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### **Editor in Chief:**

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

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Iran University of Science and Technology, Iran  
E-mail: [mbayati@ind.iut.ac.ir](mailto:mbayati@ind.iut.ac.ir)

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Telfer School of Management  
University of Ottawa, Canada  
Email: [edgardo.palza-vargas.1@ens.etsmtl.ca](mailto:edgardo.palza-vargas.1@ens.etsmtl.ca)

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Lecturer, Department of Management, ArbaMinch University,  
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Mr. Olu Ojo  
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Osun State University, Nigeria  
Email: [oluoioe@yahoo.com](mailto:oluoioe@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](mailto:masanda@ug.edu.gh)

Mr. Khalid Zaman  
Assistant Professor, Department of Management Sciences  
COMSATS Institute of Information Technology, Pakistan  
Email: [khalidzaman@cit.net.pk](mailto:khalidzaman@cit.net.pk)

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

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Affiliated to Osmania University, India  
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Associate Professor, Department of Commerce &  
Management Science  
Maulana Azad College, Aurangabad, India  
Email: [rrazakhan@sify.com](mailto:rrazakhan@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](mailto: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](mailto:commercesundar@gmail.com)

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# **E-government system acceptance and organizational agility: theoretical framework and research agendas**

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Dr. Soud Mohammad Almahamid

Middle East University, Faculty of Business Administration, Department of Business Administration, 383  
Amman, 11831 Jordan.  
S.almahamid@meu.edu.jo

## **Abstract**

**Purpose-** This study aims to develop theoretical framework that links e-government system acceptance with organizational agility. In addition, provide a solid theoretical landscape that is expected to stimulate more empirical research into an area relatively ignored by current literature.

**Design/methodology/approach-** an extensive literature review was done to make clear link between e-government system acceptance popular models and the dimensions of organisational agility.

**Research limitations/implications-** This research lack of the empirical root. Therefore, the proposed framework and its derived hypothesis remain just theoretical assumptions unless someone provide empirical validity for it. In addition, the proposed theoretical framework neither is claimed as comprehensive model nor mutually exclusive, but it represents a simplified model of complex IS phenomena.

**Practical implications-** By focusing on e-government system acceptance and links it with organisational agility, this research highlights the importance of preparing good marketing strategy directed toward governmental employees to promote individual and organisational benefits of e-government system to ensure high level of usage. It also, assists in preparing excellent e-government strategy that avoid any pitfalls either related to e-government acceptance or e-government service implementation and delivery.

**Originality/value-** This paper represents the first attempt to link e-government system acceptance with organisational agility. In addition, it opens new research venue to gauge the organisational benefits of e-government system implementation. Further, it proposes new theoretical framework that is rooted in the literature which represents an extension to the current literature. Finally, it provides some new research agendas that are valid for empirical investigation.

**Keywords-** E-government adoption; E-government acceptance; and organisational agility.

**Paper type-** Research paper

## 1. Introduction

The growing need to use e-government system and its related services becomes a universal phenomenon in developed and developing countries. The revolution of information and communications technologies enables government to offer better, faster, convenient, and cost-effective services to citizens, business, and employees. Although the Jordan government as well as community dedicate great effort towards transforming Jordan into e-society in an attempt to close the digital divide, the situation does not look as easy as it should be. It is not clear if Jordanian citizens are ready and willing to use the e-government offerings. It is worth noting that the success of any e-government system is limited to the majority adoption or acceptance. More importantly, do really the employees in governmental agencies accept and use e-government system effectively? What are the implications of this acceptance for governmental organisations?

Various models and theories were used in the literature to explain new technology acceptance. i.e. TRA (Theory of Reasoned Action), TPB (Theory of Planned Behaviour), DTPB (Decompose of Theory of Planned Behaviour), UTAUTA (Unified Theory of Technology use), DOI (Diffusion of Innovation), and TAM (Technology Acceptance Model)( Davis, 1989; Ajzen and Fishbone;1975, Venkatesch et al. 2003; Rogers, 1995). The most popular one of these theories is TAM. TAM assumed that individual's attitude towards new technology determine by two external variables: perceived usefulness and perceived ease of use. The attitude towards in turns affects behavioural intention, which in turn impact actual use. Although this model is widely used in different information domain to explain behaviour intention, the model was subject to various modifications and adaptations (Wu and Chen, 2005; Hung et al.2006; Horst et al.2007; Yuanquan et al.2008; Lean et al.2009; Hamner and Qazi, 2009). In the e-government context, the model used to explain "demand side" of e-government offerings which focus on citizens' acceptance. However, little research has been done to understand the acceptance of e-government system by governmental employees? And what is the impact of this acceptance on organisational agility? Nowadays, governmental organisations more than ever before face highly uncertain; unpredictable; hostile; and dynamic environment and citizens require quick response for getting instant services.

It is a big challenge for governmental organizations to keep abreast with citizens changing demands. Thus, governmental employees should develop new skills, competencies, capabilities, and knowledge to respond to changes in business environment. Creating these skills, competencies, capabilities, and knowledge practices should be faster than ever before. Several agile methodologies, frameworks, and techniques, and tools are suggested to cope with uncertainty in business environment (Sharifi and Zhang, 1999; Sherehiy et al. 2007; Jain et al.2007). One of these agile capabilities is using IT or IS effectively and efficiently (Zain *et al.* (2005). If this is true, this study attempts to extend this argument to suggest that acceptance of e-government system by employees can improve organisational agility. For agility or agile capabilities, different concepts and terms were used in the literature interchangeably referring to organizational agility, for example, "flexibility", "responsiveness", "adaptability", "speed", etc. However,

some scholars clearly distinguish between these terms and concepts (Conboy and Fitzgerald, 2004), while others use them synonymously (Sharifi and Zhang, 1999; Yusuf et al. 1999, 2004). In a review of enterprise agility concepts, frameworks, and attributes by Sherehiy et al.(2007) show that all related concepts and terms to organizational agility concentrate on an organization's abilities to adapt its processes, strategies, production lines, resources, and so on to respond to the new circumstances created by change. Conboy and Fitzgerald (2004) criticize the prior definitions of agility for including the word "adapt to" and should be "embrace to", they suggest that the response to environmental changes may be proactive or reactive.

The above arguments conveyed the clear notion that there is no widely accepted definition for organization agility. The reason for a lack of an accepted definition might be attributed to irrelevant, imprecise, vague, surrogate, fuzzy logic, linguistic expression, and operational measures (Giachetti et al., 2003; Arteta and Giachetti, 2004; Lin et al., 2006a; Jain et al., 2007). In fact, IT/IS is a key enabler for organizational agility by enabling organizations to sense and respond to changes in citizens needs (Weill et al. 2002). Not only that, but also how an organization designs and manages information technology determine its agility.

## **2. Motivations for this study**

The motivations for this study emerge from a recommendation that appeared in the literature of IT/IS and organisation agility. For example, Gallagher and Worrell (2008) state that achieving agility requires organisations to innovate, organize and integrate information technology and business objectives in often time complex settings (p: 87). Zain et al. (2005) argue that the acceptance of IT becomes a main component of organisational agility. Jain and Vitharana (2008) provide a list of numerous research issues that are related to agility definitions, business value, measurement, agile applications development approaches, design models, project team organisation, communication within and across project teams, and governance need to be addressed. The seminal work of Zain et al. (2005) launched a strong call for researchers to investigate empirically the relationships between external variables, information technology acceptance, and organisational agility. Although the adoption of e-government system is compulsory for governmental organisations in Jordan, there is a dearth of research studies that investigate the acceptance of e-government system and organisational agility. So far, there is also paucity of models and frameworks that explain and predict the implications of e-government system acceptance to governmental organisations. Therefore, this research represents an attempt to further extend the arguments of Zain et al (2005) and show the applicability of these arguments in e-government context. In fact, this research has the originality in the following aspects:

- 1- Originality in developing a theoretical model, which predicts the hypothesized relationships between e-government system acceptance and organisational agility.
- 2- Originality in making links between e-government system acceptance and agile capabilities. i.e. responsiveness, competency, flexibility/ adaptability, quickness/ speed and e-government adoption. To the

best of our knowledge, this work has never been done before in e-government context.

3- Originality in extending some of the theoretical ideas and showing its applicability in e-government context. Much of the prior studies focus on e-government acceptance by citizens but this research shed new light on the importance of acceptance by employees and how it impacts organisational agility.

4- Originality in providing solid theoretical arguments that can be easily used as landscape for empirical studies.

### **3. Research Objectives**

The major objectives of this research are concerned with answering the main question: what is the relationship between e-government system acceptance and agile capabilities? The following questions can be derived from this main question:

1-What is the relationship between e-government system acceptance and responsiveness?

2-What is the relationship between e-government system acceptance and competency?

3-What is the relationship between e-government system acceptance and flexibility/ adaptability?

4-What is the relationship between e-government system acceptance and quickness/ speed?

### **4. Literature review**

In order to make clear link and to build parsimonious model, first we review both the e-government system acceptance literature and then organisational agility literature. Afterwards, link both literatures in logical manner to construct the research framework.

#### **4.1 Literature of e-government acceptance or adoption**

E-government literature emphasizes that applying e-government can provide various benefits when it is compared with traditional government system. Numerous e-government initiatives were set forth to increase the efficiency and effectiveness of government procedures and activities to improve public services delivery (Lee and Kim, 2007). However, Al-adawi et al. (2005) argued that e-government is far from reaching its maximum potential until the gap between what is offered and what is used is bridge. Although the majority of e-government literature focuses on the supply side of e-government, Riddick (2005) explored the citizens' interaction with the e-government from the demand side. According to his view, the E-government evolved through two phases: First, information dissemination in which governments cataloguing information on a formal website for public use. Second, transaction in which citizens can execute transactions and at the same time receive service delivery electronically. At the end, Riddick concluded that the informational phase is more dominant than transactional phase in reality.

The phases or stages of e-government developments dominated the literature - "evolutionary approach" (van Dijk et al. 2008, Lau et al. 2007, Reddick, 2005; 2004). While Layne and Lee (2001) provided four stage-growth model that consist of: (1) cataloguing information on a formal website; (2) conducting



transaction on the website; (3) vertical integration; (4) horizontal integration, Reddick (2004) examined a two-stage model in the context of U.S cities: stage (1) - cataloguing information on a website and stage (2) - conducting transaction on a web site. These two stages are similar to the first of Layne and Lee. Based on these stages, four relationships can be derived: government to citizen (G-2-C), government to business (G-2-B), and government to government (G-2-G). Finally, Reddick concluded that most of the U.S cities were located in stage (1) and the advancement toward stage (2) moves gradually and slowly. However, there are some transactions can be completed over the web site. Other four stage model was proposed by Lau et al. (2007), which consists of: 1- information dissemination in which information is published and disseminated; 2- interaction in which forms are circulated and filled; 3- transaction in which citizens can execute end to end transaction, and 4- seamless service.

Not only the presence of evolutionary approach is dominated the literature but also there is obvious assumptions of the linearity of the process development. However, other approaches are also possible, Ebbers and Dijk (2007) proposed multi-disciplinary and non-linear innovation model which indicates in details the processes of adoption and implementation of e-government services. Several indicators of resistance and support of e-government adoption were derived from the model. Certainly, the importance of aforementioned literature cannot be denied but it did not show the acceptance and use of e-government services by governmental employees. In addition, it does not show what the implications of this acceptance on governmental organisations are. However, we only found one study that investigates ICT adoption by one governmental organisation (Gupta et al. 2008). This study used UTAUT to investigate the factors that influence adoption of ICT by employees. The results revealed that performance and effort expectancy, social influence and facilitating conditions positively impact the use of the ICT. However, the study failed to find any significant moderating effect for gender on the aforementioned relationships. van Dijk et al. (2008) used TAM to explain government internet services use. The results demonstrate that the availability of internet service; the knowledge of this availability; the preference to use digital channels, and the ability and experience to do this are the fundamental conditions for internet usage. They argued that the acceptance and use should be analyzed as a dynamic process. Unexpectedly, the results showed that social-demographic and psychological factors did not influence e-government acceptance and usage.

Although, the fashion of e-government development disseminated quickly around the glob, the average usage of the e-government website fall below expectation even in more developed countries (Kumar et al., 2007, vanDijck et al.2008). Therefore, the adoption of e-government services by citizens considered a significant factor that determined e-government success. In two consequent studies, Carter and Belanger (2004, 2005) presented a high level research model proposes that relative advantage, image, compatibility, ease of use would influence e-government intension to use. The results revealed that perceived relative advantage, perceived image, and perceived compatibility are significant component of e-government adoption. However, higher level of perceived ease of use does not increase intention to use. Tung and Rieck (2005) examined the factors that influence e-government system adoption among business organisations in Singapore. A theoretical framework was developed and proposed that perceived benefits,

management readiness, sensitivity to cost, external pressure, and social influences were positively influence adoption decision. The results revealed that a significant positive relationship between perceived benefits, external pressure, and social influence and the firms decision to adopt e-government services.

Tung and Rieck (2005) argued that despite of the bulk of research articles that investigate e-government adoption, there is a lack of studies that explain why and under what circumstances individuals and organisations will intend to use e-government services and will continue to use it. Further, according to their research “the outcomes of e-government adoption depend mainly on e-government maturity level where should the investigation take place”. Furthermore, They argued that “the portrayal of an up-to-date, effective and secure online public administration may also encourage more companies to make queries, download forms, file returns and even tender for government projects online, leading to significant cost savings and efficiency gains for both the government and participating companies” (P:437). Kumar et al. (2007) developed a model of e-government adoption and citizens’ satisfaction emphasises that user characteristics (perceived risk, perceived control, internet), website design (perceived usefulness, perceived ease of use) influence directly e-government adoption whereas service quality improves citizens’ satisfaction. The model hypothesized that if the citizen satisfies with the e-government service quality, he/ she will adopt and use e-government service frequently. If this argument apparently looks reasonable, logical, and to some extent is true, it lacks of empirical basis.

Hung et al. (2006) explored Taiwanese acceptance and use of online tax filing and payment systems by using a survey instrument. The results indicates that the most determinants of e-government services were perceived usefulness, ease of use, perceived risk, trust, compatibility, external influences, interpersonal influence, self-efficacy, and facilitating condition. Hung et al. (2006) argued that the vast majority of e-government literature aimed to improve government service responsiveness, convenience, and quality. They classified the literature into five categories: (1) the concept, history, structure, initiatives, policies, key principles, challenges, development success factors of e-government; (2) the technological applications, tools, or approach to facilitating e-government services development, implementation, and evaluation; (3) the assessment, measurements, or investment model of e-government services to clarify economic, social, or public benefits of implementing e-government services; (4) management support or implementation strategies, including knowledge management, process-oriented management, service lifecycle management, customer relationship management, and reputation recovery management, to facilitating e-government services management; and (5) key factors affecting acceptance, expectation, and usage intension of e-government services. Until recently, the e-government intention to use did not realise the importance of continuance intention to use. This encourage, Wangpipatwong et al.(2008) to suggest empirically that perceived usefulness, perceived ease of use and computer self-efficacy directly enhanced citizens’ continuance intention to use e-government. In addition, they found that perceived ease of use indirectly enhanced continuance intention through perceived usefulness. We can extend these arguments and show how TAM model can be extend and linked with organisation agility.

#### **4.2 literature of organisational Agility**

In today's business environment, change is the only certain circumstance. New competitors, new potential customers, and harsh global competitions alter or nearly modify most industries in unexpected ways. To prosper, organisations should use the turbulent environment as an opportunity rather than a threat, organizations need to adapt quickly to new conditions. Turbulent environment should be seen as a motivator to establish organizational agile capabilities. These capabilities are considered strategic weapons in coping with an unpredicted, hostile, and ever-changing business environment. It is useful, if not critical to review the main literature in organizational agility and related concepts / terms. Several frameworks and methodologies appeared in the related literature. The prominent scholar Sharifi and Zhang (1999); Zhang and Sharifi (2000) developed a methodology for achieving agile capabilities in manufacturing companies. They divide the agile capabilities into four major categories namely: responsiveness; competency; flexibility; and speed. Recently, Lin et al. (2006a) comply with the categorization of Sharifi and Zhang, (1999); Zhang and Sharifi (2000) in which they consider the same capabilities are very important for dealing or coping with uncertainty and changes in business environment. These capabilities are described below:

1. Responsiveness, which is the ability to identify changes and respond to them quickly, reactively or proactively, and also to recover from them;
2. Competency, which is the ability to efficiently and effectively realize enterprise objectives. In other words, competency is an extensive list of abilities that provide a company with productivity, efficiency, and effectiveness in achieving its aims and goals. Examples of these abilities include: strategic vision, sufficient technological capability, and cost-effectiveness;
3. Flexibility/adaptability, which is the ability to implement different processes and apply different facilities to achieve the same goals. It consists of items such as: product volume flexibility, people flexibility, etc; and
4. Quickness/speed, which is the ability to complete an activity as quickly as possible. Items include: quickness in new products time-to-market, quickness and timeliness in product and service delivery.

According to Goldman et al. (1995) there are four strategic dimensions of agile capabilities: (1) enriching the customers; (2) cooperating to enhance competitiveness; (3) organizing to master changes; (4) leveraging the impact of people and information. Enriching customers refers to delivering value and solutions to the customers rather than products. Cooperating to enhance competitiveness relates to internal and external cooperation which is necessary to allocate resources effectively and efficiently. Therefore, products will be delivered to market in a cost effective and efficient manner. Organizing to master change means how flexible is an organization structure to permit relocation all organization resources. Leveraging the impact of people and information means how flexible and configurative are your human and information resources. For Jackson and Johansson (2003) agile capabilities is not a specific goal organizations have to attempt to achieve rather is a necessity to maintain competitiveness in

an unpredictable, dynamic, and continuous changing business environment. Agile capabilities are established based on various elements related to three main enterprise dimensions: manufacturing, product, and market dimensions. Also, Jackson and Johansson (2003) divide agile capabilities into four main dimensions: (1) product-related change capabilities, (2) change competency within operations, (3) internal and external co-operation, and (4) people, knowledge, and creativity.

However, manufacturing companies' often faced competitive pressures to be agile, this inspire Yusuf et al. (1999) to identify competitive foundations of agile capabilities as follows: speed, flexibility, innovation, proactivity, quality, and profitability. They proposed that competitive foundations are primary features of agile manufacturing that must be accomplished at the same time. In their framework, they differentiate three types of agile capabilities that could be related to specific levels of organization. Elementary agile capabilities pertain to individual resources (people, machinery, and management); micro-agile capabilities refer to the enterprise as a unit, and macro-agile capabilities represent the inter-enterprise level. Sharifi and Zhang (1999); Zhang and Sharifi (2000) have identified four important characteristics of manufacturing agility: (1) drivers, (2) strategic abilities, (3) providers, and (4) capabilities. Lin et al. (2006b) have summarized the agile capabilities drivers in five factors: (1) market volatility (2) intense competition (3) changes in customer requirements (4) accelerating technological change, and (5) changes in social factors. More recently, Sherehiy et al. (2007) extend the prior literature in agile manufacturing and agile work force by showing the global characteristics that could be applied to all aspects of organization: flexibility, responsiveness, speed, culture of change, integration and low complexity, high quality, customized products, and mobilization of core competencies. Sherehiy et al. (2007) strongly call for further research in agile manufacturing capabilities and agile work force to validate the suggested attributes and indices of suggested agile capabilities.

#### **4.3 The link between e-government system acceptance and organisation agility**

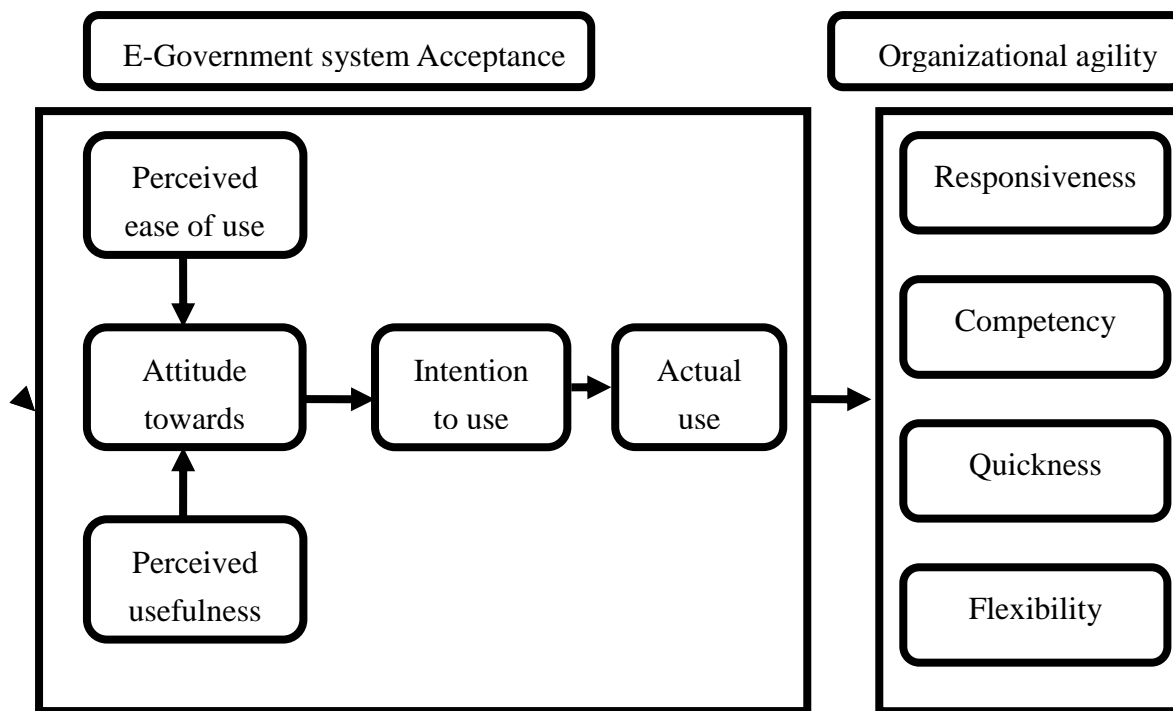
Information system enables organisations to sense and respond to environment changes (Gallagher and Worrell, 2008). It has been argued that TAM show how attitude toward new technology system impact organisational agility through actual use of information technology (Zain *et al.* 2005). The attitude toward the new information technology systems is a function of perceived usefulness and perceived ease of use of information technology. The perceived usefulness and perceived ease of use influencing organisation agility through actual use and attitude toward technology. Gallagher and Worrell (2008) present a longitudinal case study of an insurance company show how agility in multi-unit organisation can be realised through managing system design at the organisational and business unit levels. At the same time, Tallon (2008) posit that managerial information capabilities based on business partnerships, strategic planning, and ex-post information technology projects analysis lead to the development of technical information technology capabilities associated with flexible information technology infrastructure which in turn drives agility. The results show that managerial and technical IT capabilities have a positive impact on agility. Concurrently, Setia et al (2008) developed a framework for organisational value creation from agile IT applications. Organisational fit, process assimilation, and network adoption were

identified as pre-requisites for realising the value of agile supply chain applications. The information sharing and clockspeed were considered the moderating factors of the framework. Although Zain et al (2005) shed a light on a new research area that is expected to attract attentions more researchers, their study was exploratory in nature, and lacks the validity to be applied to governmental organisations. Furthermore, Zain et al (2005) investigated IT acceptance impacts on organisational agility in broader terms while the current research look at the e-government information system and links it with organisation agility.

## **5. The Theoretical framework**

Considering the arguments presented in section 4, the research model is depicted in Figure 1, the model suggests that the organization agility is a function of e-government system acceptance. The independent variable is e-government system acceptance which includes: perceived usefulness and perceived ease of use while, the dependent variable is organisational agility which includes responsiveness, competency, quickness, and flexibility. However, it has been argued that determining the required level of agility is done by matching agility driver assessment with agility capabilities. In this context, Lin et al. (2006) argue that different types of changes need to be predicted to assess the agility drivers. These changes include: changes in marketplace, change in competition, change in customer desire, change in technology, and change in social factors. As a result, the challenge that faces government today is how to cope with uncertainty caused by changes in citizens' expectations and new communication technologies, etc. (Becker and Knudsen, 2005). Thus, it is expected that e-government system can play a major role in reducing uncertainty results from changing in technologies and citizens expectations. This notion means that e-government has a job to do; its function is to enable an organisation to respond effectively to changing circumstances in both internal and external environment. In other words, it will enable organisation agility.

### **Figure 1: The Research Model**



Based on the above arguments in section 4, and the proposed relationships in Figure 1, the following main hypothesis can be derived: There is no relationship between e-government system acceptance and organisational agility. From this hypothesis the following sub-hypothesis can be derived:

- H1: There is no relationship between e-government system acceptance and responsiveness.
- H2: There is no relationship between e-government system acceptance and organisation competency.
- H3: There is no relationship between e-government system acceptance and quickness.
- H4: There is no relationship between e-government system acceptance and flexibility.

### 7. Clarifying the concepts and measurement suggestions

In order to enable future research to empirically test the proposed relationship between e-government system acceptance and organisation agility, we provide various definitions and supply guidance how to measure the research constructs. To do so, intensive literature review was conducted for the research constructs, and item-based measurements were developed. Most if not all the e-government acceptance literature used TAM to explain acceptance from citizens’ perspective. Thus, this research is in line with prior study by adopting TAM and links it with agility. Due to its well-established and significant relationship with PU, PEOU (Yuanquan et al. 2008), BI is used as a dependent variable in the current research model. However, Venkatesch and Davis (2000) show support for using BI as an independent variable for actual use by stating that “BI is a good independent variable for predicting actual use.” The e-government system acceptance is a function of perceived usefulness, attitude towards, perceived ease of use, and intention to use. The measurement scales and indexes can be adapted from the previous work includes Hung et al. (2006); Tung and Rieck (2005); Wangpipatwong et al. (2008).

For agility, various definitions have been suggested. Kidd (1994) defines as *a rapid and proactive adaptation of enterprise elements to unexpected and unpredicted changes*. Dove (2001) defines agility as the ability to manage and apply knowledge effectively, so that organizations would be prosper even under continuous changes in business environment. Arteta and Giachetti (2004) use complexity as a proxy measure of agility. Zain et al. (2005) see agility as a response to the challenges imposed by changes in business environment. Ismail et al. (2006) defines manufacturing agility as *an ability to respond to, and create new windows of opportunity in a turbulent market environment driven by individualized (bespoke) customer requirements cost effectively and rapidly*. Measures tested in prior studies can be adopted with changes in wording to suit e-government system context. Several approaches to measure agility can be found in organisation agility and agile manufacturing system literature. For example, agility index is used by several authors (Tsourveloudis and Valavanis, 2002; Yusuf and Adeleye, 2002). The agility index refers to a set of capabilities intensity levels. Another method for measuring agility (Ren *et al.*, 2000) is based on analytical hierarchical process (AHP) methodology. Other researchers (Giachetti *et al.*, 2003; Arteta and Giachetti, 2004; Jain *et al.*, 2007; Lin *et al.*, 2006a, 2006b) acknowledged that agility as a concept is imprecise, vague, and complex. Therefore, linguistic expression and fuzzy logic are the suitable measure of agility.

For the purpose of this study, Agility can observe to include four dimensions: Responsiveness, Competency, Quickness, and Flexibility. These capabilities enable organizations to respond proactively and innovatively to changes in citizens needs on a timely basis. The measurement scales and items can be adapted from items suggested by prior studies (Becker and Knudsen, 2005; Sharifi and Zhang, 1999; Zhang and Sharifi, 2000) for measuring *responsiveness, competency, and quickness*; Gupta and Somers (1996); Zhang et al. (2002) for measuring flexibility. Nine items were used to measure responsiveness; six items were used to measure competency; and four items were used to measure quickness. Because flexibility is a multidimensional concept, it was divided into five dimensions namely: volume flexibility, mix flexibility, labour flexibility, expansion flexibility, and delivery flexibility. These dimensions according to (Pagell and Krause, 2004) are dominant in the manufacturing strategy literature to address the flexibility. Sixteen items can be adapted from the aforementioned study to measure flexibility.

## **8. Contributions of this Research to Knowledge**

This study has contributed to knowledge on both the academic and practical levels. Academically, the study extends prior empirical research investigating the impact of IT acceptance on organisation agility by establishing link between e-government system acceptance and organisational agility. In addition, highlights the critical role of e-government system acceptance in facilitating organisational agility. A significant part of the literature focuses on citizens' acceptance of e-government system but ignore employees' acceptance of e-government systems and how it impacts organisational agility. Practically, the study has several managerial implications. More specifically, the major contribution of the findings lies in increasing the ability of governmental organisations managers to improve their skills and capabilities for responding effectively to uncertainty related to IT and citizens expectation changes. It helps governmental

managers to understand how their employees interact with e-government systems. Thus, put in place road map that increase and heighten of e-government system usage.

The findings of this research suggest governmental organisations managers should use e-government to sense and respond to changes in IT and citizens expectations. In addition, managers are encouraged to use different agile capabilities in order to cope with changes associated with IT changes and citizens expectations. However, definitions of capabilities such as flexibility, competency, quickness, and responsiveness are linked to certain types of change. In other words, enumerating the changes result from IT and citizens expectations provide a basis for identifying the needed level of organisation agility. The findings of this research can help policy makers sense of managers perceptions of the impact of e-government system on organisation agility. Finally, Fast and dramatic changes in citizens' needs, expectations, requirements, and new technology developments are creating an increasingly needs for policy makers to understand how governmental managers perceive the role of e-government system in enabling organisational agility.

### **9. Limitations and further directions for future research**

This research has several limitations, which should be noted. It is worth mentioning that the measures used in this research are based on managers' perception, which might be to some extent subjective. The research also has not taken into consideration the effect of the moderating and intervening variables (*such as organisation size, nature of service, organisation culture, political issues, management style, etc.*) on the relationship between the e-government system acceptance and organisation agility. Since different groups of managers experience different sets of problems with e-government system, a comprehensive sample from different level is needed. In addition, the study has considered the impact of e-government system acceptance on organisational agility while the organisation agility might be affected by other factors. (e.g. culture, innovation, new technologies, business strategy, etc.).

Despite the above limitations, this study is the first attempt to make a clear link between e-government system acceptance and organisation agility. Therefore, the formentioned limitations should be viewed as opportunities for future research. The study propose a need for conducting more empirical studies about the impact of perceived usefulness, perceived ease of use, attitude towards, intention to use, and actual use on organisation agility. Also, other moderating and intervening variables can be added to the framework e.g. organisation size, business strategy, social values, human resource management, etc.

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**About the author:**

**Dr. Soud Almahamid** is an associate professor in Management Information Systems. Almahamid was the Former-Dean of Academic Research and secretary of Research Committee in Al Hussein Bin Talal University during the academic year 2010/2011. Currently, Almahamid is working in the Middle East University at department of Business Administration. In addition to his job responsibilities, he is a member of the research team on Middle East University level. He worked as a visiting lecturer in the department of Management Information Systems in Amman Arab University during the academic year 2011/2012. Almahamid joined the faculty of Business and Economics in Al Hussein Bin Talal University as a senior lecturer in Management Information Systems during 2005 until 2011. Dr. Almahamid work is published in various national and international journals such as, *Jordan Journal of Business Administration*, *Dirasat: Administrative Sciences*, *Journal of the Theoretical and Applied Information Technology*, *International Journal of Management*, *International Journal of Electronic governance*, *Interdisciplinary journal of Information, knowledge, and Management*, *International Journal of Business and Management*, *International Business research*, etc. Almahamid's research interests include E-business Systems Usage, E-government System Acceptance and Usage, Knowledge Management and Sharing, Strategic Alignment, Non-traditional Systems of Performance Evaluations, Information Systems Success, E-business Systems Dependability, E-business Systems Quality, ERP system Deployment, Human resource management system practices, Agile capabilities, Strategic Agility, and Technical and Managerial Innovation.

# **Examining managerial decision making process in Information technology shared services in Public sector entities from an activity theory perspective.**

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**Dr. Neil McBride,**

**Dr. Richard Hall and**

**Isaack Okwaro. (Researcher)**

## **Abstract**

*For many organisations (both in the private and public sector), the managers must make crucial decisions on a daily basis. The success of the entities that they run is hinged on how well their decisions are undertaken*

*The managers of these public sector bodies must consider a number of factors in their quest to working with other public or private sector bodies. These factors may be internal, external and personal. The managers of the public sector bodies must be open to the 'Sunshine laws' and hence, for them, decision making is in itself a milestone. Their experience, qualifications, surrounding teams, political intricacies, community being served, the media and intuition all play a key role in making such decisions.*

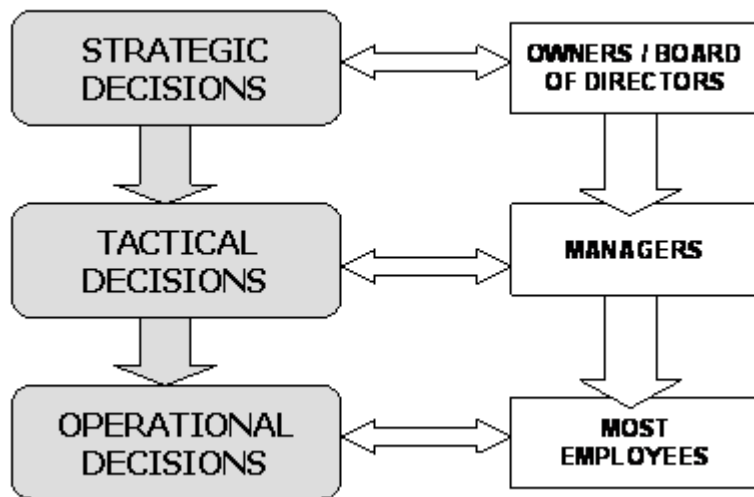
*Through the use of case studies developed from the data gathered from a number of local authorities this discussion has examined the position of decision making as an artefact and an object within the broad framework of Activity theory. This theory mainly identifies decision making as an artefact and therefore in this discussion, the researcher has made attempt to look at this issue from two perspectives thereby highlighting an area of Activity theory that needs to be debated again. Another area of contribution has been on the issue of decision making as a process and an outcome. This paper explains the complexity of making decision in the public sector hence making it a process and an outcome. Public sector managers should consider their decisions as being supporting to achieve objectives and as objectives themselves.*

## **Introduction**

For many organisations (both in the private and public sector), the managers must make crucial decisions on a daily basis (Bozeman, & Pandey, 2004). The success of the entities that they run is hinged on how well their decisions are undertaken. Yet, Nutt (2005) noted that, while decision making in the private sector is 'smooth', within the public sector, this it is full of turbulence and distance (Rodriguez and

Hickson 1995 and Schwenk 1990). These managers are expected to deliver better services to the citizens and support political manifestos of the politicians (Dillion 2002). But decisions are often taken at different levels, and Schwenk (1990) noted that there are three key levels of management in any organisation: Corporate, Tactical and Operational level.

#### Levels of decision making



While in the private sector these levels are represented by: Corporate level (Board of Governors and the Chairperson of the company), Tactical (Human Resources Manager, ICT Manager, Operations manager, Marketing Manager etc), Operational level (Supervisors, Team leaders and Foremen), within the public sector, these levels are represented thus: Corporate (Political class i.e Ministers and Secretaries), Tactical (Public sector managers: Directors, Departmental heads), Operational (Team leaders, supervisors etc). It therefore follows that, the functions of the Tactical level managers, as given by Scholes et al (2011) is to make tactical decisions (quick decisions that are bound to change, basing on the behaviour or the other stakeholders notably the, competitors. However, in the public sector, competition is not aimed at winning the market, but ensuring that service provisions are improved because, the public sector bodies must answer to the Ministers and Government secretaries and the citizens. According to Dillion (2002), legislative mechanisms and budgetary constraints also determine the scope of decisions in the public sector entities. The organisation must therefore compare its performance against those of similar organisations and its past records (Nutt 2005). Since the public sector organisations are therefore not in active

competition (Bozeman, & Pandey, 2004), they may have reasons to work together or collaborate in different areas, in order to achieve their common objective. One of the areas of collaboration that has become common in the local authorities in many countries around the world has been in the area of Information Technology shared services (ITSS). Like other government bodies, local authorities are expected to find ways of sharing their Information technology facilities with other entities.

### **ITSS in a nutshell**

According to Schulz et al (2009), while there has been great interest in examining the concept of shared services over the past decade, most studies have clearly provided two fundamental aspects of the same; definition and different features of shared services. While Schulz et al (2009) noted that there has not been any attempt to provide an authoritative definition of the term Shared services, we examine two definitions given by different researchers in our attempt to find a working definition; According to Schulman et al (1999: 9) shared services are *“The concentration of company resources performing like activities, typically spread across the organization, in order to service multiple internal partners at lower cost and with higher service levels (or efficiencies), with the common goal of delighting external customers and enhancing corporate value”*.

### **Decision making in the public sector and Activity theory**

The managers of these public sector bodies must consider a number of factors in their quest to working with other public or private sector bodies. These factors may be internal, external and personal (Romzek and Johnston 2002). Nutt (2005) however noted that, for public sector managers, decision making is a formality and they need not take into account many factors. Dillion (2002) stated that public sector managers get their policies from the politicians and they only have to implement these, hence they do not have to make critical decisions, and do not have to consider many factors in making such decisions (Nutt 2005). The reason for this might be because of the trust that has been built up between different entities over a long period of time (Artz and Brush 2000; Hart and Moore 1999; Levin 2003; Grimmelikhuijsen,

Stephan 2010). But Bozeman, & Pandey, (2004) noted that whereas the managers may not consider a number of factors, or may overlook parts of the deals that facilitate their co-operation, they often must resort to such parts when things begin to go wrong. Still Romzek and Johnston (2002) noted that scrutiny of the decisions made by public sector managers is much higher because of the number of stakeholders involved in the process. They must be open to the 'Sunshine laws' (Nutt 2005) and hence, for them, decision making is in itself a milestone (Grimmelikhuijsen, Stephan 2010). Their experience, qualifications, surrounding teams, political intricacies, community being served, the media and intuition all play a key role in making such decisions. Therefore, can decision making be extended to mean a 'process within a process?'. As a process, it implies choosing between alternatives, but as a process within a process it implies choosing between stakeholders' anticipations.

Grimmelikhuijsen, Stephan (2010), gave the definition of decision making by stating that it involves, considering the alternatives and picking the best. Dillion (2002) has however indicated that it is difficult to define best, because, there are many parameters that can be considered 'best'. It must also be noted that depending on the objectives of a particular organisation, or its composition, its best option might be different from that of other organisations. It is for this reason that the managers remain very cautious when making decisions. Decision making is therefore a key tool in mediating between subjects and the outcomes. It goes beyond the physical tools, and it sits within a foundation position of mediation. In order to provide further explanation of this, let us examine the concept of Activity theory as it applies in this discussion.

The Cultural Historic Activity Theory (CHAT), commonly known as the Activity theory focuses not on the individual but on the activity that is being performed. According to Leont'ev (1978), activity is made of actions, norms, subjects and objects. The object (objective) is with the subject and it is what motivates the subject to work hard (Billet, 2002; Russell 2002). The capabilities and knowledge of individuals is centred around interactions with humans in physical and in social circumstances in ways that are beneficial. Humans beings are able to achieve this by becoming accustomed to patterns that embody situations, and the way humans act and create the situations.



Humans develop proficiencies with these patterns by mostly applying them in learning elements by expanding the level and the difficulty of these capabilities (Engeström, Engeström, & Vahaaho, 1999; Billet, 2002). Humans combine these capabilities in other new ways in order to achieve new goals. In other words, these new capabilities are developed similar to ways in which language acquisition take place, ways in which individuals become proficient at work or in playing golf, or similar to ways in which individuals become proficient in using a computer.

In each mentioned example, there is evidence in the interaction between personal intuition and interpersonal knowledge that is mediated by both conceptual and physical tools that involves series of acting, reacting and learning (Rogers 2009; Linna 2010).

The focus of this discussion is to examine how Activity theory can be applied in seeking to understand the dynamism that exist when people are made to work together in a collaborative way by sharing certain resources. This research, in employing activity theory, therefore seeks to contribute to the understanding about emerging issues that might hinder effective working among work colleagues and hence to suggest ways through which management and other stakeholders might improve certain aspects of resource management within an organization, for instance; training and resource allocation.

Engeström's 1987 Activity Theory presents a platform that can be used to analyse these elements of interpenetration of human activity. Therefore, in this section, an overview of the elements of applied Activity Theory will be presented. The Activity Theory will be used to analyse different kinds of activities at different levels, different difficulty and different circumstances.

According to Kaptelinin and Nardi (2006) and Engeström, Engeström, & Vahaaho, (1999) there are four aspects of Activity Theory which might be instrumental in examining the dynamism of the employees in an organisation; Hierarchical structure of activity; object orientedness of activity; Externalization or internalization of activity; and development.

Hierarchical structure of activity or also known as Means/ends is where the motive of the activity is related to the activity's highest level, the goals of the activity is related to the action which is the middle level, and

the conditions of the activity is related to the operation of the activity which is the lowest level.

Next is the Object-orientedness or the environment which is perceived as best described by the graphical descriptions of a subject that transforms an object to the finished product through mediatory of artefacts, rules, community and labour that provides an important framework that can be used to describe work environments (Engeström, Engeström, & Vahaaho, 1999).

