private sector and the regional apparatus in the development of Sleman Smart Regency.

4.2 Implementation of Sleman Smart Regency

Sleman Smart Regency was realized in the form of Smart government (smart collaborative, smart governance, smart employee, smart system, smart public service, open government); Smart mobility (smart transportation, smart car service, smart network); Smart living (Smart education, smart building, smart security, smart tourism, smart health); Smart Economy (Bussiness marketplace, smart investment, smart MSME, Smart entrepreneurship, Regional potential, Smart commerce), Smart Environment (Smart energy, Smart Water, Smart waste), Smart people (Smart citizen, Smart innovation, labor marketplace).

Assessed from the of implementation of Sleman Smart Regency, Sleman Regency governance was an integral and comprehensive form of bureaucratic reform because the Sleman Regency government had carried out institutional reforms (policy, reorganization, collaboration), management (application systems), and HR (professionalism in governance, service, and development with ICT). The implementation of Sleman Smart Regency was effective because there was a strong commitment of the Regional Head to develop e-Government in governance and public services, the human resources of the Sleman Regency civil apparatus in managing ICT, able to integrate ICT facilities and infrastructure owned by the government, the public and the private sector, capitalize on the participation of the community, the private sector and the regional apparatus in the development of Sleman Smart Regency.

The implementation of Sleman Smart Regency had an impact on the level of competitiveness of Slemen Regency. The results of the measurement of the Indonesian Tourism Index were Denpasar City, Surabaya City, Batam City, Sleman Regency, Semarang City, Bandung Regency, Bandung City,

ISSN 2076-9202

Banyuwangi Regency, Badung Regency, Bogor Regency, Bantul Regency (Ministry of Tourism, 2016). Yokatta Wonderful Indonesia Tourism Awards 2018, Sleman Regency ranks second in the 10 Best Districts, after Badung Regency, followed by Banyuwangi Regency, Bogor Regency, Buleleng Regency, Gianyar Regency, Klungkung Regency, Bantul Regency, Sidoarjo Regency, and Bandung Regency (IDN Times, 07/20/2018).

The economic growth rate of Sleman Regency in 2017 which was shown by GRDP, according to the current price reached 40.336 trillion, while according to the constant price of Rp. 31.519 trillion; economic growth of 5.25%; Sleman Regency's Gini index of 0.390 was better than the Gini DIY (0.430) and national (0.393) index (Tribune Yogya.com, 05/10/2018). The number of foreign investment in Sleman increased in 2017 which reached 70 business units, an increase of 6.06% compared to 2016. The number of PMDN Business Units in 2017 reached 77, which also increased by 28.33% from 2016 (Tribun Yogya .com, 05/10/2018).

The results of the study were supported by the reality of the relationship between the best countries in implementing e-Government with high competitiveness countries and countries that had the highest happiness level. The United Nations (UN) again published the EGDI (E-Government Development Index) ranking based on a 2018 survey, first to tenth position, achieved by Demark (0.9150), Australia (0.9053), South Korea (0,9010), United Kingdom (0,8999), Sweden (0,8882), Finland (0,8815), Singapore (0,8812), New Zealand (0,8806), France (0,8799), Japan (0.8783) (UN-Government Survey 2018). The figures obtained were a reflection of the condition of implementing E-Government to ensure that public institutions were already more inclusive, effective, accountable and transparent. Inclusive, effective, accountable and transparent public services indicate quality public services. Quality public services showed prosperity.

From the results of the world happiness survey (UN, 2017), it turns out that the first to tenth order is Norway, Denmark, Iceland, Switzerland, Finland, the Netherlands, Canada, New Zealand, Australia and Sweden. World prosperity index, ranks are Norway, New Zealand, Denmark, England, France, Singapore, Japan, Hong Kong (Tribune, 2018). As for the Global Competitiveness Index (World Economic Forum, 2017/2018), the top is Switzerland, United States, Singapore, Netherlands, Germany, Hong Kong, Sweden, United Kingdom, Japan, and Finland.

V. CONCLUSION

Sleman Smart Regency was form of comprehensive and integral bureaucratic reform both in institutions, governance and human resources. Sleman Smart Regency also provided a foundation for good governance so that development and public services are effective and efficient. The impact of Sleman Smart Regency increased the competitiveness of Sleman Regency and the level of welfare of its people.

REFERENCE

Akadun, 2005. Pemberdayaan Birokrasi Pemerintah: Upaya Peningkatan Kinerja Pelayanan Pemerintah Yang Efektif, Bandung: CV. Maulana.

---------, 2009. Teknologi Informasi Administrasi, Bandung: Alfabeta.

ISSN 2076-9202

Alusi, Fahmi; Sensuse, Dana Indra (2014): Penyusunan Strategi E-Government Berbasis Kerangka Kerja Pemeringkatan E-Government Indonesia (Pegi) di Lembaga Penerbangan dan Antariksa Nasional. In *Faculty of Computer Science Universitas Indonesia* (2014): Jurnal Sistem Informasi. http://jsi.cs.ui.ac.id/index.php/jsi/article/view/376.

Aulia rachma, e. V.i.; Puspasari, Durinda (2015): Penggunaan Aplikasi E-Surat SIKD (Sistem Informasi Kearsipan Dinamis) Dalam Pengelolaan Arsip Elektronik Untuk Mendukung E-Government Di Badan Arsip dan Perpustakaan Kota Surabaya. In *Jurnal Administrasi Perkantoran (JPAP)* Vol 3, No 3 (2015): Volume 3 Nomor 3 edisi 2015. http://ejournal.unesa.ac.id/index.php/jpap/article/view/12515.

Bhaskara, Yoga Prasetya (2016): Perencanaan Program Sistem Informasi Manajemen Puskesmas (SIMPUS) dalam Penerapan E-Government (Studi di Dinas Kesehatan Kabupaten Gresik). In *Jurusan Administrasi Publik, Fakultas Ilmu Administrasi, Universitas Brawijaya* Vol 4, No 2 (2016). http://administrasipublik.studentjournal.ub.ac.id/index.php/ jap/article/ view/1150.

Cohen, Daniel A. dan Paul Zarowin. 2010. Accrual-Based and Real Earnings Management Activities Around Seasoned Equity Offerings. Journal of Accounting & Economics Vol. 50 No. 1: 2-19.

Dernhart, Robert B., 2008. Theories of Public Organization, Fifth Edition, USA: Thompson & Wadsworth.

Dolongseda, Edmond, Ronny Gasal, Alfon Kimbal, 2017. Reformasi Birokrasi Pada Dinas Kependudukan dan Pencatatan Sipil Pemerintahan Kabupaten Sangihe, Jurnal Eksekutif Vol 2 No 2 (2017), https://ejournal.unsrat.ac.id/index.php/jurnaleksekutif/ article/view/17670

Fairuzabadi, Muhammad; Erizal, Erizal (2015): Master Plan e-Government Pemerintah Daerah Kabupaten Klaten. In *Dinamika Informatika* Vol 5, No 1 (2015): Jurnal Dinamika Informatika. http://upy.ac.id/ojs/index.php/dinf/article/view/109.

Fuadi, Ahmad Iqbal; Marom, Aufarul (2016): Implementasi E-Government Melalui Media Informasi Publik Berbasis Website Daerah di Kabupaten Tegal. In *Jurusan Administrasi Publik, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Diponegoro* Volume 5, Nomer 4, Tahun 2016. http://ejournal-s1.undip.ac.id/index.php/jppmr/article/ view/13625.

Hijrih, Fatchul; Prasetyo, Taufan Harry (2015): Desain Arsitektur Enterprise Application Integration (EAI) Sebagai Middleware Untuk Aplikasi Pemerintah (E-Government). In *Proceedings Konferensi Nasional Sistem dan Informatika (KNS&I)* 2015. http://ejournal.stikom-bali.ac.id/index.php/knsi/article/view/432.

Ibrahim, Amin, 2008. Teori dan Konsep Pelayanan Publik serta Implementasinya, Bandung: Mandar Maju.

IDN Times, 20/7/2018, Yokatta Wonderful Indonesia Tourism Awards 2018.

Insani, Priskandini April, 2017. Mewujudkan Kota Responsif melalui SMART City, Publisia (Jurnal Ilmu Administrasi Publik) Volume 2, Nomor 1, April 2017, halaman 25-31.

Karis, Widyatmoko; Tyas Catur, Pramudi Y. (2011): Model Penggunaan Teknologi Informasi Dan Kinerja Pegawai Kelurahan Menuju Terwujudnya E-Government. In *Semantik* Vol 1, No 1 (2011): Prosiding Semantik 2011. http://publikasi.dinus.ac.id/index.php/semantik/article/view/147.

Kedaulatan Rakyat, 15/5/2017, http://krjogja.com/web/news/read/32815/ Menuju_Sleman_Smart_Regency).

Kementerian Pariwisata, 2016, Indeks Pariwisata Indonesia, http://krjogja.com/web/news/read/18098/Kemenpar_Umumkan_Top_10_Kota_Berdaya_Saing_Pariwisata.

Mardahayati, Mrs. (2012): Perencanaan Pengembangan E-Government Dalam Penyelenggaraan Pemerintahan dan Layanan Publik Di Kota Solok. In *FIA UB* Vol 13, No 1 (2012): Jurnal Ilmiah Administrasi Publik. http://ejournalfia.ub.ac.id/ index.php/jiap/article/view/273.

Masyhur, Firdaus, 2017. Penelitian e-Government di Indonesia: Studi Literatur Sistematis dari Perspektif Dimensi Pemeringkatan e-Government di Indonesia (PeGI), *IPTEK-KOM*, Vol.19 No.1, Juni 2017, 51-62, ISSN 2527-4902.

Molnar, Andreea, Marijn Janssen, Vishanth Werakkody, 2015, E-Government Theorist and Challenge: findings from plenary expert panel, Proceedings of the 16th Annual International Conference on Digital Government Research page 160-166, Phoenix, Arizona, May 27-30, 2015, ACM New York, NY, USA @2015, ISBN: 978-1-4503-3600-0.

Mujiraharjo, Febri Nugroho, 2017. Analisis Daya Saing Potensi Unggulan Kabupaten Sleman, Teknoin Vol. 23, No. 1, Maret 2017, 49-55, http://journal.uii.ac.id/jurnal-teknoin/article/viewFile/8336/7107

ISSN 2076-9202

Noviana, Rina; Sulandari, Susi; Lituhayu, Dyah (2015): Manajemen e-Government Berbasis Web Model Government-to-Citizen (G2C) Pada Dinas Kebudayaan dan Pariwisata Provinsi Jawa Tengah. In *Jurusan Administrasi Publik, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Diponegoro* Vol 4, No 3 (2015): Tahun 2015. http://ejournal-s1.undip.ac.id/index.php/jppmr/article/view/8949.

Novita, Dien, 2014. Faktor-faktor Penghambat Pengembangan E-Government: Studi Kasus Pemerintah Kota Palembang, Sumatera Selatan, *Eksplora Informatika*, Vo. 4, No. 1 September 2014, 43-52

Nugroho, Eko; Setiawan, Noor Akhmad; Setyadi, Daru Hagni (2015): Peran Dimensi-Dimensi PeGI dalam Penyusunan Rencana Induk/ Rencana Strategis Pengembangan E-Government dengan Menggunakan Kerangka Kerja Arsitektur TOGAF®. In *Jurusan Teknik Informatika, Fakultas Teknologi Industri, Universitas Islam Indonesia* 2015. http://journal.uii.ac.id/index.php/Snati/article/view/3547.

Prasetyo, Alfian Adi, Herbasuki Nurcahyanto, Rihandoyo, Analisis Pengembangan E-Government di Kota Semarang, Jurusan Administrasi Publik, FISIP Undip Semarang, https://media.neliti.com/media/publications/100048-ID-analisis-pengembangan-e-government-di-ko.pdf, didownload tanggal 7 Agustus 2018.

Resta, Adi (2013): Peran Bagian Pengolahan Data Elektronik Dalam Penyelenggaraan E-Government (Studi Pendayagunaan Website Resmi Kota Semarang). In *Journal of Politic and Government Studies* 2 (4).

Silalahi, Mesnan; Napitupulu, Darmawan; Patria, Gulda (2015): Kajian Konsep dan Kondisi e-Government di Indonesia. In *Fakultas Ilmu Komputer Universitas Borobudur* Vol 1, No 1 (2015). http://unbj.net/e-journal/index.php/08/article/view/80.

Slamet (2013): Manajemen Strategik Sebagai Pendekatan Dalam Mengembangkan E-Government Di Indonesia. In *IQTISHODUNA* 9 (1). http://ejournal.uin-malang.ac.id/index.php/ekonomi/article/view/2283

Sosiawan, Edwi Sarif, 2008. Tantangan dan Hambatan Dalam Implementasi E-Government di Indonesia, Seminar Nasional Informatika, UPN Veteran Yogyakarta, 24 Mei 2008, ISSN 1979-2328, https://media.neliti.com/media/publications/175130-ID-none.pdf.

Sri Purwandani, Maesaroh, Rihandoyo, Analisis Penerapan Electronic Government di Kabupaten Pati, Jurnal Ilmu Administrasi Publik FISIP Undip Semarang, dalam http://download.portalgaruda.org/article.php?article=73037&val=4925, didownload tanggal 7 Agustus 2018.

Sudaryono. 2014. Perilaku Konsumen Dalam Prespektif Pemasaran. Jakarta: Lentera Ilmu Cendekia.

Sutaryono, 2017. Menuju Sleman Smart Regency, Kedaulatan Rakyat, Yogyakarta, 15/5/2017.

Suwitri, Sri; Djumiarti, Titik; Fitriani, Rizka (2012): Analisis Penerapan Website Dalam Rangka E-Government Di Kabupaten Tegal. In *Journal of Public Policy and Management Review* Volume 1, Nomor 3, Tahun 2012. http://ejournal-s1.undip.ac.id/index.php/jppmr/article/view/1328.

Tim Penelitian dan Pengembangan Bidang Pencegahan Ombudsman RI, 2015. Ringkasan Hasil Penelitian Kepatuhan Pemerintah Pusat dan Pemerintah Daerah terhadap Standar Pelayanan Publik Sesuai UU No. 25 Tahun 2009 tentang Pelayanan Publik, Jakarta: Ombudsman RI.

Tribun, 2018. Inilah Negara-negara Termakmur di dunia, Bagaimana Indonesia? http://www.tribunnews.com/internasional/2018/02/18/inilah-negara-negara-termakmur-di-dunia-bagaimana-posisi-indonesia?page=3.

Tribun Yogya.com, 10/5/2018, Perkembangan Ekonomi Sleman mengalami peningkatan, http://jogja.tribunnews.com/2018/05/10/perkembangan-ekonomi-sleman-alami-peningkatan.

United Nation, 2018. UN E-Government Survey 2018, https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2018, didownload tanggal 9 Agustus 2018.

World Economic Forum, 2017, Global Competitiveness Index, https://widgets.weforum.org/global-competitiveness-report-2017/

ISSN 2076-9202

IMPROVING ORGANIZATIONAL PERFORMANCE ALONG WITH STRATEGIC PLANNING IN THE FRAMEWORK OF COMBINING THE DAVID MODEL AND BSC ASSESSMENT MODEL

Maryam Mottaghi
Department of Management, Ershad Damavand University, Tehran, Iran Mottaghi_maryam@yahoo.com
(Corresponding Author)

Abstract
The role of balanced scorecard in strategic planning is to create a link between the organization's strategy and executive actions in a chain of cause-and-effect relationships. In this way, the results of strategic planning are not suspended and are linked in a clear and transparent way to the action. Balanced Scorecard forms strategic issues and determines the measures of goals realization and actions, and thus, operationalizes the organizational strategy. The purpose of this paper is to promote organizational performance along with strategic planning within the framework of combining the David model and BSC model. The statistical population of this research is the employees and customers of one of the largest airline companies in Iran. The simple random sampling was used for sampling from customers and random method of classification according to Cochran formula was utilized for sampling among employees. Its validity was confirmed by content validity and its reliability was calculated by computing Cronbach's alpha. The results of this study showed that the combination of these two models significantly improves the organizational performance, customer satisfaction, and David's model weaknesses in the targeted population**.**
Keywords: Strategic Planning, assessment, David's Model, Balanced Scorecard, Airline Company

Introduction

Excellence organizations implement their missions and prospect through formulating a strategy focused on the benefit of the organization's stakeholders in their related industry or sector. Strategies, plans, long-term goals and processes are developed in such a way that leads to realize strategies. Strategic planning models are used to implement strategies. David's planning model is one of the planning models used by large companies. This planning model has weaknesses in implementation, evaluation and control, which results in reduced performance. So, in order to complement and improve the strategic planning model of David and resolve its weakness in implementation, assessment and control, as well as aligning the vision-mission and the organization's strategies, we require a model to evaluate the organization's performance. One of the organizational performance evaluation systems is the balanced scorecard. The balanced scorecard model is a tool for strategic management. Facing various phenomena such as the

ISSN 2076-9202

organization's movements, the market position, being empowered against competitors, identifying improvement methods, and combining them and how to treat each one in the form of strategic management concepts can be understood and followed. Therefore, the main priority of the management actions is the preparation and evaluation of strategy and evaluating it. The actions priority is as follows: 1. the need for perspectives and how to guide the business. 2. The need to pay attention to harmony and coordination (Strickland Mutanson, 1982).

Research thematic literature

The strategic management is a term used to describe the decision-making process. Strategic management is the flow of decisions and activities that lead to one or more effective strategies for achieving goals (Ali Ahmadi, 2003).

Strategic planning: Strategic planning in different organizations is carried out in different ways strategic planning is one of its styles. The strategic planning process provides an outlook and analysis of the company and its environment; explains the current conditions of the company and identifies the effective key factors for its success (Fry& stoner, 1995).

The benefits of Strategic Management: Strategic management allows the organization to act in a creative and innovative manner and not passively shaping its future. This management mode will make the organization to act initiatively and shape its activities in a proactive way (rather than only respond to actions) and thereby, shape its fate and control the future. Small business owners, executives, directors, and for profit and nonprofit organizations' managers have been aware of the benefits of strategic management and have embraced such a reality. Historically, the main benefit of strategic management has been to help the organization choose the most appropriate, more rational way of strategic planning, and thus develop better strategies. There is no doubt that this is one of the main interests of strategic management, but the result of current research shows that this process (and not decisions or documents) can play a more important role in strategic management. Communication is the key to strategic success. Managers and employees are committed to support the organization by engaging in this process (David, 1997).

Strategic planning is a process that most successful and well-known companies use to steer their programs and activities with a long-term vision for achieving goals and realizing their mission; this type of planning, that is often used by large organizations, if properly designed, will lead to the selection of strategies that, if implemented correctly and on time, brings the organization's excellence and success to its intended goals and objectives. Strategic planning identifies the organization's external and internal environments, opportunities and threats and the strengths and weaknesses of the organization, and, with regard to the mission of the organization, sets the long-term goals for the organization and, to achieve these goals, among the strategic choices, it chooses strategies that rely on strengths, eliminates weaknesses and avoids threats, and in case of successful implementation, the organization succeeds in the field of competition. To put it simply, a strategic plan can improve performance because members of the organization may be confused with constant tasks and daily challenges, and lose the goals of the organization. Strategic planning is a powerful tool designed to help organizations to adapt themselves to changing environment. In particular, the strategic planning process provides an attitude and analysis of

ISSN 2076-9202

the company and its environment; explains the current situation of the company and identifies the key factors affecting its success (Fry & stoner, 1995). Strategic planning can improve performance. A successful plan that ends up with implementation, creates a common value-based vision and is a collaborative process where employees and managers feel shared ownership to it; it accepts responsibility towards society, it is sensitive to and focused on the external environment of the organization, and is designed based on high-quality data, and is the key to effective management (Parnell, 1996).

David's Strategic Planning Model

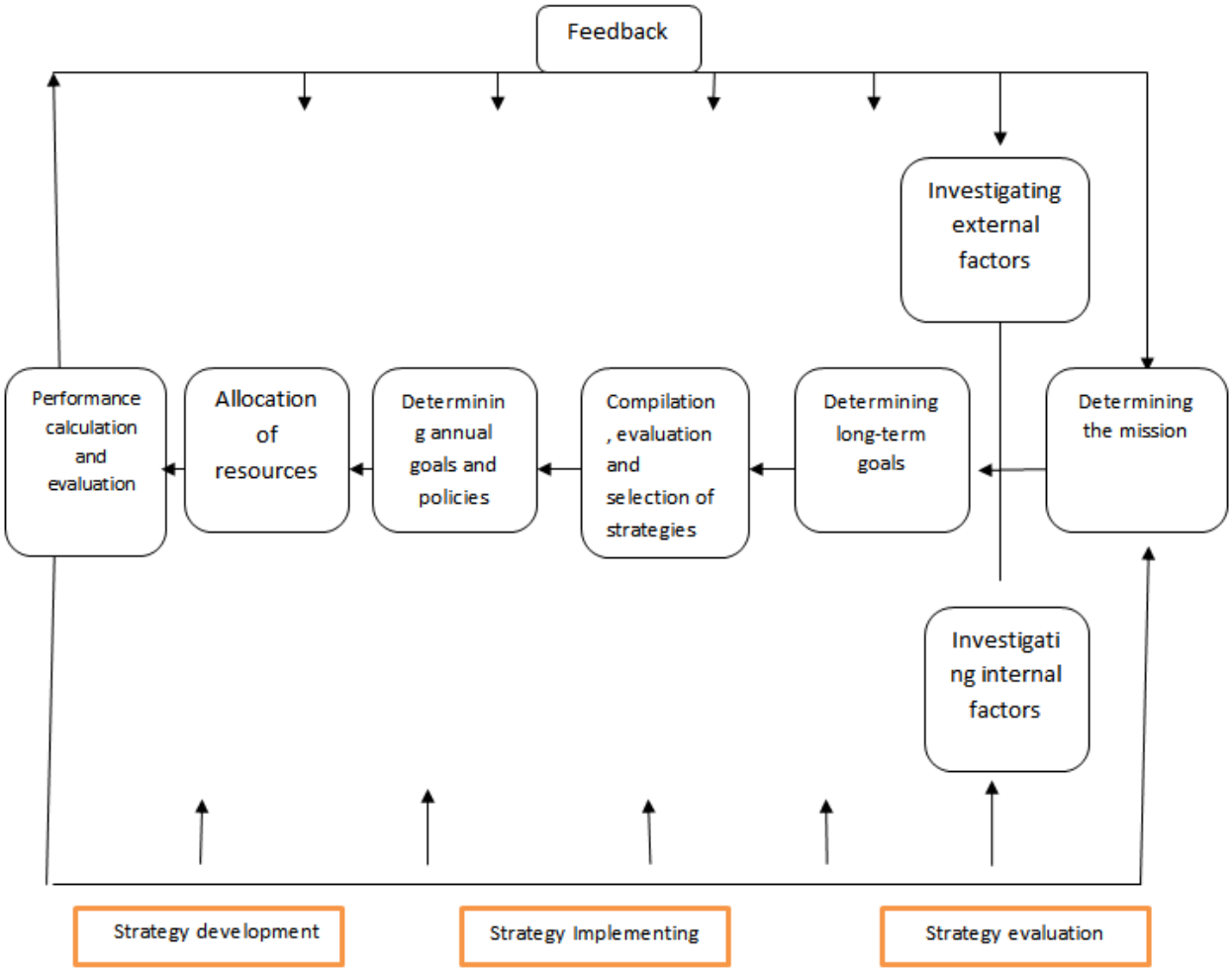
Mission Formulation - Definition of Organizational Values - prospect formation- Exploration of External Factors and Extracting Opportunities and Environmental Threats - Investigating Internal Factors and determining Internal Strengths and Weaknesses - Determining Long-Term Objectives - Formulating Assessment and selection of strategies - Determining annual goals and policies - Allocation of resources - Calculating and evaluating performance; this is David's strategic planning model. Based on this model, strategic management consists of three main parts of the strategy development, implementation and evaluation, which are closely related (David, 1999).

In David's model, a framework named the comprehensive framework of strategy development is used to formulate a strategy. This framework will help strategists to identify and evaluate strategies (Aarabi, Aghazadeh et al., 2006)

Start step	
Determine the mission and prepare the mission statement of the organization	
Input stage	
External factors evaluation matrix	internal factors evaluation matrix
Comparison step	
Internal and external matrix	SWOT matrix
Decision making stage	
the quantitative strategic planning matrix	

Comprehensive Framework for Strategy Formulation (Source: Arabi et al., 2006)

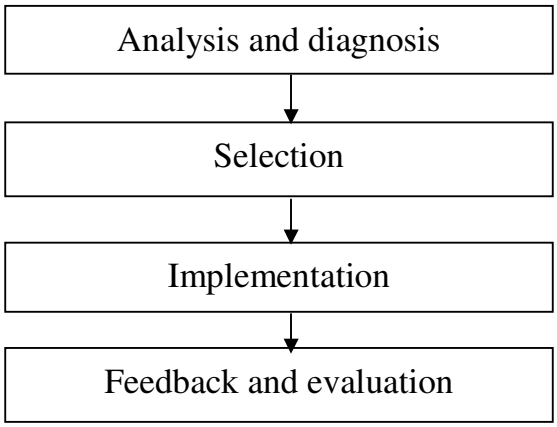
ISSN 2076-9202



The Comprehensive Strategic Management framework of David's Model, (Source: David, 1997)

Strategy formulation: A three-stage decision-making framework that includes identifying, evaluating and selecting strategies that help strategists. 1. Input stage (external factor evaluation matrix and CPM matrix and IFE evaluation matrix. The second stage of the comparison, which includes the SWOT, SPACE, BCG, EFE matrices and the main strategy matrix), and the decision stage including the QSPM matrix (Ibid, 1997). All strategic planning and management models are carried out in four phases:

ISSN 2076-9202



Strategic Planning Model (Source: Feghhi Farahmand, 2005)

Strategic Planning Features

These features include introversion, extraversion, task integration, key people participation, using analytic-creativity techniques in planning and focus on control (Parnell, 1996).

A strategic planning can improve performance and a successful plan is a plan that ends in action, creates a common vision based on values, a collaborative process that employees and managers feel shared ownership about it, accepts responsibility towards community, is sensitive to the external environment of the organization and focuses on it; it is projected on the basis of high-quality data and an important key to effective management (Ibid, 1996).

Strategic planning constraints

Costs, time, expert human resources, lack of access to information, lack of flexibility and stability

- Benefits of implementing strategic planning in an organization

- Before any potential problems arise, reports about the occurrence.
- Help managers become interested in the organization.
- Specify changes and provide conditions for response to changes.
- Determines any need that is necessary to redefine the organization.
- Creates a suitable platform for achieving predetermined goals.
- Helps managers gain a clearer understanding of the organization.
- Facilitates recognition of future environmental opportunities.
- Provides a targeted vision of management issues.
- Provides a platform for monitoring the implementation of program and control activities.
- Helps managers make key decisions in line with their goals.
- Effectively allocates time and resources to designated opportunities.
- creates coordination in the implementation of the tactics that will bring the program to the end.
- Minimizes the time and resources that need to be corrected for incorrect decisions without long-term vision.
- Creates a model for internal communication between employees.
- Arranges priorities in time schedule.