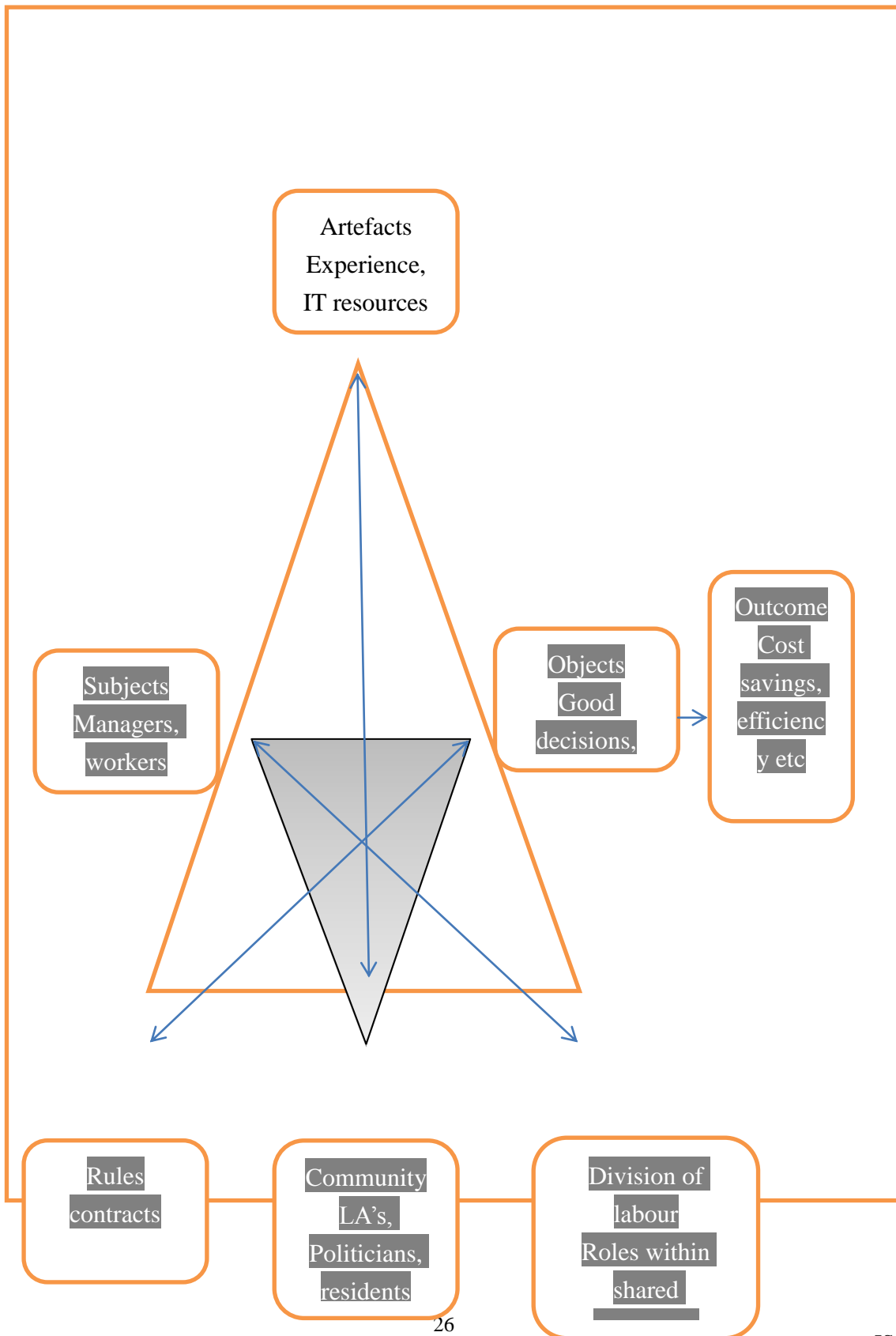
Thirdly is the externalization / internalization also known as the learning /cognition/ articulation: the processes of internalization and the externalization are important in simulation and visualization of certain activities, for instance, the new work arrangement where resources have to be shared. And lastly, the development activity where the Activity Theory provides a platform for the development of practises such as the usage of software tools therefore this provides an understanding onto how the employee learning process has evolved. The intention was to use the Activity Theory both a tool for describing as well as for analysing the cases of employee interaction in the new work environment. Barab, Hay, and Yamagata-Lynch (2001) provide the Constructing Networks of Action-Relevant Episodes (CN-ARE) methodology that helps to operationalize these four aspects of Activity Theory and how they have been relevant to our work.

According to Huff, Steinberg & Matts (2010), mediational triangle is a very important representation of the Activity Theory. The mediational triangles, according to Mitlevy et al (2009) are formed two arrows that represent interactions; the bi-directional arrows are similar to those of the Vygotsky's concept of mediated activity, the cultural psychology, or by those developed by Engeström, (1999).

The next diagram is based on the Vygotsky's representation of Activity Theory and has terminologies such as initiator, participant, issue at hand, resource and practise: all key words used by Barab, Hay, and Yamagata-Lynch (2001) which are used in the subject of student's use of simulation environments (Mitlevy et al, 2009). These arrows that are used between different elements of the mediational triangles show mutual influence whereas the triangles themselves show the mediational relationships. In this particular case for this study, someone might be able to observe the employee (who in this situation is the initiator or the subject) completing their work (practise) on any problem (object in which they are transforming into an

outcome, or the issue at hand) by using a certain technology (mediating artefact, the resource (Margolis & Clouser, 2006).

For this discussion, the following diagram of activity theory has been given



By trying to use the cultural or the historical approach to distributed cognition, describes the mediational triangle of Russian Activity Theory that is illustrated in the above figure, where the object can be acted on by the subject using either of the two routes presented in the triangle, either the phylogenic route which is the more direct route or the artefact mediate cultural route which is the more indirect route. From this basic mediational triangle, the explanation can be interpreted in two different ways. Firstly, using the way the triangle is bidirectional and the way the codes of the legs that are in the triangle are determined.

For example; when the object is acted upon by the subject, but the image of the object is what controls the subject. In time, the dynamicity of the activity of the triangle also become clear, the relationships now become more part of the triangle. the relationships between the subject and the object even though static, in many cases leads to a new subject, initially by leading to a new condition of the subject, then with time becoming a new subject. The above figure on mediational triangles highlights the many key ideas of the Activity Theory; many common beliefs in psychology may give a totally different interpretation for the mediational triangle and therefore a different look at the world as whole on its application (Russell, 2002). Other psychologists have given the interpretation of the diagram as constituting the exchange between the object and the subject in separate ways.

Kaptelinin and Nardi (2006) in their Activity Theory however argue that in trying to understand the subject and object, the two cannot be separated because it is as a result of the interaction between the both that results into appropriate outcomes: hence meanings are made and upheld. They further argue that history, needs, intra and interpersonal forces are what define a subject. This leads to the emphasis on the understanding of interchanges of the real life situations, rather than focussing on abstract traits.

Another important concept of the diagram, as indicated by Huff, Steinberg & Matts (2010), is that it shows that the activities of the subject and object are mainly mediated by cognitive artefacts. Mitlevy et al (2009)

quoting Engeström (1999) writes that

*‘The mediation by tools and signs is not simply a psychological idea; rather it is an idea simplifies the Cartesian walls that separate an individual’s mind from the society and the culture. The fact that humans can control their own behaviour from the outside using and creating artefacts as opposed to from the inside based on the biological arguments..... is the idea. This view of external control call for research of artefacts as an important and inseparable component of human behaviour’*

An extension of the basic Activity Theory diagram that includes some socio-historical forces affecting human activity was done by Engeström (1990). The diagram above gives new terminologies as introduced by Barab, Barnett, Yamagata-Lynch, Squire, and Keating (2002) and includes some key words by Barab, Hay, and Yamagata-Lynch (2001). Kaptelinin and Nardi (2006) suggest that the extension of the basic Activity Theory gives an in-depth framework that has been applied in many concepts of human interaction. The extended triangle includes terminologies to give a more full description of human activity systems, i.e. subject, object, mediating artefact, outcome, rules, community and division of labour.

Huff, Steinberg & Matts (2010) suggests that the ‘extended mediating system triangle gives a conceptual framework to place loci among which human cognition is distributed’, and further suggests that these systems are best perceived as complex configurations in which balance or equilibrium may not be achieved and therefore is exceptional, and that tensions, disruptions and local inventions form the rule of change. Mislevy et al (2009) argues that the overall quality may change with time when an activity system is followed through.

The following table summarises the diagram of Activity theory given above, focussing on the situation in UK local authorities;

Activity	The sort of activity?	Technology sharing
Object (ive)	The reason for the activity?	<ul style="list-style-type: none"> <li>• Reduce costs</li> <li>• Free up resources</li> </ul>

		<ul style="list-style-type: none"> <li>• Encourage efficiency</li> <li>• Service provision</li> </ul>
Subjects	The persons involved?	Local authority employees
Tools	The means that are employed to perform the activity.	<ul style="list-style-type: none"> <li>• Experience of the managers, their skills etc</li> <li>• Computers and</li> <li>• Generic and bespoke softwares</li> <li>• Rooms</li> </ul>
Rules and Regulations	The norms, rules and regulations	<ul style="list-style-type: none"> <li>• Strategy policies</li> <li>• Employment and work regulations</li> </ul>
Division of labour	Who is responsible for what and their roles	The different departments within the councils or partnering authorities
Community	The environment where the activity is taking place	Different councils and the local residents that are being served by these local authorities.
Outcomes	The intended outcome	Support each other in achieving cost reduction and better services to customers. The overall aim is to attain efficiency and ensure that services are maintained and costs contained.

## Methodology

In this research, case studies were developed from various sources. The researcher conducted surveys through questionnaires and interviews. Various information technology managers in different local authorities in the UK. Other information were got from council strategy papers and Government computing website where information on ITSS are in much avail.

In this paper, two of the case studies have been given, and these are representative of all the case studies that have been conducted and summarised in the tables and charts given. These case studies are for the arrangements between Cambridge and Northampton local authorities, and that between Aylesbury Vale and Dacorum borough council. These two sets of councils have been chosen here because, they represent

sharing between; a) two large authorities and b) two smaller authorities.

Case studies were developed as shown in the table and diagram below. The outcome of these case studies demonstrate areas of collaboration, the stage of the process and the reasons for the same. The chart shows key consideration when choosing a partner authority. Yin (2009) noted that case studies can be developed from different sources.

## **Case studies**

### **Case 1**

#### **Cambridge – Northampton local authority case study**

##### **Introduction**

This case study examines the technology sharing arrangement between Cambridge and Northampton local councils and this was a mail interview which was sent to the councilor in charge of information Technology implementation at the council. The manager was informed of the ethical aspects governing the interview and the implied view of their acceptance to acknowledge the same. The manager was given two sets of questions with the view to examine the issues surrounding this venture.

The main reason why the organisation embarked on sharing its information services was for efficiency and cost savings. The organisation's fit for Information Technology engagement is in the area of Human Resources Management, and finance, with the main reason for sharing being what in the words of the manager is 'Fully worked up regarding finance and standards.'. This implies that the council wants to ensure that it removes the problems faced in the areas of finance and to keep its operations in good standards.

Since implementation of various kinds of technology might affect the organisations internal policies, the management noted that as '*As the fits are progressed in the short, medium and long term processes are adapted for a best practice/fit*' This was in response to seeking to find if there will be any changes to the processes of the council for instance, the staffing process, and employment policies.

The manager hence meant that as time progressed, they will seek to leverage the needs to the resources. Since implementation of technology sharing may involve movement of staff members, it was noted that some (not all the staff members), will have to be moved.

Since the project will involve two local authorities, there was need to examine if there will be a need for a separate team to work on the venture, and the respondent noted that in most cases, these two teams have to be streamlined into one team. Since this endeavour involves Cambridge and Northampton council, the teams drawn from these two councils must be made to work as one.

In line with this, it was also important to examine if there will be legal issues that will surround the working of the staff members. The respondent noted that the model, unlike other efficiency saving models, does allow for less outsourcing and before it was adopted, the council engaged the employees' unions in elaborate discussions and the council hence has full support of the local authority, hence there was no current problems involving the council employees.

In terms of seeking to find out if the arrangement is successful, the respondent noted that continued monitoring of the process will be done to ensure that the program goes according to plans and that a reasonable duration to make a comprehensive judgment about the success or otherwise of the model will be after a couple of years. However, the manager noted that each year, annual reviews will be conducted to assess the progress of the system.

While the respondent was confident that the process has so far gone according to plans, and that in the near future there will be an evaluation to assess the progress of the project, the respondent admits that the main problem is that change has never been easy to manage.

Since different teams are made up of different persons with different qualities and experiences, there is always need to change the composition of these teams from time to time as the need arises, and this reinforces the view that there cannot be an ideal team, therefore there is need to ensure that an effective team management is done, and the onus for this lies with the manager of the organisation.

Also, it was noted that while there are present challenges that must be managed, the future challenge that the manager envisions is about getting the right team and convincing the staff members about the program that the organisation engages in with the view to create a certain level of understanding across the organization. The respondent noted that there are no ethical concerns that have been identified at the moment, and also that so far the plans are progressing quite well.



## **Analysis**

This case examines the case of Information Technology sharing between Cambridge and Northampton local authorities. It has been found that the main reason for seeking to share their infrastructure was due to the need for efficiency and cost savings. These are two councils with the same size.

These two organisations entered into a partnership agreement with Fujitsu to develop an ERP. It has been recorded that; *Based on the Oracle e-Business Suite (11.i.10), the solution enables the two Councils to share the delivery of back office processes and transactional services across a range of key functions, including finance, human resources (HR), on-line procurement and payment facilities. The underlying infrastructure is owned, hosted and managed by Fujitsu, which also provides shared technological support and application development.*

The managers of these councils have given their optimistic view about the arrangement thus;

Stephen Moir, Director of People and Policy, Cambridgeshire County Council, says, *“The Council has a strong track record of high performance, low cost IT and we wanted to make further improvements to equal industry best practice, especially in transactional processing. However, the affordability of these changes would have been a major challenge and we were already looking at the broader Government agenda for shared service delivery and were keen to take a lead in this area.”* At the same time, Northamptonshire County Council was looking to create its own ERP capability as Paul Blantern, Corporate Director of Customer and Community Services, Northamptonshire County Council, explains, *“The Council had no form of ERP system, so it was a business imperative for us to fast track a solution, and Fujitsu was clearly in a good place to help us do that.”*

Some of the metrics of these authorities are given below;

## **Organisation**

Cambridgeshire & Northamptonshire County Councils

## **Services delivered**

Development and management of an ERP shared service, based on Oracle 11.i.10 e-Business Suite, that

enables the sharing of back office processes and transactional services

### **Key metrics**

- Cambridgeshire – 18,000 staff and up to 6,500 users
- Northamptonshire – 19,500 staff and up to 5,000 users

### **Benefits**

- **Improved customer experience** – significant resources can be re-directed and aligned to customer needs
- **Reduced costs** – the Councils expect to save a total over £3 million in the next two years
- **Optimised productivity** – the enhanced functionality and standardised processes has streamlined operations
- **Enhanced decision-making** – comprehensive information is available to manage performance and resource allocation
- **Improved customer service** – 80% of citizens' requirements are dealt with on first contact and the choice and speed of accessing and paying for services has improved dramatically
- **New revenue opportunities** – through the expansion of the service to include other public sector organisations
- **Enhanced operational agility** – the Oracle platform is fully up-to date and can be extended in the future

The two councils have a common purpose for working together and also, they are bound by their relative size and are 57 miles apart. They both identified a common vendor to support their information technology sharing needs in the areas of Finance, Human Resources and procurement. These are three key areas vital for the success of their day to day operations.

The use of or formation of a harmonized team to support their operations is also crucial as they are able to gain from the experience of working together.

### Case 2

#### **Aylesbury-Vale and Dacorum councils**

This case presents another example of IT shared services between two local authorities. The questions asked during this interview were similar to those asked to the respondent in Leicester council. The researcher had already read various articles and council reports about the kind of shared arrangement that is being pursued by these authorities. The two local authorities had to sign and have in place a memorandum of understanding so that they can have in place IT infrastructure that will among others; save money, improve service delivery, support transformational change, help deal with less funding from government and provide better service. The manager noted that this is the first tangible step to sharing, and that in the future, these two bodies, will explore other areas of sharing.

The memorandum stated that in the short run, there might not be any savings and that no staff will lose their jobs. The long term plan is to join the councils and operate as one. The respondent noted that this arrangement is vital for the survival of both the councils and that it is worth pursuing. Aylesbury has already bought a space in the cloud and hence reduced the costs of hosting services and its carbon footprint. This shows that there are various objectives for sharing, because, in this case, it does not mean that if one is having a particular object, the other also has to have the same. As noted at one instance, before this agreement, these two authorities had expressed interest in working together on service level agreement, but Aylesbury considered that option too risky, because, Dacorum would have to make very many changes to its structure.

In this agreement, there was no involvement of a third party, Aylesbury was to provide the service to Dacorum borough council, and hence the model adopted is that of a server-client. These councils are within 20 miles of each other, and hence the management noted that distance was key, but that they had been approached by Dacorum council because, they are near one another. While at present, the shared agreement is for IT resources, in the future, these authorities consider other areas of sharing.

On the need for teams in the process, it was revealed that both the authorities will have to appoint persons to spearhead the implementation, and these persons will form the team. The respondent noted that it would be highly improbable to work without a team. The management negotiate the agreement, and form the team

that is needed to implement the same. The management, it was noted, does not have to or does not have the skills necessary to run an IT project, and therefore the choice of the team will dictate the success level of the program.

Another issues that arose from the interview was the fact that, while Aylesbury has the resource, it will seek to generate money from the same, to the extent that such a project remains profitable to the council. This explains why Aylesbury withdrew from the earlier project of 2010, where a number of parties were involved in an IT shared arrangement. Therefore possession of the asset, before other authorities possess the same is key to profit or revenue generation by the council. The management noted that they have to be quick to identify what is 'out there' which might be useful to the council and to other entities. The council is therefore a vendor of the Shared service product and service. The respondent noted that the management are therefore vital for any implementation process, because, while they are under pressure to adopt certain practices in their councils, they must adapt quickly and not only manage, but 'sell' their products or services to other entities. The reason for this, is that, in the public sector, often the ultimate responsibility rests with those in authority to make decisions. The management feel that if they do not implement the new arrangement, they will be branded failures by the government, and if they implement the same irresponsibly, they will be branded failures by the service users.

While the program is scheduled to run for a number of years, the respondent noted that in the short term, the benefits will not be realised and that the council will start enjoying the benefits after at least 3 years. The way that management estimated this decision was however not inquired, because, this would have entailed seeking further information that was not in the scope of this research. The management also noted that all the benefits got from any shared arrangement, are for the residents and the council. The residents will enjoy better services, the council will enjoy better internal practices. To the management however, the biggest challenge and fear is the failure and not the achievement of the objectives, because, the respondent noted that, for now, at least, the council is performing its duties and the best that the council could do in the absence of any shared agreement or any other agreement is to continue providing the services as they are.

Engaging in a new shared arrangement is in a way invoking changes within the council, and such changes are multifaceted in that they involve many other stakeholders. The management noted that, therefore, while the process for managing change exists, its implementation will or can change from time to time depending on the situation that arises. It informs our research about the role of managers in change management within their organisation. These managers must ensure that they adopt the best, bespoke change management practice, failure to which they will have failed. They have to accommodate new practices and demands along their implementation timeframe.

This case highlights the crucial role of managers within Aylesbury and Dacorum local authorities vis a vis sharing of their IT resources. The managers come across as the heads, marketers, negotiators etc of the project. Managers 'sit' between the government and the service users. They have to translate policies into action and translate actions into reality within the community. They are held accountable for any wrong doings, and must hence plan each of their activities to meet the demands of various entities. It is for this reason that the managers become quick in decision making and take charge of many of the functions within the organisation. As shown above, they negotiate and market; they make decisions and sign contracts. Sharing of resources across organisations in the public sector therefore appears to be leading to state of additional demands from public sector managers. They appear to move from the era of specialisation or less work that has been associated with the public sector bodies, to increased responsibilities than their counterparts in the private sector. While they have to take into account various factors when making decisions, they have to take into account additional political factors, hence they appear to have more responsibilities. This has led them to be shrewd and adapting to new changes with short notices.

This case again introduces the relationship between time and action, in the public sector. Organisations in the public sector can achieve their objectives when they mind the time and take quick action. Time should therefore be given consideration as a separate entity, as it dictates the behaviour of the managers of the public sector. Time, in Activity theory appears to have been incorporated within the rules, but it is not clear. It is not obvious that it is there, and hence it must be unearthed and be linked to the level of success of

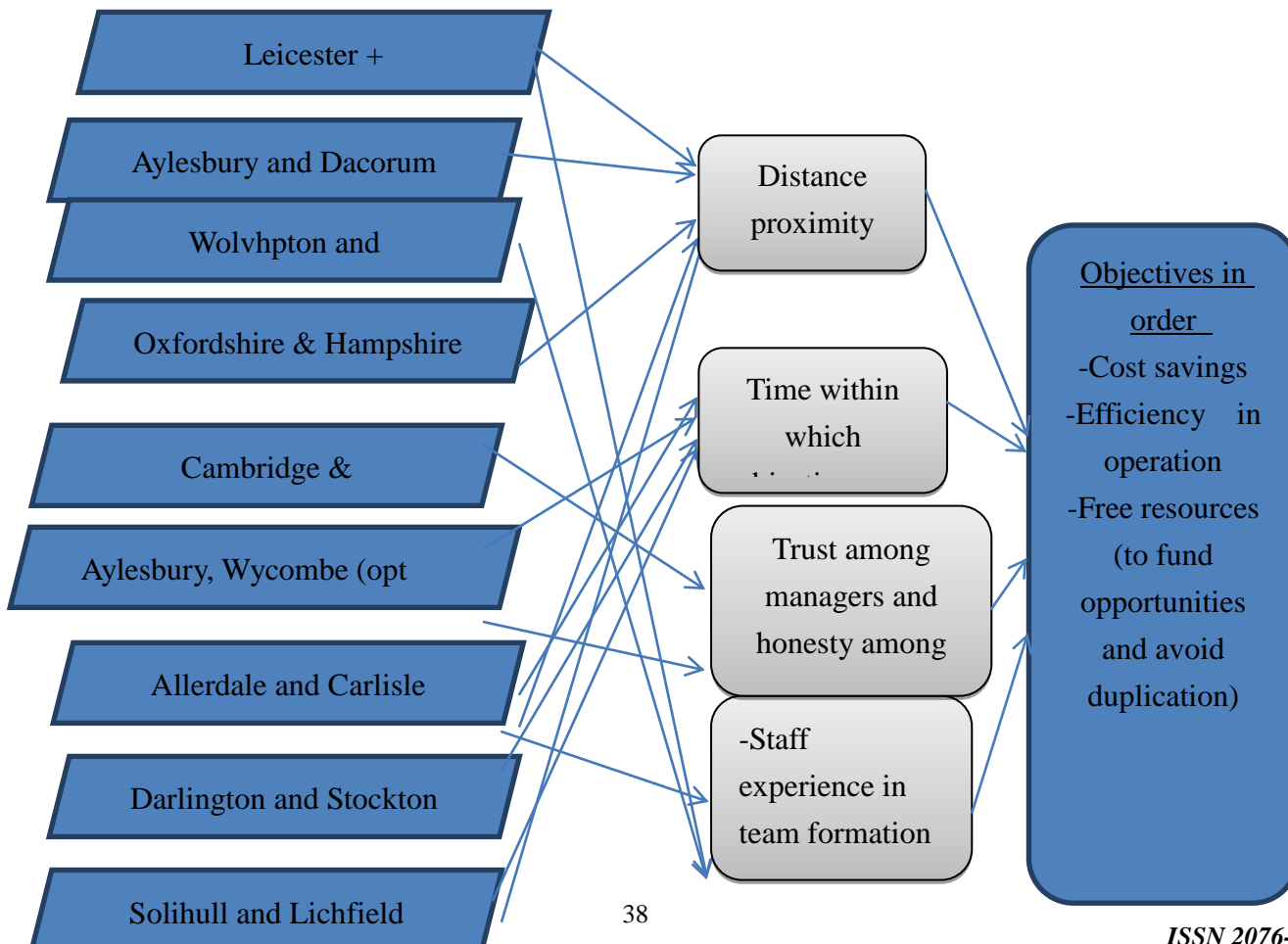
managing certain activities within the public sector.

In this case, the importance of time comes in two ways, first, the time within which a joint agreement should be implemented or last, and secondly, the time within which certain decisions must be made. The managers of the public sector must ensure that they take this very seriously, because, when an environment of sharing exists, the managers do not only manage internal environments as it were, but also the external environment.

<b>Council or Borough</b>	<b>Collaborating with</b>	<b>Area of collaboration</b>	<b>Stage</b>	<b>Reason for sharing</b>
Solihull Council	Lichfield District Council	Financial and Procurement System	Executed and went live in 2009	Cost reduction
Staffordshire County Council	All local authorities in Staffordshire	Customer relationship management and Shared e-Payments		Efficiency and funding opportunities.
Royal Borough of Windsor and Maidenhead	N/A	Any model	2010-2015	Scalability and business offers to other councils
Brighton and Hove	Various councils and Police departments	Security and Human Resources	2011-2016	Cost benefits
Camden Council	In-house sharing.	Human resources area	2007 - 2012	Efficiency and cost reduction
Allerdale Borough Council	Carlisle City Council	Procurement and Human resources		Cut service duplication and reduce costs
Darlington Council	Stockton council	Human resources	2009 -2011	Cost reduction

		management		
Aylesbury Vale District council	Buckinghamshire, South Bucks and Wycombe District council.  Also Milton Keynes fire and rescue service.	Aylesbury Withdrew		No cost benefit from the third party.
Oxfordshire	Hampshire	Human Resources and Finance		Cost Reduction

**Local authorities shared services themes**



## **Findings**

From the information presented above, it is evident that decision making in the public sector is dependent on a number of factors. Key among these include, distance between partner authorities, duration for achieving objectives, trust among the managers, staff experience in handling such matters and team work. Apparently, cost savings is more of an anticipated outcome than a factor in making decision, because, it is not an outlay but a savings. It is worth noting that costs of the project was not a factor in decision making, probably because in the public sector, the money for such project has been provided for. It must also be noted that where savings are not envisioned, the ITSS project may not be considered and managers can opt to leave, and it is at this point that the provisions of the contract are examined. This was witnessed in the case of Aylesbury and Vale, and High Wycombe councils that pulled out of Buckinghamshire shared services project.

In the cases given above (Cambridge-Northampton and Aylesbury-Dacorum) it is clear that the role of the manager spans across various activities, ranging from negotiating to team building and staffing. Irrespective of the size of the organisation, the managers have duties that are similar.

In terms of making decisions, the managers must ensure that they make their decisions after taking into account other persons decisions. In this case, decision making is a key activity that must be done at various stages. Therefore, it is dependent on personal factors, experience, internal and external pressures that the management undergo. It is an activity that mediates between other decisions and other resources. Without this, even the availability of resources may not be put to use.



It should also be noted that, the outcomes of a decision may be known immediately or after a certain period of time. Therefore, as a process, decision making, unlike other artefacts, does not provide an outcome that can be easily audited. It is also dynamic and hence it is an artefact as well as an object.

## Conclusion

Sharing Information Technology services in the public sector, particularly among local authorities is no longer a luxury but a necessity. External pressures have made local authorities to shun fragmented operations and embrace collaboration in one or many aspects of their operations.

Managers of public sector bodies must take into account the decisions or anticipated decisions of other stakeholders when they are making their own decisions. They then make decisions and evaluate these after a long duration. The cases given in this paper highlight the fact that in making such decisions, managers of local authorities rely on their experience but are guided by the principles or thrust of politicians, residents, and other stakeholders.

Decision making is a key activity that determines the outcome of the project. These managers, in making decisions, must also demonstrate a will to work with others for their mutual benefits. They may have to make decisions that can be changed within a short notice. Public sector bodies therefore require managers who can be quick in decision making between their authorities.

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## **New Paradigm to Enhance BI Tools: A Systems Thinking Approach**

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**Raed Musbah Al-Qirem**

**Khaled Saleh AlOmoush**

**Amin Ahmad Shaqrah**

*Management Information Systems Department  
Al-Zaytoonah University of Jordan*

### **Abstract**

Business intelligence is the set of tools, processes, practices, and people that are used to implement useful information to support decision making in the organisation. System thinking is a new paradigm that enhances decision making by describing dynamic relationships that influence the behaviours of systems. This paper illustrates the importance of implementing system thinking in BI Tools by providing the ability to see the world as a complex system, where “you cannot just do one thing” and that “everything is connected to everything else”. It is a holistic worldview that enables people to act in consonance with the best interest of the system as a whole and thus enhance the learning loop through his paper which is system Dynamics.

**Keywords:** Business Intelligence, Systems Thinking, System Dynamics, Simulation

### **Business Intelligence**

The term business intelligence was first used in 1989 by Howard Dressner, then a research fellow at Gartner Group, as an umbrella term to describe concepts and methods to improve business decision making by using fact-based support. Business intelligence is one of the information technology areas that has grown and evolved the most in the last few years. According to a recent research by MIT, the total spending on business intelligence and performance management by 2008 was 57.1 billion dollars, in a market growing 4.2% per year. Through business intelligence it is easy nowadays to improve the decision making process in virtually any department, organisation or industry.

Business intelligence tools have evolved in the last few years offering more functionality to the manager or analyst, and also provide solutions for more users [1,2,3]. But managers today are expected to cope with increasing complexity, change and diversity. They have to continue to ensure that organisational processes are efficient and that they are served by the latest developments in technology. As the world becomes more complex, many people and organisations find themselves bombarded with lots of problems to solve, less time to solve them, and very few chances to learn from their mistakes. Managers will need

to deal with complexity and with these changes. Also they need to develop their new capabilities to be able to create an effective learning process in complex dynamic systems to overcome the different barriers to learning which are created by complex dynamics systems, and thus to get a significant insight into their simulated problems. This can be done by allowing the managers to develop new ways of thinking that allows deeply understanding of the simulation process, the relations between the variable, and the consequences of their experiments more effectively.

Lots of philosophers, scientist and managers have been calling for a fundamental new ways of thinking that improve the ability to see the world as a complex system. As Sterman [4] stated, “a system in which we understand that you can’t just do one thing and that everything else is connected to everything else. He argued that it’s crucial to develop new ways of system thinking. He states that “if people had a holistic worldview, they would then act in consonance with the long term best interest of the system as a whole, identify the high leverage points in systems, and avoid policy resistance”.

This can be done by using new simulation methods that increase the capabilities of managers to experiment their decisions more effectively by using system dynamics simulation tools.

## **New Paradigm: Systems Thinking**

Systems Thinking concept was produced as the world of systems found that there is a need to shift from the more linear, analytic way of thinking that many of us are used to, to a non linear, dynamic and holistic thinking.

Moving to new Paradigm in analysing complex problems enables the managers and the analyst to understand dynamic relationships and complexity that influence the behaviour of a system as shown below, and thus improve business intelligence in organisations

### **Features of Systems Thinking**

#### **Dynamic and Non-Linear Thinking**

The static thinking assumes that causality runs only one way and any system’s factors are independent which is quite primitive. Dynamic thinking offers effective alternatives to see and understand systems or problems. This creative thinking allows viewing the world with ongoing, interdependent relations, dynamic process. Each of the causes in the dynamic thinking is linked in a circular process to both the effect and to each of other causes. These circular processes are the feedback loops which enable us to better understand what is going on in the system; these circular loops represent a non-linear and dynamic thinking, Richmond [5].

Taking into consideration this type of thinking, the analyst or the manager can understand the problem in a better way as the feedback process inside a firm clarifies the dynamic relations inside a firm, analysing

the causes and effects and their interconnection and allows for observing the behaviour over time.

For example, if a firm decreases its product's price, this decision has an effect on the sales as it increases the sales, but on the other hand the firm's profits will be less than usual, which affects the firm's pricing policy and push the firm to increase the prices.

### Holistic Thinking

Holistic thinking is one of the most significant features of systems thinking as it allows us to see the "Big Picture". So instead of examining each part of the system, the whole system is examined. Whatever the problem we are experiencing and searching for its source, we must always widen our focus to include that bigger system. Dealing with the wholes rather than parts is a very effective idea in system analysis. Each part or department in a firm is not isolated from other department, so trying to solve a problem in one process; we must first look the whole firm and the interconnections inside it to understand the nature and the reasons for such problem.

This research illustrated how systems thinking tools provides managers and analysts with a creative holism to enhance their decision making process.

### Systemic Thinking

In recent years, systems thinking has provided new effective methods for tackling issues in a systemic than a reductionist way. Systems thinking allow us to look for various patterns of behaviour, to seek underlying systemic interrelationships which are responsible for these types of behaviour and events.

A recent study by Bartlett [6] defines systemic thinking as a technique that provides a deeper insight into complex situation very quickly. It stated that Systemic thinking "combines analytical thinking (breaking things apart) with synthetical thinking (putting things together)" as the next figure shows.

This provides more effective holistic and systemic analysis of the system.

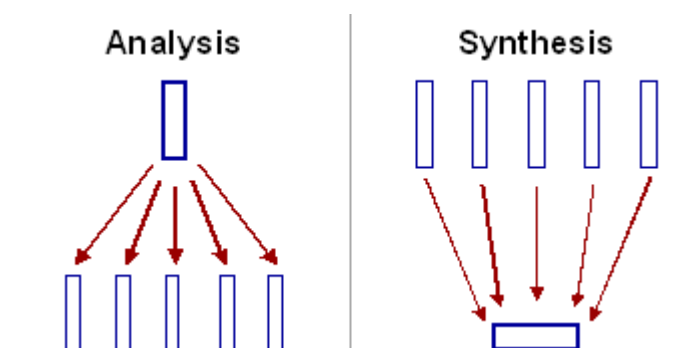


Figure 1: Analysis and Synthesis. Bartlett [6]

## Systems Thinking Approaches

Systems thinking approaches can be divided into two categories, hard systems and soft system. Hard systems thinking is a generic title defined by Checkland [7] to various types of systems approaches for solving problems in the real world. The approaches related to hard systems are operational research, system analysis and system dynamics. It is a useful way of thinking which gives the managers and the decision makers the ability to optimize and control the system's performance in pursuit of clearly identified goals. Another approach is introduced to help to decide what purpose the organisation should pursue which is soft systems methodology and Cybernetics.

In this paper, we will introduce system Dynamics methodology, and later the paper demonstrates how SD models can improve the decision making process in the organisation.

### System Dynamics

System Dynamics methodology is considered an important approach which has a sophisticated tools such as Virtual world (formal models, Microworld, management flight simulators, computer simulation) in which decision makers and managers can refresh decision making skills, test their scenarios and strategies, and conduct experiments through effective simulation by using system Dynamics simulation tools

System Dynamics is a computer-aided method for analysing, framing, understanding, and solving problems in complex real world systems. Jay W. Forrester's work at the Massachusetts Institute of Technology was the major move towards developing this field to extend the range of applied system thinking to more strategic problems in complex systems.

System Dynamics approach uses a perspective based on information feedback and delays to understand the dynamic behaviour of complex physical, biological, and social systems. It also helps the decision maker untangle the complexity of the connections between various policy variables by providing a new language and set of tools to describe. It even models the cause and effect relationships among these variables [4, 10, 11]

Furthermore, System Dynamics method enables the decision makers or the modeller via its tools in any system to identify the underlying structure of their system or issue and how this structure determines the system's behaviour as shown in the diagram in figure 2, The left arrow symbolizes the relationship while the right arrow indicates the deeper understanding that happens from analysing a system structure. System Dynamics can also be used to study the changes in one part of a system in order to observe its affect on the behaviour of the system as a whole. Martin [8]. Sterman [4] gives an insight that the real value of an SD model should be to eliminate problems by changing the underlying structure of the system rather than anticipating and reacting to the environment. This allows the model to interact with the environment and gives/alerts feedback for structure changes. This is what the term (Dynamics) refers to. To The changes in the system's variables while interacting which stimulate changes over time?

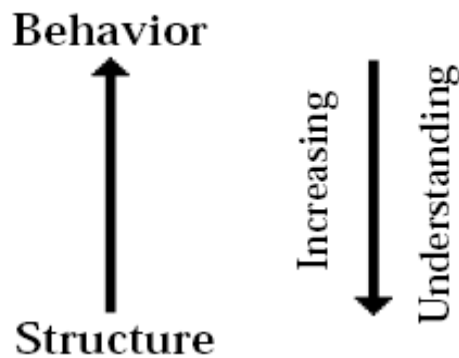


Figure 2: the link between structure and behaviour

Lyneis [9] stresses the importance of System Dynamic simulation and its power to forecast a market demand for instance and compares this with a statistical forecast. He mentions that an SD Model provides more reliable forecasts than the statistical (non-structural) models and tries to understand the underlying structure that created the data stream.

Implementing SD Modelling in Decision Support System, Data warehouse, Data mining, and OLAP powers the managers ability to get a deeper insight into the problem and analyse it by testing different scenarios by using SD models and simulators.

### 3 Conclusion

This paper briefs how Systems Thinking tools especially System Dynamics Could be a significant tool because it can easily deal with non-linearities and time which are not considered by a static analysis.

By applying System Dynamics, one can enhance the usefulness of the model to address and analyse problems in a complex situations and provide more significant, rational and pertinent policy recommendations, and of course better understanding of the problems which finally leads to effective decision making process.

In summary, the process is to “observe and identify problematic behaviour of a system over time and to create a valid diagrammatic representation of the system, capable of reproducing by computer simulation the existing system behaviour and facilitating the design of improved system behaviour. Existing business simulators are designed to allow the users to play a realistic role in management decision making. Users can make decisions and receive outcome feedback about their performance, by rehearsing strategies and observing results, the managers in the case study were able to discover how to make better decisions and hence improve their performance and reduce the risk of losing money and thus increase the business intelligence tools efficiency.

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# Employee Turnover Intentions: Job Stress or Perceived Alternative External Opportunities

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**Dr Riyaz Ahmad Rainayee**

Associate Professor, Department of Business and Financial Studies, University of Kashmir

Email: rizrainayee@yahoo.com

## INTRODUCTION

Turnover intention has been a critical issue for management for many years (Chen, Lin & Lien, 2010) and it is a major problem for organisations till now. Therefore, much attention has been paid over the past some years towards employees' turnover behaviour and the major causes that lead towards the turnover intention of employees (Richer, Blanchard & Vallerandi, 2002). The broad range of turnover studies is indicative of the significance and complexity of the issue. The phenomenon attracts interest due to its psychological dimension, its organizational significance, and its economic dimension. Thus organizations of all types are giving increased attention to this problem because they know that low level of turnover enhances the performance of organization and reduces the costs associated with recruiting and training new employees (Chen et al., 2010). As a consequence, many organizations have taken it seriously and started to invest in their employees in terms of orientation, training, maintaining, developing and retaining them at any cost (Ongori, 2007), because turnover has great impact on business (West, 2007). In the past, researchers have focused on various factors which contribute towards the employee's intention to leave the job. The present study addressing "Employee turnover: is it job stress or perceived alternative external opportunities?" attempts further investigation into turnover intentions.

## LITERATURE REVIEW

### Turnover Intentions

A topic closely related to voluntary job mobility is "turnover intention". *Turnover* is defined as the "individual movement across the membership boundary of an organization" (Price, 2001); *individual* refers to an employee within an organization and the *notion of movement* may be understood as an accession to or a separation from the company; many authors have used other words – such as quits, attrition, exits, mobility, migration, succession – for turnover. Turnover has three fundamental characteristics: Voluntariness, Avoidability and Functionality. In this study

“turnover intent” rather than “turnover” was used as the dependent variable. The importance of analyzing turnover intention draws upon a number of recent research papers that have assessed its role in forecasting and understanding actual quits. The operational definition of turnover intentions for this study is “Turnover intention is the subjective and cognitive response to the working environment by the organizational member which characterise as feelings of retreating the current job for alternative opportunity.”

### **Stress and Turnover Intentions**

Psychological pressure of work has a considerable influence on an employee’s quit intention. Stress and work exhaustion play an important role in increasing turnover of employees (Moore, 2000) because both stress and emotional regulation influence turnover intention, and stress is also an emotion that decreases job satisfaction and increases turnover (Côté & Morgan, 2002). Work stress has become a major cause of voluntary turnover leading to loss of employees (Zhang & Lee, 2010). Many researchers have clearly found that the greater the amount of stress the higher is the turnover intention of employees (Kavanagh, 2005; Cropanzano et al., 2003; Chen et al., 2010; Applebaum et al., 2010). Stress is universally present in all organizations and it is produced by various workplace stressors (Zhang & Lee, 2010). These stressors in the work environment influence the job satisfaction of employees, which in turn leads to the intention to leave the job (Applebaum, 2010). Khurram (2011) found that employees tend to leave their organization when they feel stress at their jobs. Tan, Tan and Tiong (2006) examined the impact of work satisfaction and stress on the turnover intention. Noor & Maad (2008) researching on marketing executives of Pakistan, found a positive relationship between work life conflict, stress, and turnover. O’Neill et al. (2009) studied the relationship between work–family climate, organizational commitment, organizational leadership characteristics, and turnover intent. A significant impact of long hours, organizational time expectations, perceived negative career consequence and lack of support was tested by Bauld et al., (2009). Ahmad and Omer (2010) developed a positive association between family supportive work culture, affective commitment, and turnover intention. Role ambiguity and role conflict have been the popular research areas. Sager (1994) and other scholars note that an employee with a lot of role conflict and ambiguity faces high work stress, which leads to dissatisfaction and ultimately develops an intention to look for another job – he quits as soon as he finds a better opportunity elsewhere. Repetition at work is another factor affecting the turnover intention. Whereas the more demanding the job the more satisfaction it brings to an employee, inspires him to work harder, hence increases the productivity, much against that, simple and routine jobs result in lower participation, higher absenteeism, and stronger desire to leave the job (Larson and Laiken, 1999). In 2008, Yu found that work life balance policies are positively associated with the job tenure of the female employees, and moreover the practices of such policies have a great effect on the turnover rate of employees. Work-life balance policies help in reducing the stress and provide a good work place where there is less chance of accidents in the working and also provide a fair platform for every employee, ultimately enhancing productivity

(Yasbek, 2004). Nowadays companies are more aware about the work life balance and implementation of friendly policies (Yasbek, 2004) because complex and additional working hours increase the stress and turnover intention among employees (Ling & Phillips, 2006). According to Forsyth and Polzer-Debruyne (2007), when employees feel that organization is supportive and providing them work life balance it enhances job satisfaction and reduces work pressure leading to reduction in turnover intention.

### **Perceived Alternative Employment Opportunities (PAEO) & Turnover Intentions**

Another possible predictor of turnover intentions is perception of alternative job opportunities among the employees. PAEO refers to an individual's perception of the availability of alternative jobs in the organization's environment (Price & Mueller, 1986), and it is the function of labour market conditions. Employees perceive more alternative job opportunities when the job market is tight and less alternative job opportunities when there is unemployment. It should be noted, however, that PAEO is not the same thing as actual labour market conditions. If organizations fail to provide substantial growth opportunities, the employees actively start searching for an alternative job and their search is based upon the perceived opportunities in external market (Negrin & Tzafirir, 2004). Findings of Ing-San Hwang & Jyh-Huei Kuo (2006) revealed a significant positive correlation between perceived alternative job opportunities and turnover intention in the public sector organizations. The same has been proved by Lambert, Hogan & Barton (2001) in a study that focused on impact of job satisfaction on turnover intent. It was revealed that job satisfaction had the largest impact on turnover intentions and perceived availability of alternate jobs had positive correlation with turnover intentions of the employees. Thatcher, Stepnia & Boyle (2003) have conducted a research on turnover of information technology workers and found a strong positive correlation between perceived alternative job opportunities and turnover intention. Past research suggests that both PAEO and labour market conditions are positively associated with turnover (Hulin et al., 1985). Although labour shortage is considered one of the most important factors contributing to employee turnover, none of the studies have yet examined the effect of PAEO and job stress on turnover intention.

### **NEED FOR THE PRESENT STUDY**

There are only a few research studies that have examined the relations between turnover intentions, perceived alternative external opportunities, and job stress. The extant literature is based on data collected in western countries, and limited to the manufacturing sector. However, whereas job stress has been found to be a direct predictor of turnover, better external opportunities together with job stress has not been analyzed. This study aims to fill this gap by focusing on the issue of turnover intentions, job stress & PAEO as its antecedents, and the extent to which these antecedents contribute to the intention to leave an organization. There are no known studies linking these subjects in the service sector of Jammu & Kashmir.

The results of this research will allow a better understanding of the influence of job stress and PAEO

on the employee turnover intentions. The results will also enhance our understanding of the determinants of these two important antecedents of employee turnover intentions. It is hoped that a better understanding of these issues and their relationship will aid further research, pinpoint better strategies for retaining of future bank employees, particularly in J&K, and probably in other societies as well.

### **Objectives of the Study**

To assess relationship among job stress (work life balance, job overload, job characteristics, and work relationship), PAEO, and employee turnover intentions;

To investigate the employee turnover intentions with two predictive variables, that is, PAEO and job stress.

### **Hypothesis**

H<sub>1</sub>: PAEO result in employee turnover intentions.

H<sub>2</sub>: Excessive job stress results in employee turnover intentions.

### **Methodology**

Pearson correlation coefficients (r) were conducted to determine whether a relationship exists between the dependent variable employee turnover intentions and the independent variables, that is, job stress and PAEO. In addition, a multiple regression analysis was conducted to evaluate the predictive values of job stress and PAEO on employee turnover. All analyses were conducted at the 0.001 significance level.

A questionnaire method using standardized measurement tools was used for data collection. Employee turnover intentions were measured by Cummann et al. (1979) instrument ( $\alpha = 0.805$ ). The perceived alternative employment opportunities (PAEO) scale contained six items and was adapted from Mowdey et al. (1984), Billings and Wemmerus (1983), Arnold and Feldman (1982), and Michaels and Spector (1982). The scale showed good reliability ( $\alpha = 0.713$ ) and finally job stress items were adopted from the "An Organizational Stress Screening Tool" commonly known as ASSEST by Cartwright and Cooper (2002) model questionnaire ( $\alpha = 0.929$ ). Responses were measured on a 5-point scale ranging from Strongly Disagree to Strongly Agree from the respondents of the largest private sector bank operating in Jammu & Kashmir. Sample size was restricted to 100 employees selected on the basis of stratified sampling procedure.

### **Research Findings**

The correlation analysis shows a significant relationship between dependent and independent variables. The employee turnover intention positively and significantly correlates with PAEO (.669\*\*) and job stress (.499\*\*). The results demonstrate that the employees' turnover intention increases when they perceive external alternative opportunities and experience undue job stress at their work place. Therefore, H<sub>1</sub> "perceived alternative external opportunities result in employee turnover intentions" and H<sub>2</sub> "excessive job stress results in employee turnover intentions" are accepted. Further, multiple regression was conducted to investigate the influence of perceived

alternative external opportunities and job stress on turnover intention. The presence of high correlations, 0.90 and above, between the independent variables may influence the regression results and interpretations. Since the correlation between independent variables is 0.38, not indicating the existence of high multicollinearity, it allows a straightforward interpretation of regression results and regression coefficients. Results of multiple regression analysis shown in Table 1 reveal that employee turnover intention in the bank is heavily influenced by PAEO explaining a variance ( $R^2$ ) of 45%. The effect of job stress on turnover intentions, though significant, explains a variance of 24% only.

**Table 1**  
**Correlation Coefficients Matrix**

	1	2	3	4	5	6	7	8
<b>Turnover Intentions</b>	1							
<b>PAEO</b>	.669**	1						
Work life Balance	.423**	.255**	1					
Work Relationship	.361**	.265**	.510**	1				
Overload	.461**	.373**	.453**	.750**	1			
Job Characteristics	.458**	.394**	.573**	.593**	.688**	1		
Job control	.394**	.335**	.627**	.597**	.664**	.834**	1	
<b>Overall Stress</b>	.499**	.385**	.763**	.813**	.849**	.867**	.896**	1

\*\*Correlation is significant at the 0.01 level (2-tailed).

Results from the regression equation for the standardized variables were as follows: Predictive turnover intentions score = - 0.314 + 0.888 (perceived alternative external opportunities) + 0.382 (job stress) shown in Table 2. Again the high positive coefficient of beta (= 0.888) (p < 0.000) indicates that the perceived alternative external opportunities highly influence employee turnover intentions than job stress which has beta coefficient of .382 (< 0.000) only.

**Table 2**  
**Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R <sup>2</sup>
	B	Std. Error	Beta			
1 (Constant)	-.314	.415		-.757	.451	
PAEO	.888	.121	.560	7.321	.000	.448
Stress	.382	.103	.284	3.707	.000	.241

a. Dependent Variable: Turnover intentions

**Table 3**

**MODEL SUMMERY of MULTIPLE REGRESSION ANALYSIS**

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	47.202	2	23.601	51.765	.000
	Residual	44.225	97	.456		
	Total	91.427	99			

a. Predictors: (Constant), Stress, PAEO

b. Dependent Variable: Turnover intentions

The model analysis included the two independent variables of perceived alternative external opportunities and job stress. The linear combination of the two independent variables was significantly related to the dependent variable (employee turnover intentions), R squared = 0.71, adjusted R squared = .50, (Table 40), F = 51.76 (p= 0.000) (Table 3). An estimated 51% of variance of the predictive variables index can be accounted for by the linear combination of independent variables, that is, PAEO and job stress and the dependent variable - turnover intentions.

**Table 4**

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719	.516	.506	.675

a. Predictors: (Constant), STRESS, PAEO.

b. Dependent Variable: Turnover intention

**Table 5**

Descriptive

Statistics			
	Mean	Std. Deviation	N
<b>Turnover intention</b>	4.04	.96	100
<b>PAEO</b>	3.46	.60	100
<b>Measures of Job stress</b>			
Work life balance	3.39	.91	100
Work relationship	2.26	.73	100
Overload	2.53	.95	100
Job characteristics	3.00	.53	100
Job Control	2.98	1.05	100
<b>Over Job Stress</b>	2.83	.71	100

## **Discussion and Conclusion**

We began with the question, “Employee turnover: PAEO or Job Stress?” Now it is possible for us to answer this question. Our analyses suggest that employee turnover problem in J & K Bank is more due to perceived alternative external opportunities than job stress. However, the importance of job stress in the employee turnover intentions can’t be ignored. Perceived alternative external job opportunities were found to explain the much greater variance in the turnover model than were the factors under the control of management. While the uncontrollable factor, that is, perceived alternative employment opportunities, added 45% of the unique variance, controllable factors (work life balance, work relationship, overload, job control, job characteristics) together contributed a unique variance of 24% in the turnover model for the total sample. Our findings reveal that the organization needs to provide substantial opportunities for growth and development of their employee at the workplace. Further, there is need to invest in training and create knowledge management panels enabling the employees to share their skills with each other and reinforce their abilities more efficiently. Under this circumstance, leaving his current job has more opportunity cost for the employee and he would likely prefer to stay. The bank further should enrich the jobs of employees so as to make the perception of employees’ better regarding the quality of working conditions, which in turn will affect the employee cognition to alternative jobs available in the labour market. The result further indicates that human resource managers in J&K Bank need to overcome their fatalistic thinking and feelings of helplessness in the face of employee turnover. It can be said that the employees work in a very stressful environment which, if not balanced with proper work life policies and other benefits, will create the desire to quit the job. There is a lot the managers can do to overcome this major human resource problem. They need to think of strategies to combat employee turnover. The employees should be given flexible working hours, should be engaged in the decision making of work life policies, because employees’ engagement, as much as commitment and support from the management, helps to motivate the employees which in turn enhances their intent to remain with the organization (Ongori, 2007). Should organizations encourage the implementation of these friendly policies and programmes, they will be successful in reducing turnover, attracting new employees, and improving the employees’ attitude and behaviour (Beauregard et al., 2009). The message is clear: Senior managers and human resource departments must cautiously balance work stress and intention to leave – to decrease the latter. Among the measures of job stress, work life balance was found to be one of the major problem areas for the employee of the bank. Therefore, it can be recommended that managers should focus on employee work life balance in order to reduce their job stress, which in turn is expected to reduce the turnover intention. Job characteristics (mean = 3), job overload (mean = 2.53), and job control (mean = 2.98) showing the correlations of 0.39, 0.37, and 0.33 with perceived alternative external opportunities, what is crystal clear is that the human resource management of the bank should redesign the policies relating to work overload, work life balance, and job control which were found to be the major stressors causing turnover.

## **Practical Implications**

This study, observing two positive determinants through statistical tests, strongly indicates that PAEO,



work life balance, job control, work relationship, job characteristics, and job overload are important factors which may be the causes of employee turnover intentions. And so the directors of human resource department should take significant measure for better management policies.

### **Limitations and Future Indications**

This study is cross-sectional and co-relational in nature. The generalisability of this study is very broad, should be conducted in longitudinal form, and more statistical tests should be applied for more concrete analysis. Employee turnover intentions were tested by considering only two antecedents – better external opportunities and job stress. There can be some other variables too, – such as commitment, job satisfaction, self efficacy, leadership, quality of work life; and these can be taken into account in future research. Sample size also is a major limitation of this study.

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# **Preliminary Study The Relationship Between Organizational Culture and Implementation of Independence Principle: Indonesia Public Listed Company Case Study**

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**Dr. Aries Susanty, Dr. Gendut Suprayitno, Dr. Ferry Jie**

Department of Industrial Engineering, Diponegoro University, Semarang  
Institute of Science and Technology National, Jakarta  
School of Business IT and Logistics, College of Business, RMIT University

## **ABSTRACT**

Company's success in implementing the principles of Good Corporate Governance (GCG) is highly dependent on the values of the corporate culture that embraced and practiced within the company. This is proven by the fact that some world-class companies and multinational companies have succeeded in implementing GCG after adopting a corporate culture consistently. Furthermore, this study aims to investigate the impact of culture on the successful implementation one of GCG's principles, namely the independence principle. This study uses seventeen companies that listed on stock exchanges. At each company, the questionnaire is delivered to approximately 71 people that include the internal's and external's company party. The internal company party consists of directors of company, board of commissioners, managerial staff, and non-managerial staff. The external company party consists of supplier, customer, insurance companies, and other stakeholders who have a relationship with the company. Overall, there were 840 participants out of seventeen surveyed public listed companies. The conclusion from this study is that uncertainty avoidance cultures and individualistic cultures have a positive significant relationship with independence of Directors and Board of Commissioners. Furthermore masculine cultures and power distance culture have negative significant relationship with independence of Directors and Board of Commissioners.

**Keywords:** *individualism/collectivism, power distance, uncertainty avoidance, masculinity/ femininity, long-term/short-term orientation, independence of directors and board of commissioners*

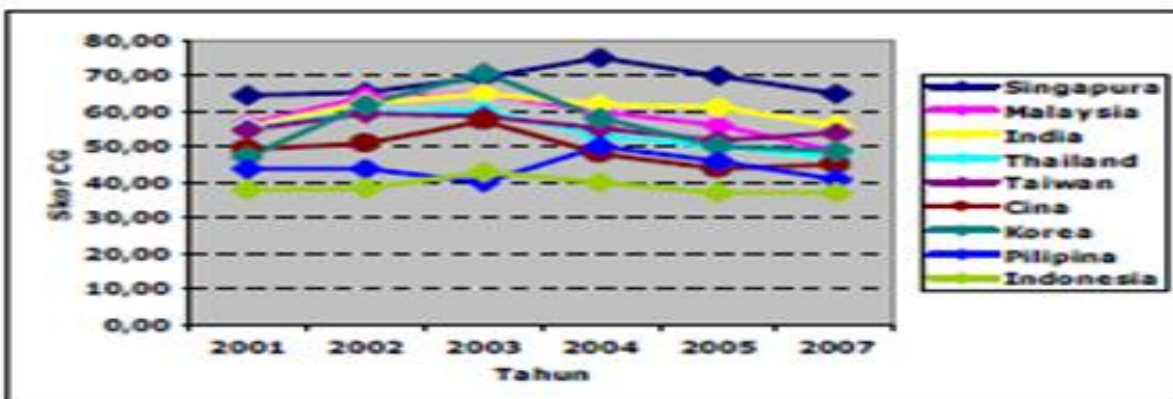
## **1.0 INTRODUCTION**

From the historical perspective, the delivery of corporate governance in Indonesia was not based upon local initiative. However, it followed the 1997 South Asian financial crisis, which impacted severely on a number of Southeast Asian countries, including Indonesia. At the time, the Indonesian currency depreciated nearly by 80 % and some businesses, especially in the banking sector, collapsed. Tabalujan states that the 1997 Asian financial tragedy was a milestone in the history of corporate governance in Indonesia. The financial condition in 1997 was abysmal where the value of the rupiah at mid-August 1997

had lost 27% against the United States (US) dollar. In this condition, the International Monetary Funds (IMF) came to offer a favor. The IMF offered a conditional loan, which means that they would give the loan if Indonesia can meet several requirements. One of the requirements is restoring the corporate governance system. The government concurred with the conditions, which can be learnt from 5 letters of intent of the government of Indonesian to the IMF (Kamal, 2008). The condition of the implementation of Corporate Governance by a number of companies in Indonesia could be described as follows.

1. The assessment conducted by Credit Lyonnaise Securities (CLSA) since year 2001 up to year 2007 give the lowest value to mostly of companies in Indonesia in realizing good corporate governance principles (GCG), even in comparison with the other nations of Asia. Specifically, we can separate the assessment conducted by CLSA in two. In the year 2001 until 2003, CLSA assessed the implementation of CG based on seven following dimensions, namely: (i) discipline, (ii) transparency, (iii) independence, (iv) accountability, (v) responsibility, (vi) fairness, and (vii) social awareness (Gill, 2002; Gill and Allen, 2003). Since 2003 CLSA joint with Asian Corporate Governance Association (ACGA) to assess the implementation of CG from Asian’s companies. Different with three previous years, in 2004 until 2007, the assessment of implementation of CG was based on five macro dimensions, namely: (i) law and practices, (ii) enforce, (iii) political and regulatory, (iv) IGAAP, and (v) culture (Gill and Allen, 2005; Gill and Allen, 2006; Gill and Allen, 2007). The result of the assessment from 2001 until 2007 can be seen in the Figure1.

Figure 1. Result of the assessment from CLSA and ACGA



After 2007, CLSA and ACGA return back to assess the implementation of CG in 2010. The result of this assessment indicated that Thailand, Japan and Indonesia – having underperformed in the past, often for extended periods - stand out this year. Thailand enjoyed an eight percentage-point jump in its absolute score and wins the award for “most improved”. Japan rose five percentage points and Indonesia three points. Given that reforms in Japan appeared to be stuck only two years ago, its performance in this survey shows what can be done when regulators show determination and market consensus starts to shift. As for Indonesia, the odds for a long time have been on its retaining last place in this survey. This is no longer the case, as it has moved ahead of the Philippines. In detail, the result of the implementation of CG assessment in the year 2010 can be seen in Table 1 (Gill, Allen, and Simon, 2010).

Table 1: CG Score in The Year 2010

Country (ranking)	Score	Change from 2007 (ppt)
Singapore (1)	67	(+2)
Hong Kong (2)	65	(-2)
Japan (3)	57	(+5)
Taiwan (4)	55	(+1)
Thailand (4)	55	(+8)
Malaysia (6)	52	(+3)
India (7)	49	(-7)
China (7)	49	(+4)
Korea (10)	45	(-4)
Indonesia (10)	40	(+3)
Philippines (11)	37	(-4)

2. The result of research from Sulistyanto and Nugraheni show us that the implementation of CG was unable to reduce manipulation of financial reports of public companies listed in Bursa Efek Jakarta (BEJ) (Sulityanto, 2003).

Although Indonesia has moved ahead of the Philippines in the year 2010, overall condition shows us that most of companies in Indonesia were unable to attain the principles of GCG because the companies were not implementing the CG seriously. That inability was due to a number of constraints which could be classified into three, namely internal constraints, external constraints, and constraints coming from the structure of ownership. The issues in the internal constraints mentioned were related to the function of several elements of the company. As a business organization, corporation was unable to achieve its goal to successfully implement GCG principles since it was not supported by its internal elements' functions. One of internal elements of a company was corporate *culture*.

Company's success in implementing the principles of GCG was highly dependent on the values of the corporate culture that embraced and practiced within the company. Currently, the company's culture had become a central theme in corporate development, especially with regard to Human Resources (HR). Besides that, the corporate culture was a basic principle in the development of the company to improve company competitiveness. As Moejono (2005) said, companies should apply the values to be adopted before the company is implementing GCG . In addition, GCG can work well if the individuals within the company have a system of values (value system) that encourage them to embrace, support and implement

the GCG. This is proven by the success of some world-class companies and multinational companies in implementing GCG after previously running corporate culture consistently (Moeljono, 2005).

All companies have a culture, whether it is recognized and consciously shaped or not. A company culture can benefit a company or be detrimental, depending on what it is. A company culture is responsible for how things are done at the company, including what decisions are made and how they're made. Although the company culture is initially established through the company's mission and the founders' implementation, as the company grows, everyone in the company comes to have an influence of some degree on the company culture. Whether the company is structured in a strict hierarchy, how departments interrelate, and how work teams are formed are all part of the company culture. Based on these, the public and privately run companies can have different corporate cultures. In their study, Ferreira et. al (2009) showed to us that private companies were more concerned than public ones about adopting values. With respect to internal customers, private companies, according to their members' perceptions, value those that carry out their jobs efficiently and competently, demonstrating a team spirit, ability, dedication, professionalism and initiative, so as to reach common organizational goals (cooperative professionalism). In addition, as private companies seem to be concerned about subjacent aspects of performance, such as employee satisfaction and well-being, they tend to humanize the work environment, making it a more agreeable and pleasant place in which to work. Such values manifest themselves in the implementation of reward and training practices. They stimulate and accomplish efficient development. Those values also manifest themselves in managerial practices oriented towards interpersonal relationships, as a form to favor the employee cohesion and satisfaction. Private companies are also concerned about their external customers by adopting measures for strategic planning and decision-making that facilitate their integration with the market. On the other hand, the public company employees tended to think that in the culture of their organization, there was a prevalence of those values associated with competitive professionalism, a rigid hierarchical power structure, and those managerial practices oriented towards communication and decision making.

Since culture has impacted on the success of GCG implementation and the type of companies can have different corporate cultures, this research aims to investigate the impact of culture on successful implementation one of GCG principle, namely independence, in public listed company. This will be achieved by examining cultural factors that could lead changes in implementation of independence of Directors and Board of Commissioners as one of corporate governance principles in public listed company's context. Independence of Directors and Board of Commissioners will be performing well if the composition of the Board of Commissioners was not dominated by representatives from a dominant shareholder who allowed both of the Board can manage the company in a professional manner without dominance or intervention from any party.

This study is expected to contribute to the body of knowledge (BoK) by filling a literature gap in the understanding the relationship between culture of public listed companies and implementation one of



corporate governance principle. The output from this research will also extend the literature by contributing to development knowledge regarding the internal factors of organization that can influence the successful implementation one of corporate governance principle.

## 2.0 LITERATURE REVIEW

### 2.1. Culture

Schein defined culture as: *“a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”* (Schein, 2001).

Similar to the above description of culture from Schein, Hofstede described culture as: *“the collective programming of the mind which distinguishes the members of one human group from another. The culture is to a human collectivity what personality is to an individual and can be further defined as the interactive aggregate of common characteristics that influence a human group’s response to its environment. Culture determines the identity of a human group in the same way as personality determines the identity of an individual”* (Hofstede, 1990).

Hofstede has identified four value dimensions that correspond to basic societal problems, such that each dimension represents a range of possible positions between two polar stances (Hofstede 2010):

1. **Individualism/Collectivism:** This dimension refers to the relationship between individual and group. Individualism reflects valuing loosely knit social relations in which individuals are expected to care only for themselves and their immediate families, while Collectivism emphasized tightly knit relations in which they can expect their wider in-group (e.g., extended family, clan) to look after them in exchange for unquestioning loyalty.
2. **Power Distance:** This dimension refers to social inequality, including the relationship with authority. It reflects accepting an unequal distribution of power in institutions as legitimate or illegitimate.
3. **Uncertainty Avoidance:** This dimension refers to dealing with uncertainty. It reflects feeling uncomfortable or comfortable with uncertainty and ambiguity and therefore valuing or devaluing beliefs and institutions that provide certainty and conformity.
4. **Masculinity/Femininity:** This dimension refers to concepts of masculinity and femininity—the social implications of gender. It reflects valuing achievement, heroism, assertiveness, and material success versus relationships, modesty, caring for the weak, and interpersonal harmony
5. **Long-term/short-term orientation.** This deals with the issue of virtue. Long-term cultures value thrift and perseverance; short-term cultures value tradition, the fulfillment of social obligations and protecting one’s ‘face’ or honor. A long-term orientation is associated with East Asian countries and Hofstede notes that their recent economic success has been built on this.

### 2.2. Five Hofstede’s Cultural Dimensions and Independence Principle

Indonesia companies adopted the same system with European Continental e.g. two tier board systems. Under the dual board system, a company has two boards, namely the Board of Directors that has to conduct company's operations and the Board of Commissioners that has to check the Board Directors' result. The board system used in Indonesia is quite different with the board system used by European Continental. The main characteristics of the system in other countries is the Board of Commissioners usually called as supervisory board, is chosen by and should be responsible to Rapat Umum Pemegang Saham (RUPS), and they will choose the Directors. While in Indonesia, the Regulatory of Perseroan Terbatas (1995) stated that Directors and Board of Commissioners are chosen by and be responsible to RUPS (Lukviarman, 2004). To ensure that the composition of Board of Commissioners is not dominated by representatives from dominant shareholder and not intervention from any party, the Board of Commissioners should consist of independent members. According to The Circular Letter of Bapepam No. SE-03/PM/2000 dated May 5, 2000 and JSX Rule No. I-A dated July 19, 2004, more than 30% of the board must be an independent commissioner. In other words, in the implementation of corporate governance, the independence of the Board of Commissioners can be determined by the composition or structure of the board.

In their study about national culture and the composition of the Board of Directors, Li and Harrison (2008) found that institutional norms, as embedded in a society's culture, affect organizational structure, at least on the board level. The cultural dimensions of uncertainty avoidance, individualism/collectivism, masculinity/femininity, and power distance have significant power to predict the composition and leadership structure of corporate boards in different countries. Firms based in uncertainty avoiding cultures tend to have more outside directors on their boards and tend to consolidate the CEO and chair positions. Firms based on societies that value higher levels of individual freedom tend to have a higher percentage of outside directors on their boards, and also consolidate the leadership positions. Firms based on societies that value personal dominance (masculinity) tends to have fewer outside directors, and also to consolidate the leadership positions. Firms based in societies that prefer high power distances are more likely to have a single leader as both board chair and CEO and fewer insiders on the board. Overall, these findings confirm the hypotheses about the relationship between national culture and board structure (Li and Harrison, 2008).

In the case of Indonesia, the results of research conducted by Li and Harrison (2008) can be adjusted by changing the structure of the Board of Directors with the structure of the Board of Commissioners. Thus, in this study, we can be said that the cultural dimensions of uncertainty avoidance, individualism/collectivism, masculinity/ femininity, and power distance have significant power to predict the composition of the Board of Commissioners. Firms based on uncertainty avoiding cultures tend to have a more independent Board of Commissioners on their boards. Firms based on societies that value higher levels of individual freedom tend to have a higher percentage of an independent Board of Commissioners on their boards. Firms based on societies that dominance by personal's value (masculinity) tends to have fewer an independent Board of Commissioners on their boards. Firms based on societies that prefer high

power distances are more likely to have fewer a non independent Board of Commissioners on their boards.

Furthermore, the relationship between corporate governance and corporate orientation can be described as follows. Long-term orientation and short-term orientation simply deal with the time orientation and foresight of cultures. According to Javidan and House in the year 2001, future orientation refers to the extent a culture focuses on the future. Cultural future orientation is the degree to which a society encourages and rewards future-oriented behaviors such as planning. Ashkanasy et. al in the year 2004 told us that high future orientation cultures achieve economic success, have organizations with a long strategic orientation, have flexible and adaptive organizations and managers, place a higher priority on long-term success, have a strong capability and willingness to imagine future contingencies, formulate future goals, and seek to achieve goals and develop strategies for meeting their future aspirations (Seleim and Bontis, 2009). Good corporate governance itself aims to achieve long-term success through the achievement of five principles, such as transparency, accountability, responsibility, independence, and fairness. Based on that, corporate culture that is more suitable for achieving the principles of good corporate governance is a long-term oriented culture.

### 3.0 CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESES

From the relationship between culture and independence as explained in the previous section, this study can make a conceptual framework and some hypotheses as follows.

Figure 2. Conceptual framework for the relationship between five Hofstede's Cultural Dimensions and Independence Index



The framework is used as a guidance to formulate and test the hypotheses below:

- H 1: Uncertainty avoidance cultures have a positive significant correlation with independence index
- H 2: Individualistic cultures have a positive significant correlation with independence index
- H 3: Masculine cultures have a negative significant correlation with independence index
- H 4: Power distance cultures have a negative significant correlation with independence

index

H 5: Long term oriented cultures have a positive significant correlation with independence index

## 4.0 METHODOLOGY

### 4.1 Sampel of Research

This study uses seventeen companies that listed on stock exchanges. All that companies have a good track record in implementation good corporate principle. At each company, the questionnaire is addressed to approximately 71 people that includes the internal's and external's company party. The internal company party consists of directors of company, board of commissioners, managerial employees, and non-managerial employees. The external party company consists of supplier, customer, insurance companies, and other stakeholders who have a relationship with the company. Overall, there were 840 participants out of seventeen surveyed companies.

### 4.2 Indicators (Items) and Measurement

The study was designed to determine whether there is a positive correlation between the independence of Directors and Board of Commissioners and organizational culture. To measures the independence of Directors and Board of, this study uses seven indicators (items) that form the construct independence. All items that form construct independence can be seen in Table 2. Each item will be assessed using a scale of 0 - 100. Value of 0 indicates that the Directors and Board of Commissioners of the company are not independent, while a value of 100 indicates that the Directors and Board of Commissioners of the company are very independent.

*Table 2: Operationalization of constructs independence of directors and board of commissioners*

<b>Operational definition of construct independence</b>	This construct shows the willingness of Directors and Board of Commissioners to carrying out the management of the company in a professional manner which characterized by the absence of dominance or intervention from one participant to another participant, and the willingness that showed by Directors and Board of Commissioners is able to encourage the member of companies to participate in carrying out the management of the company in a professional
<b>Indicators (items) of construct independence</b>	
1. The pattern of decision-making and action by the Board of Commissioners is accordance with their duties and functions as well as related regulations, and no influence from any party (IND-1)	
2. The pattern of decision-making and action by the Directors is accordance with their duties and functions as well as related regulations, and no influence from any party (IND-2)	
3. There is no affiliation relationship between the Board of Commissioners and Directors in accordance with the regulations imposed by the relevant institutions (IND-3)	

4. There is no affiliation relationship between shareholders with the Board of Commissioners in accordance with the regulations imposed by the relevant institutions (IND-4)

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5. There is no affiliation relationship between shareholders with Directors in accordance with the regulations imposed by the relevant institutions (IND-5)

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6. Board of Commissioners and Directors has been working very hard on aligning policies with the company's internal control mechanisms in order to avoid any influences, pressures and conflicts of interest in the company (IND-6)

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7. Directors have been working very hard at doing the measurement on the alignment of company policy with internal control mechanisms in order to avoid any influences, pressures and conflicts of interest in the company (IND-7)

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8. Member companies have participated actively in the realization of no conflict of interest and free from pressure in the completion of the work (IND-8)

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To measure the organizational culture, this study uses the values survey module (VSM) was developed by Hofstede in the year 1989. This value survey module was recommended by Hofstede for future cross-cultural survey studies. The original value survey module was in English.

#### **4.3.Data Analysis**

This study used SPSS (Statistical Package for Social Science) and Microsoft Excel software as main statistical analysis tools. In the analysis by SPSS, there are two things to do. First, test the validity and reliability of the construct independence that used in this study and second, test the hypothesis about the correlation between Hofstede's culture and independence of Directors and Boards of Commissioners.

Validity is defined as the extent to which the instrument measures what it purports to measure. Validity assessment is done by calculating the correlation between each item with a total score using the product moment correlation. This is another technique to prove the construct validity (Singarimbun and Effendi, 1989). In assessing the validity using the product moment correlation, the correlation numbers shown by each item should be compared with the critical value contained in Table Correlation r-values. Based on the table, the critical value for  $n=17$  with level of significance of 5% is 0.493. The item which has the value of correlation lower than the critical value will be excluded from the questionnaire because that item (indicator) does not have internal consistency or not measure the same aspect compare with other items (Singarimbun and Effendi, 1989).

The reliability of the research instrument is concerned with its internal consistency. Cronbach's alpha measures how well a set of item measures a single unidimensional latent construct (Cortina, 1993). Cronbach's alpha remains the most widely used measures of scale reliability. When data have a multidimensional structure, Cronbach's Alpha will usually be low. Technically speaking, Cronbach's Alpha is not a statistical test - it is a coefficient of reliability (or consistency). When there are many items, Cronbach's Alpha tends to be the most frequently used estimates of internal consistency (Jackson and

Pearson Correlation was seen as appropriate to analyze the relationship between two variables which were interval-scaled and ratio-scaled. Furthermore, correlation coefficients reveal the magnitude and direction of relationships which are suitable for hypothesis testing (Malhotra, 2007). The researcher used Pearson correlation to test five independent variables (uncertainty avoidance cultures, individualistic cultures, masculine cultures, power distance cultures, long term oriented cultures) that influenced independence of Directors and Boards of commissioner and to test if a relationship existed between the independent and dependent variables.

## 5.0 FINDINGS AND DISCUSSION

### 5.1 Validity and Reliability

In this study, result of validity assessment demonstrates that all items in the construct independence have a value above the critical value ( $>0.493$ ). This means, no item should be removed from the construct independence. Result of reliability assessment demonstrates that construct independence has value Cronbach's equal to 0.871. This means, construct independence has good reliability.

### 5.2 Hypothesis Test

Table 2 represents the result of a test of hypothesis the correlation between Hofstede's culture and independence of Directors and Boards of Commissioners. The study results support Hypotheses 1 and Hypothesis 2 concerning a positive relationship between uncertainty avoidance cultures and individualistic cultures and independence of Directors and Board of Commissioners. The study results also support Hypothesis 3 and Hypothesis 4 concerning a negative relationship between masculine cultures and power distance culture and independence of Directors and Board of Commissioners. Firms based on uncertainty avoiding cultures and firms based on societies that value higher levels of individual freedom tend to have a more independent Board of Commissioners on their boards so they will be more independent in action and making decision. Commissioner independent tend to not have affiliate relationships with shareholders so they will very hard in aligning policies with the company's internal control mechanisms in order to avoid any influences, pressures and conflicts of interest in the company. An independent behavior that showed by Independent Commissioner will encourage the members of the companies to participate actively in realizing the behavior of no conflict of interest and free from intervention from another party in the completion of the work. On the other side, firms based on societies that value personal dominance (masculinity) and firms based on societies that prefer high power distances tend to have fewer independent Board of Commissioners on their boards so they are more difficult to independent in action and making decision. Directors and Board of Commissioners who not independent more likely to have an affiliate relationship with shareholders.

*Table 3: Result of test of hypothesis*

	UAI	IDV	MAS
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Independence	Person Correlation	0.711**	0.496**	-0.580**
	Sig (1-tailed)	0.001	0.021	0.007
	N	17	17	17
		<b>PDI</b>	<b>LTD</b>	
Independence	Person Correlation	-0.728**	0.064	
	Sig (1-tailed)	0.000	0.404	
	N	17	17	

The study results fail to support Hypothesis 5 concerning a positive relationship between long term oriented and independence of Directors and Board of Commissioners. Although there is a positive relationship between long term oriented and independence of Directors and Board of Commissioners, but the relationship is not significant. This can occur because long-term orientation is a factor which is a primary consideration for every board in the company when they act. No matter they independent or not, the Director and Board of Commissioners should formulate future goals, seek to achieve goals, and develop strategies for meeting their future aspirations.

## 6.0 CONCLUSION, LIMITATION, AND FUTURE RESEARCH

Good Corporate Governance (GCG) refers to the structures and processes for the direction and control of companies. Corporate governance concerns the relationships among the Directors, the Board of Commissioners, controlling shareholders, minority shareholders, and other stakeholders. GCG contributes to sustainable economic development by enhancing the performance of companies and increasing their access to outside capital. GCG can work well if the individuals within the company have a system of values (value system) that encourage them to embrace, support, and implement the GCG. This is proven by the success of some world-class companies and multinational companies in implementing GCG after previously running corporate culture consistently and this study can prove that there is a very significant relationship between Hofstede's cultural dimensions that owned by the company with the independence of Directors and Board of Commissioners. However, this study has been limited by sample sizes. The analysis included 840 participants from 17 public listed companies that are recognized for their good corporate governance program. Based on that, the results of study cannot be generalized to all organizations. This study also has been limited by the focus of the research. This study just focuses on the implementation one of good corporate governance principles, namely independence. There are four other GCG principles that have not been studied its relationship with a cultural dimension from Hofstede. It is recommended that future research focus on four other GCG principles to gain further insight on culture involved in the implementation of good corporate governance.

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# **The Relationship between Innovation Diffusion and Human Resource Information System (HRIS)**

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Bader Yousef Obeidat  
Assistant Professor of Strategic Management  
Department of Business Management Faculty of Business, University of Jordan  
Amman, Jordan

**Abstract:** The purpose of this study is to investigate the relationship between innovation diffusion and human resource information system (HRIS). The theoretical framework of this study is based on the previous literature discussing innovation and HRIS. Innovation was treated as an independent variable, whereas HRIS was dealt with as a dependent variable. A survey questionnaire was used and sent to the human resource executives and the human resource professionals working at the pharmaceutical sector in Jordan to collect the data of this study with a response rate of 85%.

It was found that there is a positive relationship between innovation diffusion and HRIS. More specifically, it was found that there is a relationship between relative advantage, compatibility, trialability and observability on the one hand and HRIS functions on the other. However, it was found that there is no relationship between complexity as a dimension of innovation diffusion and HRIS functions.

**Keywords:** Innovation, Human Resource Management, Human Resource Information System, diffusion, Pharmaceutical Sector

## **Introduction**

Organizations depend heavily on the performance of their human resources (HR) (Lipper and

Swiercz, 2005). Accordingly, the use of information systems within organizations and their impact on human resource management within them has been given a great deal of attention over the past decade (e. g., Eddy et al., 1999; Shrivastava et al., 2003). Organizations try to increase their effectiveness by relying on their Human Resource Information System (HRIS) (Troshani et al., 2010). Consequently the literature on HRIS and associated subjects has been growing (Troshani et al., 2011). For example, Heines and Petit (1997) discussed HRIS and the conditions necessary for its success within an organization. Browning and his colleagues carried out a study in 2009 and discussed HRIS from another perspective and focused on its role in achieving a competitive advantage within organizations. Furthermore, Toe and his associates in 2007 focused on HRIS adoption, whereas, Dery et al. (2009) and Wiblen et al. (2010) in their study focused on the strategic role of human resources within organizations.

As mentioned before, one of the factors that can play a significant role in the success of organizations is their HRIS. However, human resource information system is difficult to adopt. Ashbaugh and Miranda (2002) commented that adopting HRIS within an organization is a challenging and costly process. They added that it might take a long time to start realizing its benefits within an organization. Nevertheless, little attention has been paid in the previous research to the adoption of human resource information systems within an organization (Troshani et al., 2011).

Human resource information system is considered to be an information technology (IT) which is resulted from technological innovations (Kassim et al., 2012) that should be applied within organizations. Kassim and his associates added that innovation diffusion can be used as an indicator of the attitude towards using HRIS. Accordingly, organizations must be careful when implementing a new innovation such as human resource information systems. Innovation is defined as “an iterative process initiated by the perception of a new market and/or new service opportunity for a technological-based invention which leads to the development, production and marketing tasks striving for the commercial success of the invention” (OECD (1991) cited in Garcia and Calantone, 2002, p. 112). Organizations that seek to maintain their competitiveness and economic success should strive for more innovation and seek new opportunities (Inauen and Schenker-Wicki, 2012). This was supported by Ortt and Van der Duin (2008)

who commented that "understanding how to manage innovation successfully is crucially important in a time when innovation is an almost obligatory survival strategy ("innovate or die") (p. 522).

The goal of this study is to investigate the effect of innovation diffusion within organizations in the Pharmaceutical sector in Jordan, focusing on the HRIS within those organizations. This is done by discussing innovation and its key perceptions of diffusion as well as discussing HRIS and its key elements which will be discussed in the theoretical framework of this paper.

This paper is structured as follows: section 2 discusses the literature concerning HRIS and innovation as well as it presents the theoretical framework and hypothesis studies. Section 3 is the methodology of the study. Section 4 presents and discusses the empirical study. Section 5 finally concludes the paper and recommends its future research directions.

## **Innovation**

Organizations face tough competition that causes the life cycle of their competitive advantage to be short. Accordingly, they have started to care more about their innovation processes so to enhance their economic situation, consequently, keep them a head of other competitors (Wheleen and hunger, 2012). This was accompanied by the increased technological development which accelerated the process of gaining information, accordingly, the global availability of knowledge (Inauen and Schenker-Wicki, 2012).

Innovation is considered to be almost an obligatory survival strategy which organizations should understand and be able to manage successfully (Drucker, 1999). However, it is not an easy process to adopt. Innovation is a risky in that its failure can negatively affect organizations (Tellis and Golder, 1996). For this, the subject of innovation is one of the main subjects that has been investigated by many researchers in both social humanities and social sciences (Kassim et al., 2012).