ISSN 2076-9202

- Provides a basis for determining the responsibility of individuals and thereby increases their motivation.
- Encourages prospective thinking.
- creates motivation in organization's members to have a coherent, integrated approach with the enthusiasm to address issues and opportunities (www.emodiran.com, 2012).

Performance assessment process

In the process of performance assessment, any selected model chosen is required to pass the steps and observance of the order and sequence of the following activities:

1-Formulate indicators, dimensions and related axes and determine their unit of measurement

2. Determination of the weight of the indicators, depending on their importance and the relevant rating

3. Standardization and determination of the desired status of each indicator

4. Measurement by comparing the actual performance at the end of the evaluation period with predefined desirable standards.

5. Extraction and analysis of results (Rokninejad, 2008).

The scorecard method as a performance assessment system

Most organizations cannot implement their strategies, and less than 10% of the strategies that have been formulated efficiently, have been successfully implemented in practice. Why do organizations fail to implement their strategies?

1. You cannot manage what you cannot describe, there is no common way to describe and develop business strategies.
2. They do not manage their strategies; they do not understand 95% of the strategy's workforce. 60% of organizations do not connect their budgets to strategy. 85% of senior executives spend less than an hour in a month discussing strategy. Only 25% of the managers find their interests linked to the strategy (Bakhtiari, 2008).

The BSC is recognized as a performance appraisal tool and a practical tool for strategy and also a structure for determining the alignment of the organization, the organization's capital and information. Today, the BSC is referred as a comprehensive framework for organizational change. The components of the scorecard include strategic maps, indicators, measurements, and the cause-and-effect relationship, and the strategic goals of the organization; these elements are introduced for the purpose of differentiating the goals among the four perspectives outlined below and describing the types of performance indicators (ibid., P. , 2008).

Definition of Scorecard:

Kaplan and Norton have presented a new managerial perspective that can turn the strategy into operational terms and thus causes growing. This is the prelude to a comprehensive and enforceable theory.

In fact, this description hardly explains the concept. Kaplan and Norton say:

- The scorecard converts the mission and strategy of the organization into a comprehensive benchmark for comprehensive performance assessment and provides a framework for strategic management and evaluation (Hevers, 1998).
- The Balanced Scorecard is a conceptual framework that turns the organization's major goals to

ISSN 2076-9202

measurable and distributable indicators among the vital areas of financial, customer, internal processes and growth and learning (Alvani and Seyed Naghavi, 2003).

- A Balanced Scorecard is a tool that translates the goals and strategy outlined in the strategy map into a full set of objectives and operational programs, and thus, provides a framework for the strategy monitoring and evaluation system of (Aria, 2002).

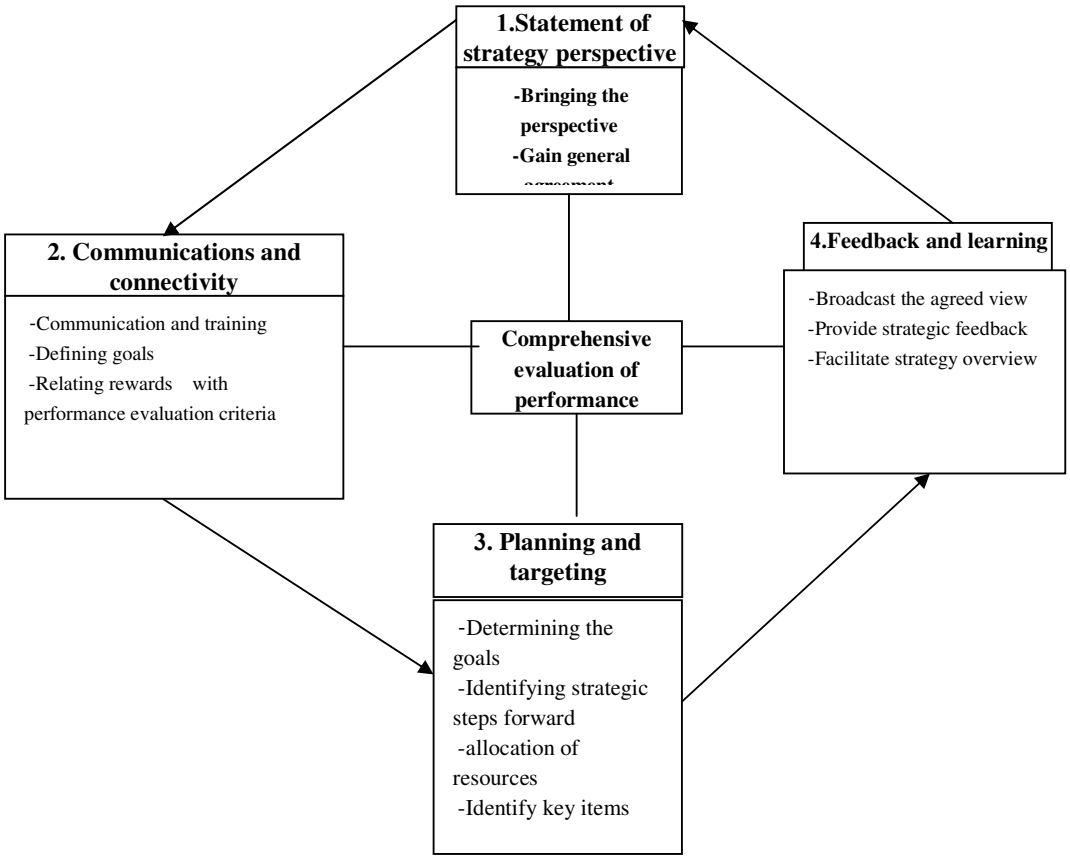
Balanced Scorecard as a Strategic Management System

For many organizations, the scorecard has been changed from an assessment tool to what Caplan and Norton called as "strategic management system". Although the main objective of the Balanced Scorecard system is to create equilibrium between the historical financial figures and the drivers of future value creation, gradually, as more organizations experienced this concept, it became a vital tool in aligning their short-term actions with the organization's strategy. In this application, the Balanced Scorecard method addresses many of the obstacles and problems, as mentioned below, involved in implementing effective strategy.

1. Eliminating barrier related to the landscape through strategy translation.
2. The elimination of human barrier through the passage of evaluation criteria.
3. Eliminating resource allocation barriers through strategy resources allocation (Bakhtiari et al., 2010).

In this view, a scorecard is known as a tool for strategy development. According to the mentioned viewpoint:

ISSN 2076-9202



Strategic Processes in the Comprehensive Performance Assessment System (Bakhtiari et al., 2010)

In the process of developing a strategy, various stages such as the definition of mission, long-term goals, operational objectives, and other requirements must be fully observed. The aid that the Balanced Scorecard provide to the strategy development process is that it leads it and helps strategy designer to better decide on what goals and in what areas and how should be defined. In this view, the Balanced Scorecard is considered as a means to determine the vision, mission, and objectives of the organization in the fourfold areas; areas that have been cleared through the Scorecard. The researcher believes that the great advantage of this strategy formulation method is that when controlling strategy, a scorecard can be used for evaluation, and since the strategy itself is based on the attitude of the scorecard, naturally, evaluation is also much easier (Ebrahimi Sarv Oliya, 2004).

Integration of David's Model and Balanced Scorecard

David's model main difference with the Balanced Scorecard is in the run-up stage. At this stage, all organizational units, processes, and, in general, the whole of our organization are aligned with the developed strategies and the integrity of the organization arises that other models lack this ability. In the feedback and evaluation phase, in BSC model, the two groups of indicators are defined for the evaluation and control of the performance of the strategies, which include the lag and lead indices. The numerical value of these indices is totally dependent on them, therefore, their targeting is based on the importance of the index and the effect of other indexes, and thus the change of an index causes the change of other indicators that these changes are under the control of the managers of the organization (Bakhtiari, 2009).

Methodology:

ISSN 2076-9202

At first, extensive studies were conducted around the strategic management and concept of David's model, strategic planning and BSC, that introduction to concepts and their application in organizations, and then the focus of studies was on reviewing these concepts and comparing them. The BSC was evaluated as a performance assessment system. David's model was also studied, and with the integration of the BSC with this model, the implementation and evaluation phase of this model were strengthened. These evaluations and implementation of the hybrid model of BSC and David was conducted as a case study in an Iranian airline company. According to what was said earlier, this research is based on the purpose of scientific research of the applied type and is a descriptive-survey research in terms of collecting data. In terms of collecting data, the nature of the research is descriptive and on the other hand, since it is based on providing questionnaires for the experts, the research has a survey aspect. The statistical population and sample is the staff of a large Iranian airline. In this research, the raw data obtained from the questionnaires have been entered into the SPSS Version 18 and the collect data was analyzed. Firstly, using descriptive statistics, the demographic characteristics of sample members in the research including age, gender, educational level, and work experience were described and summarized and then, the inferential statistics were used. T-student and ANOVA have been used in order to study the effects of gender variable and the effects of graduation, work experience and respondents' age, respectively. Data gathering was done using a questionnaire as field and library method. In this research, content validity was verified based on the opinions of the supervisors, advisers, and experts. Customer sampling was based on the simple random sampling and employee sampling was done randomly. Reliability of this research is calculated by Cronbach's alpha coefficient, which is usually evaluated higher than 0. 7

Customers' Reliability

In the customers' section, according to the results, using the Cronbach's alpha coefficient, a reliability of 0.76 is obtained, and since it is higher than 0. 7, then, it has an acceptable reliability.

Reliability statistics	
Cronbach's Alpha	N of Items
. 746	20

Customer reliability

Employee reliability:

According to the results, using the Cronbach's alpha coefficient, the reliability of 0.899 is obtained, and since it is higher than 0. 7, therefore, it has an acceptable reliability.

Reliability statistics	
Cronbach's Alpha	N of Items
. 899	22

Employee reliability

Data analysis structure:

The structure of data analysis was presented according to the questionnaire, which has a questionnaire consisting of 26 questionnaires and employee questionnaire including 23 questions.

ISSN 2076-9202

The staff questionnaire, according to the Cochran formula, was to be provided to 352 people that for more confidence, it was amounted to 388 people; so, about 390 questionnaires were sent to the staff, that 380 were returned. According to the conditions set out in the questionnaire, the employee's work and service experience should be more than 5 years, because BSC has been implemented in this organization from 2008 to 2013. Most likely, employees who have been over 5 years of experience are included in the sample.

The customers' questionnaire was provided manually and electronically to 400 customers (384 questionnaires should be answered using Morgan's table and Cochran's questionnaire) and 352 were returned.

The analysis has been conducted using descriptive statistics and exploratory factor analysis. The statistical population of this research is one of the Iranian airline companies. After collecting 2 groups of questionnaires, 380 employees were surveyed who had been under 5 years of work experience, which in total, 367 questionnaires were acceptable and the data analysis was conducted using these questionnaires. Among the customers' questionnaires also 352 questionnaires were analyzed and the analyses were conducted in two descriptive and inferential analysis. In descriptive analysis, the frequency and the percentage of demographic variables have been investigated and in the inferential analysis, Single sample t test, paired comparison t-test and analysis of variance and Friedman test were used. The analysis of the status quo and the research questions showed that all questions had average higher than the test value and it could be said that the items examined in this sample were above the average and were in a good condition. In the following, the results of this research are presented along with the analysis of the data on the data and the research questions and according to research questions, the results of this research are presented.

1. In order to investigate the enhancement of organizational performance, firstly by integrating the questions of the questionnaire, we defined an indicator as the question of "whether the combination of David's model with BSC is effective in improving the performance of the organization", and then, the average equality test was used in the SPSS software for the above test.

In the staff questionnaire, in order to increase the organization's performance, we first defined the index as the above question by integrating the questionnaire questions. Then, we used the average equality test in SPSS software for the above test. We performed the above test at 95% confidence level and the results were as follows: significant coefficient = 0.000 and degrees of freedom of = 339 and t = 62. 328 and average = 3

The value of Sig is less than 5%, which means that H_0 is rejected and the claim is accepted and with the 95% degree of confidence we can assert that: the importance of the above question is greater than the test value (3), and we conclude that from the employees point of view, the combination of David’s model with BSC improves the performance of the organization.

2. In the staff questionnaire, in order to improve the effectiveness of strategy implementation in the organization, firstly by integrating the questions of the questionnaire, we defined an indicator as questioning "whether the combination of the David model with BSC would improve the organization's effectiveness", and then, the average equality test was use in SPSS software. We

ISSN 2076-9202

conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and t = 78. 844, and an average of = 3. As it is clear, Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the effectiveness of implementing a strategy in an organization.

3. In the staff questionnaires, in order to investigate the above item in improving the assessment of the organization, firstly by integrating the questionnaire's questions, we defined an index as the question of "whether the combination of David's model with the BSC is effective in improving the organization's assessment", and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and t =120.871, and an average of = 3.the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the assessment in the organization.
4. In the staff questionnaires, in order to investigate the improvement of control of the organization, firstly by integrating the questionnaire questions, we defined an index as the question of "whether the combination of David's model with the BSC is effective in improving the organization's assessment", and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and t =142.64, and an average of = 3.the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC improves the control of the organization.

In the staff questionnaires, in order to investigate the effectiveness of combining the two models Included in Strategic Planning, firstly by integrating the questionnaire questions, we defined an index as the question and then, the average equality test was use in SPSS software. We conducted the test at 95% confidence level, and the following results are obtained: a significant coefficient of 0.000 and a degree of freedom = 339 and t= 253.73, and an average of = 3. the Sig value is less than 5% and this means that H_0 is rejected and the claim is accepted and with 95% of confidence it can be claimed that: the importance of the above question is higher than test value (3) and we can conclude that from the employees' point of view, the combination of David's model with BSC is effective in strategic planning of the organization.

Also, in order to be more reliable, the analysis of customer variance for the second cognitive group was examined. In order to equalize the mean in different ages, ANOVA was used. The obtained results are as follows: Wherever the Sig value is greater than 5%, it means that the different age categories in customers have almost identical opinions and the Sig value less than 5% indicates that at least two age groups have

ISSN 2076-9202

different opinions and, if H_0 is given, then the proposed statement is accepted. Also, for the gender variable, the variance equation test was used and then, the average equality of the two communities was made for both equality and non-equality of Variance. First Sig is related to the variance; wherever the Sig value is greater than 5%, it means that the different genders in customers have almost the same views, and H_0 is accepted, and wherever Sig is less than 5% indicates that the assumption H_0 is rejected and the H_1 assumption is accepted, This means that different genders have different opinions in their customers.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average in the two populations is not equal.

Also, in order to equalize the mean at different levels of education, ANOVA was used. Results: Wherever Sig is more than 5%, it means that the different grades of education in the customers have almost the same views and the Sig value of less than 5% indicates that at least two grades of education have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, in order to be more reliable, the analysis of variance of employees for the second census was examined. In order to have a mean equation for different ages, the variance analysis was used. Results: Wherever the Sig value exceeds 5%, it means that the different age groups in staff have almost the same opinions and the Sig value less than 5% indicates that at least two age groups have different opinions; the H_0 hypothesis is rejected, and the proposed statement is accepted. Also, for the gender variable, the variance equation was firstly used, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the ANOVA; wherever the Sig value is greater than 5% means that the different genders in the employees have almost the same views, and H_0 is accepted, and wherever Sig is less than 5% indicates that the assumption H_0 is rejected and the H_1 assumption is accepted, that is, there are different views among the different genders of staff.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.

Also, in order to evaluate the average equality at different levels of education, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in employees have virtually similar views and the Sig value less than 5% indicates that at least two grades of education have different opinions; H_0 will be rejected and the proposed statement will be accepted.

In order to evaluate the average equality at different levels of work experience, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different work experience in employees have virtually similar views and the Sig value less than 5% indicates that at least two different level of work experience have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, for the gender variable, the Equation Test of two Variances was used at first, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the employees have almost identical opinions and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_1 hypothesis is accepted and H_0 is rejected, which means that there are different views among the different genders of the employees.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the

ISSN 2076-9202

average of the two populations is not equal.

Friedman test has been used to rank customer and employee responses. This is for the purpose of determining "what is the best indicator and satisfaction from the customers' and employees' point of view.

In order to rank the level of people satisfaction from the company's services, the following results were obtained: Questions 7, 14, and 23 ranked highest in the customer rating, with an average rating over 18. The next rank is related to Question 16, with the average of 17. 80, and the next ranks is related to Questions 13 and 22. With a rating above the average of 16, and the lowest average score is for questions 4 and 11, and the question 17 with an average of about 4.

We used Friedman test to rank the employees' indexes; the first and the 16th questions have the highest rank with an average of 26. The next ranks are related to questions 9, 10, 18, and 20 with an average of 24 and the lowest rank is for question 16 with an average of 6.94.

At the end, to reach the overall conclusion, the question arises: is it possible to eliminate or mitigate the weaknesses of the David model using BSC model? According to the obtained results, for more reliability, the results of the analysis of variance of customers for two demographic variables were examined. In order to equalize the mean in different ages, ANOVA was used; wherever Sig value was greater than 5%, it means that the different age categories in the customers have almost the same views and the Sig value of less than 5% indicates that at least two age groups have different opinions; H_0 is rejected, and the proposed statement is accepted. Also, for gender variables, we used the test for equality of variance in two populations and then, we compared the mean of the two communities for both equality and non-equality modes. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the customers have almost the same views and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_0 is rejected and H_1 is accepted; which means that the different genders in the customers have different opinions.

The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.

Also, in order to evaluate the average equality at different educational grades, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in customers have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.

Also, in order to be more reliable, the analysis of variance of employees for two demographic variables was examined. In order to reach the mean equation for different ages, the ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that different ages in staff have almost the same opinions and the Sig value of less than 5% indicates that at least two age groups have different opinions and, if H_0 is given, then the proposed statement is accepted. Also, for the gender variable, the equation test for two variances was used at first, and then, the average equality of the two populations was made for both equality and non-equality of variance. The first Sig is related to the variance test; wherever the Sig value is greater than 5% means that the different genders in the employees have almost identical opinions, and H_0 is accepted, and wherever Sig is less than 5% indicates that the H_0 is rejected and the H_1

ISSN 2076-9202

is accepted, which means that there are different views among the different genders of the employees.
The second Sig is for the purpose of average equality in different genders, and the result indicates that the average of the two populations is not equal.
Also, in order to evaluate the average equality at different educational grades, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different educational grades in customers have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.
In order to evaluate the average equality at different work experience levels, ANOVA tests were used. Results: Wherever the Sig value exceeds 5%, it means that the different work experience levels in employees have virtually similar views and the Sig value less than 5% indicates that at least two different educational grades have different opinions; H_0 will be rejected and the proposed statement will be accepted.
Finally, the Friedman test was used to rank customer and employee responses. This is to determine what is the best indicator and satisfaction from the employees and customers' point of view.
As can be seen, given that the Sig value in this is less than 5%, therefore the H_0 is, based on the ineffectiveness of the BSC model in the organization, is rejected and we conclude that the implementation of this model in the organization is effective. In order to evaluate the improvement percentage and the reduction of weaknesses of the David model by implementing the BSC in the organization, we compared the ratio of variables before and after the implementation of BSC in the organization. Implementation of BSC showed that in the financial perspective, from 98.3% of the people point of view, about 60% = 1. 2 times, from 93.3% of the people point of view about 65% = 1. 3 times improvement has been achieved; in the internal processes perspective, about 65% = 1. 3% has been achieved from the viewpoint 100% of people, and in terms of growth and learning, 94.9% of people namely about 65% = 1. 3 times is improved. The improvement value is 1 to 1.5 times. In financial perspective, it is equal to 2.1 times. In the customer perspective, 1.3 times, in the internal perspective, 1.3 times improvement and in learning and growth 1. 3 times improvement is achieved. It can be said that in the financial perspective, about 60% improvements and in the other perspectives, 65% improvement have been achieved.

References:

1. Ali Ahmadi, A.R, Ali Ahmadi, F. Ali Ahmadi, M. Tajodini, I (2003), "A Comprehensive approach to Strategic Management, Tehran, Tolide Danesh Publication.

2. Bakhtiari, P. (2009), "Strategy-driven organization", Tehran, Industrial Management Organization publication.

3. Thomson, Estricland, (1982 and 1972), "Strategic Management/Concepts and case studies

4. Feqhi Farahmand, N (2005), "Organization Strategic Management", Tabriz, Foruzesh Publication, First Edition

5. Aria, N (2002), "The Scoreboard transcript, Hesabres Journal, No. 17. p. 58-61.

6. Ebrahimi Sarvolia, M.H (2004), "A Review of the Role of a Comprehensive Assessment of Balanced Scorecard Performance in Performance Evaluation and Management Control', Doctoral dissertation, Business management, financial orientation, Islamic Azad University of Science and Research.

7. Alvani, M, Seyed Naqavi, M.A. (2003), "balanced score model, a model for measuring performance in the public sector", Management Studies Quarterly, No. 37 & 38. P. 2-17.

ISSN 2076-9202

8. Arabi, M, Aqazade, H. Nezamivand Chegini, H. (2006), "Strategic Planning Manual", First Edition, the Office of Cultural Research publication

9. David, R. (1997), Strategic Management, Translation: Parsaian and Arabi. Tehran, Office of Cultural Research Publication

10. Rokni Nejad, M. (2008), "Evaluation of Organizational Performance. Articles of the performance evaluation system of the executive organizations of the country", Productivity and Management Studies Center of Tarbiat Modarres University, 2001, Office of Cultural Research Publication.

11. David, Fred R. (2010), Strategic Management, Translation: Parsayian, A. Arabi, M, Seventeenth Edition, Tehran, Office of Cultural studies Publication.

12. Bakhtiari, P. Asghari, J. (2010), A comprehensive guide to strategy-driven organization, Tehran, Industrial Management Organization Publication P. 67, 75, 159.

13. Bakhtiari, P. (2008), "Strategy-driven organization", Tehran, Industrial Management Organization Publication.

14. Bakhtiari, P. (2009), "Strategy-driven organization", Tehran, Industrial Management Organization Publication

15. Hepw -Fry.L, Fred & Stoner.R, Charles.(1995). Strategic Planning For The New And Small Business. Upstart Publishing Company, INC. pp12.

16. orth ,paul.(1998).Weighing it up-A literature Review for the Balanced Scorecard.Journal of Management Development .Vol 17.No 8.p 559-563.

17. David , F.R.(1997). Strategic Management

18. Parnell, J.A.(1996).The RIC-Sterategy-Performance linker :an empirical test of catalog and mail-order houses,A Dissertation Presental to the School Memphish State University the Requirement of the Degree of Doctor of Philosophy . p 44

19. Hepworth ,paul.(1998).Weighing it up-A literature Review for the Balanced Scorecard.Journal of Management Development .Vol 17.No 8.p 559-563.

20. Fry.L, Fred & Stoner.R, Charles.(1995). Strategic Planning For The New And Small Business. Upstart Publishing Company, INC. pp12.

21. www.emodiran.com.2012

ISSN 2076-9202

EXPLORING THE CORRELATION OF OCCUPATIONAL STRESS, PRODUCTIVITY: A CASE OF POLICE OFFICERS IN IRAN

Fatemeh (Hannah) Hadiyan[1] Helen Hadiyan[2]

[1]Azad University, Tehran, Iran
[2]Victoria University, Melbourne, Australia

Correspondence concerning this article should be addressed to Helen Hadiyan, 14 Hope Street, Fitzroy North, Victoria, Australia. E-mail: Helen.hadiyan@hotmail.com

ABSTRACT

Today, due to high occupational stress work process is too hard. This location will make stressful and undesirable situations in different aspect of individual, social, and economic for employees. It will diminish the quality of work. Also, hazard the continuity of community life. This study examined the connection between Occupational stress, productivity. A self-administered questionnaire was employed and distributed among upper and lower police officers in Iran. 190 samples were randomly selected in the study. The results showed that there was as a negative connection between occupational stress and productivity among the police officers in Iran. It is suggested that good organizational support may alleviate the work stress and result in less negative effect on performance.

Key words: Occupational stress, Productivity, police officers

1. INTRODUCTION

Occupational (job, work or workplace) stress has become one of the most important health issues in the working world (Lu et al., 2003, 479), as it occurs in any occupational and is even more present than decades ago. Namely, the world of work differs noticeably from the working environment of 30 years ago: longer hours at work are not strange, numerous changes in society and configuration are often cited, as well as the loss of life time vocation paths (Clarke and Cooper, 2000 in Fotinatos-Ventouratos and Cooper 2005), which all leads to superior occurrence and levels of stress. Occupational stress is one of the top ten work-related healthiness troubles. Stress disorders cost organizations over $150 billion in lower productivity, absence and disability (Blix et al., 1993). Stress can lead to physical, psychological, and behavioral difficulties. Progressively more, health education professionals confront statistics indicating that occupational stress can confirm life-threatening. Today, in a quickly evolving and varied humanity, workplace changes happen practically during the night. Many employees admit anxiety and ignore its

ISSN 2076-9202

long term effects; those who are aware of their anxiety levels may not cope successfully (Walcott-McQuigg, 1994). At the same time, workplace violence has enlarged with a cost of over $4 billion in a year in lost work and lawful expenditure (Anfuso, 1994; Mattman, 1998). The expenditure in lost wages alone came up to $55 million in 1994 (Keim, 1999). Cooper and Marshall (1978) found that work stress had an impact on individuals and organizations. A survey of 28,000 workers in 215 organizations in the United States revealed that stress at work was linked to poor work performance, sensitive and continual health problems and worker burnout (Ivancevich et al., 1990)

In the argument of a previous study that was related, it was seen that stress is not the demand or the foundation of anxiety itself; but it is the awareness of that pressure (Cox, 1978; Lazarus, 1966; McGrath, 1970). Lazarus and Folkman (1984) indicated that work stress can be defined as a connection between the person and the environments. Gellis et al. (2004) showed the service coordination nature of the work and dealing with crisis situations was a major foundation of stress regularity and passion. According to Williams and Cooper (1998), the dissimilar awareness of individuals (such as coping and supporting) and the awareness of stress outcomes (such as wellbeing and Occupational satisfaction) should also be considered. Hart and Wearing (1995) made the point that stress cannot be uttered as a single variable and that elements such as personality distinctiveness, coping processes, and positive and negative work experiences must also be measured. Cooper and Marshall (1976) have classified the sources of occupational stress as: intrinsic to the Occupational, role in the association, connections at work, career improvement, organizational formation and atmosphere, and homework border.

Clarke and Cooper (2000) focus on the stress of retail workers. Their study indicated that occupational stress must be negatively perceived and subjected to insufficient coping to result in negative stress outcome, while the experience of stress is also moderated by a number of individual divergence variables. Kessler et al. (1999) estimated that, in terms of hopelessness, monthly productivity losses of approximately $200 to $400 were experienced by each worker. Also Greenberg et al. (1993) attributed lost productivity to dejection cost American corporations $12.1 billion in 1990 alone. Further, the impact of mental ill health on absenteeism has already been established in a number of studies (Pflanz and Heidel, 2003). Establishing a link among stressors, well-being, and productivity provides further compelling impetus to employers to make sure suitable working conditions are maintained and adds to management understanding of the role of stress in organizations.

There are extensive evidences that professionals are increasingly uncovered to a working environment that places their health at risks through workplace stress and difficulties in maintaining an efficient work-life balance (Davidson and Cooper, 1983; Greenhaus and Beutell, 1985; Burke, 1994; Dwyer, 1999). Clarke and Cooper (2000) focus on the stress of retail workers. Their study portended that occupational stress must be unconstructively perceived and subjected to insufficient coping to result in un helpful stress outcome, while the experience of stress is also moderated by a number of individual diversity variables. The primary objective of every organization is to generate surplus turnover. Turnover is a measure of extra of amount incurred over earnings over expenditure. To achieve this objective efficiently the management must create an environment in which people can work productively. Productivity is an output-input ratio within a time period with due contemplation for quality. The

ISSN 2076-9202

furthermost opportunity for rising productivity is certainly to be found in knowledge work itself and particularly in management". In common, productivity development programs are frequently aimed at the worker level. Incentive and stress management plays vital role in productivity. Even though a great deal of research has focused on the stress and its contributing factors, it seems that there is no study to examine the correlation between stress and performance. Therefore, this research aims to investigate the correlation between stress and performance among police officers in Iran. Further, given that police officers have a high income and support provided by their organization, the rate of their stress is unclear.

4. Research Method

Participants in the study included upper and lower level police officers in Iran. A total of 190 officers were selected randomly. Like previous studies (Hameed et al., 2014), the selection of the participants was according to the simple random sampling method. The Occupational Stress Inventory The revised edition of the Occupational Stress Inventory (OSI-R) was developed by Osipow (1998) and was used for this study. This questionnaire is based on 5 Linkert and the validity and reliability of that have been reported at 89% and 83 % (Osipow, 1998) Also, productivity employee questionnaire was used to measure the productivity. It is a 7 Linkirt scale which measure ability, Understanding, organizational support, feedback, motivation, credit.

Questionnaires were sent out to the police officers in Iran. Participants were required to answer the questionnaires in three weeks. In all, a total of 190 questionnaires were used in the statistical analysis.

3. RESULTS

Using SPSS, the below data show the result of productivity and occupational stress among police officers in Iran. Pearson correlation was used to analyze the correlation of these two variables.

Table I. Subscales of productivity

	Mean	S.D	N
Ability	6.20	002.	190
Understanding	5.01	2.90	190
ganization support	5.38	2.64	190
Feedback	5.42	2.90	190
Motivation	5.01	1.89	190
Credit	4.95	1.55	190
Compatibilities	4.82	1.85	190

ISSN 2076-9202

Table II. subscales of Occupational Stress Inventory

ORQ	Mean	S.D
Role Overload	51.44	10.51
Role Insufficiency	42.27	7.12
Role Ambiguity	46.15	8.79
Role Boundary	73.52	9.19
Responsibility	49.83	9.66
Physical Environment	40.86	3.53

The tables above demonstrate the results of productivity and occupational stress among 190 police officers in Iran. As it can be seen clearly, the rate of stress among the officers is not that high compared with other prior research. As such it has led to a high productivity.

Table 3 shows the correlation of productivity and occupational stress. The result indicates a significant negative correlation between these two variables.

Table III. Correlation between occupational stress and productivity

	Ability	Understanding	Organizational support	Motivation	Credit	Compatibilities	Total
Stress	0.38	- 0.2.1	0.6	-0.4	0.7	0.3	-0.63
Sig	0.06	0.03	0.04	0.02	0.12	0.26	0.01

6. Summary and Concluding Remarks

The main aim of this study was to investigate the correlation between occupational stress,and productivity among the police force in Iran. Prior research has shown that stress at work is linked to the performance and health problem (Ivancevich et al., 1990).

Gellis et al., (2004) demonstrated that the nature of the work and dealing with crises situation was the major foundation of the stress. The result of this research is in far contrast with the prior research. It is probably because of other contributing factors to the stress. As Hart and Wearning (1995) noted there are various factors that contribute to the stress and pressure of the work. Thus, probably the work experience of the officers and their good connection with their colleges and work environment let to this low amount of stress among them.

Also, the sources of the stress such as career improvement, connection at work and role in the work should be taken into account. It should be considered that the police force in Iran has been highly

ISSN 2076-9202

regarded by the public and in the society. As such, this might has been one of the factors that has alleviated the amount of pressure on the officers. Moreover, another reason of low rate of stress could be attributed to a great service and support provided for these employees such high income, free holiday packages, service for the children of the employees, discounts on many products.

The results also showed that there is a negative relationship between stress and performance. As these officers expressed a low rate of stress, it indicates that they may not have significant problem at their work performance. Also, stress management play a role in productivity. As mentioned earlier, there is a good stress management approach in the place for the police officers. In other words, the negative effect of stress can be mediated by coping (Gellis et al, 2004). In short, employees who recognize low occupational stress and high coping tend to have higher work performance. Managers conventionally have administered human resources by applying the same policies and methods to all employees, but the logical results presented here suggest that employees differ, and that the differences are manifested in perceptions of occupational stress and coping strategies. The moderator roles of coping show the effectiveness of coping strategies in the workplace (Kitaoka-Higashiguchi et al., 2003).Unquestionably in every organization, a small group of the working population suffers from stress. If the management consider stress as an individual problem and not as a management problem, then they have to meet out with the loss due to absenteeism, turn over, total cost of work-related accidents a work that is not unto the standards. The organization should manage stress positively to enhance the productivity.

7.Limitations/Implications of the Research

This study has also a number of limitations; firstly the data collected is based on a very small sample size. Secondly for data collection has been made through questionnaire which may not capture the true responses of the respondents. Apart from these Implications this research may provide insights to the Superior policeman to enhance the juniors of their subordinates.

8. Recommendations

This study recommends that the police force brings up an training plan as well as a set of other plans geared towards managing stress amongst the police officers. This would include among others putting up a branch of counseling on how to efficiently handle stress among the policemen. Also, providing the staff with good service and support can alleviate their stress. As such it is recommended that the force organizations such as army, police and so on consider this fact when it comes to distressing their employees.

REFERENCES

Anfuso D. (1994). Defusing workplace violence. Personnel Journal,73(10), 66-77.

Blix G A, Cruise RJ, Mitchell B M , and Blix G G (1993). Occupational stress among university teachers, Educational Research, 36(2). 157-169.

ISSN 2076-9202

Burke RJ (1994). Sources of managerial and professional stress in large organizations. Causes, coping and consequences of stress at work, C. Cooper and R. Payne, eds., Wiley, New York

Clarke SG and Cooper CL (2000). The risk management of occupational stress. Health Risk Soc., 2(2): 173-187.

Cooper CL and Marshall J (1978). Sources of managerial and white collar stress, John Wiley and Sons, New York.

Cox T (1978). Stress MacMillan, London. Davidson M, Cooper CL (1983). Stress and the woman manager. Martin Robertson, Oxford, U.K.

Davidson M, and Cooper CL (1983). Stress and the woman manager. Martin Robertson, Oxford,U.K.

Dwyer J (1999). Hard work never killed anyone? Works Manag., 52(1): 52–55.

Faragher E B, Cooper C L, and Cartwright S (2004). A shortened stress evaluation tool (ASSET). Stress and Health, 20, 189–201.

Fotinatos-Ventouratos, R and Cooper C (2005). The role of gender and social class in work stress,Journal of Managerial Psychology, 20(1): 14-23

Gellis Z D Kim J, Hwang SC (2004). New York State Case Manager Survey. J. Behav. Health Serv. Res., 31(4): 430-440.

Greenberg P E, Stiglin L E, Finkelstein S N and Berndt E R (1993). The economic burden of depression in 1990. Journal of Clinical Psychiatry, 54, 405–418.

Greenhaus J H and Beutell NJ (1985). Source of conflict between work and family roles. Acad. Manage. Rev., 10(1): 76–88.

Hameed M A, and Counsell S (2014). User Acceptance Determinants of Information Technology Innovation in Organisations," International Journal of Innovation and Technology Management (11:5), p 17.

Hart P M and Wearing A J (1995). Occupational stress and well-being: A systematic approach to research, policy and practice. In: P Cotton (Ed.), Psychological health in the workplace. Australian Psychol. Society, Victoria, Australia, 185-216.

Ivancevich J M, Matteson M T, Freedman S M and Phillips JS (1990). Worksite stress management interventions. Am. Psychol., 45(2): 252- 261.

Keim J (1999). Workplace violence and trauma: A 21st century rehabilitation issue. Journal of Rehabilitation, 65 (1), 16-20.

Kessler R, Bauber C, Birnbaum H G, Frank R G, Greenberg P E and Rose R M (1999). Depression in the workplace: Effects on short-term disability. Health Affairs, 18,163–171.

Kitaoka-Higashiguchi K, Nakagawa H, Morikawa Y. Ishizaki M, Miura K, Naruse Y, Kido T and Sukigara M (2003). Social support and individual styles of coping in the Japanese workplace: an occupational stress model by structural equation analysis. Stress Health, 19(1): 37–43.

Lazarus RS (1966). Psychological stress and the coping process. McGraw-Hill, New York.

Lazarus RS and Folkman S (1984). Stress, appraisal, and coping. Springer, New York.

Lu L, Cooper C L, Kao S F and Zhou Y. (2003). Work stress, control beliefs and wellbeing inGreater China – An exploration of sub-cultural differences between the PRC and Taiwan, Journal ofManagerial Psychology, 18(6): 479-510

Mattman JW (1998). Preventing violence in the workplace. Workplace Violence Research Institute. 1-5,

Pflanz S E and Heidel S H (2003). Psychiatric causes of workplace problems. In A. M. Langlieb& J. P. Kahn (Eds.), Mental health and productivity in the workplace: A handbook for organizations and clinicians. San Francisco: Jossey-Bass.

Osipow S H. (1998). A manual for the Occupational Stress Inventory Revised Edition (Professional Manual). Lutz, Florida: Psychological Assessment Resources.

Walcott-McQuigg J A. (1994). Worksite stress: Gender and cultural diversity issues. American Association of Occupational Health Nurse Journal, 42(11), 528-533.

ISSN 2076-9202

Williams S and Cooper L (1998). Measuring occupational stress: Development of the pressure management indicator. J. Occup. Health Psychol., 3(4): 306-321.

ISSN 2076-9202

THE IMPACT OF EXTERNAL ENVIRONMENTAL ANALYSIS IN THE CHOOSING APPROPRIATE COMPETITIVE STRATEGIES / ON THE APPLICATION OF THE FOUR-STAR HOTELS IN THE CAPITAL AMMAN / JORDAN

Ayman Alarmoti

http://orcid.org/0000-0002-6892-2111
Ayman.alarmoti@khawarizmi.com
Al Khawarizmi International College
Al Ain City, United Arab Emirates

ABSTRACT

The aim of this study is to identify the impact of external environmental analysis in the choosing of appropriate competitive strategies for the four-star hotel in the capital Amman.

The most prominent perceptions which the study reached to ; by using statistical methods is : their perceptions for both ; the external environment dimensions (economic environment, technological environment, competitors, customers) within its creative dimension were in a high level .

While the perceptions toward the strategy of taking the risk were in a low level .Beside to what mentioned before ;the results showed there is an impact for the external environmental analysis in choosing a competitive strategic in those hotels and there are not relevant statistical differences for the environmental analysis due to the gender , education and position .

According to the study results , some recommendations are reached to like : Training the managers on the important of adapting of the external environment analysis with its various dimensions in order to be able to choose an appropriate strategies to suit the hotel organization .

Keywords: the external environment analysis, competitive strategies and hotels.

Introduction:-

Jordan hotels sector played a prominent impact in the process of the development of tourism; because it is one of the components of the activity of Jordanian tourism, which is of very importance, where the development and prosperity in this sector to increase the numbers of tourists, and thus increase the revenues of the hotels which can expand and increase its branches; in response to global changes.

And there is no doubt that increasing branches lead to reducing unemployment and revive local regions, also contribute to the revenues from the attractions in improving the overall economic performance with the number of the beds busy in the chain as a four star in Jordan 167.442 thousand bed in 2017 to 167.592 million bed in 2016 where the rate of change of 0.1 %, which is a positive indicator, the number of beds busy in the hotel sector as a whole reached 840.938 thousand bed, this indicates the high turnout at the

ISSN 2076-9202

hotel industry..(15)(

Importance of the study :-1-

the importance of the current study highlights through talking about hotels which considered one of an essential elements in tourism industry, as well as the problem of the research appeared through limited studies which dealt with the external environmental analysis, which was one of the factor which encourage researcher to study; bridging the gap in the literature on the external environmental analysis and its impact in the choosing of competitive strategies

the importance of the study appears in two aspects :-

first: theoretically the study shows the need for supreme management in hotels to choose its strategy accurately, as this study will contribute in providing a scientific theory about variables of study , and its will give a perception about the external hotels environment to help the decision-maker in choosing appropriate information to choose the appropriate competitive .

Second practically : the study focused on hotels in Jordan which is considered one of the important sectors , a form of the prosperity of Jordanian economy, and an important factor of its development .

the study concerned by the environment as precondition to achieve the strategy goals of the hotels sector by choosing the appropriate competitive strategy , where this sector described by the absence of sufficient information, about its environment which requires giving an good perception to contribute in identifying the appropriate strategic choice .

2-The objectives of the study-:

trying to the current to achieve the following objectives:

1 . building a perception about the external environment in four star hotels.

2 .Test the impact of external environment characteristics and, competitive strategies are followed in four star hotels .

3 . providing appropriate recommendations in the light of the results of decision makers in hotel organizations, which thought that it will contribute to the strengthening the ability to choose strategies and formulate of appropriate competitive.

3-The problem of the study and its components:-

Hotels organizations face an increasing challenges as a result of changes and developments in both internal and external environment which appeared in the ability of managers to play their role to face these changes on external level, which directly affect on hotel organizations to realize that the strategic choices adopted stemming from environmental factors outside the organization. That lack of hotels understanding to the characteristics of the organization's environment may affect directly on its relationship with this environment; therefore management hotels must know and understand the influential powers in it ; all these reasons make a sense to study the hotels environment .

ISSN 2076-9202

The managers who are not able to understand the actors in the environment and trends affecting the work of the Organization, may resort to choose unsuitable strategies which is for inappropriate inconsistent with the nature of the environment and their requirements, this would affect on the performance of the Organization in a negatively , and has exposed to losses leads to failure in achieving its objectives. Thus, the purpose behind this study is the impact of external environmental analysis in the choosing of appropriate competitive strategies.

the following questions will respond the purpose of this study :-

1 .What are the perceptions of the directors of the study toward the dimensions of the external environment (the of economic environment, technological environment, competitors, and customers) for a four star Hotels?

2 .Is there an impact for external environment analysis in choosing appropriate of the competitive strategies for a four star Hotels ?

3 .Are there differences in external environmental analysis in choosing of appropriate competitive strategies due to demographic variables (gender, level of education, and position) in the four star Hotels ?

4-Hypotheses of Study :-

researcher seeks to study the impact of the external environmental analysis in choosing of appropriate competitive strategies for in hotels through the following hypothesis :

first hypothesis: there is no statistically significance impact at (a $\leq$0.05) for external environmental analysis in choosing of appropriate competitive strategies in the hotel as a four star in Jordan.

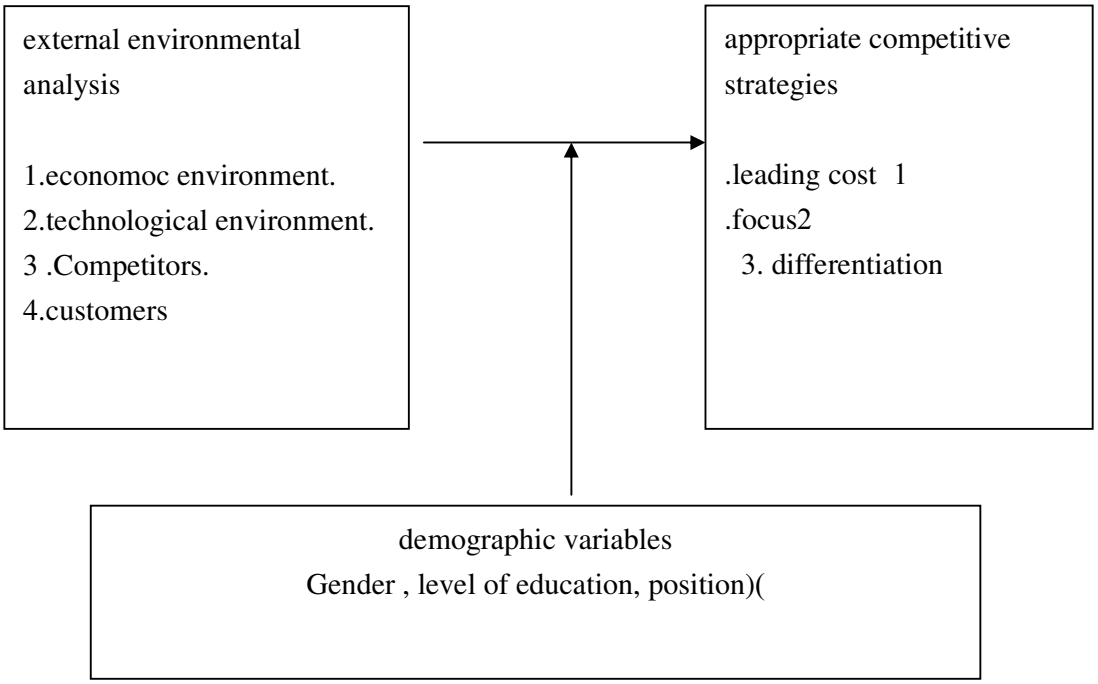
second hypothesis: there is no statistically differences at the the significance of (a $\leq$0.05) for external environmental analysis in the choosing of appropriate competitive strategies attributable demographic variables due to manager's personal directors in four star hotels in Jordan.

5-Model of the study:

Model was designed to shows variables study as following -:

Dependent variable **Independent variable**

ISSN 2076-9202



6-Limitations of study- :

the current study interested in the external environment analysis of the hotels where include the current limitations :

A. time limits : Researcher started to collect the necessary data for the purposes of this study (2016/2017).

B. place limits : study concentrated on a four star hotels in the capital Amman.

C. Human limits : included managers in the a four star hotels within four administrative names (the position of the General Director,

deputy general director, Director, Chief of Section).

7-Population of study and its sample :-

the population of study represented in four star hotels working in Jordan, registered with the Ministry of Tourism and Antiquities and the general statistics of (2016-2017) in (23) a hotel in Jordan and have been taking a sample (19) a hotel in the capital of Amman.

And the preview pane represented in those hotels from managers and who work in the top management, within the four administrative names (the position of the General Director, deputy general director, Director, Chief of Section); because they have the responsibility to make strategic decisions**.**

7.1 Methodology of study :-

The current study can be considered as analytical and descriptive study because it describes the realization of the management of the hotels importance of external environmental analysis, and also choosing appropriate competitive strategies for in a four star hotels . beside what mentions before its

ISSN 2076-9202

Analytical because the study works in knowing the impact of the external environment analysis in choosing appropriate competitive strategies . The study depends on collecting the data by using questionnaire in order to reach the objectives study :

the theoretical approach: the researcher of this study have been briefed on all various studies references and periodicals which addressed to the subject of the impact of external environment analysis in choosing appropriate competitive strategies to form a clear picture of the study .

- the method of field survey: the study has been covered population study composed from supreme management in four star hotels in the capital Amman, within four names(general director, deputy general director, Director and Chief of Section).

8-The conceptual framework and the previous studies

the successive developments of recent decades are large and spacious, especially in the area of (the goods, services, products, and information); this is what led to the development of the Administrative thought in order to cope with these developments and is keep up in all fields, as the traditional administration have become unable to face the challenges such as globalization, privatization and the emergence of digital and virtual organizations under the strong competition and increasing , environmental disturbances.(8)

From time to time these disturbances led to review strategy and evaluated it then choose the best which meets the interest of the Organization. That strategic management as a pioneering approach characterized by modern, flexibility and alone is capable of addressing the former challenges according to the distinguishing between the opportunities and threats in the external environment beside the strong and weak points of organization environment. (4). The Strategic management facilitates the decision-making process and make appropriate decisions in the light of environmental variables which threaten the existence of the Organization and survival its alive (3)

The capability of the Organization to establish a strategic database to the organization gives it the approaches to take or stay away which needs a specialized section within the organization entrusted with the data collection, compilation and analysis the conclusion; so that the organization can make strategic change. (jauch, L, R,(1984)

The interaction that resulted from the general external environment and the special external environment with each other is one of the powerful influences that affect the performance of the organization where you can not isolate the organization from the its environment, as well as affected by environmental damage of public external variables (1), and in general this effected equal for all organizations, because general laws that apply in the state, affecting all working organizations.

ISSN 2076-9202

On the other hand became a focus on measuring customer satisfaction and consumers it is of great importance when making surveys of the target markets (5). So the consumer behavior approaches have been appeared in the marketing department, which means the act that appears from the consumer during the purchase process or get a service or use of goods. (6)

As for the economic factors are one of the most important environmental factors , which has a significant impact on the performance of the organization for its work which is apprares in interest rate, economic growth, trade balance, and other inflation. (Vincze, j, w, 1986).

As well as a very important factors for organizations which should be taken considered is the technological environment where it shows the organization's capacity to take advantage in customers service and increase their well-being , in terms technology is one of the main pillars for the success of any organization if it was used positively serving its strategic objectives .also there is a important things should be taken into consideration the technology evolve and changes, updated from time to time making organizations monitor these changes to work and correspond with Moreover technology is one of the influential factors in choosing the strategy which adopted in future. (Whittington, (2002).

8.1 The appropriate Competitive strategies- :

Its is the strategies proposed by (Michel porter) to excel in performance over competitors in a given industry. And include the following strategies :-

1-leading Cost :-

Some organizations characterized by their ability to produce or sell the same products at a lower price than competitors this feature arises from the organization's ability to reduce the cost. And it has been measuring this variable depending on the paragraphs of the questionnaire (21-24).

2-Focus- :

In this strategy the organization focusing on certain segment of market or geographic area trying to meet the demands of target customers, and therefore the organization in this case aims to achieve the excellence in products or price, or both. And it has been measuring this variable depending on the paragraphs of the questionnaire (25-27)

3-differentiation :-

It Is the organization is characterized by its ability to produce products or provide valuable services to

ISSN 2076-9202

the customers so unique to all competitors, as well as the organization's ability to provide services with high skills, and providing human resources which understand the changing needs of customers. And it has been measuring this variable depending on the paragraphs of the questionnaire (28-33).

8.2 Literature review :-

First study :

Ajou Study , (2007) his study aimed to look for the impact of external environmental factors (cultural, political, technological, economic, social) one to formulate the employment strategy of workers in the four-star hotels in of Amman and Aqaba cities , where the researcher has designed and distributed a questionnaire to members the study sample (150) who were directors of departments in hotels, who numbered 224 questionnaire was distributed where (94) questionnaire were valid for analysis . the results indicated that there is influence of factors of public external environment on the employment strategy according to importance on the following order (economic environment, technological, social, cultural, political, legal) and There is influence of external environmental factors on employment strategy as following (competitors, owners, customers, employees, government policies). (12).

Second study

Alsakarneh Study , (2005) the study aimed to develop leadership strategies to achieve competitive advantage and improve the performance of the Jordanian communication companies, has been developed a model consisted from independent variables (creativity, innovation, uniqueness, take the risk, initiatives) and two dependent variables are: competitive advantage which include (differentiation, cost leadership, innovation, alliances) and performance included (improve operations, worker's trends development, improve the level of service to customers, growth and productivity), where the community composed from operating four companies in the telecommunications field (Zain, Orange, Umniah, Express) and (140) department managers were taken as a sample . The results of the study are that a relationship exists between entrepreneur leadership strategies and achieve competitive advantage and the elements of entrepreneurship , competitive advantage and performance. (11).

Third study

Zoubi and Abu Rumman study (2003) This study aimed to determine the impact of external environmental factors in determining the strategic choice for small hotels (one and two star hotels) in the city of Amman, where the study sample consisted of (41) directors on supreme management who are in two types: (21) a managers in one and two star hotels (20) directors in two star hotels. And the study indicated that the external environment factors differ in their impact on the strategic choices in small hotels. Where The study has proved that the most widely strategies used in small hotels are (focusing strategy, the incursion strategy, retention strategy, a strategy retreat or deflation). (14).

Hotel industry: the hotel industry in this time has become a unique and distinct industry having its characteristics , culture , laws , regulations and policies, the current reality shows that this industry has

ISSN 2076-9202

grown and interest from many business men , venture capitalists. Many companies in the countries of the world are interested in invest in the hotel sector to gain enormous benefits on both investors , local and global economy, as some international companies seek to manage the large hotels chains using latest construction and modern technology (7)

As well as many hotels proceeded to attract visitors and travelers to it; because they realized that travelers do not just care about the beauty of nature, external services from facilities in transportation and soon , but they take care from quality of food provided to them and the nature of the services that they want and expect to find them at the hotel which will be chosen (9) . This turnout on hotels industry creates a kind of a challenge in front of hotels, especially the four-star ones; in order to provide all the means and methods that achieve and fulfill the desire of visitors and travelers.

As for the definitions of the concept of the hotel are multiple and specially from specialists themselves determind. Hamid defines it as places prepared to tourists and defined by an order from the Minister of Tourism (2), and defined by Mr.Masere as an equipped and building to receive and stay guests, so they find the comfort and shelter, food and service for certain period of time, for specific known fee. (10).

9-The field study : deals with the field study procedures of society and the sample study, the instrument used to collect the primary data in this study, and the methods of statistical processing used in the data analysis. And then the analysis of the data personal of the members of study sample. after that the analysis and testing the hypotheses upon of study**.**

The Analysis of personal data: it deals with personal data of respondents, frequency table where data characterization, according to the following :

(1-1) Table

The distribution of the members of study sample according to the study variables

Variable	group	Frequently	Percentage
gender	male	43	%84.3
	Female	8	%15.7
level of education	High school	6	%11.8
	Diploma	14	%27.5
	Bachelor	27	%52.9
	Master	2	%3.9
	Doctorate	2	%3.9
Position	General manager	4	%7.8
	Vice of manager	5	%9.8
	Manager	13	%45.1
	Head of department	19	%37.3
Total			100%

ISSN 2076-9202

The table (1-1) shows that the vast majority of managers are males, by 84.3%, which shows that men have the leadership characteristics than females, and bear the responsibility even more.

And it found that 52.9% of the study sample at the level of educational attainment hold bachelor degree, and this means that hotels take care interest in experience employing high degrees holders, note that two of the study sample hold doctoral degrees, and six have a high school degree.

As for the position , reaching the proportion of 45.1% of the directors of departments and four general managers and researcher find the reason for this difficulty of access to general managers for their concern and frequent travel, unlike the directors of departments.

9.1 Tool of study :-

Researcher Rebuilt a questionnaire to collect the necessary data to test the study's hypotheses as contained (33) terms : where has allocated terms interest care to represent the data, the terms from (1-20) the independent variable, and the terms of the (21-33), the dependent one depending on the five-Likert scale.

Reliability 9.2

The term of Reliability indicates that the management indicators available to measure a concept that helps in assessing the quality of the scale, where the researcher distributed measurement tool on the study sample consisted of (51) directors at the four-star hotels, it was entered into the computer, and using the software (SPSS) / Cronbach's alpha coefficient shows that of the Reliability of the measure of the study variables were elevated indicate reliability, whenever the alpha coefficient is higher the measurement tool will be best. It appears in the following table.