Some of the earliest studies carried out by Schumpeter in 1934 and 1939 defined innovation as an important element of economic change which organizations use in increasingly tough competitive environment. Other researchers studied the factors that affect the degree of adoption of an innovation

within organizations. For example, Zuboff (1988) and Remenyi et al. (1991) discussed this issue and commented that automation, information, and transformation are considered to be one of the most important factors that affect the diffusion of innovation. Rogers carried out an earlier study in 1983 in which he defined innovation diffusion as “the process by which an innovation is communicated through certain channels over time among the members of a social system” (p. 5). Rogers identified four factors that determine the diffusion process of an innovation. These factors are the characteristics of the innovation, the communication channels, the change agent effort, and the nature of the social system. Furthermore, he talked about the diffusion of innovation as the process of gathering information and reducing uncertainty. According to Rogers, knowledge, persuasion, decision, implementation and confirmation are considered to be five stages that comprise this process. Additionally, he identified compatibility, relative advantage, complexity, trialability and observability as characteristics of innovation that affect and determine its diffusion within an organization. These factors are considered to be intrinsic characteristics of innovations that influence an individual’s decision to adopt or reject an innovation. This study investigates the relationship between the perception of employees within the pharmaceutical sector in Jordan towards the diffusion of innovation and human resource information system functions. The focus of this study will be on the five factors that affect this perception. The following section discusses these five characteristics.

#### Relative advantage

This attribute refers to the perceived usefulness of an adoption of innovation (Davis, 1989). It is defined by Rogers as the extent to which an innovation is perceived to be better than the idea it takes the place of (2003). Kassim and his colleagues (2012) added that this element is perceived as by how much benefit it is going to bring to the users. However, this benefit depends on the nature of innovation to be held within an organization. Rogers (1983) stated that this attribute is usually measured by productivity improvement, economic profitability, and relative benefits. Hence, Kassim and his associates (2012) commented that this attribute is positively related to its rate of diffusion.

### Compatibility

Compatibility is how much an innovation has to be taken into an individual's life. It is the degree to which this attribute is well matched with what pre-exists within an organization regarding its culture, values, the need for potential adopter, and past experience (Rogers, 2003). An innovation is more likely to be adopted within an organization if it was compatible with its culture (Chaudhuri, 1994).

### Complexity

Complexity is defined as how much the innovation is perceived as difficult to understand and implement within an organization (Roger, 2003; Kassim et al., 2012). The higher the probability to understand and use a certain innovation idea, the higher the possibility it would to adopt such an idea. This was supported by Chaudhuri (1994) who commented that "If the innovation is less complex than existing products, then the rate of diffusion will be enhanced" (P. 24).

### Trialability

This attribute is necessary to reduce the uncertainty and ambiguity associated with adoption of an innovation (Kassim, et al., 2012). It is defined as the possibility of trying and experimenting with an innovation within a set of limits (Rogers, 2012). The higher the probability of experimenting an idea of innovation before usage, the higher the possibility of it to be adopted (Chaudhuri, 1994; Kassim et al., 2012)

### Observability

Observability is defined as the degree to which the results of innovations are visible to others (Rogers, 2003). Some results of an innovation are easy to recognize and some others are not (Rogers, 1962; Chaudhuri, 1994; Kassim et. al., 2012).

## **Human Resource Information System**

Organizations operate in a dynamic environment which is characterized as being uncertain and tough. One of the main factors behind such environment is the increased use of technology which requires organizations to invest a lot in order to face and respond to such an environment. This was supported by Kassim and his associates (2012) who commented that “the most salient factor impacting organizations and employees today is technological change. This can be seen in areas such as computer-supported-work-at-home, overall changes in labor force skills, and changes in organizational structure, and organization of work” (P. 604).

Using technology allows organizations to imitate others products and services which leads to shorten the life cycle of their competitive advantages (Wheelen and Hunger, 2012). This also forces organizations to invest in human resources. This was supported by Troshani et al. (2011) who commented that in today’s knowledge economy, organizational success depends heavily on the performance of their human resources (HR). The increased importance of human resources within organizations was also discussed by Snell et al. (2001) who stated that a new era has begun for the role of human resources evolving from a production factor to valuable and inimitable resources. Rodriguez and Ventura (2003) added that the role has also shifted towards a significant contribution in the strategic management of the organization. Hence, this shift is attributed to HR technology, such as HRIS (Troshani et al., 2011).

HRIS is a system that is considered to be a part of an organization’s management information system. Its main purpose is to collect, analyze, and use the information necessary to help HR department to do its job properly. Most of the previous research on HRIS is defined as a system used to acquire, store, manipulate, analyze, retrieve, and disseminate information regarding the human resources within an organization (E. g., Kavanagh et al., 1990; Lippert and Swiercz, 2005; Kassim et al., 2012). This has lead organizations to rely heavily on HRIS as it helps them to increase their HRM effectiveness(Ball, 2001; Troshani et al., 2010), to improve their administrative efficiency (Troshani et al., 2011; Kassim et al., 2012), improve organizational performance, and change the way they are managed (Katou and

Budhwar, 2006).

Human resource information system is considered to be a part of the overall organizational information system which is created to help an organization to perform better. To this, Wiblen and his colleagues (2010) stated that HRIS can help organizations to improve their efficiency through faster and more accurate processing of information, and improved employee communication. They added that it can also improve the productivity. HRIS is made up of many elements that work together. A malfunction of one element causes the functions of the whole system to fail (Kassim et al., 2012).

Due to its importance, many previous researchers have discussed the issue of HRIS; however, they discussed it from many perspectives. For example, Heines and Petit (1997) investigated the factors and conditions that affect the successful implementation of human resource information system. Browning and his Colleagues (2009), on the other hand, discussed the role of HRIS in achieving competitive advantages within organizations. Dery et al. (2009) and Wiblen et al. (2010) agreed with Browning et al. (2009) and discussed the degree to which HRIS can enable the strategic focus of human resources within organizations. However, recent studies have examined HRIS adoption within organizations (e. g., Toe et al., 2007; Troshani et al., 2011). This study investigates HRIS from another perspective and discusses the issue of human resource information system within organization. It also investigates the relationship between innovation diffusion within organizations and HRIS functions within the same organizations.

As mentioned earlier, human resource information system is a part of the overall strategic vision of an organization. Much of the previous research has discussed this issue; however, they did not come out with a comprehensive model of HRIS (e. g., Haines and Petit, 1997; Simon and Werner, 1996). Nevertheless, Mayfield et al (2003) developed a comprehensive model of HRIS that identifies major HRIS attributes and their interdependence. They identified strategic integration, personnel development, communication and integration, record and compliance, human resource analysis, knowledge management, and forecasting and planning as seven main components of an HRIS model. They stated that that "these seven factors are integrated and linked to organizational outcome through the influence of strategic organizational vision" (p. 144). Hence, this study will depend on Mayfield et al.'s

model of HRIS and its seven suggested components that play a significant role in a fully functioning human resources information system (HRIS).

### Strategic integration

Human resource departments play a significant role in the strategic direction of an organization. Human resource function is involved in both strategy formulation and strategy implementation. This was supported by Mayfield and his colleagues who stated that without exchanging information between the HRM department and the top management, managers would not be able to include personnel factors in their decision making process (2003). Furthermore, strategic integration between top managers and human resource people is a continuous process rather than a sequential interaction (Noe et al., 2010).

### Human resource analysis

Human resource planning is the process of deciding what positions are available within an organization and how to fill them (Dessler and Al Ariss, 2012). It is the process by which an organization determines whether its human resources are congruent with their overall vision and strategic goals (Mayfield et al., 2003). This was supported by DeCenzo and Robbins (2010) who stated that employment planning should be derived from an organization's strategic plan.

### Forecasting and planning

Forecasting and planning within an organization is connected with its human resource analysis. It is the process of expecting organizational future human resources and the required skills to achieve its goals and objectives (Mayfield et al., 2003). This was also discussed by Dessler and Al Ariss (2012) who commented that managers should consider several factors when forecasting personnel needs. In other words, they should forecast the revenues of a goal and then estimate the number of staff required to achieve it.



### Personnel development

Personnel development is concerned with the process of formal education, job experience, and assessment of an employee's personality and abilities, to help them prepare for their future (Noe et al., 2003). It is the process that attempts to "improve current and future management performance by imparting knowledge, changing, attitudes, or increasing skills" (Dessler and Al Ariss, 2012, p. 204).

### Record and compliance

Record and compliance is associated with the next factor (knowledge management). This component is important for meeting legal requirements which require some data retention. This was supported by Mayfield and his associates (2003) who commented that cooperation between record and compliance function on the one hand, and the knowledge management function, on the other hand, is important to fully benefit from the information contained in the records.

### Knowledge management

Knowledge management plays a significant role in creating and maintaining a sustainable competitive advantage of an organization (Teece, 2004). It focuses on tacit and other undocumented forms of important organizational knowledge. Knowledge management acts like organizational memory that is necessary in maintaining high level of organizational performance (Mayfield et al., 2003). To this, Gavrilova and Andreeva (2012) stated that "human nature recurs throughout knowledge management literature as a serious barrier to full and efficient usage and creation of knowledge in an organization" (p. 524).

### Communication and integration

Communication is important to deliver the necessary information within an organization. Accordingly, mechanisms such as intranet are necessary to spread this information. Moreover, communication mechanisms should be integrated with other functions within an organization, consequently, achieving the overall goals and objectives that are connected with organizational vision and strategy (Mayfield et al., 2003).

### **Research Framework**

Organizations should have dynamic capabilities to actively respond to the challenges and changes within the external environment (Markova, 2012). Such capabilities are defined as “the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environment” (Teece et al., 1997, p. 516). Human resource information system is one of the most valuable tools within an organization that can help it in quickly and adequately respond to the changes in the external environment.

Human resource information system is costly and crucial to the success of organizations, nevertheless, HRIS adoption has been paid little attention within organizations (Troshani et al., 2011) and even under researched (Blount and Castleman, 2009). The goal of this research is to study the relationship between innovation diffusion, on the one hand, and human resources information system, on the other hand. It is suggested by the researcher that HRIS will be more beneficial if organizations have positive attitudes towards the diffusion of innovation. For this, innovation diffusion is dealt with as the independent variable, whereas human resource information system is dealt with as the dependent variable. Innovation as the independent variable will be measured using Rogers (1983) diffusion theory and adopted by Kassim et al. (2012) which includes five key perceptions about the characteristics of innovation. These perceptions are relative advantage, compatibility, complexity, trialability, and absorbability. Similarly, as introduced by Mayfield and his associates (2003) and adopted by Casico (2006) and Obeidat (2012) human resource information system (HRIS) consists of seven functions namely, strategic integration, forecasting and planning, performance development, human resources analysis,

knowledge management, communication and integration, and records and compliance.

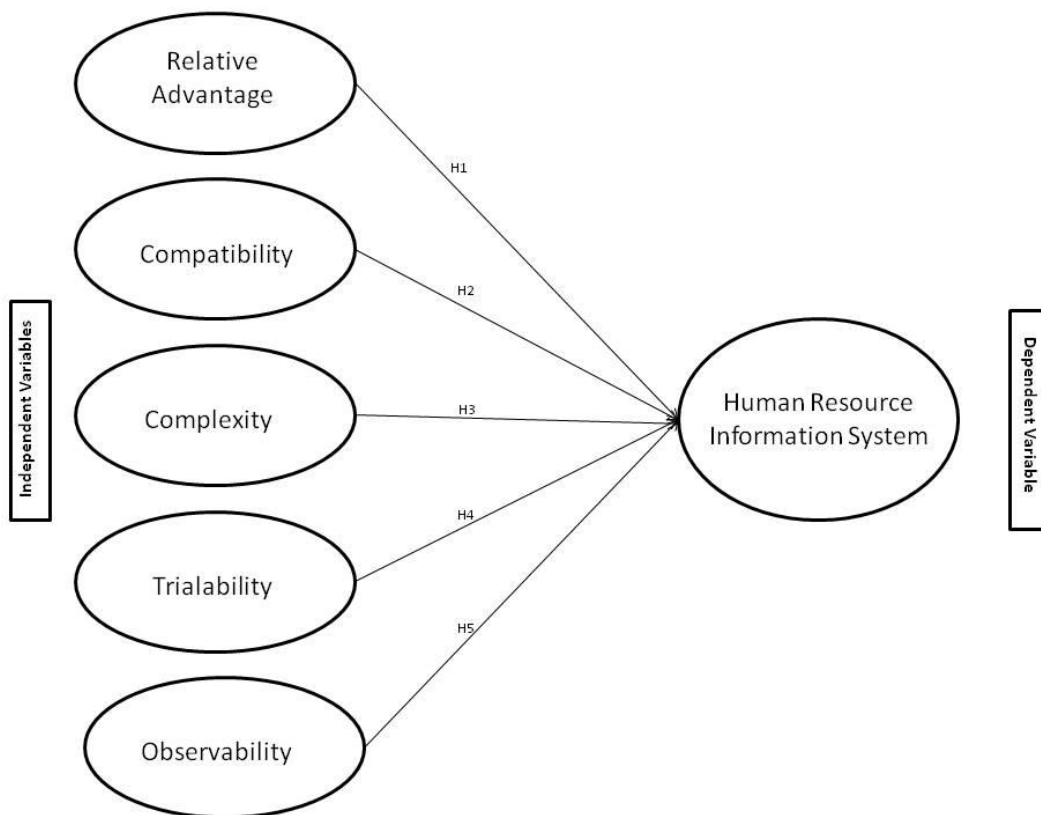


FIGURE 1: RESEARCH FRAMEWORK

Looking at the above framework, this study tries to test the following main hypothesis:

There is a significant relationship between innovation diffusion and human resource information system functions

To answer this hypothesis, the following hypothesis will be tested:

H1: There is a significant relationship between relative advantage and human resource information system

H2: There is a significant relationship between compatibility and human resource information system

H3: There is a significant relationship between complexity and human resource information system

H4: There is a significant relationship between trialability and human resource information system

H5: There is a significant relationship between observability and human resource information system

### **Methodology**

To test the hypotheses, depending on the review of previous literature and the pilot study tested in some organizations, a five-point Likert scale questionnaire was developed to collect the primary data of this study. To measure the dimensions of this research, fifty two questions were included in the questionnaire which was divided into three parts. The first part included questions regarding the characteristics of the sample, whereas the second part included questions regarding the human resource information system. The final part included questions to measure the dimensions regarding the innovation diffusion. This study was applied on the pharmaceutical sector in Jordan. The reason behind choosing this sector was because it is considered to be one of the few sectors in Jordan that uses HRIS. Additionally, access to this sector was relatively easy.

The study population comprises the human resource executives and human resource professionals working in the organizations within the pharmaceutical sector. It was agreed that the sample of this study should know what HRIS is. This was supported by Kassim et al. (2012) who commented that "to ensure meaningful data are collected, each respondent was required to acknowledge that he or she knew what HRIS was before completing the questionnaire" (p. 611). A letter of access was sent to the companies explaining to them the purpose of this study and asking their permission to collect data. After their approval, 180 questionnaires were sent by emails to the selected sample with authorized login information for the online survey. The respondents were given the freedom to either fill in the questionnaires online or print them out and send them by mail.

Only 156 questionnaires were returned, however, 3 were rejected due to errors in completing section in the questionnaires. Accordingly, a sample size of N= 153 was used in this study with a response

rate of 85%.

## Data Analysis

As mentioned earlier, a questionnaire which was distributed to the human resource professionals within the pharmaceutical sector in Jordan was used to collect the data of this study. The Statistical Package for Social Sciences (SPSS) version 17 was used to analyze the data and test the research hypotheses.

Cronbach Alpha was used to measure the internal consistency of a test or a scale that describes the degree to which the items and the questions of the questionnaire measure the same concepts (Tavakol and Dennick, 2011). It is expressed in terms of numbers between 0 and 1. In this study, scale reliability was assessed using Cronbach's alpha coefficient. The appendix table 1 presents the Cronbach alpha coefficients for the different dimensions and items of the questionnaire. Many researches discussed this test and came out of many results regarding the accepted value of Cronbach Alpha. Nevertheless, they all agreed that the accepted value ranges from 0.70 to 0.95 (E. g., Nunnally and Bernstein, 1994; DeVellis, 2003). Indeed, it can be seen that the results range from 0.715 to 0.962. Therefore, all values exceed the recommended threshold 0.70, indicating good internal consistency among the items within each dimension, each variable, and the entire scale.

## Hypothesis Testing

It is readily seen that the higher VIF or the lower the tolerance index, the higher the variance of  $b^{\wedge}$  and the greater the chance of finding  $i b$  insignificant. Before starting the process of testing the hypotheses, multicollinearity diagnosis was done using Variance Inflation Factor (VIF) and tolerance value. The tolerance of an independent variable -which is considered to be an additional method of measuring the effects of multicollinearity- ranges from zero to one. A VIF value of 5 or 10 and above and a tolerance of less than 0.20 indicate that variables are multicollinear (Chadha and Kapoor, 2009). As shown in the appendix table 2, it can be seen that VIF range between 2.320 and 3.701 values which are

well-below five. On the other hand, the tolerance values range between 0.322 and 0.431 which are above 0.2. These factors indicate that there is no evidence of multicollinearity problem in the regression model. In addition to the VIF and tolerance values, a Correlation Matrix was computed the independent variable dimensions to check correlation between them as shown in the appendix table 3. According to Sekaran and Bougie (2010), a value of 0.75 and above suggests high correlation between the variables. The results in the above table, are all below 0.75 and thus do not suggest high correlation between the variables. Therefore, these findings also show that there is no evidence of multicollinearity problem. Multiple regression analysis was used to test the hypotheses of this study in which an HRIS was entered as the dependent variable and Innovation (Relative Advantage, Compatibility, Complexity, Trialability, and Observability) as the independent variables.

**TABLE 1: MULTIPLE REGRESSION FOR THE HYPOTHESES**

	R Square	F	Sig.	Beta	T	Sig.	Empirical Evidence
Relative Advantage	0.851	133.2	0.000	0.232	4.259	0.009	Supported
Compatibility				0.384	6.708	0.000	Supported
Complexity				0.019	0.299	0.766	Not Supported
Trialability				0.468	7.839	0.000	Supported
Observability				0.247	2.182	0.041	Supported

The above table shows that  $F(5, 153) = 133.292$  and  $p\text{-value} = 0.000$ . Since the  $p\text{-value}$  is smaller than the level of significance (0.05), the research model is accepted at  $p < 0.05$  significance level. Hence, there is a statically significant impact of Innovation diffusion on HRIS functions. Hence, the positive effect of innovation diffusion on human resources information system functions was supported by several studies carried before (E. g., Tornatzky and Klein (1982), Lean et al. (2009), Sang et al. (2010), Schaupp

et al., 2010), Van Slyke et al. (2010), and Kassim et al., 2012)

Moreover, as shown in table1, the R Square's value of (0.851) indicates the proportion of the variance in the criterion variable which is accounted for by the model and shows that about 85% of the variance in HRIS has been significantly explained by Innovation. The fact that Innovation explained more than three quarters of the variance in HRIS may be due to the absence of other factor explaining the other half. This shows that innovation diffusion plays a significant role in the adoption of human resource information system within an organization; nevertheless, it is not the only factor that determines this diffusion.

The *t* and sig. (which is known as p-value) values, as shown in table 1, give a rough indication of the impact of each predictor variable (Kumar, et al, 2010). A big absolute *t* value and small *p* value suggests that a predictor variable is having a large impact on the criterion variable. The results show that Relative Advantage, Compatibility, and Trialability, have a significant impact on HRIS. Also, the standardized beta coefficient is a measure of the contribution of each predictor or how strongly each predictor variable influences the criterion variable (Kumar, et al, 2010). A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The strongest predictor for HRIS is Trialability, achieving a  $\beta$  of 0.468, followed by Compatibility ( $\beta=0.384$ ), and Relative Advantage ( $\beta=0.232$ ).

The findings revealed that Trialability is the strongest or most important predictor of the decision of adopting an innovation within organizations, accordingly, an HRIS within them. This result agrees with the fact that pharmaceutical in Jordan operates in an Arabic culture which is characterized by high uncertainty avoidance (Daniels et al., 2013). Accordingly, people prefer to try the system before the decision to actually adopt it is made so to reduce the uncertainty associated with it. Next section discusses the results of this study.

## **Discussion**

As mentioned earlier, this study tries to investigate the relationship between innovation diffusion and the use of human resource information system functions. It was hypothesized that there is a significant relationship between the two dimensions. For this, five hypotheses were developed to examine this relationship. This section discusses the results of the hypotheses testing and compares them with the results of other researches related to the subject of this study.

**Relative advantage:** The first hypothesis assumes that there is a significant relationship between relative advantage and human resource information system functions. The results of this study support this hypothesis and a relationship was found between the relative advantage of innovation perceived by an organization's members and the decision to adopt a human resource information system within that organization. This result is inline with previous studies carried out by Tornatzky and Klein (1982), Lean et al. (2009), Sang et al. (2010), Schaupp et al., 2010), and Van Slyke et al. (2010). However, it contradicts with what was found by Kassim and his colleagues (2012) who found that there is no significant relationship between perceived relative advantage of technology and the adoption of that technology. Organizations are aware of the perceived benefits-costs trade off connected with the use of HRIS (Troshani et al., 2011). It can be argued that although HRIS is associated with many costs related to its implementation and use, its perceived benefits encourages organizations to adopt it.

**Compatibility:** The second hypothesis assumes that there is a significant relationship between compatibility and human resource information system functions. Previous studies carried out by Karahana et al. (1999), Gan (2003), Ojha et al. (2009), and Van Slyke et al. (2010) found that innovation is more likely to be adopted within organizations whenever it is compatible with the value system and job responsibilities of individuals. The result of this study is compatible with what was found in the previous research and support this hypothesis. The result of this hypothesis can be argued to the fact that the



population of this study is the pharmaceutical sector operating in Jordan. Jordan is considered to be an Islamic country with conservative culture that affects the organizational culture (Daniels et al., 2013). Therefore, organizations in Jordan will never be able to adopt technology that does not go along with what people in such organizations believe in.

**Complexity:** The third hypothesis assumes that there is a significant relationship between complexity and human resource information system functions. The results of this study do not support this hypothesis and found that there is no significant relationship between the perceived complexity of innovation and human resources information system functions. The higher the complexity of an innovation, the higher the skills and efforts needed to implement such an innovation, consequently, the less chance to adopt it within organizations (Cooper and Zmud, 1990). The results of this study show that organizations in Jordan do not adopt difficult to use HRIS and organizations look to adopt relatively easy to use human resource information systems. Such a result can be grouped with the result of the first hypothesis regarding the relative advantage of innovation. In another word, organizations might look at the complexity as a cost associated with the adoption of HRIS which might affect the decision of adoption of such a system. The result of this hypothesis go ahead with what were found in the studies carried out by Davis et al. (1989), Ramayah et al. (2003), Ojha et al. (2009), Van Slyke at al. (2010), and Kassim et al. (2012).

**Trialability:** The fourth hypothesis assumes that there is a significant relationship between trialability and human resource information system functions. The results of this study support this hypothesis and agreed with Rogers (1995) that people who have the ability to experiment an innovation are more likely to adopt it. Trying an innovation before using it reduces the uncertainty associated with it. This is compatible with the Jordanian culture which is characterized by having high uncertainty avoidance (Daniels et al., 2013). In such cultures, employees like to reduce the uncertainty associated with a certain element by calculating its consequences and outcomes before the final decision to implement it. Moreover, employees who try the system are more likely to develop a positive impression towards such a system in comparison to those whom they did not try (Kassim et al., 2012). Accordingly,

employees of pharmaceutical in Jordan should try the HRIS before making the decision of whether to adopt it or not. The result of this hypothesis also supports what was found in the previous studies of Agarwal and Prasad (1997) and Kassim et al. (2012)

**Observability:** The fifth hypothesis assumes that there is a significant relationship between observability and human resource information system functions. As mentioned before, observability refers to the degree to which innovation is observable to individuals. The results of this study support this argument and found that the higher the visibility of HRIS to individuals within an organization, the lower the uncertainty related to it, the more the probability to adopt it. The findings of this hypothesis go ahead with the results of the previous hypothesis that when employees within an organization try an HRIS, it becomes more visible to them, the probability of adopting such a system becomes greater. This result is also compatible with the results of the previous research carried out by Karahana et al. (1999), Gan (2003), Kolodinsky et al. (2004), and Kassim et al. (2012).

### **Conclusions, Implications, Recommendations, and Limitations**

This study adds to the existing knowledge by enhancing the current understanding of innovation diffusion and its relationship with HRIS functions. It also proves that people's attitude towards innovation influences the extent use of HRIS. It was found that there is a significant relationship between innovation diffusion and human resource information system functions within the pharmaceutical sector in Jordan. The results of this study agree with what was found in the previous research. It was found that there is a relationship between the relative advantage perceived by respondents towards innovation and the human resource functions, consequently, the adoption of such a system. It was also found that the higher the compatibility of an innovation with the social system within an organization, the higher the probability of the adoption of an HRIS within that organization. Additionally, it was resulted that organizations do not adopt a human resource information system if they perceive it is perceived as a complicated one. For this, organizations like to try and observe an innovation before making the final decision of whether to adopt it or not. The results of this study also shows that organizations in order to reduce the uncertainty associated

with applying new things- like to try a human resource information system before taking the final decision of implementing it. This also goes ahead of the observability dimension in which this study showed that individuals who use the system themselves are more likely to use HRIS than those who have not.

The results of this study hold important implications of how to successfully implement an HRIS within organizations. The results imply that those who use human resource information system should be able to try and observe it before taking the final decision of using it or not. This encourages those who market innovation in organizations to allow users to try innovation and to allow them to realize the benefits and advantages associated with it. Furthermore, it is important to such people to realize that organizations prefer to implement systems that are easy to use as well as those which are compatible with their social systems.

Finally, the results of this study derived from data that were gathered from one sector in Jordan which is a limitation of this study. Moreover, only human resource professionals were included in this study. Additionally, only a quantitative method was used to collect this data which is also considered to be the second limitation of this study. It will be more credible and reliable if further studies are applied on more sectors in Jordan. Moreover, it will be credible and reliable if interviews – as a qualitative approach- are used as a second method to collect data.

### Appendixes

**TABLE 1: CRONBACH ALPHA COEFFICIENTS**

	<b>Cronbach alpha</b>	<b>No. of items</b>
<b>Innovation</b>	0.894	21
Relative Advantage	0.949	4
Compatibility	0.860	4
Complexity	0.790	4
Trialability	0.831	4

Observability	0.715	5
<b>Human Resource Information Systems</b>	0.962	31

**TABLE 2: MULTICOLINEARITY**

	<b>Tolerance</b>	<b>VIF</b>
Relative Advantage	0.431	2.320
Compatibility	0.390	2.562
Complexity	0.322	3.102
Trialability	0.358	2.792
Observability	0.399	3.701

**TABLE 3: CORRELATIONS BETWEEN CONSTRUCTS**

<b>Constructs</b>	Relative Advantage	Compatibility	Complexity	Trialability	Observability
Relative Advantage	1.000				
Compatibility	0.699	1.000			
Complexity	0.631	0.699	1.000		
Trialability	0.480	0.630	0.748	1.000	
Observability	0.519	0.613	0.480	0.472	1.000

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# Domestic Violence against Women

## *Strategical remedies for its Causes and Consequences*

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**DR. P. MALYADRI, M.Com, Ph.D, PGDCA**

**PRINCIPAL**

**GOVERNMENT DEGREE COLLEGE**

**Osmania University**

**TANDUR-501 141**

**RANGA REDDY DISTRICT**

**ANDHRA PRADESH**

**Email: [drpm16@yahoo.co.in](mailto:drpm16@yahoo.co.in)**

### **ABSTRACT**

Domestic violence refers to physical, sexual, psychological, and economic abuse from an intimate relationship due to unequal power structure between men and women. It is often under reported because of social stigma, uncertainty of safety, and lack of appropriate response from institutions meant to protect them. Domestic violence is a much more **serious problem** than is commonly thought due to unawareness of legal provisions for women even among the well educated women. Sometimes, family disputes end in brutality. In this case, the legal system is generally utilized as a last remedy if other mechanisms like family counseling have been exhausted or proved ineffective there are no statistics against domestic violence though the rate of such violence is increasing day by day due to ineffective and insensitive law and the stigma attached with the victims. Furthermore it is a problem beyond criminal justice which is related to health, legal, economic, education, development and human rights as well. Victims seek assistance from family, friends, doctors, social workers, counselors and women's organizations. Women's organizations and Mother Groups in rural areas have started reacting through social action and mass protest against it. This paper tries to reveal the causes and consequences of domestic violence against women and offer some approaches and strategies for combating violence against women.

**KEY WORDS:** Legal provisions, Human rights, social action, violations, , NGOs

### **Introduction**

Violence against women is present in every country, cutting across boundaries of culture, class, education, income, ethnicity and age. Even though most societies proscribe violence against women, the reality is

that violations against women's human rights are often sanctioned under the garb of cultural practices and norms, or through misinterpretation of religious tenets. Moreover, when the violation takes place within the home, as is very often the case, the abuse is effectively condoned by the tacit silence and the passivity displayed by the state and the law-enforcing machinery. The global dimensions of this violence are alarming, as highlighted by studies on its incidence and prevalence. No society can claim to be free of such violence; the only variation is in the patterns and trends that exist in countries and regions. Specific groups of women are more vulnerable, including minority groups, indigenous and migrant women, refugee women and those in situations of armed conflict, women in institutions and detention, women with disabilities, female children, and elderly women.

Combating violence against women is a developmental process which is not limited to women in isolation from broader social contexts. Violence is a cycle that does not stop with the person practicing violence or the person exposed to it. It is a behaviour that expresses a direction of thought and culture based on control. This control is promoted through the culture, norms and traditions which reinforce roles division between males and females. Women's role is often limited to a reproductive one, thus confining women to the private sphere, the family. Men's role, on the other hand, is often seen as a productive one in which responsibilities linked to their role as providers are attributed a monetary value and thus associated with the public sphere.

Indian women experience various forms of violence at two levels: at the international and national levels, on the one hand, and at the local level, on the other hand. At the international level, the Israeli occupation increases the level of violence in Indian society in general and affects all social groups, not women exclusively. Thus the occupation puts all members of Indian society, men, women, boys and girls, at risk of getting involved in cycles of violence. Yet, for women, the oppressive policies of the occupation are a double source of violence, reinforcing the violence they experience as a result of their already compromised social role and status at the internal, domestic level, where they often find themselves beyond official systems of protection in the Indian society, especially legal protection.

## **Seven "P" of Domestic Violence against Women (DVAW)**

UNIFEM revealed the analysis of Feminist that described seven "P" (Power, Privilege, Permission, Paradox, Psychic Armor, Psychic Pressure Cooker and Past Experience) of male violence against women; 3 main and 4 general. Power is linked to their violence against other men and to himself. Privilege is supposed to maintain power with logic for e.g. beating wife when not getting food on time. Permission is due to tacit permission in social custom, legal codes, religious teachings, law enforcement and lack adequate legal provisions, regarding home and marriage as part of our personal sphere, granting permission for violence and people fail to call police though hearing a woman neighbor or child being beaten. Paradox constructs a capacity to dominate and control creating crippling problems to women. Psychic Armor, an emotional distance created due to the distance of love from near ones during childhood. Psychic Pressure Cooker is a dominant form of masculinity hinge on the internalization of a range of emotions and their redirection into anger, e.g. culturally boys/ men are told not to cry so they alone are not to be blamed. Past Experience grew up where mother beaten by father.

In our country, the women still remain the secondary citizens even after 64 years of independence. From cradle to the grave, women are objects of violence from those nearest and dearest to them. Most areas of human activity are still considered as the close circle of men. They are considered as unproductive financial burden even though they have broken almost all the male myth today. Women have come forward to compete with men in almost all fields of activities. But the age old superstitions, fanaticisms, and conservations of Indian societies have created obstructions in the way of development of women. Women in much of the world lack support for fundamental functions of a human life. They are less well nourished than men, less healthy, more vulnerable to physical violence and sexual abuse. They are much less likely than men to be literate, and still less likely to have pre-professional or technical education. Should they attempt to enter workplace, they face greater obstacles, including intimidation from family or spouse, sex- discrimination in hiring, and sexual harassment in the workplace- all, Frequently, without effective legal recourses.

## **Human Rights of Women**

Human Rights as commonly understood are the rights that are inherent in all persons. These are considered important due to their characteristics- inalienability and universality. Obligations related to ensuring that these rights are enjoyable by all equally and without any discrimination rests primarily with the State. There are numerous instruments at international level agreed upon by states which enumerates these rights. Human rights could be generally defined as those rights which are inherent in our nature and without which we cannot live as human beings. Human rights and fundamental freedoms allow us to fully develop and use our human qualities, our intelligence, our talents and our conscience and to satisfy our spiritual and other needs. They are based on mankind's increasing demand for a life in which the inherent dignity and worth of each human being will receive respect and protection.

- The denial of human rights and fundamental freedoms not only is an individual and personal tragedy, but also creates conditions of social and political unrest, sowing the seeds of violence and conflict within and between societies and nations. As the first sentence of Universal Declaration of Human Rights states, respect for human rights and human dignity “is the foundation of freedom, justice and peace in the world”. Human rights are universal legal guarantees protecting individuals and groups against actions which interfere with fundamental freedoms and human dignity. As Justice V. R. Krihna iyer says: “Human rights are those irreducible minima which belong to every member of the human race when pitted against the state or other public authorities or groups and gangs and other opperessive communities.
  
- Women's rights around the world are an important indicator to understand global well-being. A major global women's rights treaty was ratified by the majority of the world's nations a few decades ago. Yet, despite many successes in empowering women, numerous issues still exist in all areas of life, ranging from the cultural, political to the economic. For example, women often work more than men, yet are paid less; gender discrimination affects girls and women throughout their lifetime; and women and girls are often are the ones that suffer the most poverty. Many may think

that women's rights are only an issue in countries where religion is law, such as many Muslim countries. Or even worse, some may think this is no longer an issue at all. But reading this report about the United Nation's Women's Treaty and how an increasing number of countries are lodging reservations will show otherwise. Gender equality furthers the cause of child survival and development for all of society, so the importance of women's rights and gender equality should not be underestimated.

- Human Rights is one of those minimal rights which every individual must have against the state or other Public authority by virtue of his being 'member of the human family' irrespective of any other consideration. As stated at the outset, though the concept of human rights is as old as the ancient doctrine of 'natural rights' founded on natural law, the expression 'human rights' is of recent origin, emerging from (post-second world war) international charters & conventions. Every woman and girl is entitled to the realization of all human rights – civil, political, economic, social & cultural on equal terms with men, free from discrimination. Women & girls also enjoy certain human rights specifically linked to their status as women. The world has recognized that the human rights of women & of the girl child are “an inalienable, integral & indivisible, part of the Universal human rights”. Women are guaranteed equal treatment and freedom from discrimination in the most basic human rights treaties and women's human rights are the subject of a specific treaty, the convention on the Elimination of All Forms of Discrimination against women, 1979. Far reaching Governmental commitments to ensuring the human rights of women have been made at each of the recent world conferences, and women's human rights are central to the unanimously approved Beijing Declaration & Platform for Action, 1995 Causes of Violence against Women in India:

- The patriarchal system and cultural conditions in India are the basic causes of subjugation of women in the society since ancient period. There are loads of conservative religious traditions and class customs which have widened the gender disparities in India. Moreover, in India violence

against women is a congruence of gender discrimination and class deprivation closely associated with caste related conflicts in the society.

■ Women have been continuously denied their individual identity and are subjected to subordinate positions such as, daughter, sister, wife and mother? Consequently, prolonged male domination for centuries together has placed women at an inferior position, making them vulnerable and easy prey of violence. The fundamental cause of violence against women is gender discrimination which is a manifestation of historically disproportionate power relations between men and women. Traditionally, the wrong notions of male superiority, determined the role of women in society, which limited her access to liberty, equality and opened up flood gates for the acceptability of violence in various forms by coercively consenting to mediocre status. As a result, women had no access to property rights, any education, any employment, etc. Thus social structure in India has dragged women away from education and empowerment. Nevertheless, in the present scenario, the female literacy rate has increased as compared to earlier times. And so has the employment status been slightly elevated. But the moot question which ponders is, has education and employment reduced violence against women? The answer certainly is in the negative mode. It is surprising to note that the better is the civilization the more is the violence against women. Primarily the biological framework of woman makes her an easy victim of violence making sexual difference as the main reason for violence against women.

■ Millions of women are currently victimised, rather 'commodified' as goods for prostitution which is the worst form of sexual violence.

■ It can be said that the causes of violence against women are interrelated and amalgamated. The subordinate position of women in the present social structure is result of cultural legacy of the traditions followed for centuries in India. This inferior status gives birth to gender inequality and discrimination. Further, lack of education and economic dependency paralyses women to be at the

mercy of dominant muscle power. As a result women are also denied adequate representation in the democracy. Apart from the other causes, the most pertinent cause of violence against women in India is the attitude of men towards women. Even if women are educated, empowered, and independent the root cause lies in the mind-set of people which needs to be transformed at the earliest to save women from the atrocious consequences of violence.

## **Consequences of Violence against Women**

- Violence against women has awful and dreadful multidimensional impact on life of women which comprises of physical, psychological, economical and social hindrance. Rather, violence proposes and forms a complex web of social, economical, political, cultural, migratory, and reproductive and community safety concerns.
- Violence is infused to such extent that its saturation entirely devastates the women's psychology affecting her life adversely. Violence against women ultimately imperils gender equality; it not only encumbers but also hampers female education. Violence also threatens the health of women; especially in case of sexual violence spread of AIDS is tremendously accelerated. It encourages unsolicited issues such as, poverty, illiteracy, population explosion and unemployment. Violence makes women meek, plaint and subservient which results in a far-reaching societal impairment.
- The victims of violence are incapable to express their opinions or even to make any decision for their own life. As violence is associated with fear it leads to powerlessness, insecurity, distortions of sexuality, sense of inferiority and trepidation of isolation.
- Subsequently, women continue to suffer in families, workplaces, community, and society which not only grossly violate their human rights but also unconstructively affect the growth of the



nation. It can be said that the most crucial consequence of violence against women is the denial of universal human rights to women.

### **Violence against Women as violation of Human Rights**

- Violence is one of the most invasive forms of human rights violations, which denies women right to equality, security, dignity, self-worth, liberty, freedom, etc. Violence against women has been officially outlawed in India after the independence. But, in practice gender inequity which is the root cause of violence appears impossible to be dismantled. The legislations do make an attempt to take care of the situation albeit at snail pace. In fact, all the legislations and Constitutional protections serve only to mask the social realities of violation of human rights of women in the form of violence. Such discriminatory, cruel, inhuman and degrading treatment results in violations of their human rights. As a matter of fact their human rights are violated on daily basis which proves the fact that women's exploitation is a reality and gender justice is a fragile myth.
- It is indeed a sarcasm that in this highly civilized democratic era, violence against women is experienced as an epidemic that tortures and mutilates women physically, psychologically, sexually and economically. Law is the most effective tool in promoting and protecting the human rights, however, the internationally and nationally approved principles should be utilized to formulate effective remedies in case of violence which can install peace, and justice in the society.
- Violence against women is a serious blow to the honour and dignity of women hence solutions to such problems should be tailored according to the requirement at the earliest. Otherwise women's rights and their legal entitlements shall be considered inadequate and merely in letter, never being executed. It is substantially imperative to analyse the present scenario from the perspective of women as the most marginalized and disposed groups to advance their human rights.

Therefore in order to guarantee and protect the human rights of women there is an immediate need to have proper implementation of the existing laws in India.

## Strategy

The following recommendations would be given to the government, local organizations and individuals.

- ▶ Adoption of strategies to include basic legal education in formal education from school level to other informal education is needed so that women would not have to be victim simply being unaware about the law for them.
- ▶ Awareness programme through local social mobilizers and different media for bringing changes in the attitude at viewing women with traditional and conservative thoughts through education, occupation and attitudinal change as any one of them alone would change nothing in our society in the matter of domestic violence against women.
- ▶ Appointment of capable women at policy level is urgently required who can emphasis on woman voice for their welfare.
- ▶ Change in the socialization process is needed in every family to create gender balance society, considering DVAV not as a private issue but a social crime.
- ▶ For this, women themselves should get out of stereotype role confined to them to create gender friendly environment in their family.
- ▶ Need of awareness on reproductive health along with legal education to defend themselves from incest and marital rape.
- ▶ Need of unity among women to reduce domestic violence against women in their community to fight against social factor of such violence like alcohol, polygamy, son's preference and work burden.
- ▶ Monitoring and evaluation of the implementation of prevalent laws along with their advocacy awareness programme is to be done in collaboration with interested organizations.

## Conclusion

Women are the main section of the society. Our Constitution as well as other statutes guarantees equality of men and women. It is not very true because these do not treat the society equally. Though Penal Laws are enacted to prevent such type of violence and to punish the accused yet are not sufficient. Work to end violence against women requires clear demonstration of political commitment and permanent

institutional mechanism. State should allot adequate resources and funding to programmes to address and redress violence against women. To protect women from domestic violence Governments, NGOs, Educational institutions and mass media should provide well funded shelters, relief support, medical, psychological counseling services, free legal aid and appropriate assistance to enable them to find a means of subsistence. Women's organizations and NGOs should be supported to raise awareness on the issue of violence against women and to contribute to its elimination.