)2-1 (Table Cronbach's alpha

Variable	Number of Questions	Cronbach's alpha
External environment	1 -20	0.80
Competitive strategies	21 – 31	0.88

Table (1-2) illustrated that the consistency of the study variables coefficients ranged between 0.80% - 0.92%, and these transactions are characterized as being suitable and meet the objectives of the current study.

9.3 Normal distribution of data test:-

) 3-1 (Table

ISSN 2076-9202

Test results (K-S) normal distribution of data study

Variable	Number	Standard deviation	Mean	K-S	significant
External environment	51	6.98	37.80	0.63	0.82
Competitive strategies	51	5.88	23.82	0.46	0.99

From the above table it is clear that the value of the test (K-S) did not reach the level of statistical significance at (a ≤0.05) or less for all the variables, this indicates that the normal distribution of data is suitable for multiple regression analysis.

Statistical processing : the use of the Statistical Package was used for Social Sciences program (Statistical Package for Social Sciences -SPSS) to perform various statistical tests, and the statistical methods that were used for testing hypotheses are as follows- :

Descriptive statistics for the study variables , the measures of central tendency and measures of dispersion have been used , to describe the answers relating to questions of the study, and judge on the hypotheses , to get a results that meets the objectives of the study and give solutions and alternatives to the problem of the study, analysis the multiple regression (Multiple Regression Analysis) in order to determine the most important variables of the independent study that have the greatest impact on the appropriate strategies in the four-star hotels and the size of this effect . also (Pearson correlation) to identify the direction of relations between dependent and independent variables. and the coefficient of determination (R^2) to identify the proportion of interpretation of independent variables to the dependent variable .then test the statistical significance of the level of reliability (Cronbach's alpha) to measure the level of consistency of the variables of the study- determine the degree of stability of the tool (And using the variance analysis (ANOVA)to determine whether there is a statistically significant differences).

10-Data Analysis:

ISSN 2076-9202

The first question, which is "What are perceptions of the sample of study (directors) about dimensions of the external environment of the four-star hotels"?

The averages and standard deviations were found for paragraphs (1-20), and of the following criteria was adopted to determine the degrees of ranks (low, medium, high) .the low degree was less than 2.33, medium was from 2.34 - 3.66, the high was more than 3.67, the table shows the results .

(2-1) Table

. average and standard deviations of the director's responses for economic environment

Question	Average	Standard deviation	degree	Rank
1. the process of Choosing an appropriate strategy affects by prevailing economic situation.	4.18	0.69	High	1
.4 high level of price competition in the hotel sector leads to improve the level of services provided to customers	4.16	1.01	High	2
5.changing taxes on hotels affect the chosen strategy type	4.12	0.59	High	3
.6 changing hotel's equipment prices rates contribute to change the strategies	3.94	0.76	High	4
3.the Continuous increasing of the operating hotel's cost's lead to possibility of loss	3.69	1.07	High	5
2. the Low level of individual income reduces their reservations in the hotel	3.49	1.14	Medium	6
Average	**3.93**	**0.88**	**High**	

table (2-1) explains that averages ranged between (4.18 - 3.49) and the paragraphs were arranged in descending order according to the averages since paragraph (1) occupied the first arrangement, which provides that " the process of Choosing an appropriate strategy affects by prevailing economic situation." and finally paragraph (2) occupied the last arrangement, which provides that " Low individual income level reduces the occupancy rate at the hotel " which averaged by (3.49) and standard deviation (1.14).

Table (2-2)

averages and standard deviations of the responses of the managers of the sample for study for technological environment dimension

Question	Average	Standard deviation	degree	Rank

ISSN 2076-9202

9. used technology in hotels contribute the quality of services provided which provided.	4.39	0.57	High	1
8.Hotel keep pace with technology developments in the framework of its services	4.22	0.50	High	2
7. the technology characterized which the hotel management operations depends on characterized by modernity which suitable to the Strategy .	4.18	0.48	High	3
10. The hotel has a high-quality technological equipment compared with competitors	4.02	0.81	High	4
.11 . the technological changes and its development impact in the regarding strategic choice	3.98	0.68	High	5
Average	**4.16**	**0.61**	**High**	

table (2-2) explains that averages ranged from (4.39 to 3.98), where the paragraph (9) occupied " used technology in hotels contribute the quality of services provided which provided." first order with the average (4.39) and deviation standard (0.57) where paragraph (11) came last, which states that " the technological changes and its development impact in the regarding strategic choice " with average (3.98) and a standard deviation (0.68). And that the average for a variable reach 4.16 this rate within a high level.

Table (2-3)

average and standard deviations of the responses of the managers of the sample for study for competitors

Question	Average	Standard deviation	degree	Rank
13. Hotel constantly seeks to know strengths and weaknesses points for it has been rivals	4.24	0.74	High	1
12. hotel environment characterized by the	4.14	0.66	High	2

ISSN 2076-9202

presence of a large number of competitors.				
15. Knowledge of competitors' strategies is a main factor for the development of strategic plans for hotel	4.02	0.76	High	3
14. Hotel offers multiple alternatives of customer services have based on his assessment of the strengths and weakness points of competitors.	4.00	0.77	High	4
16. changing competitive methods by competitors affects change the current strategy of the hotel	3.88	0.79	High	5
average	**4.06**	**0.74**	High	

table (2-3) explains that averages ranged between (4.24 - 3.88) where paragraph (13) ranked, the first arrangement, which provides that " Hotel constantly seeks to know strengths and weaknesses points for it has been rivals," at average (4.24) and a standard deviation (0.74) and paragraph (16) came in the final standings, which states that " changing competitive methods by competitors affects change the current strategy of the hotel " at average (3.88) and a standard deviation (0.79). and the overall average of the variable was 4.06, and it in high level.

Table (2-4)

average and standard deviations of the managers of the sample for study for customers dimension

Question	Average	Standard deviation	degree	Rank
20.Customer satisfaction is a strategic goal for the hotel .	4.65	0.56	High	1
17. The hotel seeks to the development in the provision of services fitting with the needs and expectations of customers	4.41	0.57	High	2
18. communication with customers has considered a strategic thing in long-term	4.31	0.73	High	3

ISSN 2076-9202

19. changing needs and desires of customers is reflected in the strategy of hotel	4.16	0.70	High	4
average	**4.38**	**0.64**	**High**	

table (2-4) explains that averages ranged between (4.65 to 4.16) where paragraph came in No. (20) the first arrangement, which provides that " Customer satisfaction is a strategic goal for the hotel ." with average (4.65) and a standard deviation (0.56) Finally, paragraph (19), which states that "changing needs and desires of customers is reflected in the strategy of the hotel." average (4.16) and a standard deviation (0.70). and that the overall average of the variable was 4.38 within a high level.

The results indicates that the overall average of the dimensions of the external environment of the four-star hotels branches (economic environment, technological environment, and perceptions about competitors, and perceptions about the customer) was within high level.

"The second question, which is "What is the reality of choosing appropriate competitive strategies in the four-star hotels"?

Table (2-5)

Average and standard deviations of the responses of managers for competitive strategies dimension (leading cost)

Question	Average	Standard deviation	degree	Rank
22. Hotel management depend on research and development to reduce costs	4.10	0.67	High	1
24. The hotel management takes consideration the consumer price sensitivity before pricing services.	3.96	0.77	High	2
23. Management of the hotel focus on the price to overcome competitors in the competitive environment	3.86	0.86	High	3
21. Hotel price are lower than competitors for the services provided.	3.65	0.87	Middle	4
Average	**3.89**	**0.79**	**High**	

ISSN 2076-9202

(2-10) explains that averages ranged from (3.65- 4.10) and the paragraphs were arranged in descending order according to the averages in terms of paragraph No. 22 ranks in the first arrangement, which provides that Hotel management depend on research and development to reduce costs " at average (4.10) and a standard deviation (0.67). Also, paragraph (24) comes in second place and which provides " The hotel management takes consideration the consumer price sensitivity before pricing services." with average (3.96) and a standard deviation (0.77).

As well as of paragraph (23) comes in third place, which states "the hotel management focuses on the price to overcome competitors in the competitive environment" with average (3.86) and a standard deviation (0.86) and paragraph (21) comes last ranking, which states " Hotel price are lower than competitors for the services provided " with an average (3.65) and a standard deviation (0.87). And that the overall average of the variable was (3.89) and is within a high level.

Table (2-6)

Average and standard deviations of the responses of a sample study managers on the competitive strategies variable (focusing)

Question	Average	Standard deviation	degree	Rank
27. The hotel management is working to develop new services to a particular segment of customers.	3.86	0.87	High	1
25. The management of the hotel choose a particular part of the market to meet its requirements	3.67	0.97	High	2
26. Hotel management focus on specific geographical area because the high cost of promotion	3.47	1.12	Middle	3
Average	**3.66**	**0.986**	**Middle**	

It is shown in Table (2-6) that averages ranged from (3.86-3.47) and the paragraphs were arranged in descending order according to the averages since has paragraph (27) occupied the first arrangement, which provides for "the hotel management is working to develop new services to a particular segment of customers." With average (3.86) and a standard deviation (0.87). Paragraph (25) comes second in the order in which states, "The management of the hotel chooses a particular part of the market to meet its requirements," with average (3.67) and standard deviation (0.97). Paragraph (26) comes last in the order in

ISSN 2076-9202

which states " Hotel management focus on specific geographical area because the high cost of promotion " with an average (3.47) and a standard deviation (1.12) and overall average for a variable is (3.66) which is within the average level.

Table (2-7)

Average and standard deviations of the responses of a sample study managers for competitive strategies (differentiation)

Question	Average	Standard deviation	degree	Rank
28. The hotel management offers special services to customers.	4.29	0.58	High	1
30. Hotel management is interesting to providing services to customers in high skilles	4.25	0.59	High	2
29. Hotel management adopts strict controls systems on the services provided .	4.18	0.56	High	3
33. The hotel management provides a distinctive human capacities to understand the needs and desires of customers	4.14	0.75	High	4
31. hotel management provides unique services to create a great interest by customers.	4.10	0.68	High	5
32. Hotel management is characterized by the adoption of the computerization of its operations in the services provided to customers	4.08	0.72	High	6
Average	**4.17**	**0.64**	**High**	

Its Shown in Table (2-12) that averages have been ranged between (4.29 - 4.08) and the paragraphs were arranged in descending order by averages, where paragraph(28) ranking first " The hotel management offers special services to customers." and an mean (4.29) and a standard deviation (0.58), as paragraph (30) comes second which states "Hotel management is interesting to providing services to customers in high skilles " with an average (4.25) and a standard deviation (0.59).

ISSN 2076-9202

Paragraph (29), which comes in third place, which states " Hotel management adopts strict controls systems on the services provided . " with average (4.18) and a standard deviation (0.56). Paragraph (33), which comes in the fourth position, " The hotel management provides a distinctive human capacities to understand the needs and desires of customers " with an average (4.14) and a standard deviation (0.75) as well as the paragraph (31) comes in fifth provides " hotel management provides unique services to create a great interest by customers. " with an average (4.10) and a standard deviation (0.68).
Paragraph (32) has been ranked in the last , which provides that " Hotel management is characterized by the adoption of the computerization of its operations in the services provided to customers," with average (4.08) and a standard deviation (0.72). And that the overall average of the variable was (4.17), which is in high level.

11-Test the hypotheses:-

The first hypothesis: "there is Not an effect with statistically significance at the level of ($a \leq 0.05$) for external environment Analysis in choosing an appropriate strategies in the four-star hotels in Jordan".
To answer this hypothesis multiple regression analysis was done between the external environment and the choosing an appropriate competitive strategies in the four-star hotels in Jordan. The following table shows the results associated with that.

Table (3-1)

Regression analysis for external environment in choosing an appropriate strategies in the four-star hotels in Jordan.

)Sig(	)T(	) ßeta (	) R^2(	) R(
0.00	4.57	0.53	0.28	0.53

Its Clear from the table above that the external environment in choosing appropriate strategies in the four-star hotels in Jordan reach to (0.53) which the value of (Beta), and Statistical value (T) reachs to (4.57) which is statistically significance at the level of ($a \leq 0.05$), so there is a statistically significant impact at the level ($a \leq 0.05$) of the external environment in choosing appropriate strategies in the four-star hotels in Jordan. We also note that the ratio interpreted by external environment using appropriate strategies reachs to 28% of the total variance. And to identify the impact of each dimension of the external environment dimensions the (Beta) values and (T) the results were found appear in the following table

Table (3-2)

the impact of dimensions of the external environment on choosing an appropriate competitive strategies in the four-star hotels in Jordan.

	VIF	Tolera	Sig.	T	Standardized	Unstandardized

ISSN 2076-9202

		nce			Coefficients	Coefficients	
					Beta	Std. Error	B
constant			0.00	6.99		23.12	161.62
Economic environment	1.44	0.70	0.41	-0.83	-0.12	0.73	-0.60
Technology environment	1.25	0.80	0.13	-1.55	-0.22	0.91	-1.41
Competitors	1.67	0.60	0.05	-1.98	-0.32	0.89	-1.76
Customers	1.33	0.75	0.80	-0.25	-0.04	1.10	-0.27

From the table above it is clear that competitors dimension has reached the statistical significance level, as the value of (T) reaches -1.98 at level of significance ($a \leq 0.05$) and less. The rest of the variables did not reach the value of (T) .

The second hypothesis: "There were no statistically significance differences at the level ($a \leq 0.05$) of the impact of external environmental analysis in choosing an appropriate competitive strategies are attributable to demographic variables and managers personality for four-star hotels in Jordan".

1-variable gender

Table (3-3)

Test results (T) of the difference in the appropriation strategies refer to variable gender

Strategy	gender	Means	Standard deviation	)T(	Sig)(
Competitiveness	Male	24.09	6.07	0.76	0.45
	Female	22.38	4.78		

Its shown from the table (3-3) that the value of (T) did not reach statistical significance at ($\alpha \leq 0.05$), so there is no statistically significance differences at the level of significance ($\alpha \leq 0.05$) for the impact of environmental analysis in choosing strategies appropriate refer to gender.

-A variable level of education 2

Table (3-4)

Results of one-way analysis of variance of the difference in the impact of the external environmental analysis in choosing appropriate strategies refer to the variable educational level analysis

ISSN 2076-9202

strategy	Source of variation	Sum of squares	Degrease of freedom	Mean square	(F)	(Sig)
Competitiveness	Between group	19.48	4	4.87	0.13	0.97
	Within group	1707.93	46	37.13		
	Sum	1727.41	50			

Its shown from the table (3-4) that the statistic value of (F) did not reach the level ($\alpha \leq 0.05$), so there is no statistically significance differences at the level ($\alpha \leq 0.05$) for the difference in choosing appropriate strategies refers to level of education .

variable of position3-

Table (3-5)

Results of one-way analysis of variance of the difference in the impact of external environmental analysis in choosing an appropriate strategies refer to the position variable

strategy	Source of variation	Sum of squares	Degrease of freedom	Mean square	(F)	(Sig)
Competitiveness	Between group	33.09	3	11.03	0.31	0.82
	Within group	1694.33	47	36.05		
	Sum	1727.41	50			

Its shown from the table (3-5) that the statistic value of F did not reach the level ($\alpha \leq 0.05$), so there is no statistically significance differences at the level ($\alpha \leq 0.05$) for the difference in choosing an appropriate strategies due to position.

results discussion associated with the first hypothesis, which states, " there is No statistical significant effect is at the level ($\alpha \leq 0.05$) for the external environment analysis in choosing of the external competitive strategies in the four-star hotels in Jordan.

The results indicates that the external environmental analysis relationship to the choice competitive strategies in the four-star hotels in Jordan amount by (0.72), and the statistical value of T reaches 7.20

ISSN 2076-9202

which is statistically significance at the level (α≤ 0.05), so there is a statistical significance effect at (α ≤ 0.05) of the external environment in choosing an appropriate strategies in the four-star hotels in Jordan. This refers to using of competitive Strategic includes being creative and risk taking is which factors can be determined in the light of the available resources in the internal environment, or resources in the external environment such as the state of the market, the nature of the services offered, the nature of the service activities provided by hotels in the market to its customers, in some cases, the hotel needs to get out of what is familiar and provide new services, where it depends on the nature of external and internal resources of the hotel.

The Discussion of the results associated with the second hypothesis, which states that" no statistical significance differences at the level (α ≤ 0.05) to the impact of external environmental analysis in choosing an appropriate competitive strategies attributed to demographic variables and managers personality of the four star hotels in Jordan"

The results indicate that the statistical value is (-0.09), which is not statistical significance at the level (α ≤ 0.05), so there is no statistical significance differences at the level (α ≤ 0.05) of the impact of external environmental analysis in choosing an appropriate competitive strategies refer to the gender of managers of the four-star hotels in Jordan .

Researcher justifies this result that the gender of the employee does not play a key role in the choice of strategies and public policies that consider as framework of hotels, but these strategies and policies identified in the framework of public administration and within the existing expeience its Also found that the statistical value (0.16), which is not statistical significance at the level (α ≤ 0.05), so there is no statistical significance differences at the level (α ≤ 0.05) of the impact of external environmental analysis in choosing an appropriate competitive strategies refer to the educational level of managers of the four-star hotels in Jordan.

And the researcher explains this result that the educational qualification of the manager does not play a key role in the choosing an appropriate strategies that framework hotels control, but these strategies identified in the framework of the Organization's management, in addition to receiving managers specialized professional determined part of the hotel work and mechanisms of its implementation, as well as what individual has from qualification which is partly contributed .

And The statistical value reaches (0.10), which is not statistical significance at the level (α ≤ 0.05), so there is no statistical significance differences at the level (α ≤ 0.05) of the impact of environmental analysis in choosing an of appropriate strategies refers to position of managers of the four-star hotel in Jordan.

Researcher explains this result that the position puts Hotel Policies under the regional policies of the hotel. The statistical value reaches (2.19), which is not statistical significance at the level (α ≤0.05), so there is no statistically significant differences at the level of significance(α ≤0.05) of the impact of external environmental analysis in choosing an appropriate competitive strategies refers to the position for four-star hotel managers in Jordan.

12-Conclusion of the study :-

ISSN 2076-9202

1.the overall average of the dimensions of the external environment of the four-star hotels: (economic environment, technological environment, and perceptions about competitors, and perceptions about the customer) was in high level**.**

The results shows that there is an impact of the environmental analysis in choosing of external competitive strategies in the four-star hotels in Jordan.

.3The results shows that there is no statistical significance differences at the level($\alpha \leq 0.05$)the impact of external environmental analysis in choosing an appropriate competitive strategies due to the (gender, educational level, position) for hotel managers in four-star in Jordan.

Recommendations :

1.Managers need to realize that the strategic options that the organization would like to be adopted must be stemming from the need of its the external environment to perform its role

2.conduct a comparison between the Jordanian hotels and regional ones in choosing an appropriate competitive strategies.

References

Books

1-Jawad, Shawki Naji, Alstratej management, Oman, Dar Al-Hamed for Publishing and Distribution, the first edition,, (2000) p. 172

2-Hamid Rajab, the art of managing hotels, hospitals, Cairo, the first edition, (2005) pp. 118.

3-Haider, Younis, strategic management for institutions and companies, Damascus, educational institution Dar Integrated Publishing and Distribution, First Edition, (1999) pp. 142.

4-League, Zechariah, strategy and operations management concepts and case studies, Oman, Dar Yazouri for publication and distribution, Arabic edition, (2005), p. 17.

5-obidat, Muhammad, contemporary marketing management, behavioral entrance, Oman, Dar Wael for Publishing and Distribution, First Edition, (2006) pp. 452.

6-obidat, Muhammad, consumer behavior strategic entrance, Oman, Dar Wael for Publishing and Distribution, Third Edition (2001), p. 13.

7-Ali, Muhammad Amin, hotel management and raise the productivity efficiency, Oman, Dar Wael for Publishing and Distribution, First Edition, (1998) p. 27.

8-Ghalibi, Tahir Idris Wael, strategic management, Oman, Dar Wael for Publishing and Distribution, First Edition, (2009), p. 27.

9-Kamhiyah, Walid, hotel management, Oman, initially publishing house and distribution, the first edition, (2008) pp. 28.

10-The Egyptian, Ahmed, hotel management, specialized facilities management chain, Cairo, young University Publishing and Distribution Corporation, First Edition, (1998), p. 29.

ISSN 2076-9202

11-Alsakarneh, Bilal, leadership and its role in achieving competitive advantage and improve the performance of telecommunications companies in Jordan strategies, Ph.D. thesis, unpublished, (2005), Amman Arab University.

12-Ammar El-Ajou, the impact of external environmental factors on the drafting of the employment of workers in the five and four-star hotels in the cities of Amman and Aqaba strategy, Master Thesis, (2007), Amman Arab University.

13-Hassan Al Zoubi and Asaad Abu Rumman, the impact of external environmental factors in determining the strategic option, Empirical Study in hotel organizations star and two star category, Yarmouk Research, a series of human and social sciences, (2003) Volume 19, Number (4 / B. (

14-Statistical Bulletin, Ministry of Tourism and Antiquities - 2010-2011 -, (the Department of Statistics, 2009

15-Glueck , w, f , jauch , L, R ,(1984), Strategic management and business policy, MC graw hall , Second edition.p95.

16- Higgins , j, M , Vincze , j , w,(1986) Strategic management and organizational policy text and cases , thired edition .p55.

17-Pettigrew , A , Thomas , H , Whittington , (2002) , Handbook of strategy and management , contribution for pavitt , keith chapter 16,Sage publication ,p345.

ISSN 2076-9202

CORPORATE GOVERNANCE AND FIRM PERFORMANCE USING GMM

List of Authors

Shahzad Hussain

PhD Scholar, Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST), Islamabad

Lecturer, Army Public College of Management & Sciences

Email:shahzadhussainpeace@gmail.com

Tanveer Ahmad

PhD Scholar, Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST), Islamabad

Lecturer, Army Public College of Management & Sciences

Email: tanveerah87@gmail.com

Shoaib Hassan

PhD Scholar, COMSATS Institute of Science and Technology, Islamabad

Lecturer, Army Public College of Management & Sciences

Email: shoaibhasan83@yahoo.com

Abstract

The study examines the empirically the linkage between Corporate Governance and firm performance GMM through Arellano-Bond Dynamic Panel-Data estimation technique**.** For this purpose, both the accounting and market based proxies of firm performance i.e Net Profit Margin, Return on Equity, Market Value of Equity, Market Value Added and Tobin's Q were used. Whereas ten Corporate Governance proxies were used i.e. Board Independence, Board Meetings, CEO duality, Concentrated Ownership, Institutional Ownership, Managerial Ownership, Big 5 Ownership, Audit Quality and Audit Committee Composition using the sample of 207 non-financial firms from 2003-2014. The Full-Sample as well as Industry analysis reveals that board size, board independence, board meetings, concentrated ownership, institutional ownership and audit committee significantly affect the firm performance. Further, Market Value of Equity is found to be the most suitable measure of firm performance.

Keywords: Corporate Governance, Firm Performance, Market Value of Equity

1. Introduction

The collapse of gigantic business corporations such as Enron, World Com, Tyco etc shattered the investor confidence on the equity markets around the globe. Similarly, the sophisticated investors raised serious reservations over the fragile financial system. This situation fetched an intensive urgency to instigate a

ISSN 2076-9202

standard Code of Corporate Governance (hereafter CCG). As sequel, the Sarbanes-Oxley act was introduced in United States to ensure transparency and financial disclosure of the firm for the protection of shareholder's interest.

The first code of corporate governance was established in 1999 by OECD to reduce the agency problem and improve the protection of shareholders' rights. The Agency theory established the relationship between management of the firm known as agent, and shareholders of the firm, known as Principal. The theory suggested that agent needs to be fairly compensated to serve the best interest of principal (Fama & Jensen 1983).

These extremely critical interconnected anomalies enforced the establishment of governance mechanism for the listed firms in Pakistan. The corporate governance code covers the keys aspects such as board composition, ownership structure and audit quality (Kamran & Shah, 2014). The previous research studies have shown the inconclusive causal affect of corporate governance on the firm performance (Akbar, Hughes, El-Faitouri & Shah, 2016). Firm performance refers to optimal utilization of the available financial resources to create a greater appetite to grab future opportunities (Ali Shah, Butt, & Hassan, 2009). The empirical studies like Akbar, Hughes, El-Fatouri & Shah (2016), Fama & Jensen (1983) and Jensen (1986) argued that the strict observance of corporate governance practices attract the rational investors which stimulate the trading activity of financial markets. As a result, stock prices move upwards from current state as per Managerial Signaling theory. Beiner, Drobetz, Schmid, and Zimmermann (2006) and Weir & Laing (2000) suggested that corporate governance has insignificant influence on the firm performance i.e. governance practices are impudent to firm performance.

Theorists argue that the problem of endogeneity exist between the corporate governance and firm performance i.e. better corporate governance compliance leads to better firm performance. Likewise, better firm performance results in the good governance practices. The previous empirical studies have used least square regression or panel regression which is subject to the problem of endogeniety. The current research contributed to the literature using Generalized Method of Moments (GMM). This advance statistical technique caters the problem of endogeneity. The problem of endogeneity arises on account of unobservable heterogeneity, firm fixed effect and simultaneity dynamic endogeneity.

2. Literature Review

2.1.1. Agency Theory

The growth of business organizations has extended the scope of work beyond the capacity of managers. The lack of management control has resulted in the instigation of agency problem (Muth & Donaldson, 1998). The goal alignment issue between the shareholders and managers has been the cornerstone of agency theory and is considered as the most popular approach in academic literature (Hermalin & Weisbach, 2001; Jensen & Meckling, 1979). The agency theory suggests that the opportunistic behaviour of the managers must be restricted to safeguard the interest of owners. Moreover, the management should be controlled to reduce their personal interest which may arise at the expense of organizational profitability (Muth & Donaldson, 1998). According to Agrawal and Knoeber (1996), this conflict of interest can be reduced by several techniques such as employee stock option plans, increasing the block-holders and institutional investors, participation of non-executive directors, debt covenants etc. The

ISSN 2076-9202

board composition is an effective governance tool which intends to align the interest of principal and agent through the monitoring and control mechanism (Kang, Cheng, & Gray, 2007). The supervisory role of the board empowers the directors to monitor the performance of managers and devise carrot and stick policies accordingly (Shivdasani & Yermack, 1999). Similarly, the debt covenants can be used to minimize the agency issue by stimulating the monitoring role of creditors (Agrawal & Knoeber, 1996). In short, the managers are opportunists and their personal interest overcome the interest of the organization. Consequently, the board of directors should be competent enough to restrict the managers and make them act in the best interest of stockholders.

2.1.2. Stewardship Theory

Contrary to the agency theory, the stewardship theory presumes the managers as 'stewards' instead of being self-centered (Muth & Donaldson, 1998). The theory suggests that that manager may have different motives other than their self interest. Therefore, it is assumed that the conflict of interest may not be the inherent factor when ownership is separated from control. According to Muth and Donaldson (1998), the theory identifies certain non-financial incentives to stimulate the managers behaviour which have been ignored by the agency theory such as appreciation, the internal satisfaction and recognition. In short, the stewardship theory presumes that the managers are dependable and perform their duties without fail for the shareholders wealth maximization. Therefore, the board must have a considerable representation of the executive directors for better control and effective decision making (Kiel & Nicholson, 2003).

2.2 Board Structure and Firm Performance

The board of directors is the supreme authority for making decisions in the corporations. The primary role of the board is to enhance the shareholders return by improving the firm performance. Moreover, it effectively monitors and controls the managerial functions (Ahmed Sheikh & Wang, 2012). Majority of the previous studies have failed to reach a unanimous decision regarding the association between the board size and firm performance. Some of these studies are in accordance with agency theory; for example, Uadiale (2010), Jackling & Johl (2009) and Belkhir (2009) suggested a significant positive relationship between the size of board and firm performance. Conversely, Rashidet al. (2010), De Andres, Azofra & Lopez (2005) and Yermack (1996) indicated the negative association between board structure and performance of firm. Larger boards are generally ineffective because it is difficult for them to reach a consensus. Similarly, the lack of expertise and commitment of the board members reduces their control over management.

When the CEO and chairman of any corporation is a single individual, the phenomenon is known as CEO duality. Most of the previous research studies have analyzed the impact of combined leadership function on the financial performance of corporations. The agency theory augments the two-tier structure i.e., segregating the positions of CEO and chairman, to amplify the independence for better supervision and control resulting in better firm performance (Jensen, 1993). The CEO duality effects the decision

ISSN 2076-9202

making giving rise to agency problem. Hence, it is not encouraged by the policy makers. The literature also suggests that when both positions are held by a single person, the effectiveness increases because of interest alignment. Moreover, the restriction on CEO duality is positively perceived by the market (Yermack, 1996). Conversely, separation between CEO and chairman positions is discouraged by stewardship theory. It is argued that effectiveness is achieved by business organizations when decision making is done by a single person (Dalton & Kesner, 1987; Donaldson & Davis, 1991). Likewise, the CEO duality helps to reduce the communication barrier between the CEO and chairman, thus minimizing the contradiction and disagreement in decision making.

The board independence i.e. percentage of independent directors to total directors has been considered as an integral determinant of financial performance. Weisbach (1988) suggested that corporations with outside directors perform better than their counterparts. Further, board independence is positively associated with firm performance (Anderson, Mansi, & Reeb, 2003; Mura, 2007). The basic reason for this positive relationship is based on the fact that presence of independent directors ensures board independence by unraveling supervision and execution of tasks. Moreover, the association between managers and stockholders can be improved by resolving the internal conflict of interest. In the same vein, the independent directors reduces communication barrier between inside directors and shareholders resulting in better corporate performance (Marashdeh, 2014). In contrast, Bhagat and Bolton (2008) found a negative relationship between number of outside directors and firm performance. Since the non-executive directors have more expertise and knowledge as compared to the executive directors therefore they play an effective role in implementation of corporate governance practices. Hence, it is anticipated that stock market response is positively associated with board independence (Brickley, Coles, & Terry, 1994).

Most of the previous research studies such as Perry and Shivdasani (2005), Ameer, Ramli & Zakaria (2010) and Uadiale (2010) have augmented a positive relationship in accordance with agency theory, whereas some of them found insignificant association between independent directors and firm performance (De Andres et al., 2005; Hermalin & Weisbach, 2001; Kajola, 2008 and Peng, 2004). The inclination towards the presence of non-executive directors is based on the agency theory (Dalton, Daily, Ellstrand & Johnson, 1998). Since the non-executive directors are not influenced by inside directors they are in a better position to exercise the monitoring and control function (Fama & Jensen, 1983). Moreover, unlike executive directors, the outside directors are generally tuned to make unbiased decisions because they are trivially affected by results (Alix Valenti, Luce, & Mayfield, 2011). Nonetheless, executive directors are deemed to be more supportive from the perspective of stewardship theory. Their professionalism, expertise, capabilities and acquaintance with the decision making of CEO makes them a better choice for evaluating the managerial function (Muth & Donaldson, 1998). Generally, from the perspective of stewardship theorists, executive directors are more productive in betterment of firm performance than non-executive directors because insiders have hands on expertise and availability of true and fair information for the better decision making.

ISSN 2076-9202

The board effectiveness can be measured by using the proxy of number of meetings held in a year. The literature suggest that firms with higher number of board and audit committee meetings are less likely to face earnings management issues (Xie, Davidson, & DaDalt, 2003). The prior research has documented mixed results while analyzing the relationship between board meeting frequency and firm performance. Vafeas (2003) analyzed the increase in firm performance due to higher frequency of board meetings. However, Jackling & Johl (2009) and De Andres et al. (2005) found insignificant association between board meetings and corporate performance. According to Conger, Finegold & Lawler (1998) the board effectiveness is directly proportional to the time spent on board meetings. Therefore, board meeting frequency is used as a measure to monitor the management and evaluate board effectiveness. Francis, Hasan & Wu (2012) suggested a positive association between board meetings and firm performance during financial crisis. Nonetheless, Fich and Shivdasani (2006) argued that the presence of directors decreases with increase in the board meeting frequency, which results in negative impact on firm performance. The results of their findings suggested that board effectiveness decreases with the increase in cross directorships of outside directors. Since the directors become busy they rarely attend the board meetings.

2.3 Ownership Structure and Firm Performance

The ownership structure of a firm has a greater contribution towards it's performance. Emprical studies such as Claessens & Djankov (1999) argued that concentated ownership has a positive association with firm performance. Likewise, Nguyen (2011) explored the causal relationship and concluded that ownership concentration has positive effect on firm performance. Similarly, McConnell & Servaes (1990) explored that institutional investment increases firm performance.

The structure of ownership either weakens or strengthens the relationship between shareholders and management. In case of scattered ownership, management has serious threat of insecurity from outside shareholders. This situation gives rise to agency problem (Jensen & Meckling, 1976). Nevertheless, concentrated ownership minimizes the conflict between principal and agent. Agency theory suggests that majority shareholders have the will and competency to oversee managerial function and keep the management motivated to serve best interest of shareholders. Thus, the dispute of principal and agent is shifted towards conflict between majority shareholder and minority shareholder (Claessens & Yurtoglu, 2013; Hussainey & Al-Najjar, 2012).

Empirical studies such as Sarkar & Sarkar (2000); Faccio & Lang (2002) and Smith (1996) suggested a positive effect of majority shareholders on firm performance. Conversely, Agrawal & Knoeber (1996) and Short & Keasey (1999) observed that concentrated structure of ownership has no statistically significant role to either improve or destroy firm performance. However, Andreou, Louca &Panayides (2014); Huang, Hsiao & Lai (2007) and Pound (1988) were unable to determine whether concentrated ownership structure contributes in a positive or negative way to firm performance.

The board ownership would have positive effect on firm performance on account of incentive alignment effect. According to incentive alignment effect, board of directors would be motivated to reduce the principal-agent conflict due to increasing proportion of shares owned by them (Jensen & Meckling, 1976).

ISSN 2076-9202

In support of the said argument, empirical studies such as Huang et al. (2007); Sarkar & Sarkar (2000) and Yermack (1996) found that increase in board ownership enhance firm performance by reducing the agency cost.

Nonetheless, managerial ownership reduces firm performance. The basic proposed rationale is that manager cum shareholders provide minimal level of information regarding their internal affairs. This would trigger "asymmetric information" regarding their corporate governance practices. This situation may involve the management in moral hazard (Holderness, Kroszner, & Sheehan, 1999; Hussainey & Al-Najjar, 2012; Morck, Shleifer, & Vishny, 1988)

Contrary to above discussion, Demsetz (1983) and Fama & Jensen (1983) concluded that managers act in the best interest of shareholder wealth even with small proportion of shareholdings due market discipline. However, Randøy, Down & Jenssen (2003) found no significant effect of managerial ownership on firm performance.

The existence of institutional investors in board of directors is preferred by majority of stakeholders (Ullah, Ali, & Mehmood, 2017). Minority share holders feel secure in the presence of institutional investors due to institutional activism. Therefore, presence of institutional investors reduces agency cost up-to large extent (Cornett, Marcus, & Tehranian, 2008). The high level of institutional involvement in firm operations yield high performance. In addition, their presence reveals a positive signal to the market participants which increase the liquidity of stock as well as market value of firm. Institutional investors may act as intermediaries between minority and majority shareholders which has positive implications.

2.4 Ownership Structure and Firm Performance

The audit committee is primarily concerned with the accuracy and reliability of financial information before the its disclosure to the stakeholders. The committee opinion enhances the credibility of financial statements. Thus sufficient number of independent directors are required to improve the efficiency and effectiveness of audit committee (Borlea, Achim, & Mare, 2017). Lin & Chang (2012) argued that independent directors and audit committee magnify the firms' financial performance. Likewise, Hsu & Wu (2014) and Cadbury (1992) suggested that compulsion of audit committee is another suitable measure to protect shareholders' interest by improving transparency and accountability across the board. Similarly, Wild (1994) observed a positive response of rational investors on account of audited financial disclosure. The opinion of Big-4 audit firms is widely acceptable to all stakeholders. Empirical studies such as Dasilas & Papasyriopoulos (2015); Mansi, Maxwell & Miller (2004) and Pittman & Fortin (2004) proved that Big-4 transparent audit has a positive effect on financial performance of corporations.

In addition, external auditors are considered as critical part of monitoring system. In UK, external auditors provide consultancy in portraying the true and fair picture of business organizations. Financial reporting council particularly focuses on the independence of auditor. DeFond, Raghunandan & Subramanyam (2002) argued that independent auditors improve the credibility of financial disclosure that onward leads to remarkable firm performance. Colbert & Jahera (1988) recommended that audit fee is part of monitoring activity and feedback must be shared with shareholders. Thus audit fee resembles the agency cost. Schroeder & Hamburger (2002) argued that non-audit services would provide a better understanding of essential elements of operations to external auditors.

ISSN 2076-9202

3. Methodology

The study investigates the effect of corporate governance on firm performance by analyzing a sample of 206 Non-Financial firms from 2003-2014 listed on Pakistan Stock Exchange (PSX) using six firm performance and ten corporate governance proxies, detail of which are in table 2. Moreover, current research analyzed the relationship using GMM through Arellano-Bond Dynamic Panel-Data estimation technique. This method is useful to curtail the problem of endogeneity which exists between the corporate governance and firm performance. Further, the Arellano-Bond Dynamic regression also minimizes the problem of unobservable heterogeneity. Previous studies such as Akbar, Hughes, El-Fatouri & Shah (2016) and Roodman (2006) suggested that ordianry least square (OLS) regression and Random Effect Fixed Effect regression is subject to the question of generalizability. As a sequel, the study used industry wise analysis by considering market value of equity as the proxy for firm performance which has outperformed the other measures in the main regression analysis.

3.2 Econometric Models

The study used the following econometric equation for the analysis

$$NPM_{it} = \beta_{it} BSIZE_{it} + \beta_{it} BIND_{it} + \beta_{it} BMEET_{it} + \beta_{it} CD_{it} + \beta_{it} CONC_{it} + \beta_{it} INST_{it} + \beta_{it} MANG_{it} + \beta_{it} BIG5_{it} + \beta_{it} AUQ_{it} + \beta_{it} ACC_{it} + D/A_{it} + Size_{it} + \varepsilon_{it} \quad (1)$$

Where NPM_{it} stands for Net profit margin, $BSIZE_{it}$ is board size, $BMEET_{it}$ is board meeting. Further CD_{it} is used for CEO duality, $CONC_{it}$ for concentrated ownership, $INST_{it}$ used for institutional ownership, $MANG_{it}$ is managerial ownership, $BIG5_{it}$ is big five shareholder, AUQ_{it} is audit quality; ACC_{it} used for audit committee composition and ε_{it} is used for Error term.

$$ROE_{it} = \beta_{it} BSIZE_{it} + \beta_{it} BIND_{it} + \beta_{it} BMEET_{it} + \beta_{it} CD_{it} + \beta_{it} CONC_{it} + \beta_{it} INST_{it} + \beta_{it} MANG_{it} + \beta_{it} BIG5_{it} + \beta_{it} AUQ_{it} + \beta_{it} ACC_{it} + D/A_{it} + Size_{it} \varepsilon_{it} \quad (2)$$

Where ROE_{it} stand for Return on equity, which calculated as Net income divided equity

$$MBR_{it} = \beta_{it} BSIZE_{it} + \beta_{it} BIND_{it} + \beta_{it} BMEET_{it} + \beta_{it} CD_{it} + \beta_{it} CONC_{it} + \beta_{it} INST_{it} + \beta_{it} MANG_{it} + \beta_{it} BIG5_{it} + \beta_{it} AUQ_{it} + \beta_{it} ACC_{it} + D/A_{it} + Size_{it} + \varepsilon_{it} \quad (3)$$

Where MBR_{it} is used for Market to Book ratio. This ratio is measure as book value divided market value.

$$MVA_{it} = \beta_{it} BSIZE_{it} + \beta_{it} BIND_{it} + \beta_{it} BMEET_{it} + \beta_{it} CD_{it} + \beta_{it} CONC_{it} + \beta_{it} INST_{it} + \beta_{it} MANG_{it} + \beta_{it} BIG5_{it} + \beta_{it} AUQ_{it} + \beta_{it} ACC_{it} + D/A_{it} + Size_{it} + \varepsilon_{it} \quad (4)$$

Where the study used MVA_{it} stands for Market value added.

ISSN 2076-9202

$$TobinQ_{it} = \beta_{it} BSIZE_{it} + \beta_{it} BIND_{it} + \beta_{it} BMEET_{it} + \beta_{it} CD_{it} + \beta_{it} CONC_{it} + \beta_{it} INST_{it} + \beta_{it} MANG_{it} + \beta_{it} BIG5_{it} + \beta_{it} AUQ_{it} + \beta_{it} ACC_{it} + D / A_{it} + Size_{it} + \varepsilon_{it} \quad (5)$$

Where $TobinQ_{it}$ stands for market capitalization plus total debt divided by total asset of the company .

3.3 Sample for Industry-Wise Analysis:

Table 1: Sample Size (Industry Wise Firm Distribution)

S.No	Industry Name	Firms
1	Textile industry	67
2	Miscellaneous	15
3	Oil and Gas	20
4	Transport, Technology and Communication	8
5	ENGINEERING and allied industries	12
6	Fertilizer	6
7	Glass & Ceramics	6
8	Paper & Board	6
9	Automobile Parts & Accessories	16
10	Pharmaceuticals	7
11	Food & Personal Care Products	29
12	Cement	18
13	Chemical	21

Table 2: Measurement of Firm Performance and Corporate Governance Factors

S.No	Variable	Symbol	Measurement
			Firm Performance
1	Net Profit Margin	NPM	Net Income after Tax divided by Sales (Junarsin, 2011)
2	Return on Equity	ROE	Net Profit after tax / Total number of outstanding common shares (Al-Manaseer, Al-Hindawi, Al-Dahiyat, & Sartawi, 2012)
3	Market value of Equity	MVE	Market price per share multiplied by number of shares outstanding (Mollah & Talukdar, 2007)
4	Market to Book ratio	MBR	Market value of equity / Book value of equity (Al Farooque, Van Zijl, Dunstan, & Karim, 2007)
5	Market value Added	MVA	It is the difference between the Market Value and book value of Equity (Abdullah, Shah, & Hassan, 2008)
6	Tobin Q	TobinQ	The market capitalization plus total debt divided by total asset of the company (Karaca & Eksi, 2012)
			Corporate Governance
1	Board size	BSIZ	Number of board members (Christy, Matolcsy, Wright, & Wyatt, 2013)
2	Board independence	BIND	The number of independent directors divided by the total directors (Bhagat and Bolton, 2008)
3	Board Meeting	BMEET	Dummy variable = 1, if Four meeting once in a year Vafeas (2003)
4	CEO duality	CD	Dummy variable = 1 if CEO is also board chairperson and 0 otherwise (Roodposhti & Chashmi, 2011)
5	Concentration Ownership	CONC	Sharehholders for firm i at the end of year t; Christy et al. (2013)
6	Institutional Ownership	INST	Percentage of common stock held by institutions Roodposhti and Chashmi (2011)
7	Managerial Ownership	MANG	Percentage of common stock held by management (Saleh, Iskandar, & Rahmat, 2005)
8	Big 5 Ownership	BIG5	Sum of ownership percentage of the five biggest firm shareholders (Masood & Shah, 2014)
9	Audit quality	AUDQ	Dummy variable = 1 if firm is audited by the Big Four (PwC, Deloitte Touche Tohmatsu, Ernst & Young, KPMG) and 0 otherwise (Hsu and Wu, 2014)
10	Audit Committee com	ACC	Audit committee non executive members divided by Total members (Borlea et al., 2017)
			Control Variables
1	Size	Size	Size of the firm
2	Financial leverage	Debt-Asset	Debt to asset ratio

ISSN 2076-9202

4. Data Analysis

The study analyzed the characteristics of six proxies for firm performance (Net profit margin, Return on equity, Market value of equity, Market to book ratio, Market value added and Tobin's Q along with ten proxies of corporate governance (Board size, Board independence, Board meetings, CEO duality, Concentrated ownership, Institutional ownership, Managerial ownership, Big 5 ownership, Audit quality and Audit committee composition.

4.1 Descriptive Statistics and Correlation Matrix:

Table 3: Descriptive Statistics

Variable	Obs	Mean	Std.Dev	Min	Max
NPM	2220	-0.052	2.926	-104.054	25.478
ROE	2251	0.204	2.594	-32.646	110.180
MVE	2208	13.93	2.118	5.224	20.896
MBR	2683	1.746	5.385	-48.420	148.047
MVA	2683	3.831	12.91	-17.62	20.808
Tobin's Q	2590	1.385	1.150	0.454	25.425
BSIZE	1857	8.002	1.730	20.000	0.000
BIND	1708	0.184	0.248	1.000	0.000
BMEET	1753	5.406	2.575	34.000	0.000
CD	1691	0.223	0.416	1.000	0.000
CONC	1881	7.541	1.267	16.064	2.079
INST	1888	0.128	0.153	0.988	0.000
MANG	1888	0.224	0.259	0.960	0.000
BIG5	1888	0.579	0.213	1.000	0.000
AUQ	1951	0.557	0.497	1.000	0.000
ACC	1747	0.801	0.220	1.000	0.000

ISSN 2076-9202

Table 4: Correlation

		NPM	ROE	MVE	MBR	MVA	TobinQ	BSIZE	BIND	BMEET	CD	CONC	INST	MANG	BIG5	AUQ	ACC
1	NPM	1.00															
2	ROE	0.01	1.00														
3	MVE	0.06	0.15	1.00													
4	M/B	0.03	0.09	0.26	1.00												
5	MVA	-0.05	0.04	0.29	0.28	1.00											
6	TobinQ	-0.02	0.09	0.27	0.50	0.48	1.00										
7	BSIZE	0.03	0.06	0.31	0.11	0.17	0.08	1.00									
8	BIND	0.00	0.03	0.01	0.04	0.02	0.02	0.05	1.00								
9	BMEET	0.01	-0.02	0.11	-0.02	-0.01	-0.06	0.05	-0.04	1.00							
10	CD	0.00	-0.10	-0.14	-0.08	-0.07	-0.02	-0.11	0.06	-0.04	1.00						
11	CONC	-0.03	0.00	0.52	0.00	0.14	0.02	0.35	0.08	-0.02	-0.03	1.00					
12	INST	0.04	0.01	0.12	0.01	-0.02	-0.08	0.13	0.09	-0.10	-0.08	0.12	1.00				
13	MANG	-0.03	-0.01	-0.33	-0.12	-0.17	-0.16	-0.21	-0.15	-0.04	0.17	-0.38	-0.23	1.00			
14	BIG5	0.03	0.05	0.14	0.14	0.22	0.21	-0.05	-0.05	-0.05	-0.05	0.03	-0.11	-0.09	1.00		
15	AUQ	0.08	0.05	0.44	0.13	0.15	0.13	0.20	0.04	0.01	-0.15	0.26	0.09	-0.21	0.17	1.00	
16	ACC	0.03	0.01	0.10	0.06	0.06	-0.01	0.18	0.07	-0.13	-0.13	0.18	0.11	-0.21	0.04	0.16	1.00

NPM is Net profit Margin, ROE is Return on Equity, Market value of Equity is MVE, MBR stands for Market to Book ratio, MVA stands for Market value added, Tobin's Q stands for Tobin Q, Board Size (BSIZE), Board Independence (BIND), Board Meetings (BMEET), CEO Duality (CD), Concentrated Ownership (CONC), Institutional Ownership (INST), Managerial Ownership (MANG), Big 5 Ownership (BIG5), Audit Quality (AUQ) and Audit Committee Independence (ACC).

Table 5: GMM through Arellano-Bond Dynamic Panel-Data Estimation

Variables	NPM	ROE	MVE	MBR	MVA	Tobin Q
BSIZE	0.0272***	0.124***	0.0543***	0.127***	1.233***	0.0607***
	-0.00496	-0.0271	-0.016	-0.0224	-0.252	-0.00996
BIND	0.107***	0.242*	0.542***	0.410***	6.864***	0.161***
	-0.0291	-0.132	-0.1	-0.0902	-1.506	-0.0327
BMEET	0.00298	0.0139	0.0214*	0.012	0.0719	0.00483
	-0.00286	-0.0135	-0.0119	-0.0113	-0.162	-0.00461
CD	-0.0787***	-0.635***	-0.326***	-0.365***	-0.545	-0.192***
	-0.0158	-0.104	-0.0699	-0.0962	-0.915	-0.0321
CONC	0.152***	0.317***	0.327***	0.267*	2.171	0.144**
	-0.0546	-0.111	-0.117	-0.142	-1.99	-0.0675
INST	0.268***	-0.0462	1.271***	-0.26	11.85***	0.493***
	-0.0556	-0.174	-0.25	-0.239	-3.707	-0.109
MANG	0.0393	-0.0623	0.204	0.727***	7.350**	0.123
	-0.0399	-0.135	-0.187	-0.192	-3.102	-0.0753
BIG5	-0.0796	-0.178	0.0258	-0.117	-2.348	0.0125
	-0.0506	-0.147	-0.14	-0.185	-1.783	-0.0818
AUQ	0.0498	0.0128	-0.106	0.117	3.481*	0.029
	-0.0384	-0.169	-0.115	-0.107	-1.997	-0.0636
ACC	0.0267	-0.0179	-0.0714	0.608***	0.378	-0.00821
	-0.0226	-0.0807	-0.133	-0.161	-1.423	-0.0388
Size	0.0830***	0.0387	0.329***	-0.071	-0.464	0.133***
	-0.0271	-0.0584	-0.08	-0.0968	-1.188	-0.0376
Debt_asst	-0.371***	-0.381*	-0.275*	-0.0186	-0.464	0.767***
	-0.0614	-0.206	-0.167	-0.0518	-0.91	-0.0252
Constant	0.294	1.329	1.07	0.741	3.162	-2.234***
	-0.516	-1.151	-1.469	-1.873	-23.84	-0.622
Wald chi2(13)	23118.24***	449.32***	313.14***	178.44***	134.49***	4391.98***
Observations	717	735	717	747	747	735
Number of id	205	207	203	206	206	204

Standard errors in parentheses ,*** p<0.01, ** p<0.05, * p<0.1, NPM is Net profit Margin, ROE is Return on Equity, Market value of Equity is MVE, MBR stands for Market to Book ratio, MVA stands for Market value added, Tobin's Q stands for Tobin Q, Board Size (BSIZE), Board Independence (BIND), Board Meetings (BMEET), CEO Duality (CD), Concentrated Ownership (CONC), Institutional Ownership (INST), Managerial Ownership (MANG), Big 5 Ownership (BIG5), Audit Quality (AUQ) and Audit Committee Independence (ACC).

Table 01 indicates summary statistics of variables used in the current research. NPM has higher negative

ISSN 2076-9202

minimum value of -104.054 among all the endogamous variables. MBR ratio has higher standard deviation of 5.385.

Refer to table 01& 02. Board size has an average value of 8.002 which is similar to Ullah and Kamal (2017). Moreover, among the corporate governance proxies, board independence has higher variation as per its standard value of 2.575. The correlation results showed either strong or moderate association among variables. However, there is no issue of Multicollinearity. According to Gujarati (2009), problem of multicollinearity exists if correlation value exceeds 0.80.

The research used Generalized Method of Moments (GMM) through Arellano-Bond Dynamic Panel-Data Estimation method to examine the casual-effect of corporate governance on firm performance. Refer to table 03, in first regression, the study used firm Net profit margin as a measure of firm performance. The results of study depicts board size, board independence, CEO duality, concentrated ownership and institutional ownership have statistically significant coefficient values of 0.0272, .0.107, -0.0787, 0.152 and 0.268 respectively. The study reveals that board size, board independence, concentrated ownership and institutional ownership improve firm performance. Conversely, the study suggests that CEO duality has adverse effect on financial performance of firms.

Likewise, in second regression the study used Return on Equity (ROE) as a measure of firm performance. The results suggest that board size, board independence, CEO duality, concentrated ownership have statistically significant coefficient values of 0.124, 0.242, -0.635 and-0.317 respectively. The results depict positive association among board size, board independence and concentrated ownership and return on equity. Nonetheless, CEO duality has substantial influence. Similarly, in the 3rd regression, the study used Market value of equity as proxy of firm performance. The study reveals that board size and board independence and board meetings coefficient values are 0.0543, 0.542 and 0.0214 respectively. This suggested that proper board structure increase the market value of equity (firm performance). Moreover, CEO duality has persistent negative coefficient value of -0.326, which indicates the decrease in firm performance in the presence of CEO duality. Further, concentrated ownership and institutional ownership positively contribute towards the firm performance as per their coefficients values of 0.327 and 1.271.

In fourth regression, Market to Book ratio is used as a market based measure of firm performance. The study reveals that board size, board independence, CEO Duality, managerial ownership and audit committee composition significantly improves the firm performance as indicated by coefficient values of 0.127, 0.410, -0.365, 0.727 and 0.608.

In addition, the Market Value Added (MVA) is proved to be a weak measure of firm performance because MVA absorbed the effect of board size, board independence, institutional ownership and managerial ownership. Likewise, in last regression, TobinQ is used as proxy of firm performance. The results revealed that board size, board independence, CEO duality, concentrated ownership and institutional ownership significantly affect the TobinQ as their coefficient values of 0.0607, 0.161, -0.192, 0.144 and 0.493 respectively.