Despite the pertinent provisions of the Indian Constitution, violence against women prevails all over the society due to the diversity of cultures, religions, customs and social attitude towards women. Though India has a well equipped set of legislations to battle violence against women, it is not possible to eradicate violence only through legal provisions. No single approach can prove effective to restrain, resist and exterminate violence. Violence is a multifaceted problem which requires multidimensional remedy. To fulfil this long desired aspiration an attempt is made to put forth a few recommendations. Any remedy or strategy proposed to combat trafficking and provide assistance to victims of trafficking must be assessed in terms of whether and how it promotes and provides protection for the human rights of women. It has been pointed out that even seemingly harmless mechanisms of prevention, such as education campaigns, may be problematic if they aid in the immobilization of women or the entrenchment of harmful or disempowering stereotypes. While anti-trafficking campaigns may merely seek to warn women of the potential dangers of trafficking, they may also serve to further restrict women's free movement. There should be counselling centres set up at Taluka, District, and State and National level for victims of violence. Medical care should be affordable and accessible for the victims. Women should be empowered to overcome the economic dependency. The Government should also provide employment schemes to women for economic independence. It is equally important to overcome gender-stereotypes working with men in order to promote gender equality.

There should be nation wide campaigns for creating awareness about the dehumanizing aspects of violence against women. Media can be of great help to raise awareness and promote gender equality and

condemn discrimination against women. The State should regularly monitor the implementation of laws and various schemes for welfare of women. The Nongovernmental organizations should also impart training to the public on gender equality and sensitize public about the evils of violence against women. The National Commission for Women should play an enhanced role in protecting rights of women. Thus, the ultimate utopian solution to the crisis of violence against women would be finally to have implementation of the international and national legislations and the society being responsive towards such gender injustice. All these efforts together can definitely diminish and annihilate violence against women in India allowing every woman to live a life full of honour and dignity.

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## Brief Profile of Dr.P.Malyadri



Dr. P. Malyadri has got 28 years of experience of Teaching, Research, Administration, Training and consultancy. A prolific writer; Dr. Malyadri has authored 4 Books and 68 research papers on Banking, Rural and economic development issues in various National and International journals of repute. He has presented several research papers in around 80 National and International seminars and conferences. **He is on the International Editorial advisory boards as a Member in 81 International Peer reviewed journals published from Canada, USA, U K ,Taiwan, Czech Republic, Italy, Turkey, Dubai, Philippines, Australia ,Bangladesh, Romania, Pakistan. Kenya. Iran, Africa, Nigeria ,Berlin , Indonesia ,Singapore ,Thailand and many others; and 42 national journals of repute.** Dr.Malyadri carried out two Major Research Projects sponsored by the UGC, New Delhi. He is a recognized Research supervisor to guide M.Phil. and Ph.D. students in the Departments of Commerce and Business Management, Osmania University and was awarded 4 Ph.D.'s and 22 M.Phil.'s under his guidance. He served as Program officer of the National Service Scheme for 5 years and conducted several programs and received outstanding awards. Presently he is serving as the Principal; Osmania University affiliated Government Degree College for the last 3 years. He received several outstanding awards for his academic achievements. **Dr. Malyadri is State level Best Teacher awardees in the year 2008, honored by Government of Andhra Pradesh.** His current research interests include CRM, Bank Marketing, and Micro Finance. Rural Development, Human Resource Management, Entrepreneurial development,

# Customer Satisfaction Measurement in Airline Services: An empirical Study of Need –Gap Analysis

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*Dr.Makarand Upadhyaya*

*Associate Professor in Marketing at College of Business Administration, Jazan University, Jazan,  
Saudi Arabia.*

## **Abstract**

Present study aims timely capturing of customers complaints and emphasizes quick resolution. The Need-

Gap analysis determines deviations between actual and expected quality and taking corrective action.

Analysis indicates presence of multi-dimensional aspects regarding complaining behavior. Critical

analysis of results helps to evolve service strategies in response to customer needs.

**Keywords:** Customer's complaints, service strategies, service delivery, enhancing customer satisfaction.

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## **Introduction**

Customer complaint is very important factor for any airline. In service industry human behavior plays a very important role to minimize customer complaint. There are two types of complaints viz controlled and uncontrolled. There are many factors that affect passengers such as, flight delays, misbehaviour by staff, etc. and they result in a complaining behaviour. Whereas, there are so many situations wherein situations can't be controlled such as, weather problems, technical fault, etc. Although these situations are not in control but can reduce the complaining behavior which depends on "how situation is handled by

airline staff". If a staff is not trained to handle situation then it is not acceptable because it is airline fault. If staff misbehaves with the passenger or due to lack of staff knowledge, wrong information has passed to the passenger. Such are the complaints which can be minimized and controlled. However, genuine customers' complaint can enhance service quality of airlines. Some airlines have customer feedback form for rating of the services rendered by them and feedback helps the airline industry in identifying its strengths and weaknesses.

### **Customer complaint behavior**

It is the tendency of every human that whatever is promised, it must be given to them if there is any deviation in the services, will attract complaint. Whenever a passenger book ticket for any airline and at the time of booking he/she is informed about the services which will be rendered to him/her, thereon. Whatsoever is the reason for not providing the services, passengers are not concerned but they want services which were promised to them at the time of booking. This will lead to the customer complaint. Some customers are followers to others, however, they don't want to make complain but they follow the others. There can be two categories of customer complaint.

- 1) Controlled customer complaints
- 2) Uncontrolled customer complaints

**Controlled customer complaints:** These complaints are attracted by staff error or staff behavior which is very important in service industry. These things are in the hands of airline people. We are explaining some common customer complaints.

- **Flight related problems:** Such problems lead to customer complaint when there is planned delay or cancellation of flights and passengers are not informed in advance. It is dissatisfying if change is planned or unplanned and the passengers are not informed. Even if passengers are informed about schedule change but it is complaining for customers who were having onward flights for different destinations but alternative arrangements were not made.
- **Fare related problems:** When there is any discrepancy in fare related issues, such as incorrect fare information, extra charges, wrong availability status etc.
- **Boarding discrepancies:** At the time of boarding if there is any discrepancy such as, duplicate seat numbers, wrong boarding pass to passengers, other flight passenger etc.
- **DNB/DNG\* due to over sale:** Over sale in the flights is a common practice of airlines. Due to this, passengers who are having confirmed ticket for the flight are denied to board the flight. Likewise, if passenger is having higher class ticket but due to over sale in higher class, passenger is permitted in lower class.
- **Reservation/Ticketing:** Any mistake at the time of ticketing by travel agents or airline staff in terms of date of travel, name mismatch etc. leads to waiting in queue for a long time for obtaining tickets.
- **Baggage mishandling:** If any baggage is missing or damaged on arrival due to wrong offloading of baggage. Claim settlement is not done properly for missing or damage baggage. Also if arrival baggage comes late on arrival belt.



- **Refunds of tickets:** If ticket is unused partially or fully and refund is not processed. Problems in airline procedure for obtaining refund for unused tickets.
  - **Excess Baggage charge:** If excess baggage charged wrongly due to non updation of current procedure, staff error whereas passenger was allowed to carry that much weight.
  - **Staff attitude:** Staff attitude plays very important role in complaint as well as compliment. If staff attitude is positive that can convert a complaint into compliment and vice versa.
  - **Advertising:** If any airline do wrong advertising for their services, will directly lead to complaint.
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- **In flight services:** If services are rendered in flight not up to the standard and behavior of cabin crew is also rude and unhelpful will lead to complaint.
  - **Cargo:** If a person books urgent cargo with the airline and it is misplaced and not delivered on time due to staff error.
  - **Tour operation:** Now a days, so many airlines operates tours (Air tickets, hotel reservations, sight seen, taxi etc.) even if there is no problem with air travel nevertheless it attracts complain if there is any problem in full tour package because it was sold by airline.
  - **Airline Security:** Generally, airline security people are not trained in customer handling therefore they behave in ordinary way with the passengers or unnecessarily tease passengers which attract complaint.
- Uncontrolled customer complaints:** There are so many problems which can't be controlled by the airline, they can try to minimize by proper handling of customers. We are explaining some common problems.

- **Flight related problems:** When there is unplanned delay or cancellation of flights and passengers are not informed in advance due to weather problems, such as fog, rain, thunderstorm etc. If there is any schedule change due to technical grounding of the aircraft and aircraft is to be changed. Flight is delayed due to any vvip/govt.official movement.
- **Fare related problems:** When there is any discrepancy in fare related issues due to misconception of passenger, such as heard wrong information from unauthorized persons.
- **Excess Baggage charge:** Passenger is allowed to carry check-in baggage, as per free baggage allowance mentioned in his ticket, if he carries more than then excess baggage will be charged thereafter if passenger makes a complain regarding excess baggage.
- **Airline Security:** If airline security people frisks any passenger more than one time and check his baggage thoroughly therefore passenger makes complain but whenever security personnel has doubt then they will not allow that person to go unless they are satisfied.
- **Cargo:** If a person books urgent cargo with the airline and it is misplaced due to wrong address of consignee which is given by the consignor.

## **Research Methodology**

Need –Gap Analysis is a gap between current performance and expected performance (Rummler, 1987).

There are different ways to determine the need gap. There are various methods like interviews, documents, surveys, observations, or focus groups (Wexley & Latham, 1981). Analyzing and identifying the gap that may exist between what the airlines is supposed to be doing and what it is doing points toward areas for complaint and scope of improvement. In this regard Quality function deployment (QFD) which is one of the structured methodologies that translate customer needs into specific quality development, and it displays and achieves effectiveness (Chan & Wu, 2005). QFD bridges the gap between what the customer wants and how the airline can render ServQual to reduce customer complaint. It is a powerful analytical framework, called the 'House of Quality' (HOQ) matrix because of its shape, with various 'rooms' containing the results of research and analysis on customer groups and competitors (Walker, 2002). It has also been applied to service industries recently (Ermer & Kniper, 1998), and application in airline industry can largely reduce the customer complaint behavior where understanding customer needs to organize the strategy to develop service quality to achieve customer satisfaction is a very important goal.

The exploratory research consisted in a survey that was applied to 100 customers. Questionnaire method has been used for primary data collection. Responses from 100 customers were taken to study the complaining behavior of customers at the airport. Concerning sampling as it is intended to get data related to complaint issues, it was key to have responses from people who have had a bad experience, this means, they have been dissatisfied with the services. For the preparation of 5 point Likert scale, the studies of Cadotte and Turgeon (1988), Sue and Bowen (2001), Wildes and Seo (2001), Heung and Lam (2003), Lam and Tang (2003), De Franco et al. (2005), Sujithamrak and Lam (2005), Yang (2005), Yüksel et al. (2006) and Kim and Lynn (2007) have been useful. Pilot test stage of the questionnaire, which was the

data gathering instrument, was tested on 20 airline customers. Cronbach alpha coefficient of the data analysis after the pilot test stage was calculated as 0.617. In the light of the results of the pilot test stage, the questionnaire was implemented. It was observed that out of all dissatisfied customers in sample 80 percent were complainers and 20 percent were non complainers. The data gathered have been analyzed with SPSS 17.0 for Windows program.

### Data Analysis

The data from questionnaire and analysis clearly indicate the factors responsible for customer complaint.

The pilot study and the Cronbach Alpha value also validates the same.

**Table 1: Percentages of respondents for complaints**

Column1	Column2	Strongly Agreed	Agreed	Average	Disagreed	Strongly disagreed
S.No.	Parameters					
1	On Time Performance	80	10	5	5	0
2	Cost Reduction	73	17	8	1	1
3	Security System	76	10	13	0	1
4	Booking/Ticketing	90	6	3	1	0
5	In-Flight Services	85	10	1	2	2
6	Air Traffic Control	81	12	2	4	1
7	Navigation	75	20	0	5	0
8	Check-In	96	3	1	0	0
9	Delay/Cancellation	94	5	1	0	0
10	Take-Off/Landing of Flight	79	8	8	5	0
11	Baggage Services	91	6	1	1	1
12	Meteorological system	70	20	8	1	1
13	Passenger facilities	97	3	0	0	0

For data analysis, to check validity and reliability Factor Analysis was done using Varimax Rotation. To check reliability of each factor Cronbach Alpha were calculated.

**Table 2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.465
Bartlett's Test of Sphericity	Approx. Chi-Square
	57.212
	Df
	78
	Sig.
	.963

**Table 3: Correlation Matrix**

	OnTimePerfo rmance	Cost Reductio n	Security system	Book ing	InflightSe rvices	AirtrafficC ontrol	Navig ation	Chec kin	Dela y	TakeoffL anding	Bagg age	Meterol ogical	Servi ces
OnTimePerfo rmance	1.000	.182	.016	-.108	-.068	-.035	.135	.012	.024	-.055	-.028	.131	-.078
CostReductio n	.182	1.000	.000	-.053	-.163	-.097	.036	.051	.144	.101	.000	-.021	.062
Securitysyste m	.016	.000	1.000	.077	.027	-.013	-.087	.098	-.122	-.040	.000	-.020	.134
Booking	-.108	-.053	.077	1.00 0	-.104	.184	-.145	-.058	-.003	-.117	-.044	-.012	.065
InflightServic es	-.068	-.163	.027	-.104	1.000	.129	.089	-.066	-.082	.235	-.090	-.107	-.060
AirtrafficCont rol	-.035	-.097	-.013	.184	.129	1.000	-.091	-.078	.077	.038	-.107	.087	-.072
Navigation	.135	.036	-.087	-.145	.089	-.091	1.000	-.040	.026	.055	-.102	.071	-.085
Checkin	.012	.051	.098	-.058	-.066	-.078	-.040	1.00 0	-.046	-.044	-.050	.043	-.034
Delay	.024	.144	-.122	-.003	-.082	.077	.026	-.046	1.00 0	-.030	.117	-.045	-.042
TakeoffLandi ng	-.055	.101	-.040	-.117	.235	.038	.055	-.044	-.030	1.000	-.039	.097	-.082
Baggage	-.028	.000	.000	-.044	-.090	-.107	-.102	-.050	.117	-.039	1.000	-.033	.056
Meterological	.131	-.021	-.020	-.012	-.107	.087	.071	.043	-.045	.097	-.033	1.000	.131

**Table 3: Correlation Matrix**

	OnTimePerfo rmance	Cost Reductio n	Security system	Book ing	InflightSe rvices	AirtrafficC ontrol	Navig ation	Chec kin	Dela y	TakeoffL anding	Bagg age	Meterol ogical	Servi ces
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Securitysystem	.016	.000	1.000	.077	.027	-.013	-.087	.098	-.122	-.040	.000	-.020	.134
Booking	-.108	-.053	.077	1.00 0	-.104	.184	-.145	-.058	-.003	-.117	-.044	-.012	.065
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Navigation	.135	.036	-.087	-.145	.089	-.091	1.000	-.040	.026	.055	-.102	.071	-.085
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Delay	.024	.144	-.122	-.003	-.082	.077	.026	-.046	1.00 0	-.030	.117	-.045	-.042
TakeoffLandi ng	-.055	.101	-.040	-.117	.235	.038	.055	-.044	-.030	1.000	-.039	.097	-.082
Baggage	-.028	.000	.000	-.044	-.090	-.107	-.102	-.050	.117	-.039	1.000	-.033	.056
Meterological	.131	-.021	-.020	-.012	-.107	.087	.071	.043	-.045	.097	-.033	1.000	.131
Services	-.078	.062	.134	.065	-.060	-.072	-.085	-.034	-.042	-.082	.056	.131	1.00 0

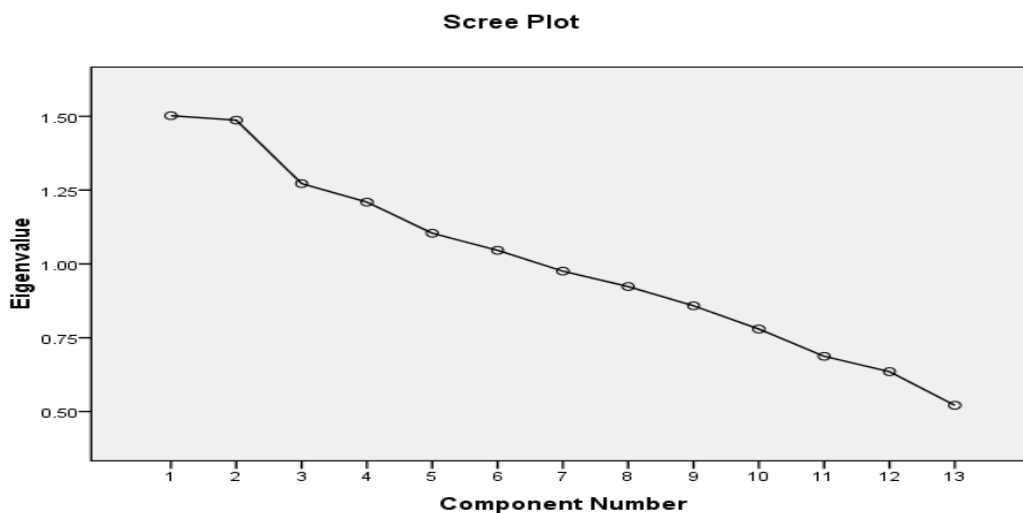
**Table 4: Communalities**

	Initial	Extraction
OnTimePerformance	1.000	.481
CostReduction	1.000	.703
Securitysystem	1.000	.500
Booking	1.000	.546
InflightServices	1.000	.608

AirtrafficControl	1.000	.669
Navigation	1.000	.487
Checkin	1.000	.478
Delay	1.000	.578
TakeoffLanding	1.000	.714
Baggage	1.000	.526
Meterological	1.000	.707
Services	1.000	.622

Extraction Method: Principal Component Analysis.

Figure 1: Screen Plot



Six Four factors resulted from factor analysis. The loading values of the scales items in their respective factor went from 0.48 to 0.70. Regarding reliability, Alfa Cronbachs were not very high ranging from 0.52 and 0.66. In relation to the total explained variance this was only 57 percent. Studies show that although complaints and complaint behaviours are studied in the same study, the studies investigating the relation between them are very limited. Complaint behaviours increase with the increase in customer complaint.

The relation between complaint and complaint behaviours have been defined with Pearson correlation analysis. Hence the hypothesis of the study can be stated as:

**H1:** There is a positive correlation between customer complaints and complaint behaviours.

The values gathered from Kaiser-Meyer-Olkin and Bartlett's Test ( $KMO = 0.47$ ;  $p = 0.000$ ) show the adequacy of sampling and applicability of factor analysis. Cronbach's alpha coefficients relating to customer complaint and complaint behaviour scale factors have been calculated as over 0.60. Pearson correlation coefficients relating to factors between complaint and complaint behaviours have been given in Table 3. According to this, all the correlation coefficients between the factors of customer complaints and complaint behaviours have been found significant ( $p < 0.001$ ). The inspection of correlation coefficients show that there is a positive correlation between all of the variables. It is seen that these findings support H1 the hypothesis of the study.

## **Recommendations and Conclusion**

When there are flight related problems then true information must be given to passengers as well as alternative arrangements should be made at least for onward connecting passengers. If there is planned cancelation or delay then passengers must be informed well in time so that they can report accordingly.

Although, DNB and DNG are very common practices in airline industry to maximize revenue, notwithstanding these practices should be minimized and utmost care must be given to privilege members of airline. Airline must have their own employees instead of outsourcing, to facilitate their passengers in better way. Staff must be provided soft skill trainings to handle controlled as well as uncontrolled



problems. Generally, baggage handling is done by the loaders and they are not educated properly therefore it must be monitored by airline staff, as well. Passengers must be educated for their free baggage allowance and security procedure to avoid unnecessary discussions. These corrective measures can be accepted to minimize the customer complaints.

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# **The Nature and Impact of Human Resource Management (HRM) Practices (A Review)**

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**Dr. Muhammad Tariq Khan**

*Head, Department of Management Sciences University of Haripur, PAKISTAN  
tariq\_phd\_@yahoo.com*

**Dr. Naseer Ahmed Khan**

*Postmaster General, Pakistan Post, Rawalpindi, PAKISTAN  
nakhan59@yahoo.com*

**Sheraz Ahmed**

*Lecturer, Department of Management Sciences University of Haripur, PAKISTAN*

## **Abstract**

*Scholars generally agree that appropriately designed HRM practices can enhance organizational performance because practices influence employees' attitudes and behaviors. So this change in the mindset of executive decision-makers has spurred an increasing body of academic research attempting to reveal a relationship between a firm's HRM practices and its performance. This literature review defines, enlists and explains the HRM practices studied so far and their impacts on firms.*

## **Introduction**

Wright et al (2003) stated referring Pfeffer, (1994) that firms have increasingly recognized the potential for their people to be a source of competitive advantage. Creating competitive advantage through people requires careful attention to the practices that best leverage these assets. This change in the mindset of executive decision-makers has spurred an increasing body of academic research attempting to reveal a relationship between a firm's HRM practices and its performance. Therefore Sanders et al (2008) revealed that during the last decade attention has been paid to the effects of high commitment human resource management (HRM), (e.g. selective hiring, career opportunities, performance appraisal, and participation in decision making), defined as a bundle of HRM practices focusing on employee commitment. According to Nishii et al (2008) scholars generally agree that appropriately designed HRM practices can enhance organizational performance. Related theories suggest and the supporting assumption holds that the practices influence employees' attitudes and behaviors and employee perceptions about, and interpretations of, the practices. Nishii et al (2008) also expressed that the perceived reasons why management chooses a set of HR practices are linked to employee satisfaction,

What are HRM practices and how they affect the firm performance is discussed below in the light of research studies conducted as yet.

## **Definition of HRM and HRM practices**

### **Definition of HRM**

According to Quresh, et al (2010) much of the debate has been around the meaning of HRM, yet there is no universally accepted definition of HRM. Some definitions interchange HRM with personnel management. Personnel management characteristically focused on a range of activities centered to the supply and development of labor to meet the immediate and short-term needs of the organization. Under personnel management, the activities of recruitment, selection, rewards, development, training, compensation and the others are viewed as separate individual functions.

HRM aims to integrate all of the personnel functions into a cohesive strategy. Personnel management is largely something that managers do to the subordinates, whereas HRM takes the entire organization as a focal point for analysis (Quresh, et al, 2010).

Quresh, et al (2010) quoted that human resource management is linked with all the managerial functions involved in planning for recruiting, selecting, developing, utilizing, rewarding, and maximizing the potential of the human resources in an organization. Human resources management (HRM) is defined as:

“The policies and practices needed to carry out the “people” or human resource aspect of a management position, including selection, job definition, training, performance appraisal, compensation, career planning and encouraging employee participation in decision making.

From another point of view, HRM is defined as:

“A process for the development of abilities and the attitude of the individuals, leading to personal growth and self actualization which enables the individual to contribute towards organizational objectives.”

### **Definition of HRM practices**

A definition of HRM practices has been derived from the research work of Sanders et al (2008) as:

“High commitment human resource management (HRM), (e.g. selective hiring, career opportunities, performance appraisal, and participation in decision making), is defined as a bundle of HRM practices.”

## List of (HRM) practices

Abang et al (2009) referred Boxall (1995) and Khatri (2000) who contended that HR practices vary in different societal contexts and none best practice can be applied universally. So it is suggested that organization should define the desired performance outcome, as HR practices are different according to the performance measures. Ahmad, and Schroeder (2003) expressed that over the years, researchers have suggested many HRM practices that have the potential to improve and sustain organizational performance.

Many researchers have considered different HRM practices in their studies. Here is list of some HR practices along with names of researchers, which have been studied by them and we have extracted from the literature. Different researchers in some cases used slightly different names from each other for the same practice.

- ‘Selective hiring’, ‘Recruitment’, ‘Process of Recruitment’, ‘Recruitment Efforts’, ‘Recruitment and Selection Practices’ studied by Kundu & Malhan (2009)- Qureshi (1994) - Shahzad et al (2008) - Sanders et al (2008)
- ‘Selection of Personnel’ studied by Qureshi (1994) Ahmad, and Schroeder (2003)
- ‘Training and Development’, studied by (Quresh, et al (2010) - Kundu & Malhan (2009) - Sun & Nam (2011) Abang et al (2009) - Mudor & Tooksoon (2011) - Shahzad et al (2008) Ahmad, and Schroeder (2003)
- ‘Empowerment’, ‘Empowering’ studied by Quresh, et al (2010) Sun & Nam (2011) Ahmad, and Schroeder (2003)
- ‘Performance Appraisal system’, ‘Employee performance Evaluation’ studied by Quresh, et al (2010) Mudor & Tooksoon (2011) - Babaei, et al (2012) - Shahzad et al (2008) - Sanders et al (2008)
- ‘Compensation System’, ‘Incentives’, ‘Rrewards’, ‘A fringe benefit’ studied by Quresh, et al (2010) - Abang et al (2009) Kundu & Malhan (2009) Mudor & Tooksoon (2011) Babaei, et al (2012)- Shahzad et al (2008) - Ahmad, and Schroeder (2003)
- ‘Job Analysis’ studied by Kundu & Malhan (2009) - Mudor & Tooksoon (2011)
- ‘Socialization’ studied by Kundu & Malhan (2009)

- ‘Career’, ‘Career Development’, ‘Career Opportunities’, Kundu & Malhan (2009) , Bashir & Ramay (2008) - Mudor & Tooksoon (2011) Sanders et al (2008)
- ‘Promotion Criteria’, Shahzad et al (2008)
- ‘Diverse Workforce’ (diversity) Kundu & Malhan (2009)
- ‘Worklife Balance’ studied by Kundu & Malhan (2009)
- ‘Attitude Survey’ studied by Kundu & Malhan (2009)
- ‘Communication’ studied by Nehmeh (2009)
- ‘Job Security’ studied by Tzafirir et al (2004)
- ‘Placement’, ‘Placement Practices’ studied by Kundu & Malhan (2009) - Shahzad et al (2008)
- ‘Supervisor Support’ Mudor & Tooksoon (2011)
- ‘Job Design’ studied by Shahzad et al (2008)
- ‘Human Resource Planning’, (Benefits planning) studied by Kundu & Malhan (2009) Mudor & Tooksoon (2011)
- ‘Participation in decision making’, ‘Employee participation’, ‘Labor management participation’ studied by Quresh, et al (2010) - Shahzad et al (2008) - Sanders et al (2008)
- ‘Reduced status distinctions and barriers’, 'including dress, language, office arrangements, and wage differences across levels studied by Ahmad, and Schroeder (2003)

Following are the detailed extracts of research studies wherein these practices were elaborated. Qureshi (1994) referring Ulrich (1990) expressed that management practices related to organizational entry include the process of recruitment and selection of personnel adopted by an organization. This process occupies a pivotal position in HRM policies since it enables an organization to identify and attract the required human resources in order to generate capabilities to stay competitive. The idea here is to use HRM practices to create a shared mindset that could be instrumental in building the competitive advantage. It is also suggested, to relate, HRM practices to organization structures with a view to sustaining the needed organizational capability in a competitive environment.

According to Sanders et al (2008) during the last decade attention has been paid to the effects of high

commitment human resource management (HRM), (e.g. selective hiring, career opportunities, performance appraisal, and participation in decision making), defined as a bundle of HRM practices focusing on employee commitment.

Kundu & Malhan (2009) referring Lassen (2007) argued that intensified global competition, dynamic change, and increasing un-certainty have led organizations to become more innovative in order to survive and grow. So, firms have to adopt new/ innovative HR practices like workforce diversity, work-life balance, attitude surveys, and leading with proactive HR practices to remain competitive in the changing environment.

Quresh, et al (2010) selected the HRM practices for their research study were selection, training, performance appraisal system, compensation system and employee participation.

Mudor & Tooksoon (2011) also quoting Lee and Lee (2007) stated that HRM practices on business performance, namely training and development, teamwork, compensation/incentive, HR planning, performance appraisal, and employee security help to improve firms' business performance including employee's productivity, product quality and firm's flexibility."

Mudor & Tooksoon (2011) further mentioned that Ruwan (2007) empirically evaluated six HRM practices (realistic job, information, job analysis, work family balance, career development, compensation and supervisor support) and their likely impact on the Marketing Executive Turnover. While Mudor & Tooksoon (2011) also mentioned that in addition, four HRM practices reported by Zaini, Nilufar and Syed (2009) showed that training and development, team work, HR planning, and performance appraisal have positive and significant influence on business performance.

Shahzad et al (2008) in 'Review of Literature' of their paper quoted that there are number of HRM practices that could be tested in connection with employee performance. Shahzad et al (2008) quoted research of Teseema & Soeters (2006) who have studied eight HRM practices and their relationship with perceived employee performance. These eight practices include recruitment and selection practices, placement practices, training practices, compensation practices, employee performance evaluation practices, promotion practices, grievance procedure and pension or social security. Shahzad et al also mentioned study of Huselid (1995) who used eleven HRM practices in his study i.e. personnel selection, performance appraisal, incentive compensation, job design, grievance procedures, information sharing, attitude assessment, labor management participation, recruitment efforts, employee training and promotion criteria

Ahmad, and Schroeder (2003) mentioned HRM practices including emphasis on employee selection based on fit with the company's culture, emphasis on behavior, attitude, and necessary technical skills required by the job, compensation contingent on performance, and employee empowerment to foster team work. Ahmad, and Schroeder also referred Pfeffer (1998) who has proposed seven below listed HRM



practices that are expected to enhance organizational performance.

1. Employment security.
2. Selective hiring of new personnel.
3. Self-managed teams and decentralization of decision making as the basic principles of organizational design.
4. Comparatively high compensation contingent on organizational performance
5. Extensive training.
6. Reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels.
7. Extensive sharing of financial and performance information throughout the organization.

## Explanation of some HRM Practices

Among above listed HRM practices mentioned by researchers in their studies fifteen practices are elaborated according to the explanation found in the cited literature.

### ▪ Recruitment

Kundu & Malhan (2009) narrated extracting from Kulik (2004) and Pfeffer (1995) that recruitment is a process of attracting a pool of high quality applicants so as to select the best among them. Top performing companies devote considerable resources and energy to creating high quality selection systems. Nehmeh (2009) asserted that HRM practices, such as recruitment and selection, play an important role in gaining employee commitment. By providing realistic job previews and accurate information, applicants are better able to determine whether the job is appropriate for them. If they are aware of the available choices, applicants will be more dedicated to the organization that they opt for.

### ▪ Selection Procedures

Nehmeh (2009) argued that selection procedures try to identify those individuals who are likely to be committed to work. This is done through various methods such as psychometric testing. However all individuals vary in their propensity to become committed, due to personal characteristics, pre-entry expectations or organizational choice variables.

## Training and Development

Tzafirir et al (2004) revealed that employee development is expected to create a sense of certainty, enhance employability and faith in management. Among its positive outcomes, this investment increases employability for the individual employee. This will result in the emergence of a global belief concerning the extent to which managers and their organizations value and care for employees' well being. Tzafirir &

Gur (2007) are of the opinion that training is also a recognized essential component of high performance work systems. From the knowledge perspective, such service workers should be trained to identify and resolve problems, to promote changes in work methods and to take responsibility for quality. Adequate training enables the generation of a work force that is multi skilled, adaptable to rapid changes and has wide conceptual knowledge of the production system. From the motivational perspective, it is reasonable that employees would feel valued by the organization that chooses to invest in their professional development. Positive perceptions of training are associated with employees' perceptions of the organization as having a strong service orientation. Sun & Nam (2011) quoting studies of Dhamodharan, Daniel, & Ambuli, (2010); Gubbins, Garavan, Hogan, & Woodlock, (2006) and Scott & Meyer, (1991) asserted that human resource development (HRD) or training and development of employees have been acknowledged as the most foundational activity of the HR system. Kundu & Malhan (2009) extracting from Kundu (2000); Pitkanen (2007); Zeithmal & Bitner (2004); Law, Wong, & Theresa (2005) and Zadel (2006) expressed that training must be viewed as an important investment for future success. Companies must develop a customer-oriented workforce to deliver service quality, which is met through training. Kundu & Malhan (2009) are of the opinion that training is an important part of the socialization process. There is a strong positive correlation between commitment and employee's motivation for training. Training should be continuous to give employees a sense of recognition and the feeling that their development is valued by the organization.

## **Empowerment**

Quresh, et al (2010) asserted that companies interested in enhancing HR performance may emphasize the need for empowerment and training. Tzafrir et al (2004) quoting (Schuler et al., 2001, Ulrich, 1998) wrote that while traditional HRM roles, practices and policies concentrate on improving functions such as selection, performance appraisal, health and safety, and the like, the emerging roles and initiatives focus on improving the flow of communication, special programs for maintaining procedural justice processes, empowerment process, and helping employees grow and develop within organizations. It is argued that such a practice may in turn affect the climate of trust in the organization and reinforce the validity of the psychological contract.

## **Performance Evaluation Practices**

Shahzad et al (2008) after studying several researches as Brown & Heywood, (2005); Brown & Benson, (2003) and Rahman, (2006) revealed that performance appraisal represents, in part, a formalized process of worker monitoring and is intended to be a management tool to improve the performance and productivity of workers'. Employee commitment and productivity can be improved with performance appraisal systems. In a research on teachers Shahzad et al (2008) concluded that appropriate explanation and supervision of performance lead to higher job satisfaction and professional commitment amongst

teachers. This is also true when performance appraisal is low. Commitment to teaching is a function of teacher's attitude towards performance appraisal system. Possibility of performance appraisal is enhanced by complementary human resource management practices like formal training and incentive pay and performance appraisal leads to greater influence of productivity. Performance evaluation practices are correlated with the performance of employees.

## Compensation/ incentives Practices

Shahzad et al (2008) referred research of Frye (2004) wherein he examined the relationship between equity based compensation and firm performance and found positive relationship between the two. For human capital-intensive firms compensation plays a crucial role in 'attracting and retaining highly skilled employees'. They also referred Ichniowski et al., (1997); Huselid, (1995) and Teseema & Soeters (2006) who found that incentive pay plans positively and substantially affect performance of workers if combined with innovative work practices like 'flexible job design, employee participation in problem-solving teams, training to provide workers with multiple skills, extensive screening and communication and employment security'. High performance work practices (including compensation) have a statistically significant relationship with employee outcomes and corporate financial performance. Significantly positive correlation has been reported between compensation practices and perceived employee performance.

Tzafrir & Gur (2007) asserted that compensation is an important facet of organizational success. First, it is a concern of equity and fairness. Employees whom expend more efforts and creativity in doing their job and see that their results benefit the employer will expect remuneration in exchange for their efforts. If employees do not receive any appreciable return, it is reasonable to expect that they will stop trying. Second, contingent compensation serves as a motivational tool, because employees know that they will share in the results of their work. Therefore, a compensation system based on excellence will result in increased employee performance. Internal equity of compensation is related to employees' perceptions of the organization as having a strong service orientation.

Abang et al (2009) referring Bashir & Khattak, (2008) expressed that it is interesting to note that information technology, employees training, and incentives showed a strong and significant relationship with organizational performance. This could be due to the fact that in most developing countries, the employees are not as highly paid as those workers in developed countries, thus the workers are more concerned with HRM practices which could subsequently increase their earnings. Hence, incentives given to the employees are found to directly affect the organizational performance rather than moderating the relationship between HRM practices and performance. The study of Mudor & Tooksoon (2011) suggests that incentive plans based on rewards, bonuses, salaries enhancement, and performance appraisal reports could be useful strategies.

## **Job analysis**

Kundu & Malhan (2009) stated that job analysis is the process of obtaining information about jobs i.e. information about the tasks to be done on the job, as well as personal characteristics (education, experience, specialized training) necessary to do the tasks. Job analysis in many ways is the first personnel activity that affects commitment and performance. Human resource planning analyzed and identified the need for and availability of human resources for an organization to meet its objectives. Nehmeh (2009) asserted that by providing realistic job previews and accurate information, applicants are better able to determine whether the job is appropriate for them. If they are aware of the available choices, applicants will be more dedicated to the organization that they opt for.

Mudor & Tooksoon (2011) revealed that the HR practices on job analysis are strong predictors of Marketing Executive Turnover. Along the same line, two components of HR practices namely, training and information technology have direct impact on organizational performance.

## **Socialization**

According to Kundu & Malhan (2009) Socialization is the process of orienting new employees to the organization, can make the difference between a new worker's feeling like an outsider and feeling like the member of the team. Nehmeh (2009) asserted that after the initial recruitment of an employee, induction training and socialization are carried out, which are vital in gaining employee commitment. It is essential to reinforce a sense of self-worth within newcomers, which can be achieved through a supportive environment. Training is an important part of the socialization process. There is a strong positive correlation between commitment and employee's motivation for training. Training should be continuous to give employees a sense of recognition and the feeling that their development is valued by the organization.

## **Job Security**

Tzafrir et al (2004) quoted that some have argued that the traditional psychological contract in which full-time permanent workers gave their loyalty to an organization in exchange for job security is dead. In its place, a new contract is emerging in which employers still expect loyalty, hard work and "value added" to the organization. In exchange, organizations offer extrinsic rewards such as pay that reflects employee contributions and experiences and training that will give them "employability security" as well as intrinsic rewards in the form of a generally pleasant working atmosphere.

## Career

Kundu & Malhan (2009) expressed that a career comprises of series of work related activities that provide continuity, order, and meaning to a person's life. Career management includes both organizational actions and individual efforts aimed at setting career goals, formulating and implementing strategies and monitoring the results.

Bashir & Ramay (2008) asserted (after squeezing from studies like Post, Borgen, Amundson, & Washburn, 2002; Puah & Ananthram, 2006; Hartzenberg, 2002; Johns 2005; Cohen, 1991; Paré & Tremblay, 2000; Shelton, 2001; Ball, 1997 and Johns, 2005) that career is the interaction of work roles and other life roles over a person's lifespan including both paid and unpaid work in an individual's life. People create career patterns as they make decisions about education, work, family and other life roles. The role of employers and employees is changing with reference to career because now employers take less responsibility, employees need to take control of their own development in order to maintain and enhance their employability. Organizations are expecting employees to assume greater responsibility for their own future as well as for organization's success. Career development has a direct influence on the achievement of job satisfaction and career commitment. Employees that have advanced would put more effort into their work. The company policies play an important role in providing career opportunities. It seems that the organization may benefit from increasing commitment across all career stages. Increasing commitment in the early career stage is important for decreasing turnover and in the mid- and late-career stages for reducing absenteeism and increasing performance. Effective IT retention strategy will focus on four key categories of HR practices, namely, 1) distributive justice, 2) competence development and career paths; 3) recognition of performance, and 4) empowerment. The career opportunities do affect employee commitment with the organization. Career advancement, autonomy and measurability of output related to commitment indicate that the creation of job ladders and job flexibility will maximize commitment and thus minimize absenteeism and turnover. Career opportunities have been identified as a determinant of organizational commitment.

## Promotion Practices

Shahzad et al (2008) quoted that Teseema & Soeters (2006) found significantly positive correlation between promotion practices and perceived employee performance, however HR outcome was used as mediating variable. Shahzad et al (2008) also argued (referring Guest, 2002 and Park et al., 2003) that HRM practices including 'vacancies filled from within' have been found positively correlated with work satisfaction and life satisfaction. Synergetic systems of HRM practices (including merit promotion decisions) lead to higher performance of an organization. It can be safely assumed that promotion practices are correlated with the performance of employees.

## Diverse workforce (diversity)

Kundu & Malhan (2009) asserted that diverse workforce (diversity) refers to the co-existence of people from various socio-cultural backgrounds within the company. A growing diverse workforce,

increased competition for businesses, growing number of mergers and acquisitions, and increased emphasis on globalization require an understanding and appreciation of a diverse set of cultures for having the 'best' people for an organization. Dynamic companies look for people who are different from us because the diverse workforce may bring different talents, interests, and viewpoints. The companies can succeed at diversity with full support from the top management. The work communities as a whole should be helped to deal with increasing cultural diversity.

### **Good communication and Feedback**

Nehmeh (2009) stated that good communication and feedback between management and employees is a means to reduce problems. A positive relationship between communication and commitment was detected highlighting the importance for management to ensure that communication channels remain open to allow for better transmission of information. Tzafrir & Gur (2007) asserted that feedback is a basic requirement for enhancing employee performance. From the knowledge aspect, employees need to know whether they are performing their job satisfactorily, and if not, how they might improve their job activities. Providing employees with structured and accurate information about their performance together with suggestions for improvement is an acceptable strategy that is likely to help them to focus on the evaluation of problematic areas, and hence, lead to better levels of performance. From the motivational aspect, employees who make an effort to improve their service performance will be more motivated to do so if they feel that the organization and their managers recognize their efforts. A comprehensive and accepted evaluation system can provide valuable feedback to employees and assist managers in making decisions regarding the individual employee.

## **Work-life balance**

Kundu & Malhan (2009) quoted squeezing from many studies that work-life balance is a state where an individual manages real or potential conflict between different demands on his/her time and energy in a way that satisfies his/her needs for well being and self-fulfillment. Today's married employee is typically part of a dual-career couple finding less time to fulfill commitments to home, spouse, children, parents, and friends. Recent studies suggest that employees want jobs that give them flexibility in their work schedules, so that they can better manage work/life conflicts.

### **Attitude surveys**

Nishii et al (2008) asserted that employees individually make their own attributions about the purposes behind the practices, which are, in turn, associated with employees' attitudes: a perception that management cares about service (or product) quality and employee well-being is associated with positive attitudes, but a sense that management is intent on cost cutting or employee exploitation is associated with

negative attitudes. Furthermore, individual attitudes are shared within work units and in their aggregate are associated with “organizational citizenship behaviors;” i.e., group-level satisfaction and commitment are associated with intra-unit helping behaviors, which are linked to enhanced unit performance and customer satisfaction. Management conducts attitude surveys. Kundu & Malhan (2009) asserted that attitude surveys can provide information on the preferences of employees, give warning on potential problem areas, diagnose the cause of particular problems, and compare levels of job satisfaction, commitment and morale in different parts of the organization.