ISSN 2076-9202

Table 6: Industry-Wise GMM through Arellano-Bond Dynamic Panel-Data Estimation

	Textile	Miscellaneous	Oil and Gas	Fertilizer	Automobile	Food&Pers	Cement	Chemical
Variable	MVE	MVE	MVE	MVE	MVE	MVE	MVE	MVE
BSIZE	0.00033	**0.288****	-0.0403	**4.552****	0.132	**0.427*****	0.0542	-0.195
	-0.0275	-0.141	-0.0633	-2.015	-0.149	-0.132	-0.107	-0.152
BIND	**0.748*****	1.7	-0.294	**-14.14****	-1.795	**0.999*****	-0.376	-0.865
	-0.124	-1.544	-0.446	-7.161	-2.384	-0.183	-0.6	-2.649
BMEET	0.0148	-0.418	-0.0118	0.0987	0.00784	0.00907	-0.0175	-0.0427
	-0.012	-0.458	-0.0321	-0.123	-0.27	-0.0635	-0.035	-0.242
CD	-0.291***	0.124	**0.241***	0.0459	-16.8	-0.0904	-0.307	-2.068
	-0.0407	-0.957	-0.136	-1.003	-10.85	-0.312	-0.309	-1.879
CONC	**0.738*****	0.624	-0.112	**35.50****	10.43	1.011	-1.419	-1.063
	-0.0573	-1.05	-0.208	-15.67	-18.38	-1.078	-1.399	-2.9
INST	-0.227	-0.517	-2.61	**88.47****	1.802	**1.495***	0.426	-5.151
	-0.288	-0.42	-2.172	-42.5	-3.704	-0.889	-1.394	-8.087
MANG	0.0942	2.424	-2.116	**57.01****	29.68	-0.175	3.006	-0.154
	-0.13	-2.506	-3.876	-25.35	-21.3	-1.564	-4.58	-5.041
BIG5	**0.389*****	6.394	-0.0418	**77.61****	6.326	0.464	-0.218	-2.34
	-0.111	-8.833	-0.474	-35.72	-5.191	-0.986	-0.193	-2.493
AUQ	-0.0268	-3.458	0.512	0.251	5.653	0.298	0.417	0.235
	-0.155	-3.038	-0.789	0.908	-5.583	-0.371	-0.502	0.671
ACC	**0.584*****	**3.683***	-0.549	**45.49****	-1.311	-0.0024	0.797	1.454
	-0.184	-1.903	-0.449	-20.79	-0.926	-0.953	-0.904	-1.132
Debt_asst	-2.665***	-10.20**	-6.365**	4.454*	2.361	0.0147	-4.052	-0.0898
	-0.176	-4.668	-2.966	-2.441	-1.67	-0.151	-4.231	-3.34
size	0.274***	0.714	0.937*	-21.91**	1.535	0.107	0.72	1.772***
	-0.048	-0.478	-0.531	-10.05	-1.869	-0.273	-0.552	-0.516
Constant	-0.55	0	6.704	0	-101.7	5.665	15.13**	-1.899
	-0.737	0	-5.92	0	-171.6	-6.23	-7.191	-12.81
Wald chi2(13)	5753.83***	56961.37***	5075.16***	51655.46***	319.25***	4296.85***	1920.74***	225946.73***
Observations	194	35	68	57	52	81	72	66
Number of id	57	11	20	12	16	25	17	16

Standard errors in parentheses, ***p<0.01, **p<0.05, * p<0.1, NPM is Net profit Margin, ROE is Return on Equity, Market value of Equity is MVE, MBR stands for Market to Book ratio, MVA stands for Market value added, Tobin's Q stands for Tobin Q, Board Size (BSIZE), Board Independence (BIND), Board Meetings (BMEET), CEO Duality (CD), Concentrated Ownership (CONC), Institutional Ownership (INST), Managerial Ownership (MANG), Big 5 Ownership (BIG5), Audit Quality (AUQ) and Audit Committee Independence (ACC).

4.3 Industry Wise Analysis:

The research analyzed the causal relationship between corporate governance and firm performance of all listed non-financial firms grouped into for seven industries such as Textile, Oil and Gas, Fertilizer, Automobile Parts & Accessories, Food & Personal Care Products, Cement, Chemical while excluded Transport, Technology and Communication, Engineering and allied industries, Glass & Ceramics, Paper & Board, Pharmaceuticals due to lesser firm observations.

The Market Value of Equity has showed the greater absorption power among the six proxies used for firm performance which is represented by the significant impact of maximum number of corporate governance variables on the Market Value of Equity. Therefore, for Industry analysis, the research has concentrated on the relationship between corporate governance and firm performance using Market Value of Equity.

In textile industry, results revealed that board independence, concentrated ownership, big five shareholders and audit committee composition has a significant positive association as indicated by coefficient values of 0.748, 0.738, 0.389 and 0.584 respectively. Likewise, Food & Personal Care Products board size, board independence and institutional ownership have statistically significant influence on firm performance.

Further, study revealed that strong foothold of corporate governance on firm performance in fertilizer industry. The study suggested that board size, board independence, concentrated ownership, institutional ownership, managerial ownership, big-5 ownership and audit committee composition significantly affect

ISSN 2076-9202

the firm performance as per their coefficient values of 4.552, -14.14, 35.50, 88.47, 57.01, 77.61, and 45.49. Nonetheless, the study showed that Miscellaneous, Oil and Gas, Automobile, Cement, Chemical industries have footprint of the relationship between corporate governance firm performance.

5. Conclusion

The study analyzed the impact of Corporate governance on firm performance for Ful-Sample as well as for industry-Wise using Generalize Method of moments. The study used six proxies for firm performance measurement. In order to find the best proxy that would suitable for this market. Moreover, the study used ten Corporate governance proxies.

The study suggests that Board Size and Board Independence and Board Meeting Concentrated Ownership and Institutional Ownership statistically significantly improve the firm performance. Nevertheless, CEO duality damages the firm performance for Full-Sample. The study results reveals that Marker value of equity is better proxy for firm performance measure in Pakistan stock exchange.

Further, the study used market value of equity for firm performance in industry-wise analysis. The research observe strong foothold of Corporate governance in Fertilizer sector. Moreover, the study reveals that observance of Corporate governance varies across industries.

References

Abdullah, M. S., Shah, S. Z. A., & Hassan, A. (2008). Impact of corporate governance on financial performance of firms: Evidence from Pakistan. *The Business Review, Cambridge, 11*(2), 282-289.

Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis, 31*(03), 377-397.

Ahmed Sheikh, N., & Wang, Z. (2012). Effects of corporate governance on capital structure: empirical evidence from Pakistan. *Corporate Governance: The international journal of business in society, 12*(5), 629-641.

Akbar, S., Hughes, P., El-Fatouri, J., & Shah, Z. (2016). More on Corporate Governance and Firm Performance in the UK :Evidence from the Application of Generalized Method of Moments Estimation. *Research in International Business and Finance, 38*, 417-429.

Al Farooque, O., Van Zijl, T., Dunstan, K., & Karim, A. (2007). Corporate governance in Bangladesh: Link between ownership and financial performance. *Corporate Governance: An International Review, 15*(6), 1453-1468.

Ali Shah, S. Z., Butt, S. A., & Hassan, A. (2009). Corporate governance and earnings management an empirical evidence form Pakistani listed companies.

Alix Valenti, M., Luce, R., & Mayfield, C. (2011). The effects of firm performance on corporate governance. *Management Research Review, 34*(3), 266-283.

Al-Manaseer, M., Al-Hindawi, R. M., Al-Dahiyat, M. A., & Sartawi, I. I. (2012). The impact of corporate governance on the performance of Jordanian banks. *European Journal of Scientific Research, 67*(3), 349-359.

Ameer, R., Ramli, F., & Zakaria, H. (2010). A new perspective on board composition and firm performance in an emerging market. *Corporate Governance: The international journal of business in society, 10*(5), 647-661.

Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2003). Founding family ownership and the agency cost of debt. *Journal of Financial Economics, 68*(2), 263-285.

Andreou, P. C., Louca, C., & Panayides, P. M. (2014). Corporate governance, financial management decisions and firm performance: Evidence from the maritime industry. *Transportation Research Part E: Logistics and Transportation Review, 63*, 59-78.

ISSN 2076-9202

Beiner, S., Drobetz, W., Schmid, M. M., & Zimmermann, H. (2006). An integrated framework of corporate governance and firm valuation. *European Financial Management, 12*(2), 249-283.

Belkhir, M. (2009). Board of directors' size and performance in the banking industry. *International Journal of Managerial Finance, 5*(2), 201-221.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance, 14*(3), 257-273.

Borlea, S. N., Achim, M. V., & Mare, C. (2017). Board characteristics and firm performances in emerging economies. Lessons from Romania. *Economic Research-Ekonomska Istraživanja, 30*(1), 55-75.

Brickley, J. A., Coles, J. L., & Terry, R. L. (1994). Outside directors and the adoption of poison pills. *Journal of Financial Economics, 35*(3), 371-390.

Cadbury, A. (1992). Cadbury report: The financial aspects of corporate governance. *Tech reprt, HMG, London*.

Christy, J. A., Matolcsy, Z. P., Wright, A., & Wyatt, A. (2013). Do Board Characteristics Influence the Shareholders' Assessment of Risk for Small and Large Firms? *Abacus, 49*(2), 161-196.

Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate performance in the Czech Republic. *Journal of comparative economics, 27*(3), 498-513.

Claessens, S., & Yurtoglu, B. B. (2013). Corporate governance in emerging markets: A survey. *Emerging Markets Review, 15*, 1-33.

Colbert, J. L., & Jahera Jr, J. S. (1988). The role of the audit and agency theory. *Journal of Applied Business Research (JABR), 4*(2), 7-12.

Conger, J. A., Finegold, D., & Lawler, E. E. (1998). Appraising boardroom performance. *Harvard business review, 76*, 136-164.

Cornett, M. M., Marcus, A. J., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics, 87*(2), 357-373.

Dalton, D. R., & Kesner, I. F. (1987). Composition and CEO duality in boards of directors: An international perspective. *Journal of International Business Studies, 18*(3), 33-42.

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal, 19*(3), 269-290.

Dasilas, A., & Papasyriopoulos, N. (2015). Corporate governance, credit ratings and the capital structure of Greek SME and large listed firms. *Small Business Economics, 45*(1), 215-244.

De Andres, P., Azofra, V., & Lopez, F. (2005). Corporate boards in OECD countries: Size, composition, functioning and effectiveness. *Corporate Governance: An International Review, 13*(2), 197-210.

DeFond, M. L., Raghunandan, K., & Subramanyam, K. (2002). Do non–audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research, 40*(4), 1247-1274.

Demsetz, H. (1983). The structure of ownership and the theory of the firm. *The journal of law and Economics, 26*(2), 375-390.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management, 16*(1), 49-64.

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics, 65*(3), 365-395.

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of law and economics*, 301-325

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of law and economics*, 301-325.

Fich, E. M., & Shivdasani, A. (2006). Are busy boards effective monitors? *The Journal of Finance, 61*(2), 689-724.

Francis, B. B., Hasan, I., & Wu, Q. (2012). Do corporate boards matter during the current financial crisis? *Review of Financial Economics, 21*(2), 39-52.

ISSN 2076-9202

Hermalin, B. E., & Weisbach, M. S. (2001). Boards of directors as an endogenously determined institution: A survey of the economic literature: National Bureau of Economic Research.

Holderness, C. G., Kroszner, R. S., & Sheehan, D. P. (1999). Were the good old days that good? Changes in managerial stock ownership since the great depression. *The Journal of Finance, 54*(2), 435-469.

Hsu, H.-H., & Wu, C. Y.-H. (2014). Board composition, grey directors and corporate failure in the UK. *The British Accounting Review, 46*(3), 215-227.

Huang, L.-Y., Hsiao, T.-y., & Lai, G. C. (2007). Does corporate governance and ownership structure influence performance? Evidence from Taiwan life insurance companies. *Journal of Insurance Issues*, 123-151.

Hussainey, K., & Al-Najjar, B. (2012). Understanding the determinants of RiskMetrics/ISS Ratings of the quality of UK companies' corporate governance practice. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration, 29*(4), 366-377.

Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review, 17*(4), 492-509.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review, 76*(2), 323-329.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance, 48*(3), 831-880.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Jensen, M. C., & Meckling, W. H. (1979). *Theory of the firm: Managerial behavior, agency costs, and ownership structure*: Springer.

Junarsin, E. (2011). Executive compensation and firm performance: an empirical examination. *European journal of economics, finance and administrative sciences, 28*, 163-179.

Kajola, S. O. (2008). Corporate governance and firm performance: The case of Nigerian listed firms. *European journal of economics, finance and administrative sciences, 14*(14), 16-28.

Kamran, K., & Shah, A. (2014). The Impact of Corporate Governance and Ownership Structure on Earnings Management Practices: Evidence from Listed Companies in Pakistan. *The Lahore Journal of Economics, 19*(2), 27-70.

Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. *Corporate Governance: An International Review, 15*(2), 194-207.

Karaca, S. S., & Eksi, I. H. (2012). The relationship between ownership structure and firm performance: an empirical analysis over Istanbul Stock Exchange (ISE) listed companies. *International Business Research, 5*(1), 172.

Kiel, G. C., & Nicholson, G. J. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. *Corporate Governance: An International Review, 11*(3), 189-205.

Lin, W.-C., & Chang, S.-C. (2012). Corporate governance and the stock market reaction to new product announcements. *Review of Quantitative Finance and Accounting, 39*(2), 273-291.

Mansi, S. A., Maxwell, W. F., & Miller, D. P. (2004). Does auditor quality and tenure matter to investors? Evidence from the bond market. *Journal of Accounting Research, 42*(4), 755-793.

Masood, A., & Shah, A. (2014). Corporate Governance and Cash Holdings in Listed Non-Financial Firms of Pakistan. *Business Review, 9*(2), 48-72.

McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics, 27*(2), 595-612.

Mollah, S., & Talukdar, B. (2007). Ownership Structure, Corporate Governance, and Firm's Performance in Emerging Markets: Evidence from Bangaldesh.

ISSN 2076-9202

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics, 20*, 293-315.

Mura, R. (2007). Firm performance: Do non-executive directors have minds of their own? Evidence from UK panel data. *Financial Management, 36*(3), 81-112.

Muth, M., & Donaldson, L. (1998). Stewardship theory and board structure: A contingency approach. *Corporate Governance: An International Review, 6*(1), 5-28.

Nguyen, P. (2011). Corporate governance and risk-taking: Evidence from Japanese firms. *Pacific-Basin Finance Journal, 19*(3), 278-297.

O'Connor, M., & Rafferty, M. (2012). Corporate governance and innovation. *Journal of Financial and Quantitative Analysis, 47*(2), 397-413.

Peng, M. W. (2004). Outside directors and firm performance during institutional transitions. *Strategic Management Journal, 25*(5), 453-471.

Perry, T., & Shivdasani, A. (2005). Do Boards Affect Performance? Evidence from Corporate Restructuring*. *The Journal of Business, 78*(4), 1403-1432.

Pittman, J. A., & Fortin, S. (2004). Auditor choice and the cost of debt capital for newly public firms. *Journal of accounting and economics, 37*(1), 113-136.

Pound, J. (1988). Proxy contests and the efficiency of shareholder oversight. *Journal of Financial Economics, 20*, 237-265.

Randøy, T., Down, J., & Jenssen, J. (2003). Corporate governance and board effectiveness in maritime firms. *Maritime Economics & Logistics, 5*(1), 40-54.

Rashid, A., De Zoysa, A., Lodh, S., & Rudkin, K. (2010). Board composition and firm performance: Evidence from Bangladesh. *Australasian Accounting Business & Finance Journal, 4*(1), 76.

Roodposhti, F. R., & Chashmi, S. N. (2011). The impact of corporate governance mechanisms on earnings management. *African Journal of Business Management, 5*(11), 4143-4151.

Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2005). Earnings management and board characteristics: Evidence from Malaysia. *Jurnal Pengurusan, 24*(4), 77-103.

Sarkar, J., & Sarkar, S. (2000). Large shareholder activism in corporate governance in developing countries: Evidence from India. *International Review of Finance, 1*(3), 161-194.

Schroeder, M., & Hamburger, T. (2002). Accounting Reform Gets Big Lift as Senate Panel Backs New Board. *Wall Street Journal, 19*.

Shivdasani, A., & Yermack, D. (1999). CEO involvement in the selection of new board members: An empirical analysis. *The Journal of Finance, 54*(5), 1829-1853.

Short, H., & Keasey, K. (1999). Managerial Ownership and the Performance of Firms: Evidence from the UK. *Journal of Corporate Finance, 5*(1), 79-101.

Smith, M. P. (1996). Shareholder activism by institutional investors: Evidence from Calpers. *The Journal of Finance, 51*(1), 227-252.

Uadiale, O. M. (2010). The impact of board structure on corporate financial performance in Nigeria. *International Journal of Business and Management, 5*(10), 155.

Ullah, W., Ali, S., & Mehmood, S. (2017). Impact of Excess Control, Ownership Structure and Corporate Governance on Firm Performance of Diversified Group Firms in Pakistan. *Business & Economic Review, 9*(2), 49-72.

Vafeas, N. (2003). Length of board tenure and outside director independence. *Journal of Business Finance & Accounting, 30*(7-8), 1043-1064.

Weir, C., & Laing, D. (2000). The performance-governance relationship: The effects of Cadbury compliance on UK quoted companies. *Journal of management and governance, 4*(4), 265-281.

ISSN 2076-9202

Weir, C., & Laing, D. (2000). The performance-governance relationship: The effects of Cadbury compliance on UK quoted companies. *Journal of management and governance, 4*(4), 265-281.

Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics, 20*, 431-460.

Wild, J. J. (1994). Managerial accountability to shareholders: Audit committees and the explanatory power of earnings for returns. *The British Accounting Review, 26*(4), 353-374.

Xie, B., Davidson, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance, 9*(3), 295-316.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211.

ISSN 2076-9202

VOLATILITY CLUSTERING, NEW HEAVY-TAILED DISTRIBUTION AND THE STOCK MARKET RETURNS IN SOUTH KOREA

Yoon Hong, Ji-chul Lee, and Guoping Ding*

Abstract: As other developed economies over the world, the stock market plays a crucial role in facilitating the economic growth. In this paper, we compare two different types of heavy-tailed distribution, the Student's *t* distribution and the normal reciprocal inverse Gaussian distribution, within the generalized autoregressive conditional heteroskedasticity (GARCH) framework for the daily stock market returns of South Korea (KOSPI). Our results show two important findings: i) the daily KOSPI returns exhibit conditional heavy tails even after volatility clustering effect has been accounted for; and ii) the NRIG distribution has a better in-sample performance than the Student's *t* distribution.

Key words: GARCH model; heavy-tailed distribution; KOSPI

JEL classifications: C22; C52; G17

1.Introduction

Since the establishment of the Republic of Korea, the economy of South Korea has received great success. The country emerged from a very poor underdeveloped economy to one of the most developed economies. Some South Korean brands become internationally famous with products sold across the nations. The stock market is one of the crucial components of the nation's economy. The South Korea Stock Exchange is the 14th largest exchange over the world with market capitalization is $1.33 Trillion adjusted US Dollars as of March 2017. The market capitalization to GDP ratio is 110.64%, which indicates the importance of the financial market. In this paper, we make use of the Korea Composite Stock Price Index

* Yoon Hong, Department of Economics, Hanyang University, Seoul, South Korea; Ji-chul Lee, Department of Economics, Dongseo University, Busan, South Korea; and Guoping Ding, School of Business, Nanjing University, Nanjing, Jiangsu, China.

ISSN 2076-9202

(KOSPI). KOSPI is the index of all common stocks traded on the South Korea Exchange. It is a very popular market index and the representative stock market index of South Korea.

During the past several decades, two stylized facts for asset returns have been frequently presented by researchers: heavy tails and volatility clustering. The heavy tails indicate that historical distribution of the asset returns has heavier tails than the standard normal distribution, and the volatility clustering says that high-volatility events tend to cluster in time. In the following, we re-investigate the two stylized facts, heavy tails and volatility clustering, but are interested in the stock market returns on the South Korea Exchange. Our framework is similar as in Guo (2017a, 2017b), and we compare empirical performance of the two different types of heavy-tailed distribution, Student's *t*, and normal reciprocal inverse Gaussian (NRIG), within the generalized autoregressive conditional heteroskedasticity (GARCH) framework for the daily KOSPI returns. We are particularly interested in the risk management aspect. Our results indicate two important findings: i) the daily KOSPI returns exhibit conditional heavy tails even after volatility clustering effect has been accounted for; and ii) the NRIG distribution has a better in-sample performance than the Student's *t* distribution.

Literature Review

Since the economy miracle of South Korea, its stock market has also received considerable attentions from the academia. Many researchers have applied GARCH based models in analyzing the stock market in South Korea. However, most of the studies are either focusing on the effects of some special events or the inter-linkage with stock markets in some other countries. Sola, Spagnolo and Spagnolo (2002) proposed a bivariate Marrkov-GARCH model to analyze volatility links between three different emerging markets. Choudhry (2010) investigated the day of the week effect on seven emerging Asian stock markets returns and conditional variance (volatility), including South Korea, using the GARCH model. Choudhry found that there was significant presence of the day of the week effect on both stock returns and volatility, though the result involving both the return and volatility are not identical in all seven cases. Lee (2009) examines the volatility spillover effects among six Asian country stock markets, including the stock

ISSN 2076-9202

market in South Korea, using bivariate vector auto-regression generalized autoregressive conditional heteroskedasticity (VAR-GARCH) model. Lee found that there were statistically significant volatility spillover effects within the stock markets of these countries. Fang (2010) used stock daily data for South Korea and other four Asian countries, and showed that currency depreciation affected adversely stock returns and/or increases market volatility over the period of the Asian crisis 1997–1999.

In this paper, we re-consider the GARCH framework but focus on risk management of the stock market returns in South Korea. We focus on two different types of heavy-tailed distributions: the Student's *t* distribution and the normal reciprocal inverse Gaussian distribution. In 1987, Bollerslev introduced the Student's *t* distribution and the GARCH model with the Student's *t* distribution could capture dynamics of a variety of foreign exchange rates and stock price indices returns. Politis (2004) introduced the truncated standard normal distribution into the ARCH model and showed the empirical performance of the new type of heavy-tailed distribution on three real datasets. Tavares, Curto and Tavare (2007) model the heavy tails and asymmetric effect on stocks returns volatility into the GARCH framework, and showed the Student's t and the stable Paretian with ($\alpha < 2$) distribution clearly outperform the Gaussian distribution in fitting S&P 500 returns and FTSE returns. Su and Hung (2011) provides a comprehensive analysis of the possible influences of jump dynamics, heavy-tails, and skewness with regard to Value at Risk (VaR) estimates through the assessment of both accuracy and efficiency. Su and Hung consider a range of stock indices across international stock markets during the period of the U.S. Subprime mortgage crisis, and show that the GARCH model with normal, generalized error distribution (GED) and skewed normal distributions provide accurate VaR estimates.

In this paper, we follow the model framework in Guo (2017a, 2017b) and are particularly interested in the NRIG distribution, a newly-developed heavy-tailed distribution. Our focuses are on their empirical performance in fitting the stock market returns in South Korea. The remainder of the paper is organized as follows. In Section 2, we discuss GARCH models and the heavy-tailed distributions. Section 3

ISSN 2076-9202

summarizes the data. The estimation results are in Section 4. Section 5 concludes.

2. The Models

We consider a simple GARCH(1,1) process as:

$$\varepsilon_t = \mu + \sigma_t e_t \tag{2.1}$$

$$\sigma_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \beta_1 \sigma_{t-1}^2 \tag{2.2}$$

where the three positive numbers α_0, α_1 and β_1 are the parameters of the process and $\alpha_1 + \beta_1 < 1$. The assumption of a constant mean return μ is purely for simplification and reflects that the focus of the paper is on dynamics of return volatility instead of dynamics of returns. The variable e_t is identically and independently distributed (*i.i.d.*). Two types of heavy-tailed distributions are considered: the Student's *t* and the normal reciprocal inverse Gaussian (NRIG) distributions. The density function of the standard Student's *t* distribution with ν degrees of freedom is given by:

$$f(e_t \mid \psi_{t-1}) = \frac{\Gamma(\frac{\nu+1}{2})}{\Gamma(\frac{\nu}{2})[(\nu-2)\pi]^{1/2}} \left(1 + \frac{e_t^2}{(\nu-2)}\right)^{-\frac{\nu+1}{2}} \quad , \quad \nu > 4 \quad . \tag{2.3}$$

where ψ_{t-1} denotes the σ-field generated by all the available information up through time $t-1$.

The NRIG is a special class of the widely-used generalized hyperbolic distribution. The generalized hyperbolic distribution is specified as in Prause (1999):

ISSN 2076-9202

$$f(e_t \mid \lambda,\mu,\alpha,\beta,\delta) = \frac{(\sqrt{\alpha^2-\beta^2}\,/\,\delta)^{\lambda} K_{\lambda-1/2}(\alpha\sqrt{\delta^2+(e_t-\mu)^2})}{\sqrt{2\pi}(\sqrt{\delta^2+(e_t-\mu)^2}\,/\,\alpha)^{1/2-\lambda} K_{\lambda}(\delta\sqrt{\alpha^2-\beta^2})}\exp(\beta(e_t-\mu)) \quad ,$$

(2.4)

where $K_{\lambda}(\cdot)$ is the modified Bessel function of the third kind and index $\lambda \in \square$ and: $\delta > 0$, $0 \leq \mid \beta \mid < \alpha$.

When $\lambda = \frac{1}{2}$, we have the normalized NRIG distribution as:

$$f(\varepsilon_t \mid \psi_{t-1}) = \frac{\alpha K_0(\sqrt{(\alpha^2-1)^2+\frac{\alpha^2\varepsilon_t^{\,2}}{\sigma_t^{\,2}}})}{\pi\sigma_t}\exp(\alpha^2-1) \quad .$$

(2.5)

We also consider the normal distribution as the benchmark distribution:

$$f(e_t \mid \psi_{t-1}) = \frac{1}{\sqrt{2\pi\sigma_t^{\,2}}}\exp(-\frac{e_t^{\,2}}{2\sigma_t^{\,2}}) \quad , \quad \nu > 4 \quad .$$

(2.6)

3. Data and Summary Statistics

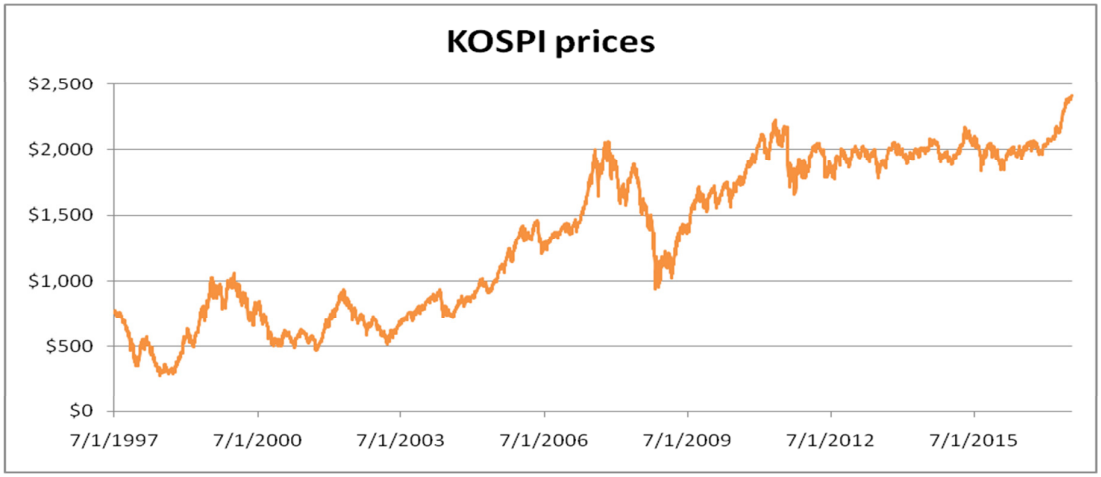


Figure 1: Daily KOSPI prices

ISSN 2076-9202

We explore empirical performance of GARCH models with heavy-tailed distribution by using the South Korea stock market returns series. Figure is the daily KOSPI index prices. We collected the standardized KOSPI daily dividend-adjusted close returns from Yahoo Finance for the period from July 2, 1997 to July 14, 2017, covering all the available data in Yahoo Finance. There are in total 4945 observations. Figure 2 illustrates the dynamics of the KOSPI returns, and the figure exhibits significant volatility clustering.

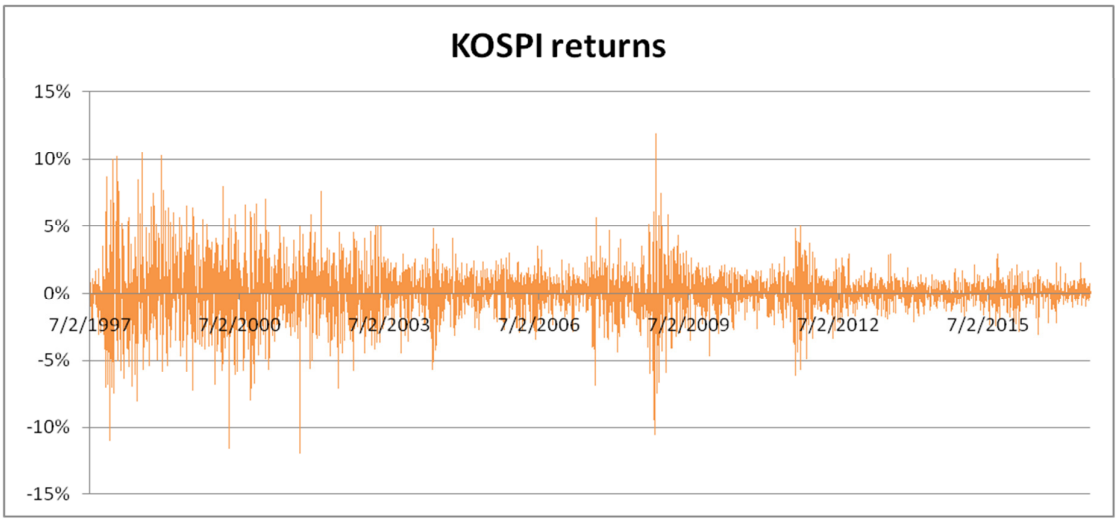


Figure 2: Daily KOSPI returns

Summary statistics of the data are reported in Table 1. The data present the standard set of well-known stylized facts of asset prices series: non-normality, limited evidence of short-term predictability and strong evidence of predictability in volatility. All series are presented in daily percentage growth rates/returns. The Bera–Jarque test conclusively rejects normality of raw returns in all series, which confirms our assumption that the model selected should account for the heavy-tail phenomenon. The smallest test statistic is much higher than the 5% critical value of 5.99. The market index is negatively skewed and has fat tails. The asymptotic SE of the skewness statistic under the null of normality is $\sqrt{6/T}$, and the SE of the kurtosis statistic is $\sqrt{24/T}$, where T is the number of observations. Almost all series exhibit statistically significant leptokurtosis, suggesting that accounting for heavy-tailedness is more pressing than skewness in modelling asset prices dynamics.

ISSN 2076-9202

Series	*Obs.*	*Mean*	*Std.*	*Skewness*	*Kurtosis*	*BJ*	*Q(5)*	$Q^{ARCH}(5)$	$Q^2(5)$
KOSPI	4945	0.04%	1.79%	-0.026*	5.33**	76.1**	8.15*	3.22	31.24**

Table 1: Summary statistics. BJ is the Bera-Jarque statistic and is distributed as chi-squared with 2 degrees of freedom, Q(5) is the Ljung-Box Portmanteau statistic, $Q^{ARCH}(5)$ is the Ljung-Box Portmanteau statistic adjusted for ARCH effects following Diebold (1986) and $Q^2(5)$ is the Ljung-Box test for serial correlation in the squared residuals. The three Q statistics are calculated with 5 lags and are distributed as chi-squared with 5 degrees of freedom.

* and ** denote a skewness, kurtosis, BJ or Q statistically significant at the 5% and 1% level respectively.

We use the Ljung-Box portmanteau, or Q, statistic with five lags to test for serial correlation in the data, and adjust the Q statistic for ARCH models following Diebold (1986). The results that no serial correlation is found for almost all the series confirm our assumption of a constant mean return μ in Equation (2.1). The evidence of linear dependence in the squared demeaned returns, which is an indication of ARCH effects, is significant for all the series.

4. Estimation Results

We study the GARCH(1,1) model with the Student's t and the NRIG distributions is defined by maximizing the following log-likelihood function of equation:

$$\hat{\theta} = \arg\max_{\theta} \sum_{t=1}^{T} \log(f(\varepsilon_t \mid \varepsilon_1, \cdots, \varepsilon_{t-1})) \quad .$$

(4.1)

Table 2 reports estimation results of the GARCH(1,1) model with the two types of heavy-tailed distribution for all the KOSPI return series. All the parameters are significantly different from zero. There results show the NRIG distribution has better in-sample performance. Since the two distribution has the same number of parameters, the Akaike information criterion (AIC) and the Bayesian information criterion (BIC) also indicate the NRIG distribution has better empirical performance.

ISSN 2076-9202

	alpha1	beta1	1/nu (1/alpha)	log-likelihood	AIC	BIC
Normal	0.034**	0.923**		-9694	19391	19404
Student's t	0.043**	0.936**	0.171**	-9402	18809	18827
NRIG	0.041**	0.941**	0.682**	-9349	18704	18721

Table 2: Estimation of the GARCH model with heavy-tailed innovations
* and ** denote statistical significance at the 5% and 1% level respectively.

5. Conclusion

The empirical performances of normal reciprocal inverse Gaussian and the standard Student's *t* distributions under the GARCH framework are compared in fitting the South Korea stock market index returns. Our results illustrate the NRIG has better performance in capture the KOSPI returns dynamics. Guo (2017a) showed the NRIG distribution also performs well in risk management of the US stock return series. We believe the GARCH model with the NRIG distribution would also perform well in risk management of the South Korea stock return series. In addition, it would be interesting to consider some other asset classes as in Guo (2017c). These are all left for future research.

References

1. Bollerslev, T. (1987) "A conditional heteroskedastic time series model for security prices and rates of return data," Review of Economics and Statistics, vol. 69, pp.542-547.
2. Choudhry, T. (2000) "Day of the week effect in emerging Asian stock markets: evidence from the GARCH model," Applied Financial Economics, vol. 10, pp. 235-242.
3. Diebold, F. (1986) "Testing for serial correlation in the presence of ARCH," Proceedings of the Business and Economic Statistics Section of the American Statistical Association, vol. 3, pp.323-328.
4. Fang, W. (2002) "The effects of currency depreciation on stock returns: evidence from five East Asian economies," Applied Economics Letters, vol. 9, pp. 195-199.
5. Francq, C., L. Horvath, and J-M. Zakoian (2011) "Merits and drawbacks of variance targeting in GARCH models," Journal of Financial Econometrics, vol. 9, pp. 619-656.
6. Prause, K. (1999) "The generalized hyperbolic model: estimation, financial derivatives, and risk measures," Ph.D. Dissertation.
7. Guo, Z. (2017a) "Empirical Performance of GARCH Models with Heavy-tailed Innovations," Working paper.
8. Guo, Z. (2017b) "GARCH models with the heavy-tailed distributions and the Hong Kong stock market returns," International Journal of Business and Management.
9. Guo, Z. (2017c) "Models with Short-Term Variations and Long-Term Dynamics in Risk Management of Commodity Derivatives," working paper.
10. Lee, S. (2009) "Volatility spillover effects among six Asian countries," Applied Economics Letters, vol. 16, pp. 501-508.
11. Politis, D. (2004) "A heavy-tailed distribution for ARCH residuals with application to volatility prediction." Annals of Economics and Finance, vol. 23, pp. 34-56.
12. Sola, M., F. Spagnolo, and N. Spagnolo (2002) "A test for volatility spillovers," Economics Letters, vol. 76, pp. 77-84.

ISSN 2076-9202

13. Su, J. and J. Hung (2011) “Empirical analysis of jump dynamics, heavy-tails and skewness on value-at-risk estimation.” Economic Modelling, vol. 28, no. 3, pp. 1117-1130.
14. Tavares, A., J. Curto and G. Tavares (2008) “Modelling heavy tails and asymmetry using ARCH-type models with stable Paretian distributions.” Nonlinear Dynamics, vol. 51, no. 1, pp. 231-243.

ISSN 2076-9202

FOREIGN DIRECT INVESTMENT (FDI) IN AGRICULTURE INFLOWS AND POVERTY IN SELECTED OIC COUNTRIES

Intan Maizura Abdul Rashida *, Nor'aznin Abu Bakara, Nor Azam Abdul Razaka

* Intan Maizura Abdul Rashid. Tel.: +6019 -3861506. E-mail address: intanmaizura@unimap.edu.my

a

School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia, Kedah, Malaysia

Abstract

This research endeavor set out to empirically examine the impacts and to see the causal relationship of FDI in agriculture inflows on poverty in selected OIC countries. The agriculture sectors react as important keys in the expansion of FDI in agriculture sector to eliminate the poverty issues. Therefore, it reviews the experiences of agriculture investment in selected member countries with a view to identify potential roles for countries seeking FDI and their development partners in nurturing FDI intra OIC especially in the agriculture new investment. In this study, the FDI in Agriculture Sector react as independent variable and the poverty as dependent variable in selected OIC Countries based on availability of data. According to the models used, the results have significant effects towards all the variables used. Lastly, according to the models employed, the results have significant effects towards all the variables used. The data was analyzed by using Panel Data includes Random and Fixed Effects Method, Ordinary Least Square and dynamic Sys-GMM panel data approaches. The results show negatives and significant impact of FDI in agriculture inflows on poverty reduction and also the poverty as determinant factors for FDI in agriculture inflows. Latter, the policy implications that happened throughout the study will be discussed with some suggestions.

Keywords:

OIC, FDI in Agriculture, Economic Growth, Panel Data, Poverty

1.0 Introduction

This paper reviews the agriculture sector in member countries of Organization of the Islamic Cooperation (OIC), and pays specific attention to issues of the poverty and FDI inflows in the sector. The time component of our dataset is based on 10 years data from 2005 to 2014. In addition, it reviews the experiences of agriculture investment in selected member countries with a view to identify potential roles for countries seeking FDI and their development partners in nurturing FDI intra OIC especially in the agriculture new investment. Based on report by Food and Agriculture Organization or

ISSN 2076-9202

FAO (2013) when the agriculture sector been improved, it can attract foreign direct investment thus diminished the insecurity of food and poverty. The improvement in agriculture sector may harm the natural resources of the sector instead of encouraging foreign direct investment due to lack of management system. Poverty is happened across the world even the countries were developed. It is not only happening in poor countries. Even though developing countries is moving towards the development and improving their growth, but still they cannot eliminate the poverty problems in their countries. The income per capita of people in a country does affect the poverty issues since it shows their capability in supporting their livings. Foreign direct investment directly contributes to the impacts of poverty because it encourages employments and income level of the people. The key issues towards the foreign direct investment are when the participation of female in labor force had been discriminated. Female workers were paid less even though the jobs were similar with male. As a conclusion, the governments need to make sure that this issue will be solved so that it will not impacts the unemployment and inflows of foreign direct investment in a country. Incremental on the foods price viewed during the food crisis in year 2006 until 2008 triggered several serious harmful socio -economic impacts on the economies of many developing countries, including the OIC members. The World Bank (2014) stated the total OIC population that are still living not more than USD $1.25 each day was about 17.4% of world total population in the year 1990 until 2011. The World Bank also indicated the poverty level of OIC countries remained comparatively very high align with their percentages over the world total poor that were also increased significantly, the world total poor recorded about 33.1% in year 2011 but only 22% in 1990. In addition, non-monetary poverty indicators also vary among the OIC Countries for examples Human Development Index values of OIC countries are between 0.855 and 0.304, Multidimensional Poverty Index values are between zero and 0.642, and Global Hunger Index values are between zero and 33.6.

2.0 Research Objectives

The primary objective of conducting this study is to investigate the impacts and the causal relationship of foreign direct investment (FDI) in agriculture sector on poverty of OIC countries. Based on the theoretical framework and research questions of this study, the research hypothesis of this research study had been constructed. The followings are the research hypothesis of this research study:

H1 There is a relationship between poverty and foreign direct investment (FDI) in agriculture sector of OIC countries.

H2 There is a causal relationship between poverty and foreign direct investment (FDI) in

ISSN 2076-9202

agriculture sector of OIC countries.

3.0 Findings and Conclusion

First of all, Panel Data Analysis that including Random Effects Method is used for the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. Fixed Effects Method used in analyzing the impact of variables that vary over the time. Pooled OLS Method is if the individual effect does not exist, ordinary least square (OLS) produces efficient and consistent parameter estimates. Generalize Least Squares (GLS) Method based on constructing an approximate covariance estimates for the log relative risks and estimating a corrected linear trend. Next is the Hausmen Test that is if find both significant level of the Random and Fixed Effects Method that going to determine which is the better than others by comparing between the Fixed and Random Effects Method. These entire tests are performed and findings of this research are based on the data that has been run by using the application called STATA.

3.1 Descriptive Statistic Analysis

Descriptive Statistic Analysis is for the data analysis that stated the number of the observation that is part required to make the observation based on the data that being collected. The analysis performed by the descriptive statistic to find out the statistic of the every of the variables involved which FDI in agriculture, poverty and the control variables namely inflation, GDP, exchange rate, and infrastructure index. Then, it also included mean of the each data of the variable and included the standard deviation square root of the mean. Besides that it also have the minimum and maximum value of the data that being run. Based on the table above all the variables are having range 30 observations. The Poverty have the highest mean and standard deviation of 113640.10 and 101071.60 respectively in the data

ISSN 2076-9202

distribution. The GDP have the lowest value of the mean and standard deviation that is 1.88 and 2.13. Next the other variables having the middle range between the Poverty and GDP. The FDIA in agriculture mean and standard deviation is 5.10 and 15.99, the INFL mean and standard deviation is 6.55 and 5.38, the EXC is 69.68 and 72.36 for the mean and standard deviation. Lastly, the INFREX with 2.20 and 2.23 for the mean and standard deviation. The table also show the minimum and maximum value of the each variable that being presented. The Poverty has highest of the minimum and maximum value that is 6557.33 and 462979.20. The lowest maximum value is the infrastructure index that is 5.70. Then the GDP minimum and maximum value is the 167545.00 and 6.38. The exchange rate is EXC that is 0.38 and 219.59 for the minimum and maximum value. Last variable that is infrastructure index represented by the INFREX having the minimum and maximum value is 0.00 and 5.70.

Table 1: Descriptive Statistics of Determinants and FDI

	LFDIA	LPOVT	INFL	LGDP	LEXC	INFREX
LFDIA	1					
LPOVT	0.2571	1				
INFL	-0.1330	0.1979	1			
LGDP	0.0611	-0.5814	0.5546	1		
LEXC	0.2244	-0.0657	0.7304	0.3118	1	
INFREX	0.1479	-0.3975	-0.0611	0.0315	-0.3146	1

3.2 *Correlation of Variables in Study*

The correlation of variables is the relationship between each variables included the dependent variable and independent variable that being analysis in the research.

ISSN 2076-9202

Table 2: Correlation of variables in study

	Obs	Mean	Std. Dev.	Min.	Max
FDIA	30	5.10	15.99	0.00	98.5
POVT	30	113640.10	101071.60	6557.33	462979.20
INFL	30	6.55	5.38	0.20	20.30
GDP	30	1.88	2.13	167545.00	6.38
EXC	30	69.68	72.36	0.38	219.59
INFREX	30	2.20	2.23	0.00	5.70

The existence of high correlation among the independent variables will lead to the problem of multi-collinearity in the estimation. Still consider these variables because of the panel data estimation which takes care of the collinearity problems. The highest value of the correlation means the very good relationship between the two variables in this research. It also shows that between two variables got the aspect that being connected that can be used for the research in the future. Based on the table above the correlation among the variables is stated by the value for each variables between others variables. The highest correlation rate is the exchange rate as EXC and the inflation as INFL is the 0.7304. It is shows that between this two variables got very strong relationship or correlation. The another good relationship between two variables is the labour cost as GDP with Poverty and GDP with inflation as INFL that the value is above 0.5 it is 0.5814 and 0.5546. Then the range value of the correlation 0.20 to 0.49 that being consider as the good correlation value that is the poverty with foreign direct investment as FDIA is 0.2571, infrastructure index as INFREX with poverty is 0.3975. Next in the table 4.3.1 also having being conclude having the poor relationship or correlation between two variables in this research. The range value of poor correlation value is below than 0.01 or the negative value. It show to the variables inflation as INFL with foreign direct investment as FDIA value is -0.1330, the GDP with foreign direct investment as FDI value is -0.0611, the exchange rate as EXC with foreign direct investment as FDIA values is - 0.2244, the infrastructure index as INFREX with inflation as INFL value is -0.0611, the infrastructure index as INFREX with exchange rate as EXC value is -0.3146.

ISSN 2076-9202

3.3 Estimation Techniques Results (Random Vs Fixed Effects Method Vs OLS)

To examine the impact of FDI in agriculture, inflation, GDP , exchange rate and infrastructure on poverty in OIC countries, this study consider a set of static panel estimation techniques including cross

–section pooled Ordinary Least Squares (OLS), Fixed Effects and Random Effects (RE) models. To choose between cross -section POLS and RE model, the Breusch –Pagan Lagrange Multiplier (LM) test was used to examine the null hypothesis that there are no random effects. This hypothesis, if rejected, would imply that cross -section POLS technique is inappropriate. In addition, in order to choose between FE and RE model, the Hausman specification test was used to examine the null hypothesis that random effects are consistent and efficient. Similarly, if this hypothesis is rejected, then the estimation results provided by FE model are found to be more robust than others (Tang and Aosedra, 2014).The Random Effects Method is the method that the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. Advantages of the Random Effects is that can include time invariant variables. The Fixed Effects Method is to explore the relationship between predictor and outcome variables. Each entity has its own individual characteristic that may or may not influence the opinion.

ISSN 2076-9202

Table 3: Panel data Estimation Results based on Random Effects (RE), Fixed Effects (FE) & OLS

VARIABLES	RE	FE	OLS
FDIA	-0.344***	-0.425***	-0.481***
	[0.00247]	(0.00847)	(0.00214)
INFLATION	-0.550***	-0.401***	-0.528***
	[0.00434]	(0.0111)	(0.00333)
GDP	0.227***	0.254***	0.215***
	[0.0330]	(0.0181)	(0.0777)
EXC	0.0291	0.132**	0.529***
	[0.0225]	(0.0558)	(0.0144)
INFREX	0.0203***	1.679***	1.840***
	[0.00308]	(0.124)	(0.230)
TIME DUMMIES	Yes	Yes	Yes
R-SQ	-	0.158	0.751
(FSTATISTIC)		0.0000	
BP-LM	0.0000		
HAUSMAN TEST		0.0000	
NO. OF OBSERVATION S	320	320	320

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 3 shows that the Breusch–Pagan LM test rejects the null hypothesis of no random effect, demonstrating that the estimation results with RE model are more robust than POLS. Then, the statistic of Hausman specification test rejects the null hypothesis of RE model is appropriate and more

efficient. In this case, the results of FE model are more appropriate than RE model. Thus, this study only present the results from FE panel data. In FE model, the model show that 42.5 per cent of the variation in FDI in agriculture of OIC countries can be explained by the level of poverty reduction. As expected, we find that FDI in agriculture have negative and significant impacts on poverty in OIC countries. This is in line to those of Gunduz and Hatemi (2005), Katircioglu (2009), Akinboade and Braimoh (2010), and Omri (2014). In table 3, it can see that inflation, exchange rate and the FDI in

ISSN 2076-9202

agriculture inflows have the highest impacts on poverty reduction in OIC countries, followed by infrastructure and GDP.The findings indicate that all the variables have significant impact at 1% except for exchange rate (5% significant level).The results are consistent with the findings of Omri (2014) and Al-mulali (2011). Lastly, this simultaneous equations results indicates that the poverty level in one country can be an impact on FDI in agriculture inlows in OIC countries.

3.4 Diagnostic Test - System GMM

Table 4 System GMM Estimation Results for FE Dynamic Panel Data

Dependent var.	FDIA	POVERTY
Constant	-5.2164	14.6633
	(-0.74)	(1.43)
FDI AGRI		-52.2200***
		(-2.84)
POVERTY	-115.0144***	
	(-5.12)	
INFLATION	-0.0005	-0.0002
	(-0.89)	(-0.53)
GDP	0.0132	0.0052
	(0.32)	(0.09)
EXC	0.0687	0.4220
	(0.11)	(1.11)
INFREX	0.1788**	0.0669
	(2.22)	(0.78)
AR(1) test (p-value)	22.11***	23.33***
AR(2) test (p-value)	0.1244	0.0433
Nb. Obs.	320	320

Note: This table presents the results from the two-step System Generalized Method of Moments estimations using STATA. The coefficients and standard errors (in parentheses). The Arellano-Bond tests are the post- estimation test to check the appropriateness of the model (in parentheses is the p-value). *, **and *** indicates significant at the 10%, 5% and 1% level respectively.

This study used a dynamic panel of the simultaneous equations specification where lagged levels of poverty are taken into account by using Sys-GMM estimators. Consistency of the GMM estimator depends on the validity of instruments. To address this issue, we consider two specification tests: the

ISSN 2076-9202

first is the first-order autocorrelation of over-identifying restrictions, which tests the overall validity of the instruments (the null is that the instruments are valid); second is the second-order autocorrelation test for error term, which tests the null according to which there is no autocorrelation. Table 4 shows that the Hansen test for diff-GMM estimation rejects the null hypothesis of over-identifying restrictions.

Therefore, results conclude that the sys-GMM estimator specification tests indicate that the used instruments are valid. Accordingly, the study conclude that the sys-GMM estimation is robust and appropriate. Based on the sys-GMM estimation, we find that one period lagged value of poverty has a negative and significant impact on its current value at 1% level for FDIA panel. In addition, FDIA have also negatively and statistically significant impacts on poverty for OIC countries at 1%, respectively. The magnitude of -5.12 indicate that a 1% increase in poverty decreases FDI in agriculture of OIC countries by 5.12% respectively. The overall findings, for both static as well as dynamic estimations, show that FDI in agriculture of OIC countries is essentially very sensitive to the level of FDI in agriculture inflows. Accordingly, policymakers should take into account these phenomena in order to build sound economic policies to sustain economic development.

Hypothesis Results

No of Hypothesis	Statement of Hypothesis	Results
H1	There is a relationship between poverty and foreign direct investment (FDI) in agriculture sector of OIC countries.	Accepted
H2	There is a causal relationship between poverty and foreign direct investment (FDI) in agriculture sector of OIC countries.	Accepted

Table 4: The Hypothesis Statement

The empirical results show that highly important in policy implementation that were related to the explanatory variables have significant effect on FDI in agriculture sector. Based on the empirical results, the government should be focused and paid attention on FDI in agriculture inflows other than other

ISSN 2076-9202

sector, particularly for reduction of poverty and agriculture growth in OIC countries. On the other hand, based on the causality relationship that was found in this study, the poverty reduction become the most significant variables to enhance the inflows of FDI in agriculture sector in OIC countries. There is no doubt that poverty played a huge role in FDI in agriculture sector as poverty has been considered as the most important factor whenever investors are coming to bring in investment into OIC countries. If the poverty in one country is being too high, it is hard to convince foreign investors to cash in into the agriculture sector in OIC countries. Nevertheless, the minimum wage policy should be well managed by the OIC countries government whereby reduce in poverty cause a slump in the amount of FDI inflows in agriculture sector in OIC member countries. The execution of minimum wage policy by the government in nevertheless being that crucial.

REFERENCES

Abd Halim Ahmad, N. A. (2013). Investigation of optimal capital structure in Malaysia: a panel threshold estimation. *Studies in Economics and Finance*, 108 - 117.

Abdoli, K. K. (2010). The citation impact of Open Access agricultural research. *Online Information Review*, 772 - 785.

Akinboade, O., Braimoh, L.A., 2010. International tourism and economic development in South Africa: a Granger causality test. International Journal of Tourism Research 12,149–163.

Gunduz, L., Hatemi-J, A., 2005.Is the tourism-led growth hypothes is valid for Turkey? Applied Economic Letter.12,499–504.

Hung, T. H. (2006). Attracting FDI in agriculture and rural development- status and solutions for improvement. *Policy Advisory Briefing*.

Katircioğlu, S.T., 2009. Revisiting the tourism-led-growth hypothesis for Turkey using the bounds test and Johansen approach for cointegration. Tourism Managment 30,17–20

Kler, P. (2007). A panel data investigation into over education among tertiary educated Australian immigrants. *Journal of Economic Studies*, 179
- 193.

Omri, A., 2013. CO2emissions, energy consumption and economic growth nexus in MENA countries: evidence from simultaneous equations models. Energy Economics 40, 657–664.

Omri, A., Kahouli, B., 2014. Causal relationships between energy consumption, foreign direct investment and economic growth: Fresh evidence from dynamic simultaneous-equations models. Energy Policy 67, 913-922.

Omri, A., D.K., Nguyen., Christophe, R., Causal interactions betweenCO2emissions, FDI, and economic growth: Evidence from dynamicsimultaneous-equation models. Economic Modelling

ISSN 2076-9202

Saiful Arif Abdullaha, N. N. (2008). Changes in agricultural landscape pattern and its spatial relationship with forestland in the State of Selangor, peninsular Malaysia. *Landscape and Urban Planning*, 147–155.

Sam, A. G. (2010). Nonparametric estimation of market risk: an application to agricultural commodity futures. *Agricultural Finance Review*, 285
- 297.

Tang, L. (2009). A Study on Foreign Direct Investment Agriculture in China. *International Journal of Business and Management*.

UNCTAD.2007.Best practices for organic policy. UNEP-UNCTAD Capacity Building Task Force on Trade, Environment and Development (available at http://www.unep.ch/etb/publications/UNCTAD_DITC_TED_2007_3.pdf).