## **Importance of (HRM) practices**

(HRM) practices are being increasingly considered as major contributory factors in financial performance of organizations (Quresh, et al 2010) and represent one avenue that can be used by organizations in shaping their employees' attitudes and behaviors. This is because HRM practices create conditions where employees become highly involved in the organization and work hard to accomplish the organization's goals (Huselid 1995). Therefore organizations use HRM practices as critical strategic tools for promoting favorable behavior among employees and leveraging their knowledge, skills, and abilities, which should increase productivity and performance (Sun & Nam 2011).

## **Impacts of HRM practices**

Zaitouni et al (2011) expressed with reference to Meyer & Allen, (1997) that HRM practices are some, but not all, of the factors that are related to an employee's commitment.

According to Wright et al (2003) while much of the research on the relationship between HR practices and performance has somewhat consistently revealed a significant relationship, some recent debates have emerged regarding the value of different approaches to studying this phenomenon. Debates have arisen regarding the proper sources for gaining the most valid reports of HR practice measures, the proper level of analysis and proximity of performance measures, and the timing of measurement. Wright et al (2003) mentioned that Delery and Doty (1996) examined the relationship between HR practices and profitability in a sample of banks in the US. In testing universalistic, contingency and configurational approaches to HRM, they found that, in general, HR practices were positively related to profitability. Guthrie (2001) examined the impact of HR practices on turnover and firm productivity among a sample of firms in New Zealand. He noted that HR practices had an impact on turnover, and that the relationship between retention and productivity was positive when firms implemented high-involvement HR practices, but negative when they did not. Wright et al (2003) also mentioned that two major studies at the plant level have been conducted examining the relationship between HR practices and firm performance. MacDuffie (1995) found that the HR practice ‘bundles’ he measured were related to quality and productivity on auto assembly lines. Meanwhile, Youndt *et al* (1996) discovered that human capital enhancing HR practices were related to operational performance among a sample of manufacturing plants.

Abbassi and Burdey (2008) quoted that HRM practices and policies could change employee commitment and enabling the organization better. The knowledge, education, training, skills and expertise of a firm's worker act the expense of physical capital like equipment, machinery and the physical plant.

Shahzad et al (2008) expressed that possibility of performance appraisal is enhanced by complementary HRM practices like formal training and incentive pay and performance appraisal leads to greater influence of productivity. Shahzad et al (2008) further revealed that HRM practices including 'vacancies filled from within' have been found positively correlated with work satisfaction and life satisfaction. Synergetic systems of HRM practices (including merit promotion decisions) lead to higher performance of an organization. It can be safely assumed that promotion practices are correlated with the performance of employees. Kundu & Malhan (2009) are of the opinion that competitive advantage of a company can be generated from human resources (HR) and company performance is influenced by a set of effective HRM practices. Abang et al (2009) argued (referring Bashir & Khattak, 2008) that it is interesting to note that information technology, employees training, and incentives showed a strong and significant relationship with organizational performance. This could be due to the fact that in most developing countries, the employees are not as highly paid as those workers in developed countries, thus the workers are more concerned with HRM practices which could subsequently increase their earnings. Hence, incentives given to the employees are found to directly affect the organizational performance rather than moderating the relationship between HR practices and performance. Quresh, et al (2010) quoted that Wan et al. (2002) examined the relationship between HRM practices and firm performance and concluded that results calculated through regression suggested that effective implementation of key HRM practices increases organizational performance. Junejo (2010) asserted that HRM practices have a direct impact on employee skills, motivation, job design and work structures. This has an impact on the profitability, growth and institutional value. While Mudor & Tooksoon (2011) also mentioned that, four HRM practices (reported by Zaini, Nilufar and Syed, 2009) i.e. training and development, team work, HR planning, and performance appraisal have positive and significant influence on business performance. Sun & Nam (2011) concluded (from the studies of Bartlett, 2001; Bates & Chen, 2004; Clardy, 2008; and Katou, 2009) that organizations use HR practices as critical strategic tools for promoting favorable behavior among employees and leveraging their knowledge, skills, and abilities, which should increase productivity and performance. Sun & Nam (2011) also revealed that in explaining the effects of HR practices on firm performance, scholars have identified three mediating mechanisms: "(a) increasing employees' knowledge, skills, and abilities (KSAs), (b) empowering employees to act, and (c) motivating them to do so". Babaei, et al (2012) reported that HR practices play a critical role in enhancing organizational citizenship behaviors (OCBs) and firm performance. OCBs mediate the effects of rewards and performance appraisal on service quality.

Tzafir & Gur (2007), who studied relationship of HRM practices and service quality at call centers of firms asserted that HRM practices could potentially affect 'Service Quality' (SQ) along three parallel channels. The first one is a control-based channel, which refers to all practices taken by the organization in order to sustain productivity and efficiency in the service process. One example for this



channel is when service employees in a call center of a firm are being measured for their number of calls per hour and the mean length of calls. The second way in which HRM might affect SQ is through a knowledge-based channel, in which HRM practices are adjusted to the service delivery process. By shaping practices in a service-oriented manner employees will be more aware of the service delivery process and SQ. The third way is via a motivational based channel, in which the organization promotes practices that are focused on employees' well being. Research has shown that adopting HRM practices that employees perceive as positive and considerate, such as employment security or a compensation system that acknowledges employee efforts and contributions, results in more service committed employees.

## Conclusion

In the light of above literature it can be concluded that HRM practices are of various types and when management applies them in its firm causes improvement in performance due to satisfaction of employees which leads to enhancement of productivity and ultimately increase of profit. As Sanders et al (2008) quoted some researchers (e.g. Benkhoff, 1997; Agarwala, 2003; Arthur, 1992 and Guest, 1997) who found a positive relationship between high commitment HRM and affective commitment of employees. The basic assumption is that high commitment HRM, through the added value of dedicated employees, ultimately contributes to the organizational effectiveness. Shahzad et al (2008) concluded that performance evaluation practices are correlated with the performance of employees. According to conclusion of Kundu & Malhan (2009) innovation is critical to sustaining and enhancing shares of mainstream markets and obtaining a desirable balance between entrepreneurial and strategic forces. So, firms have to adopt new/ innovative HRM practices like workforce diversity, work-life balance, attitude surveys, and leading with proactive HR practices to remain competitive in the changing environment. Junejo (2010) also found positive relationships between compensation, promotion, and evaluation practices.

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# ASSESSMENT OF FACTORS INFLUENCING COSTING SYSTEM IMPLEMENTATION IN NIGERIA

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**AKINYOMI, Oladele John (Corresponding Author)**

**Financial Studies Department, Redeemer's University, Ogun State, Nigeria.**

**E-mail: [delejohn21@yahoo.com](mailto:delejohn21@yahoo.com); GSM: +234 (0) 8038673767**

## **Abstract**

The importance of cost accounting information for decision making has been a fundamental issue in cost accounting for several years. However, only a small proportion of the previous studies were carried out in the developing countries. Thus, this study investigates the factors which influence costing system implementation in Nigeria. Adopting survey research design, the sample includes forty manufacturing firms in Nigeria. Questionnaire was administered to financial managers, management accountants, senior accountants, accountants and cost accountants that are staff members of the selected companies. Descriptive statistics was used for the analysis. The findings revealed that each of the variables of: firm size, product diversity, top management support and intensity of competition has a significant influence on costing system implementation in Nigeria. The main recommendation is for future researchers to focus on small and medium scale enterprises which have been identified as critical for the development of any economy.

**Key word:** Costing systems, product diversity, competition and management support.

## **1. Introduction**

The significance of cost information for decision making has been an essential matter in cost accounting for a number of years (Adeniji, 2009). Decision making is possibly, the most noteworthy goal of a cost accounting system (Lynn & James, 2002). But this fact is more manifest at this time more than ever, because of the current economic and social situations. In the face of severe competition, galloping quality standards and price wars for customer attraction, the costing of products has become an imperative success factor in today's business world. Companies are zealous to make their products more competitive and reasonably priced.

### **1.1 Statement of Problem**

Literature reveals that quite a lot of studies have been carried out on the implementation of costing systems (Al-Omiri & Drury, 2007; Ahmadzadeh et al, 2011). However, only a small proportion of these studies were carried out in the developing countries as most of the studies were conducted in the advanced market economies of the world (Baird, Harrison & Reeve, 2004; Brown et al, 2004). Specifically, Lana and Fei (2007) reported that bulk of research on costing system implementation still was done in developed countries; very little research has been done in developing country context. They therefore recommended that future research should be conducted in developing nations

### **1.2 Research Objective**

The main objective of this study is to investigate the factors influencing the implementation of costing systems in Nigeria. Specifically, the study sets out to:

1. Investigate whether firm size affects costing system implementation.
2. Examine whether product diversity influences costing system implementation.
3. Investigate whether top management support influences costing system implementation.
4. Explore whether intensity of competition influence costing system implementation.

### **1.3 Research Questions**

The following research questions have been developed mainly based on the review of literature on costing

system implementation:

1. Does firm size influence costing system implementation in Nigeria?
2. Does product diversity influence costing system implementation in Nigeria?
3. Does top management support influence costing system implementation in Nigeria?
4. Does intensity of competition influence costing system implementation in Nigeria?

#### **1.4 Research Hypotheses**

In order to be able to test the significance of the relationship that exists between the identified factors and costing system implementation in Nigeria, the following hypotheses have been formulated:

Ho<sub>i</sub>: Firm size does not significantly influence costing system implementation in Nigeria.

Ho<sub>ii</sub>: Product diversity does not significantly influence costing system implementation in Nigeria.

Ho<sub>iii</sub>: Top management support does not significantly influence costing system implementation in Nigeria.

Ho<sub>iv</sub>: Intensity of competition does not significantly influence costing system implementation in Nigeria.

#### **2. Review of Literature**

Fei and Isa (2010) opined that costing information is essential for all businesses including both trading, manufacturing and service organizations. Literature provides some specific behavioural and

organizational factors which may likely influence the decision on the implementation of particular costing systems in an organization (Al-Omiri & Drury, 2007, Ahmadzadeh et al, 2011). Fei and Isa (2010) have opined that examination of factors that influence costing systems successful implementation is acknowledged as an imperative research area.

Previous studies have identified firm size as a vital factor influencing the implementation of more complex cost accounting systems (Innes et al, 2000; Ahmadzadeh et al, 2011). Previous studies have also noted a positive association between company size and the implementation of modern costing systems. A possible reason for this is that larger organizations have relatively greater access to resources to experiment with the introduction of more sophisticated costing systems such as activity-based costing system (Al-Omiri and Drury, 2007).

Furthermore, studies have shown that businesses these days operate in a highly competitive environment brought about by advance in information technology and globalization (Cokins, 2002). As a result of these, consumers are now demanding for lower prices of goods and superior quality services while, firms are focussing on ways to best identify their cost drivers and improve profit (Chea, 2011). Companies that find themselves in a market with fierce competition have no room for distorted cost estimates and therefore, Cooper and Kaplan (1988) have recommended that firms facing severe competition should implement complex costing systems.

Besides, top management support has also been found to play a crucial role in the implementation of any cost accounting system (Innes, 2000; Fei & Isa, 2010). Chongruksut and Brooks (2005), in their study of ABC system implementation in Thailand reported that top management support was acknowledged as a key decisive factor influencing the successful implementation of costing systems. Similarly, other researchers have reported significant influence of top management support in the successful implementation of cost accounting system (Maelahi, 2006). Management support includes active involvement, sufficiency of resources provided, and ties to the competitive strategies of the business outfit.

Product diversity is yet another major factor that leads to reporting of distorted product costs as output of traditional cost system (Fei & Isa, 2010). When products consume different proportions of resources of supportive departments, a cost system that incorporates several cost pools, with each cost pool indicating a separate supportive activity, better captures the variability in resource consumption. To capture volume diversity, a complex cost system is required that establishes separate cost pools for batch-level activities and incorporates non-volume based cost drivers that evaluate the consumption of resources by batch sizes rather than volume (Drury & Tayles, 2005). Thus, to evaluate the resource consumption of different products in a complex setting, more complex cost systems (such as ABC system) involving a greater number of cost pools and cost drivers are required.

### **3. Methodology**



The study adopts a survey research design. Five-point rating scaled questionnaire starting from strongly agreed (SA), agreed (A), undecided (U), disagreed (D), and strongly disagreed (SD) was used to collect data from forty (40) randomly selected listed manufacturing firms in Nigeria. The respondents include: financial managers, management accountants, senior accountants, accountants and cost accountants that are full-time staff members of the selected companies. The questionnaire was designed in such a way that every question in the questionnaire was related to the research questions.

### 3.1 Test of Hypotheses

Chi-square test with 5% level of significance was employed in testing the hypotheses. The decision rule is to reject the null hypothesis if the calculated value is greater than the critical value and accept if otherwise. Chi-square is calculated with the help of the following formula.

$$X^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where  $O_{ij}$  = represents observed frequency;  $E_{ij}$  = represents expected frequency

$$E = \frac{\text{Number of questionnaire}}{\text{Number of response}}$$

Level of significant= 0.05; Formula for degree of freedom= n-1; Therefore the degree of freedom df= 5-1 = 4. Thus, the value of  $X^2$  from that 4 degree of freedom at 5% significance is 9.49.

### 4. Data Analysis and Discussions

The responses of the respondents on the various statements put forward in the questionnaire are analyzed

as follows:

**Table I:** Analysis of responses to statement 1 in the questionnaire: firm size influences costing system implementation in Nigeria.

S/No.	Responses	No. of responses	% of Responses
1	Strongly agree	145	52.92
2	Agreed	97	35.40
3	Undecided	8	2.92
4	Disagreed	19	6.93
5	Strongly disagreed	5	1.83
Total		274	100

Source: Field Survey, 2012

The analysis of responses to statement number one reveals that most of the respondents (88.32%) agreed that firm size influences costing system implementation. Furthermore, in order to confirm whether firm size significantly influence costing system implementation; the first hypothesis is then tested below.

**Table II:** Analysis of questionnaire based on Hypothesis 1

Observed (O)	Expected (E)	(O – E)	(O – E) <sup>2</sup>	(O – E) <sup>2</sup> /E
145	54.8	90.2	8136.04	148.4679
97	54.8	42.2	1780.84	32.4971
8	54.8	-46.8	2190.24	39.9679
19	54.8	-35.8	1281.64	23.3876
5	54.8	-49.8	2480.04	45.2562
$\chi^2$				289.5767

Source: Field Survey, 2012

The result of hypothesis one indicates an  $\chi^2$  value of 289.5767 which is greater than the critical value of 9.49. Therefore, we reject the null hypothesis and accept the alternative hypothesis. Thus we conclude that firm size significantly influence costing system implementation in Nigeria.

**Table III:** Analysis of responses to statement 2 in the questionnaire: Product diversity influences costing system implementation.

S/No.	Responses	No. of responses	% of Responses
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1	Strongly agree	103	37.60
2	Agreed	132	48.18
3	Undecided	17	6.20
4	Disagreed	11	4.01
5	Strongly disagreed	11	4.01
Total		274	100

Source: Field Survey, 2012

The analysis of responses to statement number two reveals that majority of the respondents (85.78%) agreed that product diversity influences costing system implementation in Nigeria. Furthermore, in order to confirm whether product diversity significantly influence costing system implementation; the second hypothesis is then tested below.

**Table IV:** Analysis of questionnaire based on Hypothesis 2

Observed (O)	Expected (E)	(O – E)	(O – E) <sup>2</sup>	(O – E) <sup>2</sup> /E
103	54.8	48.2	2323.25	42.3949
132	54.8	77.2	5959.84	108.7562
17	54.8	-37.8	1428.84	26.0737
11	54.8	-43.8	1918.44	35.0080
11	54.8	-43.8	1918.44	35.0080
$\chi^2$				247.2408

Source: Field Survey, 2012

The result of hypothesis two indicates an  $\chi^2$  value of 247.2408 which is greater than the critical value of 9.49. Therefore, we reject the null hypothesis and accept the alternative hypothesis. Thus we conclude that product diversity significantly influence costing system implementation in Nigeria.

**Table V:** Analysis of responses to statement 3 in the questionnaire: Top management support influences costing system implementation.

S/No.	Responses	No. of responses	% of Responses
1	Strongly agree	181	66.06
2	Agreed	69	25.18
3	Undecided	13	4.74

4	Disagreed	3	1.09
5	Strongly disagreed	8	2.93
Total		274	100

Source: Field Survey, 2012

The analysis of responses to statement number three reveals that majority of the respondents (91.24%) agreed that top management support influences costing system implementation in Nigeria. Furthermore, in order to confirm whether top management support significantly influence costing system implementation; the third hypothesis is then tested below.

**Table VI:** Analysis of questionnaire based on Hypothesis 3

Observed (O)	Expected (E)	(O – E)	(O – E) <sup>2</sup>	(O – E) <sup>2</sup> /E
181	54.8	126.2	15926.44	290.6285
69	54.8	14.2	201.64	3.6796
13	54.8	-41.8	1747.24	31.8839
3	54.8	-51.8	2683.24	48.9642
8	54.8	-46.8	2190.24	39.9679
				415.1241

Source: Field Survey, 2012

The result of hypothesis three indicates an  $\chi^2$  value of 415.1241 which is greater than the critical value of 9.49. Therefore, we reject the null hypothesis and accept the alternative hypothesis. Thus we conclude that top management support significantly influence costing system implementation in Nigeria.

**Table VII:** Analysis of responses to statement 4 in the questionnaire: The intensity of competition influences costing system implementation.

S/No.	Responses	No. of responses	% of Responses
1	Strongly agree	62	22.63
2	Agreed	188	68.61
3	Undecided	5	1.83
4	Disagreed	16	5.84
5	Strongly disagreed	3	1.09
Total		274	100

Source: Field Survey, 2012

The analysis of responses to statement number four reveals that majority of the respondents (91.24%) agreed that intensity of competition influences costing system implementation in Nigeria. Furthermore, in order to confirm whether intensity of competition significantly influence costing system implementation; the fourth hypothesis is then tested below.

**Table VIII:** Analysis of questionnaire based on Hypothesis 4

Observed (O)	Expected (E)	(O – E)	(O – E) <sup>2</sup>	(O – E) <sup>2</sup> /E
62	54.8	7.2	51.84	0.9460
188	54.8	133.2	17742.24	323.7600
5	54.8	-49.8	2480.04	45.2562
16	54.8	38.8	1505.44	27.4715
3	54.8	-51.8	2683.24	48.9642
<b>X<sup>2</sup></b>				446.3979

Source: Field Survey, 2012

The result of hypothesis four indicates an  $\chi^2$  value of 446.3979 which is greater than the critical value of 9.49. Therefore, we reject the null hypothesis and accept the alternative hypothesis. Thus, we conclude that intensity of competition significantly influence costing system implementation in Nigeria.

The review of related literature and data analysis carried out in this study revealed that each of the variables of: firm size, product diversity, top management support, intensity of competition and the availability of staff; significantly influence costing system implementation in Nigeria.

## 5. Conclusion

This study examined the factors influencing costing system implementation in Nigeria. Primary data

(obtained through the administration of Likert scale questionnaire) were used for the study. Forty manufacturing companies were randomly selected from the Nigeria Stock Market; meanwhile the respondents included: financial managers, management accountants, senior accountants, accountants and cost accountants that are full-time staff members of the selected companies. The result confirmed that: firm size, product diversity, top management support and intensity of competition, all significantly influence costing system implementation in Nigeria.

## **6. Recommendations**

This study focused on the manufacturing sector of the Nigerian economy. Future researchers could extend the scope of their study beyond the listed companies. Specifically, the small and medium scale enterprises could be the focus of future study as this category of business organizations have been identified as critical for the development of any economy.

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# **The Impact of Foreign Ownership on Stock Prices in the Amman Stock Exchange**

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Mohammad Alawin  
The University of Jordan

## **Abstract**

This study aims at finding the nature of the relationship between stock prices in the Amman Stock Exchange (ASE) and the level of foreign investment, presented by the foreign contribution in the shares of companies listed at the ASE. The empirical model presented in this paper includes the stock price as the dependent variable. As for the independent variables, it includes the size of the market, the volume of trading, and the level of foreign participation at ASE. In addition, a dummy variable was included to the model to capture the effect of the global financial crisis in 2007.

The results show a negative relationship between the foreign contribution in the ASE and the value of the stocks. This result could be accounted for as foreign participants are attracted by the low stock prices. Besides, those participants have a long-term investment goal, not a quick trade presented by quick speculations in the Jordanian financial market.

## **I- Introduction**

Emerging financial markets are more exposed to financial crisis in developing countries than that of developed countries. Foreign investors are usually considered a reason to cause financial instability by doing sudden inflows or outflows in these emerging markets (Adabag and Ornelas, 2004). Over the last three decades, the foreign investment has accelerated at a tremendous speed. This flow of investment works to reshape the global economic view.

It is believed that the flow of investment drives development. Many government authorities establish sound policies to attract international investment believing that the appropriate level of productive investment is a key factor in sustainable development. On the other hand, flows of foreign investment may be accompanied with speculation by some foreign investors. Speculators engage in risky financial transactions in an attempt to profit from short term fluctuations in the stock market. In some cases, speculators play an important role in fuelling financial markets' crises. Their actions during periods of mild decline in the stock market could convert the situation to a severe incline.

The significance of this stems from the belief of the significance of ownership structure as one of the factors affecting returns and risks of stocks. In Jordan, Amman Stock Exchange (ASE) attracted huge amounts, invested by foreign investors in equity portfolio. The percentage of foreigners in the ASE



exceeded 51% at the end of 2011 ([www.ase.com.jo](http://www.ase.com.jo)). New legislations in ASE allow foreigners to own a 100% of the stocks of any firm(except construction and servicesectors).

In the light of these amendments, foreign ownership might have a multiplier effect on the economy in cases of entering or leaving the market quickly. Therefore, the degree of regularity and symmetry of foreign ownership (represented by the contribution of foreigners in ASE) is an important element this study tends to analyze. Contribution of foreigners in ASE is an element that we expect will theoretically and practically affect the efficiency of the financial markets. Thus, the basic hypothesis is whether the levels of foreign investment had an impact on the stock prices or not?

The issue of the impact and behavior of foreign investors in ASE has not been, due to the researcher's knowledge, addressed fully by the literature yet. The aim of this paper is to evaluate the role of foreign investors' trading in Amman Stock Exchange (ASE). The attention is to evaluate if foreign investment is beneficial or not to the Jordanian stock market. To obtain these objectives, this paper builds an empirical model that includes the significant variables affecting the overall value of ASE.

The rest of the paper is organized as follows. Section two provides a literature review of studies about foreign investment in stock markets. The methodology and data sources are given in sections three and four, respectively. Section five discusses the empirical results. Finally, section six concludes the paper.

## II- Literature Review

Adabag and Ornelas (2004) tried to analyze the effects of foreign investment on the Istanbul Stock Exchange (ISE) and their behavior when trading on the Turkish stock market using a VAR model. The papers found out a monthly contemporaneous relationship between foreign investors and the ISE index. On the same line, studying the Indian Financial Market, Jain, *et al.* (2012) shows that foreign institutional investors have gained a significant role in Indian stock markets. It is clear that the value of the financial market increased positively with the inflow of the foreign investment towards the financial market.

Ezazi, *et al.* (2011) analyzed the effect of different aspects of ownership structure (shareholders structure) like individual or institutional, internal or external, being focused or disseminated of the shareholders on the share price volatility of listed companies in Tehran Stock Exchange (TSE). The results of this research indicate the price of shares of the companies of which more percentage of shares are held by their greatest shareholders may have more volatility and the share price volatility of the companies that the more percentage of their shares is hold by individual shareholders is lower. In addition, the measure of ownership of five greater shareholders and institutional shareholders and members of the board of directors would not show any solution for investors interested in share price volatility.

In his study, Qatrooz (2004) analyzed the reality of foreign investment in ASE through examining the impact of the changes in economic variables and their consequences on the market indices; stock prices, trading volume and the number of traded shares. In order to analyze the relationship between foreign investment and the level of activity inside ASE with economic variables, he used a simple econometric analysis approach; Ordinary Least Squares (OLS). The study found out that foreign investment positively affects the growth rate of both national and per capita income. This task of foreign investment is done by activating the role of competition between companies and raising the skills of human capital which should reflect the prosperity of the country.

Opposite to what was found by Qatrooz (2004), the study of Nazzal (2000) aimed at testing the regularity emerging from foreign participation in Amman Stock Exchange (ASE) in a sample of 40 companies listed on the ASE. The whole sample was divided into two sub-samples; the first contains companies with a high foreign contribution, whereas the second contains companies with a low foreign contribution. The results of the study showed the lack of regularity arising from foreign ownership in ASE.

### III- Methodology and Theoretical Framework

The study is based on the objective of analyzing the impact of the participation of the foreign investors in ASE on stock prices during the monthly period (January 2006 – December 2011). The model of this study has been developed, based on including those factors that affect the behavior of stock prices. The model is built upon the initial efforts done by Ezaziet *al.* (2001). The study based on the following standard model:

$$(PRICE)_t = b_0 + b_1 (VALUE)_t + b_2 (VOL)_t + b_3 (FOREIGN)_t + b_4 (D)_t$$

Where *PRICE* represents the weighted average of shares' prices in ASE, *VALUE* represents the total value of companies listed in ASE, *VOL* represents the trading volume in ASE during the month, *FOREIGN* represents the proportion of foreign contribution in ASE, and *D* is a dummy variable aim at representing the impact of pre-and post-global financial crisis.

It's believed that the above mentioned variables can determine the performance of the stock prices in Amman Stock Exchange. The following theoretical framework supports this model to include these variables in the empirical model:

*The total value of companies listed in ASE (VALUE):*

The value of any company is calculated by multiplying the average value of the share during the month by the number of the shares. So, the total value of the shares listed in the stock market would be changed because of either of the two components. For a positive change in both of them, we expect positive impacts on the performance of the stock prices in ASE (*PRICE*).

*The volume of trading in ASE (VOL):*

The volume of trading is represented by the number of shares that were traded during the period multiplied by the average market share price. It is expected that the sign of the coefficient of this variable would be positive since the increase in trading volume reflects an increase in demand for shares, which lead to higher prices.

*Foreign contribution in financial market (FOREIGN):*

This percentage is represented by the level of foreign participation out of the total participations in ASE. Usually, this variable has a positive impact on the stock value. The increase in demand by foreigners for shares is reflected in higher price.

*Dummy Variable (D):*

This variable shows the severe reflection happened in ASE after the global financial crisis which shows a clear impact on most of the financial markets. With the appearance of the global financial crisis, the market value for most stock markets around the world declined. Therefore, it is vital to check the reflection of this factor on ASE. In order to do so, a dummy variable (*D*), with a value of (0) for the period preceding the year 2008 and a value of (1) beginning that year, is introduced in the model to capture that effect. Normally, we expect a negative and statistically significant value for the coefficient of this variable on the value of the financial market.

#### **IV- Data**

Data of this study consist of several variables covering the period (January 2006 - December 2011); equivalently 72 monthly time period. The data are collected for the following variables: the weighted average of shares' prices in ASE (*PRICE*), the total value of companies listed in ASE (*VALUE*), the volume of trading in ASE during the entire month (*VOL*), and the proportion of foreign contribution in ASE (*FOREIGN*). The data on the variables of this study will be entirely collected from the home page site of Amman Stock Exchange, which is available at: ([www.ase.com.jo](http://www.ase.com.jo)).

#### **V- Empirical results**

The methodology of this paper includes applying the Ordinary Least Squares (OLS) on the model that shows the underlying variables that affect the value of the dependent variable of the study; average share prices of ASE. It is worth mentioning that the cointegration among the variables of study has been tested using the Johansen cointegration test. The purpose of this test is to determine if there would exist a long-term relationship among the variables of the study to enable us to count on the reliability of the results of the OLS model and to assure that it won't give superior results among the variables (Bader and Magableh, 2009). However, due to Johansen test, there is a long-term relationship that links the variables of the study with each other (results are available upon request). Therefore, the results of the OLS can be displayed as follows (figures in brackets are t-statistical):

$$PRICE = 15.868 + 0.995 \text{ LOG}(VALUE) + 0.029 \text{ LOG}(VOL) - 0.034(FOREIGN) - 0.047(D)$$

(17.213)
(20.418)
(2.076)
(-12.124)

(-2.800)

The results of the study show that all variables carried the expected signs; as they were analyzed in the theoretical framework of this study. One exception was the contribution of foreigners (*FOREIGN*). In particular, both the volume of trading (*VOL*) and the total value of companies listed in ASE (*VALUE*) show positive and significant statistical signs.

It is strange to find that *FOREIGN* has a negative sign (the opposite of what this study expected). The coefficient of *FOREIGN* has a statistically significant negative sign at a 1 percent level. This result is not far away from the finding of Nazzal (2000), which ended to the conclusion that there is no regularity arising from foreign ownership in ASE. That is, increasing the participation of foreigners at ASE is not necessarily connected to a positive impact on the value of the shares. This result agrees, certainly, with the analysis of some brokers at ASE who confirm that one of the main reasons behind the entry of foreigners to the market is the low prices. In addition, big numbers of foreign investors in the ASE are real and long term - investors and not as speculators who seek quick profits accompanied by a big risk in the financial market. This may explain the inverse relationship between the level of foreign contribution and stock prices.

Considering the matrix of correlation coefficients for the variables of interest, Table 1, we find out a positive relationship between the level of weighted average of shares' prices on ASE (*PRICE*) and both the total value of companies listed in ASE (*VALUE*) and the volume of trading in ASE (*VOL*), while the proportion of foreign contribution in ASE (*FOREIGN*) appeared to have a negative correlation with shares' prices.

**Table (1): Correlation coefficients matrix among variables of the study**

	<i>PRICE</i>	<i>FOREIGN</i>	<i>VALUE</i>	<i>VOLUME</i>
<i>PRICE</i>	1			
<i>FOREIGN</i>	-0.49221	1		
<i>VALUE</i>	0.859592	-0.01989	1	
<i>VOLUME</i>	0.854331	-0.25819	0.825751	1

Finally, the dummy variable coefficient (*D*) had a negative, statistically significant sign as the study expects. In brief, this means that the global crisis is directly associated with the decrease of the value of Amman Stock Exchange as happened in many financial markets around the world.

## VI- Conclusion

This study investigated the relationship between levels of stock prices in the Amman Stock Exchange and a group of relevant variables, including the level of foreign participation. The goal was to investigate the effect of this variable on the price levels for a monthly time period (2006:1 - 2011:12).

The study used OLS methodology after being sure of the existence of a long-term relationship between the variables to allow us to depend on the results of the model. The results showed a statistically significant and negative relationship between the contribution of foreigners and the values of the stocks in the Amman Stock Exchange. This indicates that some foreign shareholders enter Amman Stock Exchange as real investors. In addition, it is clear that lower prices in ASE induce foreigners to increase their investments in the market.

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# EMPLOYEE SATISFACTION IN RETAIL BANKING AT LAHORE--A CASE STUDY OF HBL

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**Uzma Ambreen**

**Pakistan**

**E-mail: ambreenuzma@gmail.com**

## **Abstract**

An employee can be well satisfied with his job but not overall satisfied due to various other reasons. The job that the employee is doing may be good for her/him and s/he likes the job but s/he may be dissatisfied about something else in the organization like the process of performance appraisal, employee recognition, a bad boss, poor compensation package etc. This study investigates employee's satisfaction with her/his job the relationship between the gender composition of an employee's work group and the employee's job satisfaction, using a random sample over 100 workers of HBL. We have tried to investigate the job satisfaction of bank employees of HBL Lahore Branches, identifying the important job satisfaction factors that are associated with the overall satisfaction of bank employees. These above discussed factors are significantly related to the overall satisfaction of the employees. **The higher level of these factors is involved, the higher overall satisfaction is likely to be.**

The factors that are leading have been identified following overall job satisfaction. We choose to do our project in HBL because it has largest network of branches in Pakistan and maximum no of employees. HBL with an extended network of over 1,400 branches and is present in 25 countries. In this report we mention the history of Banks, Retail Banking, History of HBL Pakistan and our main topic Employee satisfaction through some statistical techniques. In this research we try to find out employee satisfaction level in retail banking and variables effecting employee satisfaction most and the least. In order to find this we conducted survey in the form of questionnaire and applied it on 6 retail branches of HBL. We find out frequencies of various demographics including age, gender, job status (grades), working tenure, marital status & education. Which help us to find whether these demographics are effecting satisfaction level or not? In this research we applied cross tab by using computer software named SPSS (Statistical Package for the Social Sciences) on various demographics to check their effects on each other.

With the help of SPSS we calculated variable with highest and lowest Mean and their Standard Deviation. We also perform ANOVA on variables (which have most and least Mean) and has effect on satisfaction level of the employees working in any organization with different demographics.

Then we apply Regression analysis on.....

Moreover by Correlation.....

At the end we have noted down conclusion which represent and recommendations for enhancement of HBL.

**Title:** Employee satisfaction in retail banking at Lahore.

## **Background of Research:**

This research is about satisfaction level of the employees in HBL retail banking. We have picked 7 demographic like age, gender,

job status (grades), working tenure, marital status & education. The idea is to identify the employee satisfaction level with different variables which indicates that there is a strong positive relation between employee satisfaction and organization. This research analysis may yield increased employee retention. Employee satisfaction is important as committed and engaged employees create satisfied customers.

### **Employee Satisfaction:**

Employee satisfaction is the terminology used to describe whether employees are happy and contented and fulfilling their desires and needs at work or not. Employee satisfaction is a factor in employee motivation, employee goal achievement and positive employee morale in the workplace.

**Problem Statement:** Employee satisfaction

### **Objectives:**

- To study the satisfaction.
- To study the employee morale.

### **Variables:**

- Organization culture.
- Salary / compensation / perks / benefits.
- Working Conditions.
- Feeling safe in the work environment.
- Decision Making
- Growth opportunities/Opportunities to use skills and abilities.
- Annual growth according to work load.
- Recognition.
- Job specific training.
- Relationship with Boss & co-worker.
- Balance between responsibility and power.

### **Hypothesis:**

- $H_0$ : Employees are satisfied in retail bank.
- $H_1$ : Employees are not satisfied in retail bank.
- $H_0$ : Age, Gender, Marital Status, Education, Job Status, Salary and working Tenure are affecting satisfaction level.
- $H_2$ : : Age, Gender, Marital Status, Education, Job Status, Salary and working Tenure are not affecting satisfaction level.

### **Methodology:**

With the help of two stages sampling a universal set of 14 areas and 94 retail branches of HBL(Habib Bank Limited) in Lahore, a sample of 3 areas and 6 branches (2 branches from each area) were randomly selected. Sampling unit include area and retail

branches of HBL. Almost sample size of 18 employees from each branch was randomly selected. Sampling elements include all officers to Senior Manager (S.V.P).

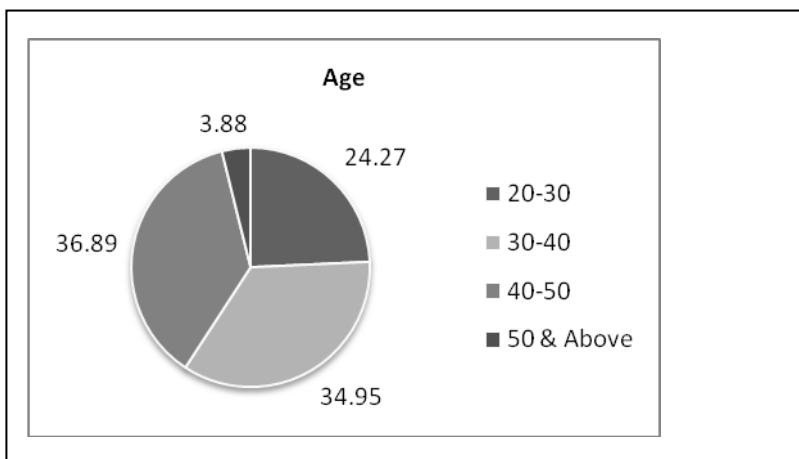
**Personal Information**

1	Age	20 – 30	30 – 40	40 – 50	50 & Above		
2	Gender	Male			Female		
3	Marital Status	Single	Married	Other (Specify)_____			
4	Education	Bachelors	Masters	PhD	Other _____		
5	Job Status	Grade I	Grade II	Grade III	Other _____		
6	Salary	Up to 15k	16k – 25 k	26 k – 45 k	46 k – 65 k	66 k – 85 k	86 k & above
7	Working Tenure	Less than 1 year		1 – 5 years	5 – 10 years		10 years & above

**Frequencies:**

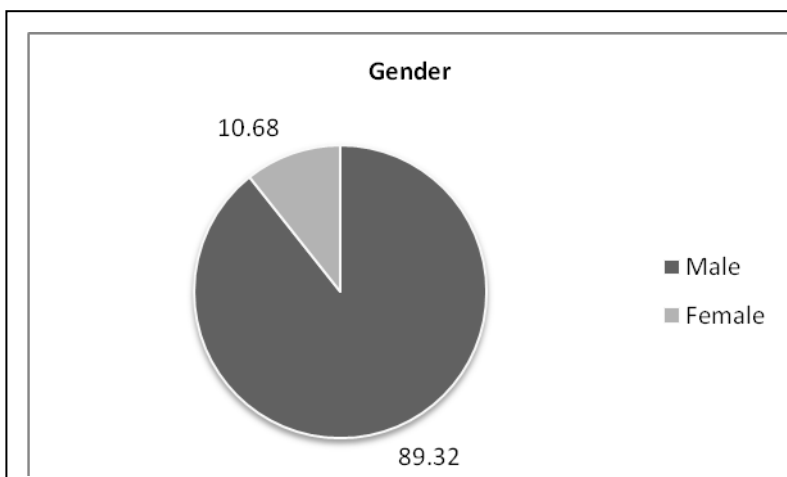
**AGE:**

Age	Frequency	Percent
20-30	25	24.27
30-40	36	34.95
40-50	38	36.89
50 & Above	4	3.88
Total	103	100



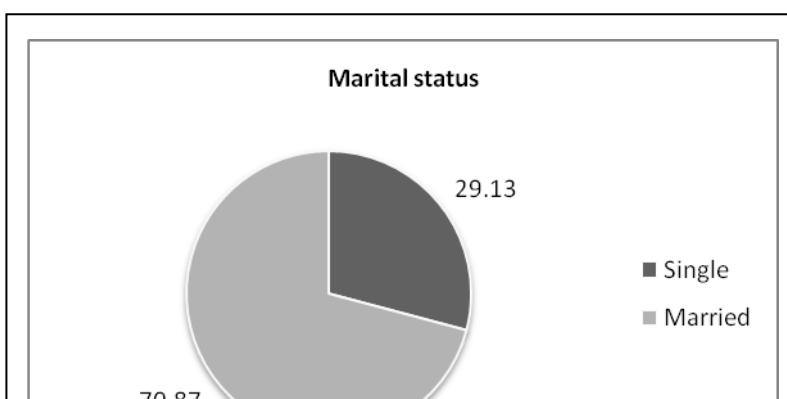
**GENDER:**

Gender	Frequency	Percent
Male	92	89.32
Female	11	10.68
Total	103	100



**MARITAL STATUS:**

Marital status	Frequency	Percent
Single	29	29.13
Married	74	70.87

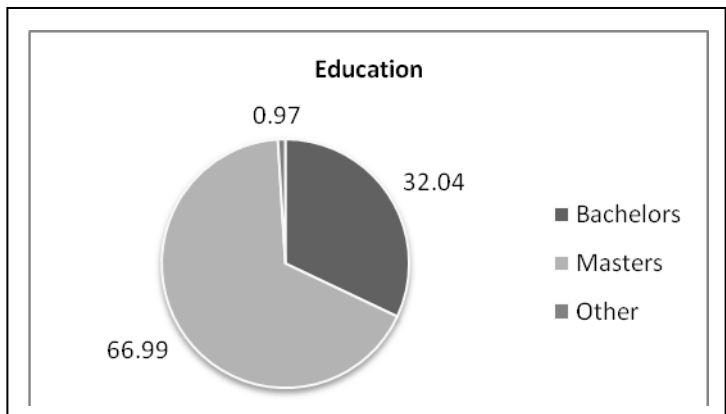




Single	30	29.13
Married	73	70.87
Total	103	100

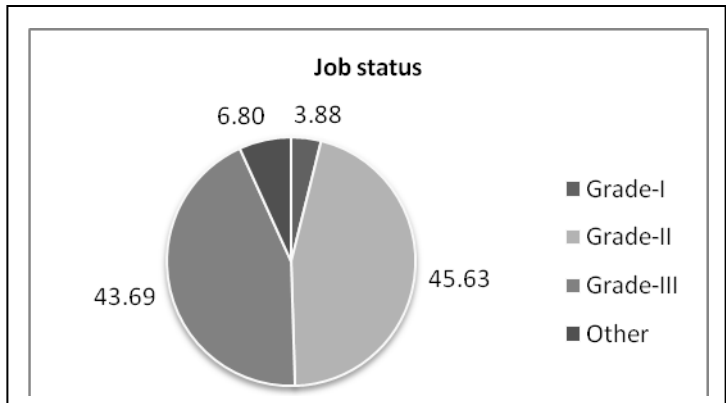
**EDUCATION:**

Education	Frequency	Percent
Bachelors	33	32.04
Masters	69	66.99
Other	1	0.97
Total	103	100



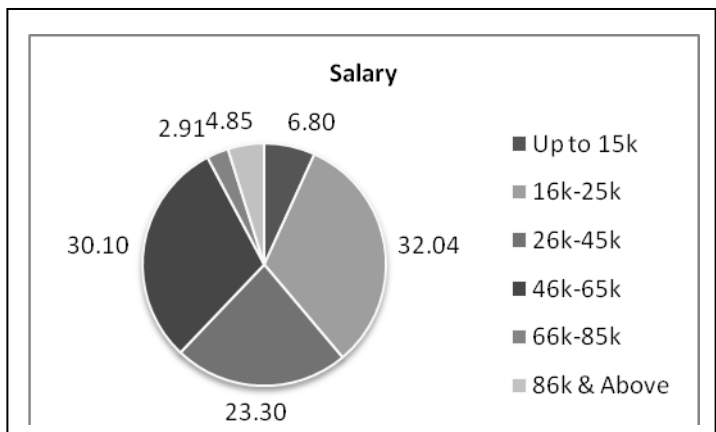
**Job Status:**

Job Status	Frequency	Percent
Grade-I	4	3.88
Grade-II	47	45.63
Grade-III	45	43.69
Other	7	6.80
Total	103	100



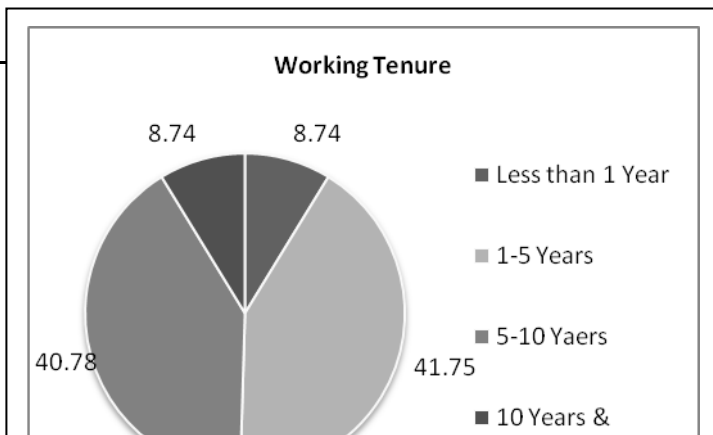
**SALARY:**

Salary	Frequency	Percent
Up to 15k	7	6.80
16k-25k	33	32.04
26k-45k	24	23.30
46k-65k	31	30.10
66k-85k	3	2.91
86k & Above	5	4.85
Total	103	100



**WORKING TENURE:**

Working Tenure	Frequency	Percent
Less than	9	8.74

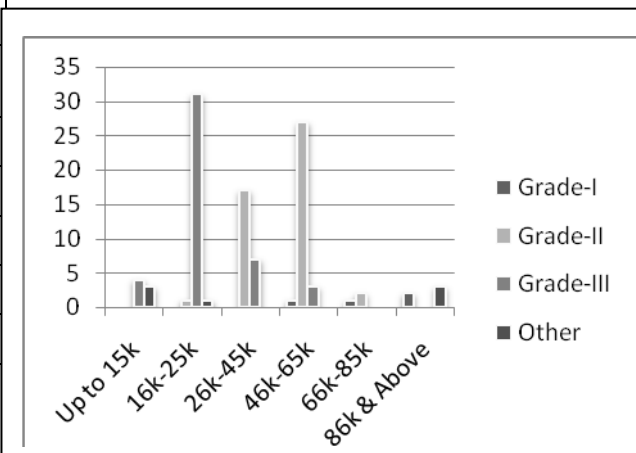


1 Year		
1-5 Years	43	41.75
5-10 Years	42	40.78
10 Years & Above	9	8.74
Total	103	100

**Cross Tab:**

**Salary \* Job Status Cross tabulation**

Salary	Job Status				Total
	Grade-I	Grade-II	Grade-III	Other	
Up to 15k	0	0	4	3	7
16k-25k	0	1	31	1	33
26k-45k	0	17	7	0	24
46k-65k	1	27	3	0	31
66k-85k	1	2	0	0	3
86k & Above	2	0	0	3	5
<b>Total</b>	4	47	45	7	103



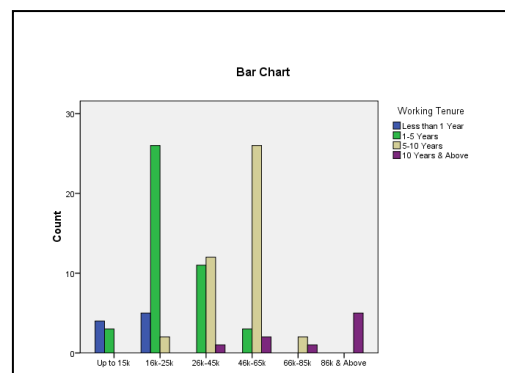
**Salary \* Gender Cross tabulation**

Salary	Gender		Total
	Male	Female	
Up to 15k	6	1	7
16k-25k	29	4	33
26k-45k	21	3	24
46k-65k	29	2	31
66k-85k	3	0	3
86k & Above	4	1	5
<b>Total</b>	92	11	103



**Salary \* Working Tenure Cross tabulation**

Salary	Working Tenure				Total
	Less than 1 Year	1-5 Years	5-10 Years	10 Years & Above	
Up to 15k	3	4	0	0	7
16k-25k	1	31	1	0	33
26k-45k	0	17	7	0	24
46k-65k	1	27	3	0	31
66k-85k	1	2	0	0	3
86k & Above	2	0	0	3	5



Up to 15k	4	3	0	0	7
16k-25k	5	26	2	0	33
26k-45k	0	11	12	1	24
46k-65k	0	3	26	2	31
66k-85k	0	0	2	1	3
86k & Above	0	0	0	5	5
<b>Total</b>	9	43	42	9	103

**Salary \* Age Cross tabulation**

Salary	Age				Total
	20-30	30-40	40-50	50 & Above	
Up to 15k	7	0	0	0	7
16k-25k	13	17	3	0	33
26k-45k	4	12	8	0	24
46k-65k	1	7	22	1	31
66k-85k	0	0	2	1	3
86k & Above	0	0	3	2	5
<b>Total</b>	25	36	38	4	103

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**Salary \* Education Cross tabulation**

Salary	Education		
	Bachelors	Masters	Other
Up to 15k	5	2	0
16k-25k	17	15	1
26k-45k	6	18	0
46k-65k	4	27	0
66k-85k	0	3	0
86k & Above	1	4	0
<b>Total</b>	33	69	1

**Salary \* Martial Status Cross tabulation**

Salary	Marital Status		Total
	Single	Married	
Up to 15k	7	0	7
16k-25k	16	17	33
26k-45k	6	18	24

46k-65k	1	30	31
66k-85k	0	3	3
86k & Above	0	5	5
<b>Total</b>	30	73	103

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**Gender \* Job Status Cross tabulation**

Gender	Job Status				Total
	Grade-I	Grade-II	Grade-III	Other	
Male	3	43	42	4	92
Female	1	4	3	3	11
<b>Total</b>	4	47	45	7	103

**Gender \* Education Cross tabulation**

Gender	Education			Total
	Bachelors	Masters	Other	
Male	30	61	1	92
Female	3	8	0	11
<b>Total</b>	33	69	1	103

**Job Status \* Education Cross tabulation**

Job Status	Education			Total
	Bachelors	Masters	Other	
Grade-I	2	2	0	4
Grade-II	7	40	0	47
Grade-III	22	22	1	45
Other	2	5	0	7
<b>Total</b>	33	69	1	103

—  
**Working Tenure \* Age Cross tabulation**

Working Tenure	Age				Total
	20-30	30-40	40-50	50 & Above	
Less than 1 Year	5	4	0	0	9
1-5 Years	18	18	7	0	43
5-10 Years	2	14	24	2	42
10 Years & Above	0	0	7	2	9

<b>Total</b>	25	36	38	4	103
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**Mean:**

**Over all mean & standard deviation:**

Descriptive Statistics				
	N	Sum	Mean	Std. Deviation
Overall	103	399.4135	3.877801	0.389933
Valid N (list wise)	103			

**Variables mean & standard deviation:**

Descriptive Statistics				
Variables	N	Sum	Mean	Std. Deviation
Balance between Responsibility & Power	103	419	4.06	0.57
Recognition	103	415	4.03	0.72
Boss/Coworker Relation	103	411	3.99	0.56
Growth Opportunities	103	403	3.91	0.46
Organization Culture	103	402	3.90	0.44
Feeling Safe	103	399	3.88	0.59
Salary Benefits	103	399	3.87	0.67
Working Conditions	103	398	3.87	0.65
Job Security	103	397	3.85	0.68
Annual Growth	103	395	3.83	0.76
Job Specific Training	103	341	3.31	0.50
Valid N	103			

**MEAN**

**STANDARD  
DEVIA  
TION**

**Analysis of Mean and Standard Deviation:**

According to research variable which effect employee satisfaction most is **Balance between Responsibility & Power** and **Job Specific Training** remain least with mean 4.06 & 3.31 and standard deviation 0.565833 & 0.504501 respectively.

**ANOVA**

**Overall BY Age:**

**ANOVA**

Over All					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	4.285	3	1.428	12.597	.000
Within Groups	11.224	99	.113		
Total	15.509	102			

**Overall BY Gender:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	.057	1	.057	.375	.542
Within Groups	15.452	101	.153		
Total	15.509	102			

**Overall BY Marital Status:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.604	1	1.604	11.648	.001
Within Groups	13.905	101	.138		
Total	15.509	102			

**Overall BY Education:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.075	2	.538	3.726	.028
Within Groups	14.433	100	.144		
Total	15.509	102			

**Overall BY Job Status:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	2.798	3	.933	7.265	.000
Within Groups	12.711	99	.128		
Total	15.509	102			

**Overall BY Salary:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	5.405	5	1.081	10.379	.000
Within Groups	10.103	97	.104		
Total	15.509	102			

**Overall BY Working Tenure:**

**ANOVA**

Overall					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	2.213	3	.738	5.492	.002
Within Groups	13.296	99	.134		
Total	15.509	102			

**Overall analysis:**

Overall significance level with comparison of different demographics were **Age**= .000. **Gender**=.542 **Marital Status**=.001, **Education**=.028, **Job Status**=.000, **Salary**=.000, **Working Tenure**=.002. So Gender was above significance level whereas age, job status, salary remains same and least effective.

**Variables with highest and lowest means were compared with demographics by using ANOVA and following results were calculated:**

**Balance between Responsibility and Power:**

**Balance between Responsibility and Power BY Age**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	10.248	3	3.416	7.487	.000
Within Groups	45.165	99	.456		
Total	55.413	102			

**Balance between Responsibility and Power BY Gender**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.778	1	1.778	3.348	.070
Within Groups	53.635	101	.531		
Total	55.413	102			

**Balance between Responsibility and Power BY Marital Status**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	2.222	1	2.222	4.220	.043
Within Groups	53.190	101	.527		
Total	55.413	102			

**Balance between Responsibility and Power BY Education**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
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Between Groups	.175	2	.087	.158	.854
Within Groups	55.238	100	.552		
Total	55.413	102			

**Balance between Responsibility and Power BY Job Status**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	4.593	3	1.531	2.983	.035
Within Groups	50.819	99	.513		
Total	55.413	102			

**Balance between Responsibility and Power BY Salary**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	8.361	5	1.672	3.447	.007
Within Groups	47.052	97	.485		
Total	55.413	102			

**Balance between Responsibility and Power BY Working Tenure**

**ANOVA**

Balance Between Responsibility And Power

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	3.233	3	1.078	2.045	.113
Within Groups	52.179	99	.527		
Total	55.413	102			

**Analysis:**

Balance between Responsibility and power have **Age**=.000, **Gender**=.070, **Marital status**=.043 **Education**=.854 **Job Status**=.035 **Salary**=.007 **Working Tenure**=.113 significance level which shows that age, salary, job status and marital status have little effect on Balance between responsibility and power where as gender, education and working tenure which are

**Training:**

**Training BY Age**

**ANOVA**

Training					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.970	3	.657	2.709	.049
Within Groups	23.992	99	.242		
Total	25.961	102			

**Training BY Gender**

**ANOVA**

Training					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	.499	1	.499	1.978	.163
Within Groups	25.462	101	.252		
Total	25.961	102			

**Training BY Marital Status**

**ANOVA**

Training

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.555	1	1.555	6.437	.013
Within Groups	24.406	101	.242		
Total	25.961	102			

**Training BY Education**

**ANOVA**

Training					
	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	.195	2	.098	.379	.686
Within Groups	25.766	100	.258		
Total	25.961	102			

**Training BY Job Status**

**ANOVA**

Training					

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	2.110	3	.703	2.919	.038
Within Groups	23.851	99	.241		
Total	25.961	102			

**Training BY Salary**

**ANOVA**

Training	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	1.798	5	.360	1.444	.216
Within Groups	24.163	97	.249		
Total	25.961	102			

**Training BY Working Tenure:**

**ANOVA**

Training	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	3.309	3	1.103	4.821	.004
Within Groups	22.652	99	.229		
Total	25.961	102			

**Analysis:**

Training have **Age**=.049, **Gender**=.163, **Marital status**=.013 **Education**=.686, **Job Status**=.038 **Salary**=.216 **Working Tenure**=.004 significance level which shows that working tenure, marital status, job status and age have little effect on training where as gender, salary and education which are satisfying this variable most.

**Organizational culture Salary Benefits Working Condition Feeling safe Decision Making Growth Opportunities Annual Growth Recognition Training Working Hours Boss and Coworker Relation Balance between Responsibility and Power BY Age**

**ANOVA**

	Sum of Squares	d.f	Mean Square	F	Sig.	
Organizational culture	Between Groups	1.801	3	.600	3.296	.024
	Within Groups	18.029	99	.182		

	Total	19.830	102			
Salary Benefits	Between Groups	9.550	3	3.183	8.595	.000
	Within Groups	36.668	99	.370		
	Total	46.218	102			
Working Condition	Between Groups	8.955	3	2.985	8.741	.000
	Within Groups	33.808	99	.341		
	Total	42.763	102			
Feeling safe	Between Groups	5.774	3	1.925	6.304	.001
	Within Groups	30.224	99	.305		
	Total	35.998	102			
Decision Making	Between Groups	3.627	3	1.209	2.765	.046
	Within Groups	43.290	99	.437		
	Total	46.917	102			
Growth Opportunities	Between Groups	2.044	3	.681	3.420	.020
	Within Groups	19.719	99	.199		
	Total	21.763	102			
Annual Growth	Between Groups	6.389	3	2.130	4.070	.009
	Within Groups	51.805	99	.523		
	Total	58.194	102			
Recognition	Between Groups	4.262	3	1.421	2.891	.039
	Within Groups	48.651	99	.491		
	Total	52.913	102			
Training	Between Groups	1.970	3	.657	2.709	.049
	Within Groups	23.992	99	.242		
	Total	25.961	102			
Working Hours	Between Groups	3.607	3	1.202	4.177	.008
	Within Groups	28.495	99	.288		
	Total	32.101	102			
Boss And Coworker Relation	Between Groups	2.843	3	.948	3.147	.028
	Within Groups	29.814	99	.301		
	Total	32.657	102			
Balance Between	Between Groups	10.248	3	3.416	7.487	.000

Responsibility And Power	Within Groups	45.165	99	.456		
	Total	55.413	102			

**ONEWAY Organizational culture Salary Benefits Working Condition Feeling safe Decision Making Growth Opportunities Annual Growth Recognition Training Working Hours Boss and Coworker Relation Balance between Responsibility and Power BY Gender**

**ANOVA**

		Sum of Squares	d.f	Mean Square	F	Sig.
Organizational culture	Between Groups	.001	1	.001	.004	.949
	Within Groups	19.829	101	.196		
	Total	19.830	102			
Salary Benefits	Between Groups	.591	1	.591	1.308	.255
	Within Groups	45.628	101	.452		
	Total	46.218	102			
Working Condition	Between Groups	.590	1	.590	1.413	.237
	Within Groups	42.173	101	.418		
	Total	42.763	102			
Feeling safe	Between Groups	.000	1	.000	.000	.992
	Within Groups	35.998	101	.356		
	Total	35.998	102			
Decision-making	Between Groups	.718	1	.718	1.569	.213
	Within Groups	46.200	101	.457		
	Total	46.917	102			
Growth Opportunities	Between Groups	.185	1	.185	.866	.354
	Within Groups	21.578	101	.214		
	Total	21.763	102			
Annual Growth	Between Groups	.003	1	.003	.006	.938
	Within Groups	58.191	101	.576		
	Total	58.194	102			
Recognition	Between Groups	.177	1	.177	.340	.561
	Within Groups	52.735	101	.522		
	Total	52.913	102			

Training	Between Groups	.499	1	.499	1.978	.163
	Within Groups	25.462	101	.252		
	Total	25.961	102			
Working Hours	Between Groups	.001	1	.001	.004	.952
	Within Groups	32.100	101	.318		
	Total	32.101	102			
Boss and Coworker Relation	Between Groups	2.439	1	2.439	8.152	.005
	Within Groups	30.218	101	.299		
	Total	32.657	102			
Balance between Responsibility and Power	Between Groups	1.778	1	1.778	3.348	.070
	Within Groups	53.635	101	.531		
	Total	55.413	102			

**ONEWAY Organizational culture Salary Benefits Working Conditions Feeling safe Decision-making Growth Opportunities Annual Growth Recognition Training Working Hours Boss and Coworker Relation Balance between Responsibility and Power BY Job Status**

## ANOVA

		Sum of Squares	d.f	Mean Square	F	Sig.
Organizational culture	Between Groups	1.036	3	.345	1.819	.149
	Within Groups	18.794	99	.190		
	Total	19.830	102			
Salary Benefits	Between Groups	12.606	3	4.202	12.377	.000
	Within Groups	33.612	99	.340		
	Total	46.218	102			
Working Condition	Between Groups	6.595	3	2.198	6.017	.001
	Within Groups	36.168	99	.365		
	Total	42.763	102			
Feeling safe	Between Groups	2.606	3	.869	2.576	.058
	Within Groups	33.391	99	.337		
	Total	35.998	102			
Decision-making	Between Groups	3.237	3	1.079	2.445	.068
	Within Groups	43.681	99	.441		

	Total	46.917	102			
Growth Opportunities	Between Groups	1.104	3	.368	1.764	.159
	Within Groups	20.659	99	.209		
	Total	21.763	102			
Annual Growth	Between Groups	5.297	3	1.766	3.305	.023
	Within Groups	52.897	99	.534		
	Total	58.194	102			
Recognition	Between Groups	5.481	3	1.827	3.813	.012
	Within Groups	47.432	99	.479		
	Total	52.913	102			
Training	Between Groups	2.110	3	.703	2.919	.038
	Within Groups	23.851	99	.241		
	Total	25.961	102			
Working Hours	Between Groups	5.514	3	1.838	6.844	.000
	Within Groups	26.587	99	.269		
	Total	32.101	102			
Boss And Coworker Relation	Between Groups	4.258	3	1.419	4.947	.003
	Within Groups	28.400	99	.287		
	Total	32.657	102			
Balance Between Responsibility And Power	Between Groups	4.593	3	1.531	2.983	.035
	Within Groups	50.819	99	.513		
	Total	55.413	102			

### **Conclusion:**

After the whole analysis study shows that overall employees of HBL in Retail banking are satisfied from their job. However the variable which is affecting satisfaction level and which need improvement is “Balance between Responsibility and Power” and the variable from which employees are most satisfied is “Job Specific Training”.

After controlling possible confounding variables, our analysis shows that the level of an employee's job satisfaction is related to the gender composition of the employee's work group, and that the relationship of these variables does not differ between male and female employees. Both men and women working in gender-balanced groups have higher levels of job satisfaction than those who work in homogeneous groups.

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## The Issue of Agricultural Extension Contact in Bangladesh

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Abu Zafar Mahmudul Haq, PhD  
Assistant Professor and Head,  
Department of Business Administration,  
City University, Banani, Dhaka 1213, Bangladesh

### Abstract

It is clarified from this study that extension services have significant contribution for farmers to raise agricultural income. It is observed that for a successful introduction of agricultural extension contacts in the country socio economic factors such as farmers' education, age, number of adult family members, ratio of agricultural income to total income should be taken into consideration.

Keywords: Agricultural income, Bangladesh, extension contact, farmers, regression.

### 1.Introduction

In order to raise farmer's income in developing countries, governments and international organizations have been aggressively promoting agricultural extension services in those countries. According to a review of tens of researches by Birkhaeuser and Evenson (1991), on the whole the extension services have contributed to some extent to raising the amount of information and technology and thus the farmer's productivity levels.

However, researches on Bangladesh, one of the poorest countries in Asia, are few. In the late 70s, an extension system involving 12000 workers was initiated under the denomination of "Training and Visit System", hereinafter referred to as T & V system, (Hasanullah 1994, Ilah et al.1996). Yet, whether or not that program actually contributed to raising farmer's income, and, if yes, whether the benefits of the system were homogeneously distributed among the farmers have not been clarified enough. It is noted that agricultural extension services do not work satisfactorily and many farmers hardly ever received agricultural extension services (Rayners and Bruening 1996, Porimol *et al.* 2008, Daily Star 2008, Rafiq 2009, Haq 2011). This means that agricultural extension services in Bangladesh still fail to reach its ultimate goal, which is to increase the farmers' socio-economic betterment. Investigating those issues toward developing further extension services that are more efficient is of prime importance.

The current research, based on case studies on rice farming in the central area of Bangladesh, has two major objectives: (1) to assess the actual benefits of agricultural extension services on productivity through an agricultural production function, and (2) if there are benefits for farmers, to determine the type of farmers who benefitted from the services.

The paper is structured as follows: Section 2 clarifies the method of analysis adopted, building on previous researches, and explains the data collection process. Section 3 examines the results of the agricultural function and the contact frequency function. Finally, Section 4 presents the conclusions of the research.

### 2.Method of analysis and data collection

Many of the previous researches used the productivity index, representing the amount of production per unit of farmland, that is, the value added of the production, which is found by deducting production costs

from gross income. By using that index, it is possible to convert the specific quantities of products into given amounts of money to be added up; therefore this represents a considerable analytical benefit. In the current research as well, the same index has been used. As to the survey area, because of livestock farming and fisheries represent a remarkably small portion of the total amount of production, this research based on the production index on crop production, namely grains, fruits and vegetables. Concerning the portion of home consumption, the amount was determined by applying the farm price to the actual quantities consumed.

As is commonly used in analyzing production functions, chemical fertilizers, farm buildings, irrigation facilities and family and hired labour should be considered as important investment functions (Evenson and Mwabu 2001, Moock 1976, Owens et al.2003). In this research, the analysis was based on the converted amounts of each type of investment. As regard family labour costs, the estimation was based on the charges applied to hired labour.

The accumulated experience of the farmer, which is an important variable, is commonly determined either from the years of farming or the age of the farmer. According to several researches, such as Evenson and Mwabu (2001) and Jolliffe(1998), there is a positive relationship between productivity, income, and the amount of technical information possessed by the farmer.

Furthermore, considering the relationship between farm size and productivity, another variable explaining the farm size was added. According to Evenson and Mwabu (2001), large farms have higher productivity, but other studies (Moock 1976, Owens 2003) did not find a clear positive relationship between the two, or, even, presumed a negative relationship. Considering the above, it can say that there is no common agreement on the relation between area and productivity.

Finally, in the objective of this research, the most important variable is that of the activities of the agricultural extension services. In the Bangladesh T & V system, farmlands are divided into blocks and the T& V workers target the representative farmers of the different blocks, who are referred to as “contact farmers”. Although the T &V workers can directly get in touch with ordinary farmers, they mainly train the contact farmers, who, afterward transmit the training results to the other farmers, in a progressive system. Considering this situation in Bangladesh, the current research used the frequency of contacts between ordinary farmers and T& V workers or contact farmers (the combination of T&V workers and contact farmers is hereinafter referred to as “extension agents”).

As done in previous studies(Owens et al. 2003), the survey population was first divided into three categories, those who had no contacts(0 contact), those who had one or two contacts (1-2 times) and those who have three or more contacts (3+). Then a dummy variable was used for the estimation.

Except for the variable of the contact frequency, all the variables were evaluated with a logarithmic converter to avoid disparities of the figures.

Following the above reasoning, productivity, expressed in terms of amount of money, is as follows,

$$\ln CRIN=f(\ln CHEM,\ln IRRI,\ln LABR,\ln EXPE,\ln AREA,EXT1,EXT2\dots)(1)$$

CRIN: Monetary value of the production per ha (taka/ha).

CHEM: Costs of chemical fertilizers used per ha (taka/ha).

IRRI: Irrigation expenditures per ha (taka/ha).

LABR: Labour cost per ha (taka/ha).

EXPE: Experience of the head of the farm household (years).

AREA: Farm area (ha).

EXT1: Contact dummy (for 1-2 contacts per year=1; for others =0).

EXT2: Contact dummy (for 3+ contacts per year=1; for others =0).

The estimations were made according the most standard OLS method.

Next, let us explain the method of analyzing the contact frequency between the farm households and extension agents. In this paper, the number of contacts was considered as a subordinate variable and then the formula below was used to identify the contact frequency function.

$NOEX=f(AGE,EDUC,RATE,NJOB).....(2)$

NOEX: Number of contacts per year.

AGE: Age of the head of the farm household.

EDUC: Years of schooling of the head of the farm household.

RATE: Share of agricultural income in total farm household income.

NJOB: Number of adult family members.

The farming income is determined by using the total monetary value of crop production from which the investment costs, labour cost, irrigation costs, land rents and the likes have been deducted. As for the total farm income, it was calculated by adding non farm income, such as income from office work, teaching and other part time works, to farm income. The share of agricultural income (RATE) represented 66.2 percent of the total.

Now, let us briefly discuss the marks of each variable. Regarding farmer's education, it is presumed that the lower the level of education is, the higher the tendency to avoid the risks involved in adopting new technologies is; inversely, the higher the level of education is, the higher the interest or acceptance of new technology is. According to a research conducted in India by Feder and Slade (1986), however, the higher the level of education is the more the use of extension services is.

Next, in large farms, the costs of acquiring technical information, estimated per unit of area, decreases, according to Feder and Slade (1984). Based on these results, it is possible to presume that the higher the share of farm income in total income is, the more willingness there is for the farmers to use the extension services to increase their agricultural income. Furthermore, the larger the number of adult family members is, the easier the contact with the extension agents is likely to be, since the family would more easily adjust to the necessary contacts with extension agents. Finally, the older the head of the household is, the higher the tendency to avoid the risk involved in acquiring new technologies is.

Considering the above reasoning, it can be inferred that the education level of the head of the household, the share of agricultural income in total income and the number of adult family members have positive correlation, while the head of the household's age has a negative general effect.

Furthermore, considering the nature of the data, which is of a spread type, instead of the ordinary Least Squares (OLS), the QML-Poisson Count (Quadratic hill climbing), was adopted.

### **Data collection**

In order to apply the above mentioned formula, a field survey was conducted in the Gazipur district,

located at 30 kilometers in the North-East of Dhaka, the capital city of Bangladesh, between August and September 2001. This area is an average farming village in the central and northern areas of the country regarding productivity, farm size and production conditions. In this paper, two areas of Gazipur (Sadar and Sreepur subdistricts) out of five sub districts were surveyed. A total of fifty farms were investigated through pre structured questionnaires.

Following is a brief explanation of the survey families. The average age is 43.1 years, the number of years of schooling 5.5 years, the farm area 1.4 ha, the family size 7.2 and the adult family members 2.2. As for the contact frequency with extension agents, the average is 0.8 time per year and only 18 families were contacted out of the surveyed families (36 percent). The contacts were particularly low with families whose heads have low education levels; families that had no contact at all formed the majority, as can be seen in Table 1. It can be inferred therefore that the lower the education level is, the less contact with extension agents there is.

Table 1: Education Level and Extension Contacts (persons)

	Education Levels	Extension Contacts	No Contacts
Total			
	High school and over	3	
4			7
	Junior High School	7	
9			16
	Primary	7	
11			18
	Illiterate	1	
8			9
	Total		18
32			50

Source: Field survey 2001; Haq 2004.

### 3. Results and Discussions

#### 1) Gross Agricultural Income

Let us start discussing the results with formula (1), shown in Table 2. The trend of each variable matches the result of previous researches, as for five out of the seven variables there is a significant difference at the 10 percent degree of probability. In addition, there are no apparent errors or irregularity problems.

Table 2

Variables	Coefficients	T-values	
LnCHEM	0.329	2.591	**
LnIRRI	0.164	2.329	**
Ln LABR	0.339	1.406	
Ln EXPE	0.259	2.343	**
Ln AREA	0.337	1.136	

EXT1	0.234	1.796	*
EXT2	0.353	2.069	**
Intercept	0.034	0.019	
Adj.R-square		0.413	
Sample		50	

\*&\*\* indicate 10% and 5% level of significance

The examination of the estimation results suggests the following points:

First, the coefficient for chemical fertilizer (CHEM) and irrigation expenditures (IRRI) per unit of farmland is positive at the 5 percent degree of probability. The coefficient for labour costs is not positive, although it does not show a significant statistical difference. Thus, it can infer that it is possible to realize high agricultural income per unit of land using a labour-capital-intensive management system.

Second, the coefficient for the experience of the head of the household is significant at the 5 percent degree of probability (0.259). Therefore, the accumulation of farm experience has a great contribution in improving land productivity.

Third, the coefficient for cultivated area (AREA) is 0.337, which is positive but not significant even at the 20 percent degree of probability. Therefore, it can be inferred that no strong relationship between management area and productivity per unit of farmland was found.

Finally, the coefficient for the dummy variable for contacts between the extension agents and the survey farms EXT1(1-2 contacts per year) and EXT2 (3 contacts or more per year) is significant at both 10 and 5 percent degrees of probability. The coefficient for EXT2 is particularly great (0.353), compared to EXT1 (0.234). Accordingly, it is possible to ascertain that the contacts with extension agents contributed to improve agricultural production per unit of farmland.

According to Owens et al. (2003), whose research was based on Zimbabwe, a frequency of 1 and 2 operations per year between extension agents and farmers generates a high contribution to productivity. However, a frequency of more than 3 times per year showed no clear effects. Compared with the results of Owens et al. (2003) in Zimbabwe, the results of the current study suggest that in Bangladesh the contacts between extension agents and survey farmers seem more effective. This is apparently because the farmers who have more than three contacts could get case-by-case, suitable guidance concerning the application of fertilizers or prevention of insects and diseases.

**Frequency of the Contacts with Extension Agents**

What kind of factors determines the frequency of contact between farmers and the extension agents? Clarifying this point is extremely important to promote more effective agricultural extension activity. The estimation results of the contact frequency function, based on formula (2), are presented in Table 3. The coefficient of the linear recurrence model being 0.632, the results can be considered highly appreciable.

Table 3

Variables	Coefficients	T-values
AGE	-0.083	-2.055

\*\*

	EDUC	0.140	1.939
*			
	RATE	4.582	2.463
**			
	NJOB	0.403	2.403
**			
	Intercept	-1.841	-1.435
	Pseudo R-square	0.632	
	Sample	50	

\*&\*\* indicate 10% and 5% level of significance.

As appear in Table 3, the survey farms that fulfilled the following conditions have had frequent contacts with the extension agents.

- (1) The coefficient for the age of the head of the farm household’s variable is significant at the 5 percent degree of probability (-0.083). This suggests that the younger the farmers are, the keener they are in acquiring new technologies and thus in contacting extension agents.
- (2) The coefficient for schooling (EDUC) is 0.140, which shows positive effects at the 10 percent degree of probability and suggests that the heads of households with high education levels are more likely to get high frequency with the extension agents. The reason is that apparently they have more interest in agricultural technologies and effectively adjust to changes in their environment. According to Huffman (1974), extension activities help farmers who did not acquire enough school education to improve their ability to adjust. However, the results of the current research clearly show that farmers with low education levels do not benefit from extension services. Therefore, the difference in the education background of the farmers influences the effects of extension services, and thus magnify the economic gap between farmers, in a vicious circle.
- (3) The coefficient for the share of agricultural income in total farm income (RATE) is 4.682 and is significant at the 5 percent level of probability. In other words, it can be said that farm households with dependency on agricultural income have increasing dependency on contacts with extension agents. The reason is that those households, hoping to increase their gross income, are likely to multiply their contacts with agricultural extension agents.
- (4) The coefficient for the number of adult members in the farm household (NJOB) is significant at the 5 percent level of probability (0.403), suggesting frequent contacts with agricultural extension agents. Judging the estimations of such a contact frequency function, it can be pointed out that the

education level of the farmers and their age are important factors to the degree of dependency on agricultural income and the number of adult members in the farm household.

#### 4. Conclusions

This research was aimed at clarifying the effects of agricultural extension services on improving farmers' productivity, with the example of one village of Bangladesh., emphasizing the relevance of contact frequency between farmers and extension agents (workers of extension services and representative of farming blocks, who directly receive training from the extension workers and, sometimes along with them, train other farmers in turn). The results of the study can be summarized as follows:

First, from the estimated results of the production function, it was clarified that the more the frequency of contacts between extension agents and farmers, the higher the productivity is. This clarifies that the extension services have positive effects in improving farm income.

Second, by examining the factors determining the contacts between extension agents and farmers, a positive correlation was found with the education level, the share of the agricultural income in the total farmhouse income, and the number of adults in the farm household. On the other hand, the head of the farm household's age is inversely proportional to the frequency of contacts with the extension agents. From these facts, it was clarified that the agricultural extension services do not work well enough for elder farmers, especially those with low education levels.

Considering the overall estimations, it has been possible to ascertain that agricultural extension services positively contribute to increasing farmers' income to some extent, but there is a necessity to develop the system toward more efficiency for elder farmers with low education levels, which is an issue that is subject for further studies.

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# **Empirical analysis of entrepreneurial intentions.**

## **A case of Kabul based Business students, Afghanistan**

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**Kalimullah Khan**

[kaleembangash@gmail.com](mailto:kaleembangash@gmail.com)

0093-788-976-922

**Lecturer, Department of Business Administration  
Kardan Institute of Higher Education, Parwan 2 ,Kabul Afghanistan**

### **Abstract**

This study is designed to explore the Kabul based business students' views of entrepreneurial intentions. Quantitative research methodology was applied and close ended questionnaire method was used as an instrument. Subject selected for this study was 264 students of final semester of Business administration, computer science and economics at Kardan Institute of Higher Education, Kabul Afghanistan.. Present research study found that predicted variables, (professional attraction, entrepreneurial capabilities, self reliance, self independence & network support) shows the significant and influencing role in entrepreneurial intention of business students of Kabul Afghanistan and concludes that predicted variables explain 57% variance significantly in criterion variable. Findings of the study cannot be generalized, and should be related to business students' views of entrepreneurship; the large sample size will help more to draw the real picture of phenomena in Afghanistan.

**Keywords:** Entrepreneurship, entrepreneurial intentions, Students' views, Afghanistan

### **Introduction**

Individual decision to start their own business depends on two main categories of factors, external and internal factors .External factors like social, legal, political and economic factors, and internal factors are the individual personal traits and personality. Initiation of own business as a result of individual traits and

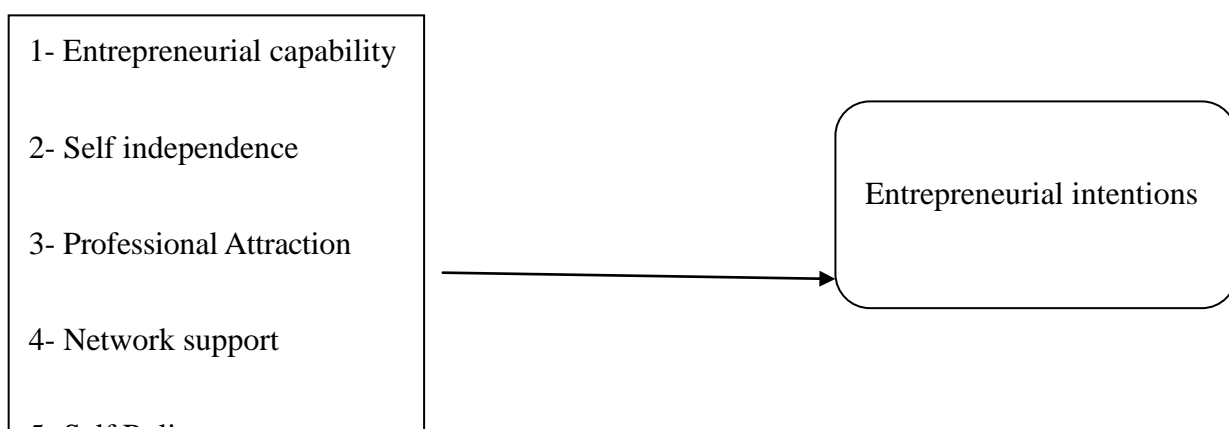
personality framework is commonly shared today (Baron, 2004). Several researchers have pointed out that the decision to become an entrepreneur is a complex one, and it is the result of complex mental processes (Shaver & Scott, 1991). According to (Bird, 1988, Boyd & Vozikis, 1994) factors in the external environments interact with individual attitudes to influence intentions. Both these external and internal factors play a key role in the decision making process of individuals to start their own business. According to Shane and Venkataraman (2000) to understand and summarize different approaches to entrepreneurship one has to look for an explanation of why, how, when or where individual or entrepreneurs realize the opportunities and make use of opportunities. In specific country, where external environment is conducive for economic and entrepreneurial activities may be easy for people to consider and take decision to start their own business and enjoy the economic benefits and support their families and economy but in an environment where legal factors, economic factors and infrastructure is totally damaged by war, law and order situation, lack of network support, lack of proper training and business institution for the enhancement of entrepreneurial capabilities, and terrorism which has direct impact on economic structure of the country, it becomes very difficult for individuals to take consideration of starting their own business. Afghanistan is one of among those countries who are facing ample problems of infrastructure, law and order situation, lack of education and legal factors which is affecting the economic and entrepreneurial activities, due to these influencing factors people from the country do not prefer investment to start their own businesses and develop companies to support themselves and economy of Afghanistan, even though the economy of Afghanistan has improved significantly since 2002 due to assistance and investments of international community and remittances from Afghan expatriates. However, Afghanistan is still one of the poorest and least developed countries in the world that is highly dependent on foreign aid. The nation's GDP is about \$27 billion. Despite of this growth still unemployment rate is estimated about 35 % and people live below the poverty line, people of Afghanistan are suffering from shortages of housing, clean drinking water, electricity and employment. The current government with the assistance of international donors has remained committed for the improvement of basic necessities of life and improving access to these basic necessities. To improve and

get access to basic necessities of life are not only challenges for government but also for public. One of the most effective alternates suggested by the economists is self employment. Self employment or entrepreneurship can add a great amount of output not only in Afghanistan but throughout the world. Keeping in view the importance of entrepreneurship as one of the solution for the economy of Afghanistan, present study has been designed to explore the Kabul based business students' views of entrepreneurial intentions.

### **Theoretical Framework**

Present research study used total six variables, one dependent or criterion variable and remaining five variables were used as an independent or predicted variables .Dependent variable used for this study was entrepreneurial intention of Afghan business students and entrepreneurial capability, self independence, professional attraction, network support and self reliance were used as predicted variables (independent variables).

#### **Schematic Diagram of theoretical framework**



On the basis of given literature following hypothesis are developed for this study

**H1:** Independent variables (Entrepreneurial capability, self independence, Professional attraction, network support, Self reliance) is not significantly related with dependent variable (entrepreneurial intentions of Afghan Business students)

**H2:** Predicted variables (Entrepreneurial capability, self independence, Professional attraction, network support, Self reliance) is not significantly explain variance in criterion variable (entrepreneurial intentions of Afghan Business students)

## **Literature Review**

Entrepreneurship is the function of many factors e.g. personality traits, education, experience, social and economic conditions, law and order and many other issues. Many researchers have reported various findings for the internal and external factors. Present paper is concerned with the entrepreneurial capabilities, network support, self reliance and self independent and demographical factors; the literature given below is about above mentioned variables. To know and identify who wants to be an entrepreneur, how a successful entrepreneur perform, and which factors affect the choice to build a business enterprise, has show the way to the researchers to conduct research in two important aspects of entrepreneurship research.

First, the researchers paying attention on linking personality traits or characteristics such as ‘self-efficacy’, self independence with entrepreneurial intentions (Ajzen, 2002; Wilson, Kickul, & Marlino, 2007).

Second, researcher investigated the demographic and background factors such as age, sex composition, work history, and dissatisfaction or disappointment from current job in activating entrepreneurial behavior (Linan et al., 2005; Wilson, Kickul &Marlino, 2007).

Bird (1998) posits the view that intention is the state of mind which is directing a person’s intentions and actions towards entrepreneurship or self-employment. According to Linan & Rodriguez (2004) Intention

is the efforts and hard work of an individual to act entrepreneurially.. Base and Virick (n.d.) reported that proper education can shape students' attitudes toward entrepreneurial activities as reported by Franke and Luthje (2004) lack of entrepreneurial education can influence the students' attitude towards entrepreneurship.