UNCTAD (1994). World Investment Report: Transnational Corporations, Employment and the Workplace‖, New York: United Nations. UNCTAD (1998). World Investment Report: Trends and Determinants‖, New York and Geneva: United Nations.
UNCTAD (2007). World Investment Report: Transnational Corporations, Extractive Industries and Development. New York and Geneva : United Nations. Retrieved on July15,2008 from http://www.conapri.org/download/wir2007_en.pdf

World Bank Agriculture and Rural Development Department, World Bank, Agricultural &Rural Development Department, Washington, D.C.World Bank (2013), A Unified Approach to Measuring Poverty and Inequality- Theory and Practice,

World Bank, Washington, D.C. World Bank (2014), Knowledge in Development Note: Measuring Global Poverty. Available at:http://bit.ly/1vUPbSJ

ISSN 2076-9202

A STUDY ON NON-PERFORMING ASSETS IN RETAIL BANKING

Dr Arfat Ahmad

Abstract

The present study investigates the relative magnitude and causes of bad loans in banks. The respondents of the study were the credit/advance managers working in various branches across seven different banking institutions operating in the Srinagar province of J &K state. The managers believe that the factors like bank specific, client specific and the managerial specific have a considerable influence on the level of NPA in these banks. They have attached highest significance to bank specific factor indicating that the banks have to improve on their existing internal system in order to curb the rising levels of NPA. Within, the bank specific factors three elementary factors were thoroughly studied which influence the level of NPA in banks. The respondents of the study attached the highest significance to the supervisory authority factor indicating loop holes in the said area should be plugged to decrease the rising levels of NPA. The respondents also believe that the right actions taken by the managers of the banks can help in reducing the level of NPA by 84.9%. the specific actions to be taken by the managers include reduction in interest rates, obtaining credit information of the borrower, training the bank officials, increased use of credit reference bureaus, using ratios in the process of evaluation, emphasizing on project feasibility, monitor of loan quality, using standard sanctioning procedure and others.

Introduction

Money lent sometimes becomes bad partly and in the banking parlance it is called as Non -Performing asset (NPA). This study deals with the problem of having Non-performing Assets and the factors responsible for it. Irrespective of little setbacks, the role of "credit" cannot be undermined when compared to its usefulness to the economy. That is why an economist said "credit has done more to enrich the nations than all the gold mines in the world put together". Government of India nationalized the banks to make them as an instrument of economic and social change and the mandate given to the banks was to expand their networks in rural areas and to give loans to priority sectors such as small scale industries, self-employed groups, agriculture and schemes involving women.

Literature review

Non-performing assets are one of the major concerns for banks in India. NPAs reflect the performance of banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset. Rathore et, al., (2016) argues non-performing assets are a drain to the banks and suggested that advances provided by banks need to be done pre-sanctioning evaluation and post disbursement control so that NPA can decrease. Proper selection of borrowers & follow ups required to get timely payment. Kavitha. N (2012), emphasized on the assessment of nonperforming assets on profitability its magnitude and impact. Credit of total advances was in the form of doubtful assets in the past and has an adverse impact on profitability of all Public

ISSN 2076-9202

Sector. Banks affected at very large extent when non-performing assets work with other banking and also affect productivity and efficiency of the banking groups. Siraj. K. K & Sudarsananpillai (2013) says that NPA is a virus affecting banking sector. It affects liquidity and profitability, in addition posing threat on quality of asset and survival of banks. The study concluded that NPA still remains a major threat and the incremental component explained through additions to NPA poses a great question mark on efficiency of credit risk management of banks in India. Mahesh (2010) examined the trends of NPAs in India from various dimensions and explained how mere recognition of the problem and self-monitoring has been able to reduce the NPAs to a great extent. Aggarwal, (2012) analyzed the comparative position of nonperforming assets of selected public and private sector banks in India to find their efficiency through comparative study. Toor N.S. (1994) stated that recovery of non-performing assets through the process of compromise by direct talks rather than by the lengthy and costly procedure of litigation. He suggested that by constant monitoring, it is possible to detect, the sticky accounts, the incipient sickness of the early stages itself and an attempt could be made to review the unit and put it back on the road to recovery. Rai (2012) in her study on Study on performance of NPAs of Indian commercial banks find out that corporate borrowers even after defaulting continuously never had the fear of bank taking action to recover their dues. This is because there was no legal framework to safeguard the real interest of banks.

Objectives of the Study

The purpose of this project study was to find out the relative magnitude of the causes of non-performing assets with regard to all the causes in the seven commercial banks operating in India.

Research design

The study was carried over a period of two months and the data was collected from the respondents who were the credit/advance managers of the banks under study. The respondents were served questionnaires which focused on the potential causes of NPAs in the commercial banks. The data collected from the respondents was analyzed with the help of statistical software SPSS, Version 16.0. The study aimed at looking into the factors that contribute to NPAs in these banks. Moreover, descriptive statistics, correlation, regression analysis and comparative statistics together with model fit statistics were used to deduce logical conclusions.

Findings

The major factor leading to NPA as identified by the respondents is the bank specific factor which has the highest mean value of 3.9821. Also from descriptive analysis, it is evident that standard deviation for all the variables is less than 1 indicate homogeneity in the data collected.

ISSN 2076-9202

Fig-1: Descriptive Statistics

Variables	Mean	Std. Deviation
Bank Specific factors	3.9821	.2147
Client Specific factors	3.4524	.2331
Manager Specific factors	3.6964	.3725

Pearson correlation coefficient was calculated to assess the relationship between the independent and the dependent variables of the study. The above table exhibits the direction and strength among the dependent and independent variables. From the table, it is clear that there exists a positive high correlation between all the factors/causes of NPA, like, bank specific, client specific, manager action, and the effect, i.e. NPA. Among these relations, the bank specific factor is depicting a very high positive correlation to the extent of 82.4 % indicating the fact that the bank specific causes are primarily responsible for the deterioration in the asset quality in banks. These causes are those which are considered to be within the direct scope of the bank management.

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value	R	RSquare
		B	Std. Error	Beta				
1	(Constant)	.811	.832		1.975	.000	0.929	0.863
	Bank Specific	.148	.156	.776	1.945	.000		
	Client Specific	.149	.160	.778	1.934	.000		
	Managerial specific	.199	.113	.849	2.761	.000		

a. Dependent Variable: NPA

ISSN 2076-9202

Regression analysis was conducted to assess the impact of the causes of NPAs on the level of NPAs in the banks understudy. The regression table provides the result of constant, coefficient of determination, t-value. Coefficient is the slope of regression line and it explains that 1 unit change in independent variable will bring how much change in dependent variable. The coefficient of determination (R^2) explains how much variation in the dependent variable is explained by the independent variable. The value of coefficient of determination reveals how robust the model is, which is an estimated 86.3%.

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.929	.863	.801	.31158	.863	114.120	4	9	.000

a. Predictors: (Constant), Client Specific, Manager specific, Bank Specific

The model analysis includes the independent variables and dependent variable. The linear combination of the independent variables was significantly related to the dependent variable, R=.929, adjusted R square=.801, F=114.120 (p=0.000). An estimated 80% of variance of NPA is explained by the causes of the dependent variables, thereby confirms the model fit.

The study also reveals that the major activity that leads to NPA is priority lending sector and the major factor contributing to NPA is the bank specific factor, thus making it imperative for the bankers to critically evaluate the bank specific factor before advancing loans to the said sector.

Conclusion and discuss

Bank lending in Kashmir is characterized by problem of non-performing loans. The high magnitude of non-performing loans in commercial banks and the rate at which it grows annually poses serious danger to both banking sector and the entire economy. A lot of factors are responsible for these anomalies in the banking sector. They include mal-administration in credit process, laxity in supervisory/regulatory oversight by RBI, weak corporate governance and unfriendly economic situation in the country. These factors contributed immensely to the excessive high level of nonperforming loans in banks. Unless these root causes of the problem are tackled as suggested above, the problem of non-performing loans will continue to have tremendous and debilitating impact in the business of banking Reduction of NPA is necessary to improve profitability and comply with capital adequacy norms. It is always better to follow proper policy of appraisal, supervision and follow-up of advances to avoid NPA's. Indeed, risk attached to lending cannot be completely eliminated. Nevertheless, each bank has loan recovery policy giving details of strategies chalked out for recovery of dues period wise, targeted level of reduction of NPA.

In light to the problem of non-performing assets in the banking sector, the idea of self-regulation by banks should be actively pursued. The RBI as an umbrella organization for bankers has a crucial role to play in this dispensation. It is further suggested the practice of regulatory forbearance must be discouraged. The regulatory authorities must act decisively by applying the full weight of the law whenever there is a

ISSN 2076-9202

serious breach of rules and regulations.

References

1. Aggarwal, S., & Mittal, P. (2012). Non-Performing Assest: Comparative Position of Public and Private Sector Banks in India. International Journal of Business and Management Tomorrow, 7.
2. Meenakshi Rajeev and H P Mahesh (2009). "Banking Sector Reforms and Npa: A study of Indian Commercial Banks". Working Paper 252. The Institute for Social and Economic Change, Bangalore
3. Rai, K., "Study on performance of NPAs of Indian commercial banks", Asian Journal Of Research in Banking and finance, Vol. 2, Issue 12, 2012.
4. Rathore, Sangeeta Malpani, Sunita Sharma, Non-Performing Assets of Indian Banking System and its Impact on Economy IOSR Journal of Economics and Finance (IOSR-JEF).Volume 7, Issue 6 Ver. III (Nov. - Dec. 2016), PP 21-26
5. Siraz, K. K., & pillai, D. S. (2013). A Study on the Performance of Non-Performing Assets (NPAs) of Indian Banking During Post Millennium Period. International Journal of Business and Management Tomorrow, 12
6. Kavitha N (2012) An Insight Into Determinants Of Funds Management In Indian Scheduled Commercial Banks Zenith International Journal Of Business Economics & Management Research.

ISSN 2076-9202

INDIAN ECONOMY: IMPEDIMENTS AND INITIATIVES

Mehnaz Manzoor
Email id: m.mehnaz89@gmail.com
Assistant Professor, Department of Commerce, Govt. Degree College for Women, Nawakadal, J&K.

Abstract

The present work critically examines the Indian economy in the perspective of its challenges for economic growth. An attempt has been made to identify the various constraints in the primary, secondary and tertiary sector of Indian economy. The impediments thus identified are classified and presented as generic and consequential economic problems. It was observed that the likelihood adverse impact of identified impediments have posed incessant challenge to the India- economically, politically and socially as well. This work further extends to accentuate the initiatives undertaken primarily to address the challenges for economic growth and are oriented to ensure ripple-down the effect of economic growth through an increase in employment opportunities and economic equality.

Introduction

From the fundamental perspective India is doing better with regard to key macro- variable like, low inflation, lower oil prices, falling interest rates, fallen subsidy and control fiscal deficits. In the recent times (2015) trend was observed wherein net investment by domestic institution has been more than that of foreign institutions. In 2015 FPIs have invested a net of rupees 16700 crore into India stock markets, where mutual fund net investment are than 4 times at rupees 70000 crore.

Topped Nielson" global consumer confidence India has achieved fair degree of macro- stability, of course not immune to every shock, but to number of shocks. The present international scenario of global economy provides leverage to Indian economy. Global liquidity, low commodity prices and low rates of interest in global economies will keep pouring investments in bonds and equities in India. The forecast by IMF 3.6% indicates prospect of global growth is not promising growth global economic for 2016. As such the economic growth 7.5% is an indicator of wealth, reflect the quantity of resources available to a society, nevertheless it provides no information about the allocation of these resources.

Similarly 'Make in India' initiative result 48% FDI inflows in India. But at the same time if the global saving does upwards rise in global interest rates, this will result outflow of hot money from India. Especially, U.S.A returns from the long haul back to move a more nominal interest policies may have serious impact on developing. Thus, taping of outflow of foreign capital in anticipating of hike in international interest rates especially with reference to U.S.A recovery is one of the major challenges of India economy. This may leave domestic economy of India with lack of liquidity problems. More on the external force china has been consistently posing treat to the domestic economy particularly to the steel industry. China has been suffering from excess capacity of 300 MT in steel industry, this result dumping of its product in developing countries including India. At the same time, advanced countries constitutes

ISSN 2076-9202

around 60% of the world's import demand, thus may worsen India export sector. All this indicates that India is recovering but yet not surging economy. Therefore there is the need to analyze the various possible impediments and challenges to Indian economy which could hinder India to pursue its objective of economic growth.

Moreover the capital is mobile because of globalization, this means wherever the wages are low, capital will move. Interestingly the global wage vector isn't rising but the productivity of workers is rising. This means surplus is rising. This leads to the redistribution of income from workers to capitalists. In other words rupee shift from workers to the capitalists' resultant is incessant growing income inequality not in cyclic in nature but structural.

Similarly the adversities of present economic system are also undraped by French economist, Thomas Piketty in his book "Capital in Twenty First century". The author posits that, "the current return in capital is higher the growth of economy". This results in concentration of wealth in the hands of few and inequality among people increases.

Aims and objectives

- To analyze the impediments in the growth of Indian economy.
- To identify the initiatives undertaken to tackle the economic impediments.
- To suggest remedial as well as corrective measures to confront the economic problems of India.

Impediments

For the sake of convenience economic problems may be classified as generic problems and consequential problems. The generic problem may be defined as indigenous impediments of economy like poor performance of agriculture, lack of quality education and health related problems. These are the fundamental bottlenecks restrains an economy to propel. While as consequential economic problems are impediments which subsequently have arisen from the generic problems. The generic problems of Indian economy spur from the fact that on 2.4% of world's area and with 1.8% of world's income, India is maintaining 18% of world's population. It clearly indicates that there is excessive burden of population India. The primarily agriculture sector of India has occupied almost 43% of India's geographical areas and around 58% of the rural household depends on agriculture as their principle means of livelihood. So if this sector does not run properly it is depressing for the economy as whole. While as India's agriculture allied sector silk, forestry logging, and fishing accounts for 16.11% share of GDP. This implies 58% of population in India accounts and contributes only 16.11% towards GDP.

The reality is that Indian agriculture that largely provides livelihood to the vast mass has been suffering from low productivity, traditional farming practices and supply chain bottlenecks. However, lack of irrigational facilities stand significant bottleneck for the growth and prosperity of Indian agriculture. Indian agriculture is mainly monsoon dependent agriculture and lacks irrigation facilities. Out of 142 million hectares of land cultivated annually, only 64 million hectares or about 45% have assured access to irrigation facilities. Adding to it 75% of India's basin is holding less than 10 years average water. Even now more than 55% of the gross cropped continues to depend on rain. As per the Nitya Jacob, water aid India's head of policy, the ground water level are so depleting, that even good monsoon isn't enough to

ISSN 2076-9202

compensate for the effect of drought. He further added, there is no hope that agriculture sector to perform better as the monsoon isn't favorable throughout India. Farmers are afraid in farming operation in fear of continuous dry spell. The long neglect of agriculture may turn out to be grave if required action isn't taken immediately.

Not only irrigation, there is also severe shortage of clear drinking water in India. About 330 million, i.e., the quarter of the population is suffering from water shortage. Beside irrigation problems, social environment of the villages like Indian farmers being illiterate, conservative and unresponsive to the new agriculture techniques is the major obstacle in the growth and development of India's agriculture sector. Moreover, the growing pressure of population on land leads to fragmentation of agricultural land into number of small uneconomical holdings. As such 81% of total holding has a size of less than two hectares. India produces 106.19 million tons of rice from 22 million hectares of land at an average yield of 2.4 tons per hectare. India is placed at 27th rank in rice production out of 47 countries. Moreover, the land degradation is very high; almost 43% of land suffers from high degradation results 33.67% yield loss. All this manifested India's annual growth rate of agriculture at 1.1%.

This is supplemented by the fact that 48.6% farmers were in debt primary because of low price of agriculture products, indicate lack of credit and marketing facilities. The labor cost, fertilizer cost and the cost of other input agriculture factors rise sharply as compare to the price of agriculture products, thereby shrinks the profit margin. Such drop in prices of agriculture products in domestic as well as in international market becomes the possible reason for farmers' suicides.

According to the traditional economy theory, the share of agriculture in national income falls with economic growth, but then the share of dependent on the agriculture sector too should fall. In India however, this has not happen, the share of agriculture has decline but not the share of people living on it. Subsequently there is fall in income growth of rural economy. This has led degradation in living standard. Since the relative to the contribution of agriculture to GDP, total employment share is as high as 58%.

In the past, Indian economy has witnessed very sluggish in the growth as reflected from the economic plans mainly due to droughts, famines and trade restrictions. In addition, fatalism (philosophical doctrine that all events are predetermined in advance for all the times and human beings are powerless to change it) is also responsible for consecutive poor performance of the Indian economy. Consequently, this led to abysmal social indicator that even natural environmental changes like heat, torrent rains and cold waves take toll of thousands of lives every year. India's social indicator of common man abysmal to the extent that 194.6 million people in India are under-nourished, 44% of children under 5 year age are under underweighted, 30% of global neonatal death occur in India. According to Tendulkar Committee report 37.2% of Indian population is living below poverty line, composite of 41.8% of population in rural area and 27.5% population in urban area. The 66 Round of NSS reports 21.92%, while as 50% reports NC saxena committee of total Indian population is below poverty line. Based on the criteria of 47 rupees per day, Rangarajan committee on poverty reports 29.5% population are living below poverty line in India. While as World Bank reports one third of global poor in India. In India 51% of women between 15 to 59 years of age are anemic. According to the report by save the children, India ranks 75 out of 77 countries

ISSN 2076-9202

on a scale of "best place to be mother". The global hunger index of India is on 63 spot. Moreover this has led to the cascade effect on education system as well, as such, 30% of children miss school for more than 5 days due to illness. This clearly indicates India's evaluation on various socio-economic and human development indexes are low. As such alarming parameters of Indian economy like poverty, poor education, and unemployment nexuses are responsible to the economic inequality.

The adversity is intensified by the decline in employment output elasticity. Low employment elasticity of output is primarily due to capital intensive and unskilled labor, together it results frictional and structural unemployment in India. India's employment elasticity of .01 implies that every 1% point growth in GDP, employment increases by just one basis point. This has led rise in unemployment level to 4.9% reported by Labor Bureau, a wing of labor ministry. Unemployment in the rural areas was not even mitigated by the migration of rural labor to the urban in anticipation of labor demand for infrastructure sector. Despite a decline in urban unemployment rate, means rural unemployment has worsen further as such 93% of household surveyed benefits from MGNREGA. All this has led to the present state of income inequality. In fact, not only in India but at global level, increasing inequality among people is the most unprecedented economic problem. India has relatively huge inequality on income grounds measured through Gini Co-efficient. This is primarily due to falling in income growth in the rural economy.

Under the sphere of identifying impediments in Indian economy, the outlook of financial, manufacture, and export sector is also under the bleak shadow. Indian economy is passing through select weak macroeconomic indicators like index of industrial production, exports, bank credit to industry, wand weak capacity utilization purchasing manager indices. The generics to these problems could be attached to long lag between capital expenditure (i.e., demand stimulus) and the output from such capital structure. Due to long gestation period, particularly, small- scale sector in spite of the their account for over 80% of manufacturing sector are confronted with the problems of proper support and cure in terms of adequate raw material, power supply, access to financial markets and obsolete production techniques.

Among the core industries of India, steel is suffering the most primarily due the imports from China, Russia, Ukraine, Japan, and Korea. The casualty to the Indian steel industry is further intensified by the excess capacity of India steel industry and intermitted type of dumping in India, particularly on part of China. All this materialize as poor performance of India's core industries with creeping growth rate of 4.4% only and manufacture sector slow down contributing only 15% to GDP. While as on international trade the result is India trade deficit with china hits 1.1 billion dollars.

The industrial problems have also seep into banking sector. In India credit growth in steel, power and sugar was higher than growth of industry (4.8%) as whole. The bank credit to power, iron, and steel stood 15% of total domestic credit. The off late reaction eventually result that, Indian steel sector is reeling under huge debt pressure stressed steel companies with borrowing of 31 billion dollars (over 196000 crore of rupees) are likely to be biggest concern for Indian commercial banks in the years to come, says report by credit Suisse. Adding to it, 37% of corporate India's borrowings are held by companies, led by steel firms, which are not generating enough revenues to service their interest expenses. Adding to this animosity of India's steel industry, Consultancy Major Reports, with around only 2% growth in market, steel supply is expected to increase by around 10% but a slower growth in demand may lead to capacity

ISSN 2076-9202

utilization falling below 78%. However steel industry can regain its sheen with the help of government effort to curb cheap imports and boost local production.

Eventually, the poor performance ripple of core industries strikes to the Indian banking sector as well. The financial sector, especially banking chunk is suffering with huge stress assets particularly public sector banks due to lending in iron, steel, power, and sugar industrial sectors. Bank credit off-take dropped to 8.5 % against 13.4%. This is because the better rated corporate entities move towards less costly capital markets sources (Bonds and commercial paper). This result in PSBs profitability dragged to 0.7%. In fact, weak demand, capital constraints of PSBs and risk aversion over last one year has led to low credit take-off. Interestingly bad performers managed to get credit. Moreover, due to the economic slowdown nearly rupees 7.05 crore of bank loan has fallen under the category of stressed assets. While as overall India NPA stands around 10% of GDP. The ICRA study suggests bankers to seek a policy intervention by the government of India to reduce the stress.

The availability of credit relatively to the national income is stained partly since India has not been able to facilitate the mobilization of savings particularly of small and middle class people. India has 630000 villages, towns and cities having less than 100000 bank branches thereby leaving a huge vacuum in banking system. India has only 26 public banks, and 20 private banks with total of 1.8 trillion assets. This clearly implies the savings in India are not mobilized to finance for the capital expenditure of producing sector, thus results in the disequilibrium in the macros of Indian economy. This has also led to the negative impact on the credit availability in banks as the money remains at homes not in banks. Consequently, this led the escalating impact on the cost of capital.

Initiatives

Addressing the unemployment, India is likely to rely on MSMEs. On account of the fact that MSMEs contribute 40% of total export and 45% of total manufacture in India, 467.56 lakh entrepreneurs, 1061. 52 lakh of employee, India is trailing favorable support to the MSMEs financially and marketability assessment – for this India has to attain literacy, land reforms, good health for people. Privileged supervision by government to MSME. These MSME will get finance on the basis of the online marketing performance. Tie up with e-commerce Company can be strategy for the customer acquisition for the banks as well as for the MSMEs. It further calls for lower lag time or gestation period between capital expenditure and supply per se, through technological development and comprehensive audit mechanisms. In a way, India is imitating and adopting Asian type economic development model. The development of Asian countries like, Japan, Taiwan, South Korea, and China in their later phases MSME sector with government supervision and direct involvement was mainly key to success for their countries on the economic grounds while as Thailand, Malaysia and Indonesia has been able to attain commendable development performance. Other initiatives undertaken by authorities to address unemployment is the establishment of multi-product SEZs, for example, a multi-product SEZ in Tamil Nadu has potential to generate employment in excess of 50000 over next decade.

Authorities in pursuit to check rural income inequalities and unemployment problem initiate biggest flagship employment of government is MGNREGA 2005 further aimed to rural development and agriculture infrastructure. Direct Benefit Transfer (DBT) scheme project is instrumental in providing a

ISSN 2076-9202

platform for direct transfer of benefits and subsidy under various government schemes. Further in order to improve employment, elasticity of output index, skill development programmes were put in place. While as mid-day meals, and NHM – NHRM, NUHM, RMNCH +A and INAP are oriented to improve social capital indicators.

Introduction of seven-step Indradhanush framework was made to revamp the PSBs, infuse rupees 700 billion into PSBs over FY15-FY19 and setting up of bank board bureau for the performance evaluation of PSBs could ensure timely senior- level appointments reduce political intervention and bring greater focus onto improving operating metrics. While as the problem of NPAs are addressed through bankruptcy code mechanism by which bank loans can be resolved faster on out of court settlement.

To address the need of fund for the infrastructure development, national Investment and Infrastructure fund (NIIF) and strategic Debt Reconstruction are implanted by the ministry of finance and RBI.

In order to set macro level disequilibrium pertaining to the gap in income-saving-expenditure, financial inclusion and financial literacy programmes are supposed to set the mechanism in proper order. As per RBI 'Financial Inclusion and Financial Literacy' are twin pillars, where financial inclusion act on the supply side i.e., for creating access and financial literacy acts for the demand side, i.e., creating demand for the financial products and services.

For the smooth run of economy it is imperative to achieve macroeconomic equilibrium equation of national production- national income-national expenditure. For this matter, propensity to consume and propensity to saving are important determinant of macroeconomic equilibrium. It is important for the macro equilibrium that income earned must be circulated back into the system either through consumption or investment of saving thereof. In the Indian scenario it is quite evident for the fact that India lives in 630000 villages and have only 100000 bank branches that all the savings accrued from income earned do not goes back to the monetary circulation system. This calls for need of initiatives like as demonetization of currency to set the macro economics equilibrium.

Similarly in order to address the depreciation in the currency exchange value initiatives like gold monetization and foreign currency non-resident deposit (FCNRD) swaps are introduced.

Conclusion and suggestions

The present economic problems in the India aren't cyclic but structural and it is very hard to rectify. As such the prolonged stagnation in the primary economic sector in India is responsible for the prevailing structural economic disequilibrium and to it Keynesian demand management system won't work due to imposition of "authority measure" insisting on balance budget primarily because Economists want their budget balance while as capitalistic want their tax burden less. All this nullified the functional utility of Keynesian demand management allowing thereby gateway open for occasional economic bubbles.

It was also observed that one of the basic structural problem in India lies in its agriculture sector spur from lack of irrigational facilities. This is the time to stir up the conscience of the powers. As such, India's man made drought is the result of non-seriousness about water security as such you have reserve police, reserve army but you don't have reserve water. All this indicate shameful slur on the successive government that they have not taken the water crises issue seriously or planned to mitigate the suffering.

To capitalize the favorable economic momentum there is need to speed up the structural reforms

ISSN 2076-9202

implementation by relaxing long standing supply bottlenecks especially in the mining and power sector. Moreover the major challenge to the India economists and policy makers is to ensure economic growth (expected GDP growth 7.5%) would trickle down to poor and thus alleviate poverty.

On examination of domestic the poor performance of the core industry reflect a sluggish industrial recovery and raise question mark on the government's revised GDP growth projection. Moreover service sector which is a part of "Make in India" initiative have strong linkage to core sector like steel and fear to be affected too. Adding to it "Make in India" campaign with key priority of creation of jobs will be lost, if India isn't globally competitive on factors like infrastructure, input cost, ease of doing business, low cost finance, and pragmatic labor laws.

However my personal conviction is the capitalists in India need to be socially responsible for wiping off inequality by making rationalization of wages on equity principle, especially at the non-executive level employees working down to line on the organizational chart. This is because the very complex nature of present economic problem can't be resolved by the application of mechanized economic model but by the responsible civic and social behavior on part of individual, corporate bodies, and administration at large. This is time to realize that, it isn't only about achieving economic growth on certain parameters but it should be inclusive to the domain of social welfare. As such, even if there is zero growth but the same income is distributed in such a way that people are able to purchase enough necessities for themselves that the system can run well. In the words of Nelson Mandela, overcoming poverty isn't gesture of charity. It is the act of justice. It is the fundamental human right, the right to dignity and a decent life, where poverty persists there is no freedom. Nevertheless, goal of sustained poverty reduction cannot be achieved unless equality of opportunity and access to basic services is ensured. In fact, goal of reducing inequality must be explicitly incorporated in policies and programmes aimed at poverty reduction. The remedy so soughed to this was social welfare schemes. However, again the Implementation of social welfare scheme and their outcome is under susceptibility of frauds. Thus does not ensure visionary results.

ISSN 2076-9202



International Journal of Information, Business and Management
http://ijibm.elitehall.com/