Aldrich and Cliff (2003) reported that family background and characteristics have great amount of impact on activation of entrepreneurial behavior among students, according to Carr & Sequeira (2007) that experience to family or ancestors business also serves as an important, motivational and influencing factor of entrepreneurial intentions of students.

Tian et al., (2009) submitted that individuals and groups associated through networking can easily get access to knowledge and information from the sources already existing and established, and can easily take actions to build up their capabilities and becomes hardliner regarding their future entrepreneurial prospects .Many students are studying business administration and entrepreneurship to invest their time and energies in modern business and ideas to achieve self independence. Audretsch and Thurik (2001) reported that financial and self independence is the main motivating forces that convince young students towards establishment of new business enterprises. Thus, to encourage students through providing entrepreneurial environment is a durable and long-lasting investment in the future economic independence and economic growth, and development for the general public as a whole. On the basis of above literature current study has been designed and following methodology has been used in this research study.

## ***Methodology***

### ***Sample and Instrumentation***

Quantitative research method was applied for current study. Close ended questionnaire method was used

as an instrument. Subject selected for this study was 264 students of final semester of Business administration, computer science and economics at Kardan Institute of Higher Education, Kabul Afghanistan and two other private institutes of Business Administration and computer science .Almost 180 questionnaires were filled by students from Kardan Institute who were in final semester of their degrees and the remaining questionnaires were distributed at other institutes of final semester students. Kardan Institute is the first, large and leading private institute in Kabul where approximately four thousand (4,000) students are registered in different disciplines. The reasons of distributing more questionnaires at Kardan Institute was the large size of the students and institute relatively other private institutes in Kabul.

The questionnaire consists of two sections. Section “A” consisting of questions pertaining to demographic characteristics’ of sample of the study such as age, gender, and education level. Nominal scale was used to measure the responses of these questions. Section “B” consists of questions regarding dependent variable and independent variables of the study .In this section five point Likert scale was used from five (5) to one (1), 5 shows strongly agree and 1 shows strongly disagree with items. Responses required from respondents was about new venture creation (five items), professional attraction (four items), networking support (three items),entrepreneurial capability (four items) developed by (Linan et al., 2008) ,Self-independence was measured by scale (Kolvereid, 1996), and self reliance was used developed by (Triandis et al., 1985). .All variables were entered in software, Statistical package for social sciences (Spss ,version 18), for analysis purpose , and Cronbach Alpha Reliability technique was applied in the same software to measure the reliability of the instrument. Overall reliability was 0.909 which shows the highest level of reliability as shown in the following **table1**.

**Table 1: Cronbach's Alpha Reliability of the overall items**

**Reliability Statistics**

Cronbach's Alpha	N of Items
.909	25

Cronbach’s Alpha reliability technique was also applied on all variables separately. Reliability of entrepreneurial intention was found .875, professional attraction, self independence and entrepreneurial capability were found .821, and network support, .724, and self reliance was .743. Descriptive statistics in form of frequency analysis and mean analysis was applied .Mean score was categorized in three levels for measurement as shown in **table 2**, Mean score with 3.80 & above was considered high level, Mean score between 3.2 & 3.79 was considered moderate level and mean score less than 3.1 was considered in low level. Pearson product movement correlation coefficient was applied to test the first hypothesis and multiple regression was applied to test the second hypothesis of the study and results are reported in following section.

**Table 2: Measurement of Mean Score**

Mean values	Categories
Less than 3.1	Low
3.2-3.79	Moderate
3.80 & Above	High

**Results**

The result shows the biographical characteristics of the students’. Total two hundred sixty four (264)

questionnaires were distributed among students, total male students were two hundred and thirty three and total female students were thirty one (31), male students from computer science were thirty one (31) and there was only (01) one female student from computer science ,male students from Business administration with specialization of management and finance were one hundred and twenty (120), and sixty eight (68) respectively, while female students from business administration with specialization of management and finance were twenty two and seven( 7) respectively and there were fourteen male students from economics and only one female student from economics .

Mean values of all the variables are reported in **table 3** which shows that entrepreneurial intention (mean score= 4.1136), self independence (mean score = 4. 2395), professional attraction (mean score = 4.1127) mean scores are in high level of mean categories as compared to entrepreneurial capabilities, network support and self reliance which shows moderate level of perception on interest of variables ,overall it shows that there is good and positive entrepreneurial intentions among Kabul based business students .

**Table 3 : Mean score of the variables**

	N	Mean
<b>Entrepreneurial capabilities</b>	264	3.732
<b>network support</b>	264	3.662
<b>Self independence</b>	264	4.2395
<b>Self reliance</b>	264	3.880
<b>Entrepreneurial intention of Afghan students</b>	264	4.1136
<b>Professional attraction</b>	264	4.1127
<b>Valid N (list wise)</b>	264	



Pearson product movement correlation coefficient was applied to test five hypothesis of the study as shown in **table 4**. Null Hypothesis , Entrepreneurial capability is not significantly related with entrepreneurial intentions of Afghan Business students, is not substantiated as result shows that entrepreneurial capability is significantly related with entrepreneurial intentions of Afghan Business students as can be seen in the **table 4** ( $r = .500$  &  $p < .01$ ) therefore, null hypothesis is rejected and alternative hypothesis is accepted , entrepreneurial capability is significantly related with entrepreneurial intentions of Afghan Business similarly second hypothesis that there is no significant relationship of self independence with Entrepreneurial intentions of Afghan business students is also rejected ( $r = .506$  &  $p < .01$ ) . Hypothesis number three, four and five are also rejected as shown in the following table that there is significant relationship between self reliance ( $r = .425$  &  $p < .01$ ), network support ( $r = .506$  &  $p < .01$ ) and professional attraction ( $r = .728$  &  $p < .01$ ) with entrepreneurial intentions of Afghan business students. Result of the study shows that hypotheses developed for this study were not substantiated but supported alternative hypothesis.

**Table 4 :Summary of results for the statistical analysis of correlation**

		professional attraction	Entrepreneurial capabilities	network support	Self independence	Self reliance
<b>Entrepreneurial Intention of Afghan Students</b>	Pearson Correlation	.728**	.500**	.398**	.506**	.425**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	264	264	264	264	264

\*\* Correlation is significant at the 0.01 level (2-tailed).

**H2:** Predicted variables (professional attraction, entrepreneurial capability, self independence, self reliance, and network support) are not significantly explain variance in criterion variable (entrepreneurial intentions of Kabul based business students)

**Regression model**

$$EI = \beta_0 + \beta_1 (PA) + \beta_2 (EC) + \beta_3 (NS) + \beta_4 (SI) + \beta_5 (SR)$$

**Where**

$B_0$  = A constant, the value of EI when all independent variables values are zero

EI = Entrepreneurial Intention

PA = Professional attraction, EC = Entrepreneurial capability, NS = Network support ,

SI = Self Independence, SR = Self Reliance

$$EI = 1.826 + .768 (PA) + .234(EC) + .209 (NS) + .078$$

Multiple regression was applied to test the **second** hypothesis of the study; results are reported in **table 5**. According to Sekeran (2002) one can interpret the result of multiple regression analysis if value of R-square, F-Value and significance value is known. Results reported in the **table 5** shows that Adjusted R- square = .579 (model summary), F= 70.992 and P < .05 (Anova) which means that predicted variables account 57% of the variance explained in criterion variable (entrepreneurial intention ) and the significance value (p < .05) shows that this variance is not by chance but explained significantly by predicted variables (independent variables ) . Result shows that 57% of the variance is significantly explain by this model and remaining 43 % variance explain by other independent variables not considered in present study. Therefore, Hypothesis that, predicted variables of study are not significantly explain variance in criterion variables is rejected and accept alternative hypothesis that is, professional attraction, entrepreneurial capability, network support, self independence, and self reliance explain 57% variance significantly in criterion variable as shown in the following **table 5**.

**Table 5. Multiple regression (Entrepreneurial intention of Afghan Business Students**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761	.579	.571	2.86143

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2906.331	5	581.266	70.992	.000
	Residual	2112.441	258	8.188		
	Total	5018.773	263			

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.826	1.109		1.646	.101
	professional attraction	.768	.075	.584	10.193	.000
	Entrepreneurial capabilities	.234	.063	.181	3.733	.000
	network support	.209	.066	.141	3.151	.002
	Self independence	.078	.074	.059	1.055	.293
	Self reliance	-.064	.066	-.052	-.978	.329

a. Dependent Variable: entrepreneurial intention of Afghan students

## Conclusion and limitation of the study

This research study, based on sample, found that there is high level of entrepreneurial intention among Kabul based business students. This study is consistent with the previous studies supporting the view that young business students are highly motivated to take initiation of risk for starting their own business. Same study conducted by Hunjra et al (2010) in Pakistan found that young graduates are highly motivated and attracted towards new venture creation. Current study supports the study of Hunjra et al (2010). According to them Network support, professional attraction, self reliance and self independence has strong

influence on entrepreneurial intention of students. This study found that there is significant relationship between independent variables with dependent variable of the study (entrepreneurial intentions). Binks, et. al (2006) reported that understanding, accepting, encouraging and enhancing entrepreneurial activities requires consistent research, training and teaching efforts. The same findings reported by Shook et. al (2003) that entrepreneurship is all about how individuals perceive and relate his/her perception with the specific environment to identify, evaluate and take advantage of opportunities. This research study found that entrepreneurial capabilities is significantly related with entrepreneurial intention of afghan business students therefore, study support the findings of Binks, et. al (2006) and Shook et. al (2003). Present research study concludes that experience of family business is one of another important influencing factor of entrepreneurial intention of afghan business students, supporting the study of (Aldrich & Cliff, 2003). Therefore based on findings present study concludes that predicted variables, (professional attraction, entrepreneurial capabilities, self reliance, self independence & network support) included in this study shows the significant and influencing role in entrepreneurial intention of business students of Kabul Afghanistan. Purpose of this study was to explore the perception of Kabul based business students, studying in business institutes specifically Kardan Institute of higher education Kabul Afghanistan, so the limitation of the study is sample size of 264 kabul based business students therefore findings of the study cannot be generalized and should be related to business students' views of entrepreneurship, the large sample size will help more to draw the real picture of the phenomena in Afghanistan.

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## INDONESIAN RICE SUPPLY CHAIN ANALYSIS AND SUPPLIER SELECTION MODEL

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Dadang Surjasa <sup>1)</sup>, E. Gumbira-Sa'id <sup>2)</sup>, Bustanul Arifin <sup>3)</sup>,  
Sukardi <sup>4)</sup>, Ferry Jie <sup>5)</sup>

### ABSTRACT

*Food Station Tjipinang Jaya (FSTJ) is a company under the auspices of the regional government of Jakarta, which has a duty to address the problem of food security, especially for rice availability in Jakarta Province, Indonesia. The availability of rice is handled by FSTJ through monitoring of the rice trade transactions undertaken by rice entrepreneurs in the area of Cipinang Rice Market Center (PIBC). The purpose of this study was to analyse the rice supply chain and designing a rice supplier selection model in Jakarta Province Indonesia. Rice supply chain data was obtained from primary and secondary data sources, interview and FSTJ data starting from 2005 up to 2010. Data were analysed using descriptive statistical methods, while the rice supplier selection model was built by using the method of technique for order preference by similarity to ideal solution (TOPSIS), with the help of visual basic 6.0 and microsoft access software. Descriptive analysis provides information about the network of rice supply chain which has been covered by PIBC in Jakarta Province. Model of rice supplier selection produces ranking of suppliers after considering alternatives and criteria for rice suppliers in Jakarta Province.*

**Field of Research :** Rice Supply Chain, Supplier Selection Model, TOPSIS.

### I. INTRODUCTION

Food Station Tjipinang Jaya (FSTJ) is one company under the management of Jakarta local government, which handles the problem of food, especially for rice commodity in Jakarta area. According to Central Bureau of Statistics of Jakarta, in 2010 the population of Jakarta is 9,588,198 people (Central Bureau of Statistics, 2010). With this population, its needed for one year about one million tonnes of rice, but rice production in Jakarta area itself by 2010 only 11.164 tonnes (Ministry of Agriculture, 2011). In Cipinang rice market center/ pasar induk beras Cipinang (PIBC) which is located in Jakarta, there were six hundred and eighty businesses who conduct trade transactions of rice every day.

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1) Lecturer of Industrial Engineering, Trisakti University, Indonesia. E-mail : d\_surjasa@yahoo.com

2) Professor of Agricultural Industry Technology - Bogor Agricultural University, Indonesia. E-mail : egum@mma.ipb.ac.id

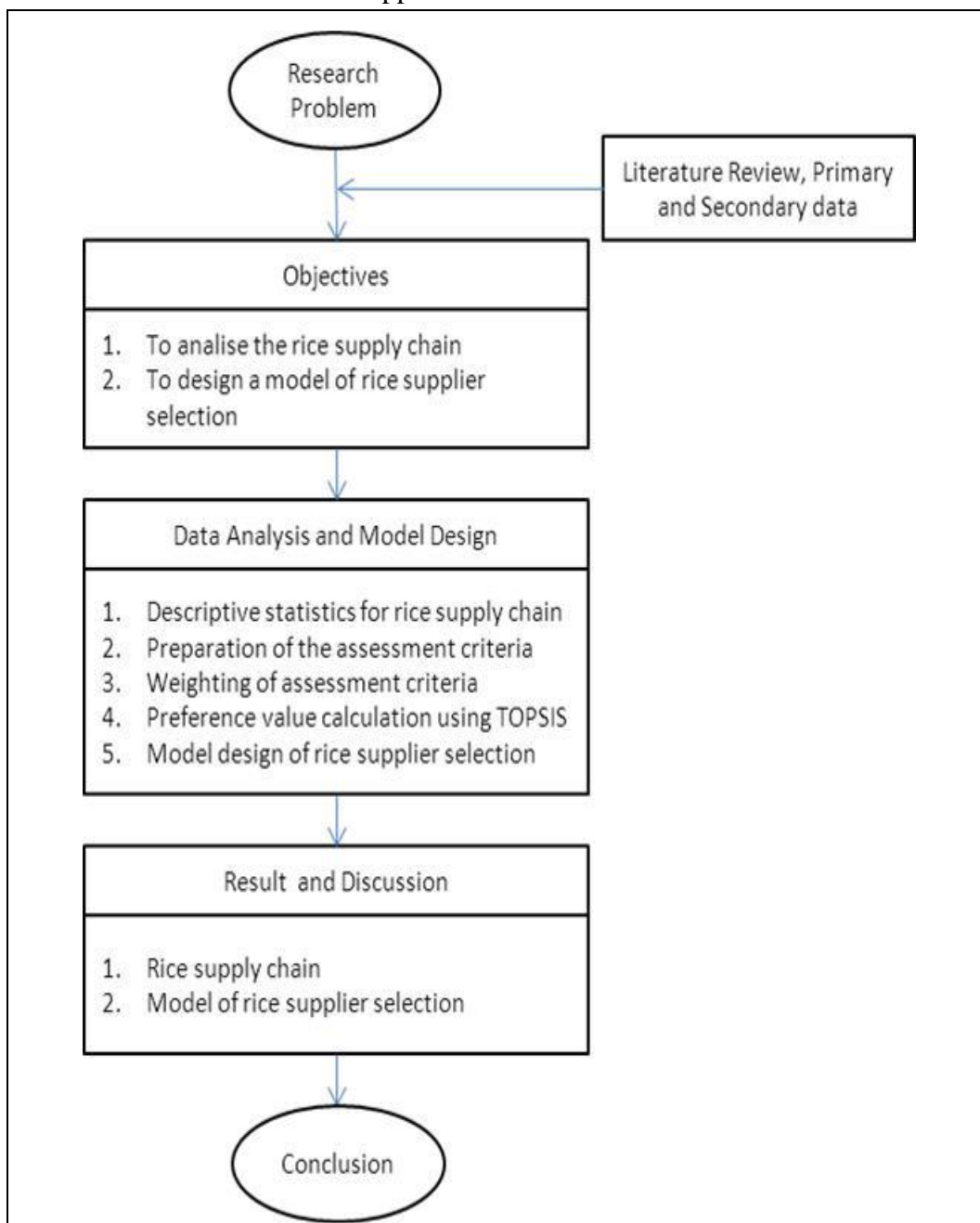
3) Professor of Social Economy of Agriculture - University of Lampung, Indonesia. E-mail : barifin@uwalumni.com

4) Lecturer of Agroindustrial Technology - Bogor Agricultural University, Indonesia. E-mail : sukardi\_ri@yahoo.com

5) Deputy Program Director, M.Bus / Logistics Management, RMIT University, Australia. E-mail : jieferry@yahoo.com

Rice trade conducted for inbound logistics and outbound logistics. FSTJ who manages PIBC has a duty to ensure food security through the stabilisation of supply and price of rice in Jakarta. Stability of supply and price of rice can be achieved if the supply of rice is always available and the price of rice could be afforded by the households of Jakarta. To obtain the stability of rice supply and prices, this study aimed to analyse the rice supply chain and to create a model design of rice supplier selection associated with PIBC and FSTJ. Stages in this study can be seen in Figure 1.

Figure 1. Research Stages of Rice Supply Chain Analysis and Model of Rice Supplier Selection in Jakarta





## **II. LITERATURE REVIEW**

### **2.1 Supply Chain Management Theory**

Supply Chain Management is the concept of business strategy which may include inter-company networks and linkages functions and activities within an enterprise (Schnetzler et al., 2004; Meier et al., 2004; Power, 2005; Burgess, 2006). In general, the supply chain is defined as the integration of all business institutions ranging from upstream to downstream, from suppliers, manufacturers, distributors, retailers to consumers and aims to provide added value for customers and all stakeholders in the supply chain (Levy, 2003 and Cristofer, 2005). According to Bolstorff (2003), supply chain management is an integrated process of an organisation or institution that handles the goods, services or information and have activities starting from planning, procurement/ sourcing, manufacturing, delivery and returns. The business processes within the supply chain covering eight aspects of customer relationship management, customer service management, demand management, order fulfilment management, manufacturing flow management, supplier relationship management, product development and commercialisation, and returns management (Croxtton et al., 2001 and Tseng et al., 2005).

### **2.2 Rice Supplier Selection**

Supplier selection activities closely related to the concept of supply chain management. Suppliers selection is one of supply chain strategic activities and it is very important in ensuring the continuity and effectiveness of the supply chain (Boran et al., 2009; Razmi, 2009; Gulsen, 2010; Hsu, 2010). Basically, suppliers selection is intended to get the proper supply of the right supplier for long periods of time with decision-making in the form of multi-attribute decision making. This was stated by Boran et al. (2009) that the selection of suppliers is the process to get the right supplier who can provide the purchaser of quality goods and services at the right price, on the right time and the right amount, while according to Gulsen (2010), the purpose of selection of suppliers is to reduce risk purchase, giving the optimal value, build long-term and reliable relationships between buyers and suppliers. Meanwhile, the decision making process in the selection of suppliers (Jadidi et al., 2009; Boran et al., 2009; Gulsen, 2010) is generally carried out through Multi- Attribute Decision Making (MADM) that influenced by quantitative and qualitative factors that involve many risks, difficult and complex . The selection of rice suppliers concept is a MADM concept. This study aimed to choose a supplier of rice after considering various alternatives and criteria of rice suppliers. The alternatives of rice supplier are eighteen rice suppliers who have supplied rice to the PIBC, namely Subang, Karawang, Indramayu, Cirebon, Bandung, Garut, Tasik, Sumedang, Tegal, Solo, Demak, Pati, Kediri, Lumajang, Surabaya , Lampung, Palembang and Makassar while the criteria for rice are as follows : price, delivery, amount of supply, broken grain, moisture content, groats, polished degree, foreign body, managerial flexibility from suppliers.

### 2.3 Technique for Order Preference by Similarity to Ideal Solution

TOPSIS (technique for order preference by similarity to ideal solution) is widely used in the process of selecting a case from a variety of alternatives and of the various criteria. Yong (2006) has been using TOPSIS to select the location of the plant to cut costs and maximise resources owned by a company, Chakladar (2008) has been using TOPSIS to select non-traditional machine (NTM) are most suitable for metals with a particular job specification, while Kannan et al. (2009) has been using TOPSIS to select a reverse logistics provider for the battery industry in India.

According to Lotfi et al. (2007) Chakladar (2008) and Kannan et al. (2009), TOPSIS is one of methods for solving problems of multi-attribute decision making. Procedure of TOPSIS is following the steps as follows (Jahanshahloo, 2006):

1. Making the decision normalised matrix,
2. Creating weighted normalized decision matrix and determining matrix of positive ideal solution and matrix of negative ideal solution,
3. Determining the distance between value of each alternative with matrix of positive ideal solution and matrix of negative ideal solution, and
4. Determining the value of preferences for each alternative.

TOPSIS procedure is as follows (Jahanshahloo, 2006)

1. Requires the performance rating of each alternative  $A_i$  on each criterion  $C_j$  that has been normalized, namely:

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{i=1}^m x_{ij}^2}} \quad ; \text{ with } i = 1, 2, \dots, m \text{ and } j = 1, 2, \dots, n$$

2. Positive ideal solution  $A^+$  and negative ideal solution  $A^-$  can be determined based on the weight rating that has been normalized ( $y_{ij}$ ) as

$$y_{ij} = w_i r_{ij} \quad ; \text{ with } i = 1, 2, \dots, m \text{ and } j = 1, 2, \dots, n$$

$$A^+ = (y_1^+, y_2^+, \dots, y_n^+) \quad ;$$

$$A^- = (y_1^-, y_2^-, \dots, y_n^-) \quad ; \text{ with :}$$

$$y_j^+ = \begin{cases} \max_i y_{ij} & ; \text{ if } j \text{ is a profit attribut} \\ i \\ \min_i y_{ij} & ; \text{ if } j \text{ is a cost attribut} \\ i \end{cases} \quad ; j = 1, 2, \dots, n$$

$$y_j^- = \left\{ \begin{array}{l} \min y_{ij} ; \text{if } j \text{ is a profit attribut} \\ i \\ \max y_{ij} ; \text{if } j \text{ is a cost attribut} \\ i \end{array} \right\} ; j = 1, 2, \dots, n$$

3. The distance between the alternative  $A_i$  with the positive ideal solution is formulated as:

$$D_i^+ = \sqrt{\sum_{j=1}^n (y_i^+ - y_{ij})^2} ; \text{with } i = 1, 2, \dots, m$$

4. The distance between the alternative  $A_i$  with the negative ideal solution is formulated as:

$$D_i^- = \sqrt{\sum_{j=1}^n (y_{ij} - y_i^-)^2} ; \text{with } i = 1, 2, \dots, m$$

5. Preference value for each alternative ( $V_i$ ), given as:

$$V_i = \frac{D_i^-}{D_i^- + D_i^+} ; \text{with } i = 1, 2, \dots, m$$

The greatest value of  $V_i$  indicates that  $A_i$  is better alternative to be selected.

### III. DATA PROCESSING AND MODEL DESIGN

Rice data used in this study were data from FSTJ starting from 2005 to 2010. Criteria used to determine the quality of rice is a type of Indonesian National Standard/ Standar Nasional Indonesia (SNI) No. 01-6128-1999 (Winarno, 2004) about the specific quality requirements which include the degree of polished rice, water content, head rice, whole grain, broken grain, grain groats, red grain, yellow grains / damaged, calcifying grain, foreign bodies, grains of rice and a mixture of other varieties. Another criterion that can be used such as price and delivery time. In connection with the selection of suppliers of rice to PIBC, TOPSIS method requires a number of alternatives and criteria. The alternative being considered is the supplier of rice that had been doing business with PIBC and prospective suppliers in the future that is likely dealing with PIBC. The criteria considered are the criteria concerning the quality of rice, rice supplier characteristics and criteria relating to the transaction between the supplier of rice to the PIBC. Such criteria may take the form of quantitative and qualitative.

The criteria are as follows :

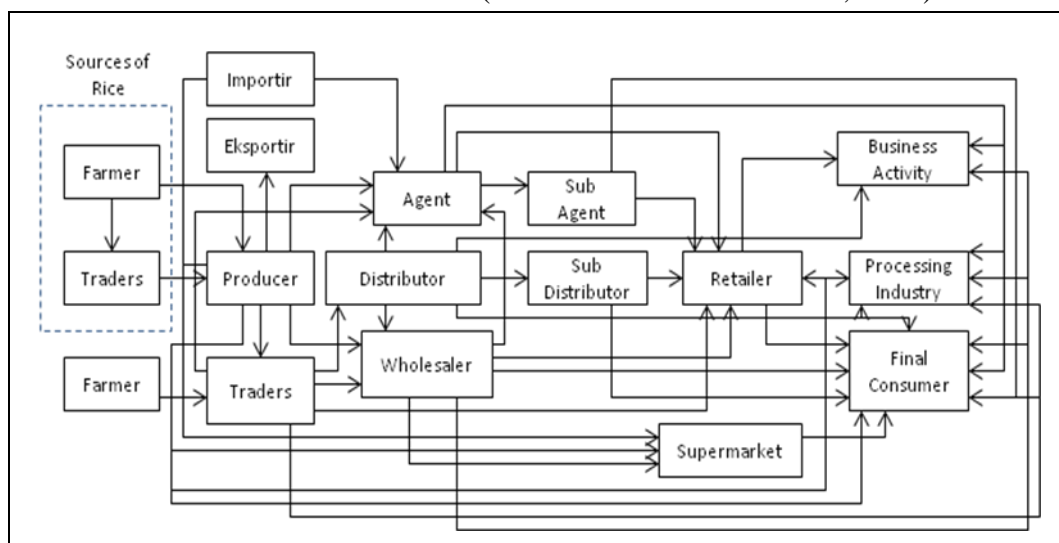
1. Criteria of rice price is the price prevailing at the PIBC, eg for a certain kind of rice, the price of 1 kg = Rp. 6000,-. The objective of this criterion means that the cheaper is the better, so the goal of this criteria is minimum.
2. Criteria of color is the color of rice that was decisive in the decision on a transaction in PIBC. Most people prefer the color white rice. Size of the color can be categorized in the form of Likert scale 1-5. So the choice is, 5 = clear white, 4 = white, 3 = quite white, 2 = less white, 1 = opaque, so that the objectives of this criterion is the maximum.
3. Delivery time is a measure that is calculated based on the accuracy of the delivery of rice from the supplier to PIBC. The more precise is the better, so its size can be calculated as a percentage, eg 99% or 97%, so the objective of this criterion is the maximum.
4. Amount of supply is a measure of the ability of suppliers to supply rice, so its size can be expressed in a Likert scale, such as 5 = the number of supply is a lot, 4 = the number of supply is adequate, 3 = the number of supply is less, 2 = the number of supply is very small, 1 = the number of supply is not available, so the greater the amount of rice supply is getting better, so the goal of this criterion is the maximum.
5. Criterion of broken grain is a measure of the number of broken grains at a certain volume of rice. It can be measured by percentage, ie 0% for first-class quality of rice, 5% for second-class quality of rice, 15% for third-class quality of rice, 25% for the fourth grade the quality of rice and 35% for the fifth grade rice quality, so the small percentage of broken grains of rice is better, so the goal of these criteria is the minimum.
6. Criteria of the moisture content is a lot of water content contained in the grains of rice. Its size can be calculated by percentage. The quality of rice from grade one to grade four, its moisture content is 14% and the moisture content for the fifth quality rice is 15%, so the smaller the percentage of water content would be the better, so the goal of these criteria is minimum.
7. Criteria of groats which are small and do not overlap. It is usually calculated by percentage, e.g., grains of rice groats 0% for first-class and second-class quality, 1% for the third grade quality of rice, 2% for the fourth-grade quality rice and 5% for the fifth-grade quality rice, so the smaller the percentage of rice groats is the better, so the goal of these criteria is the minimum.
8. Criteria of Polished degree is a measure which is calculated based on a percentage, e.g. 100% for the quality of rice quality grade one to grade three, 95% for the fourth-grade quality rice and 85% for fifth-grade quality rice, so the greater the degree of polished rice is the better, so that objective of this criterion is the maximum.
9. Criteria foreign body is a measure of the number of items other than rice such as sand. It is calculated based on a percentage, eg 0% means that the rice has a quality first class and second class, 0.02% for rice with the quality of third grade, so the smaller the percentage of foreign bodies in the rice is getting better, so the goal of these criteria is a minimum.

10. Criteria of managerial flexibility is the ability of supplier of rice in the face of problems of business transactions with other parties. Flexibility can be measured based on the Likert scale, 5 = extremely flexible, 4 = flexible, 3 = quite flexible, 2 = less flexible, 1 = not flexible, so that the objectives of this criterion is the maximum.

#### IV. RESULTS AND DISCUSSION

The pattern of distribution channels of rice trade in the province of Jakarta in general can be seen in Figure 2. The pattern of distribution of rice trade starts from manufacturers and then distributed to rice exporters, distributors, agents, wholesalers, supermarkets, retailers, final consumers (households, hospitals, orphanages and social institutions), processing industry (food industry such as industrial cake, rice cake , crackers and rice flour industry), and distributed to other business activities such as restaurants, hotels and catering (Central Bureau of Statistics, 2009).

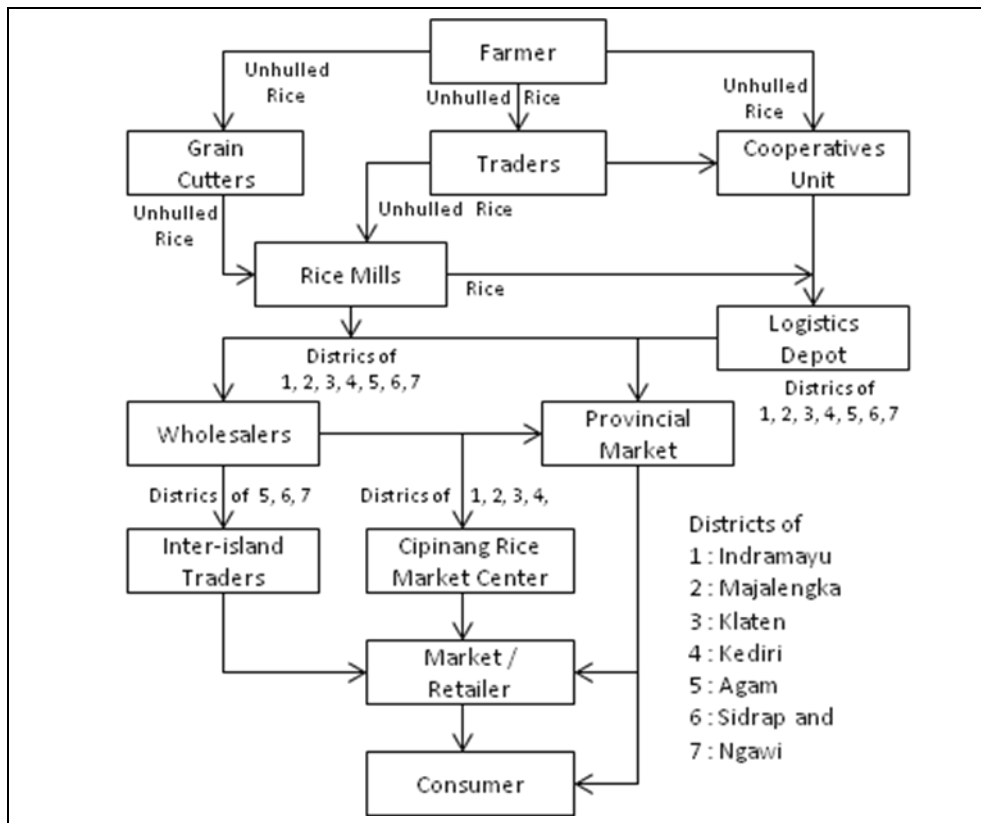
Figure 2. Distribution Patterns of Rice Trade in the Province of Jakarta  
(Central Bureau of Statistics, 2009)



According to Rusastra et al. (2004), in general, farmers in seven districts namely Indramayu, Majalengka, Klaten, Kediri, Agam, Sidrap and Ngawi sell grain through district collectors, rice mills and the Village Unit Cooperatives/ Koperasi Unit Desa (KUD), whereas the rice produced are then sold through wholesalers , market and Logistics Depot (DOLOG). Most of the marketing of rice in seven districts of suppliers enter the consumer markets of Jakarta, go directly to retailers and consumers. For example, a supplier of rice that goes to the retailers and consumers coming from the districts of Agam, Sidrap and Ngawi, while the district of Indramayu, Majalengka, Klaten and Kediri, rice sold through the wholesale market of rice Cipinang (PIBC) first. Rice distribution pattern can be seen in Figure 3. According to Central Bureau of Statistics (2009), the procurement of rice for Jakarta, both at the distributor and traders

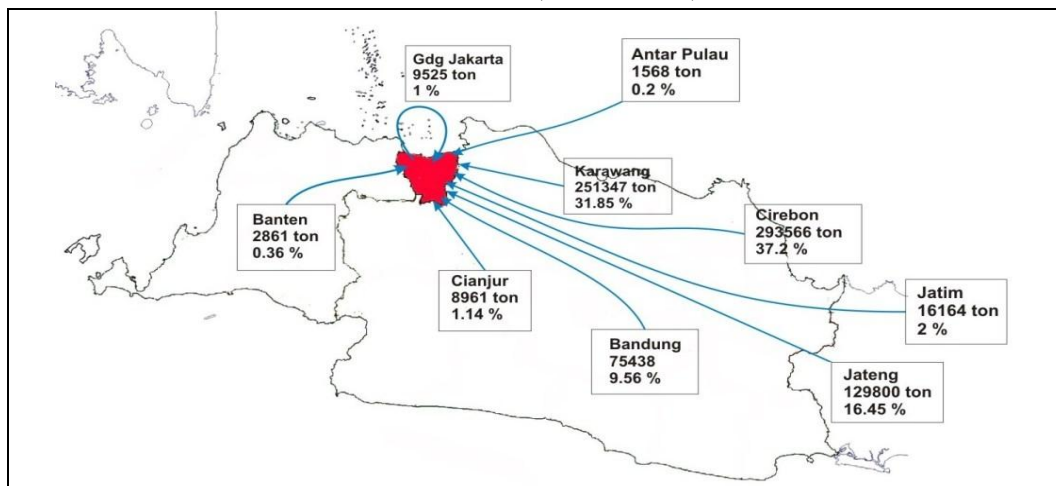
come from producers located in other provinces, while importers are supplied from abroad. Rice procurement process for the Jakarta area has a distribution pattern of trade that goes from the distributor to the retailer. Most of the rice at the distributor sold to wholesalers (49.48%), then the agent (24.82%), to the retailer (17.19%), the sub-distributor (6.30%), to the supermarket (1.62%), to the end users (0.57%), and a small part to other business activities (0.02%).

Figure 3. Regional Distribution of Rice From Seven District to Jakarta (Rusastra et al., 2004)



Based on data from FSTJ, the supply of rice coming into the PIBC, derived from a variety of areas like Banten, Cianjur, Karawang, Bandung, Cirebon, Central Java and East Java. A total of 80.8% of rice supplied from the three regions, namely from Karawang, Cirebon and Bandung, while 19.2% was supplied from Central Java, East Java and outside Java island. From the same area for 2006, 2007, 2008 and 2009, respectively rice supplied to PIBC is 74.73%, 70, 89%, 69.19% and 78.61%. For 2009, the supply of rice to the PIBC illustration can be seen in Figure 4.

Figure 4. The Distribution Pattern of Rice From Outer Region Go to PIBC (FSTJ, 2009)



Supply of rice out of PIBC, distributed to various areas, namely the area of Jakarta, Bogor, Tangerang, Jakarta, West Java, Central Java, East Java and between islands. Based on data FSTJ, for the year 2005 were 65.98% of rice distributed to a number of markets in Jakarta, as many as 16.21% of rice distributed to the inter-island, as much as 14.91% of rice distributed to Bogor, Depok, Tangerang and Jakarta, while the rest approximately 2.9% is distributed to West Java, Central Java and East Java. In more detail, from 2005 until 2009, the percentage of rice distributed to the outside PIBC PIBC can be seen in Table 1 and as an example to illustrate the distribution of rice from PIBC outside PIBC in 2009 can be seen in Figure 5.

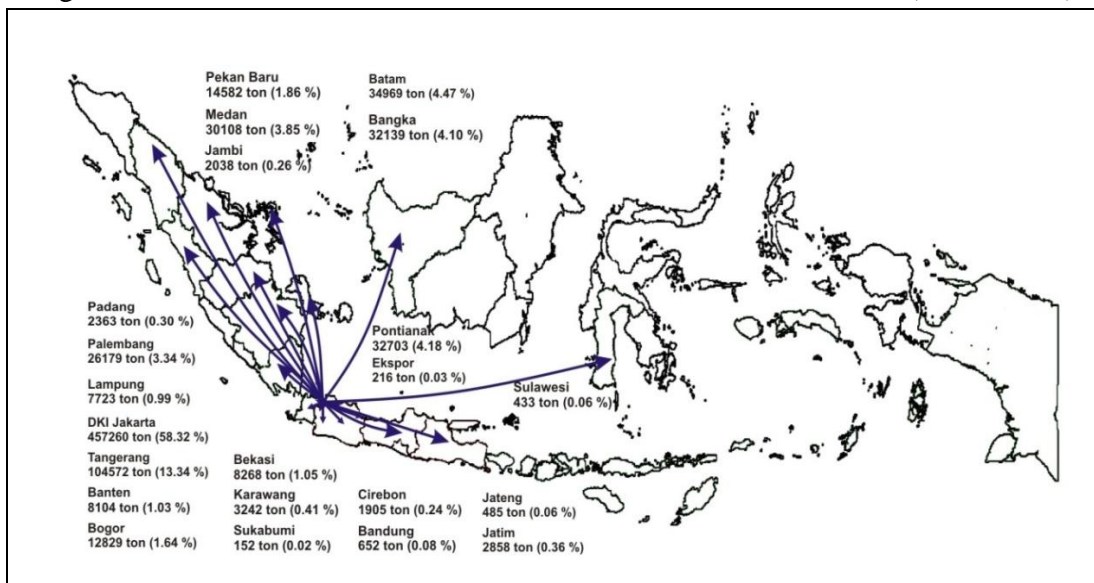
Table 1. Distribution of Rice From PIBC out PIBC, 2005 - 2009 (%)

Region/ Year	2005	2006	2007	2008	2009
Jakarta	65,98	66,48	74,43	65,27	58,32
Antar Pulau	16,21	17,49	10,01	15,60	23,43
Bodetabek	14,91	13,86	13,41	17,27	16,03
Jabar, Jateng, Jatim	2,89	2,18	2,16	1,86	2,22

(FSTJ data are compiled from 2005 - 2009)

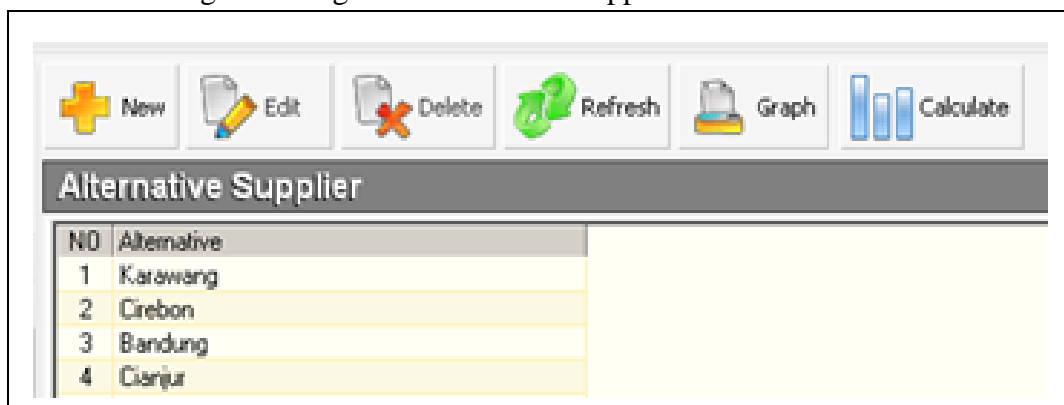
Here are shown some of the display computer-generated program of the selection program of rice supplier with TOPSIS. Display program generated using Visual Basic 6.0, while for the data base used by Microsoft Access. Figure 6 shows an example of alternative suppliers of rice from different regions of the supply of rice varieties IR64/ III to PIBC. The suppliers are from Karawang, Cirebon, Bandung and Cianjur. Figure 7 shows the criteria to be obtained from the suppliers of rice such as criteria related to quality of rice, rice suppliers as well as the transaction between the supplier of rice to the PIBC.

Figure 5. The Distribution Pattern of Rice from PIBC out of Jakarta (FSTJ, 2009)



Until now there are eighteen rice suppliers who have supplied rice to the PIBC, namely Subang, Karawang, Indramayu, Cirebon, Bandung, Garut, Tasik, Sumedang, Tegal, Solo, Demak, Pati, Kediri, Lumajang, Surabaya, Lampung, Palembang and Makassar. Criteria that can be incorporated into the program is the price, water content, fracture, time of arrival and the other suppliers criteria. Data input can be either numeric such as price, may be a percentage such as water content. It can also be a Likert scale such as to color.

Figure 6. Regional Alternative Suppliers of Rice to PIBC

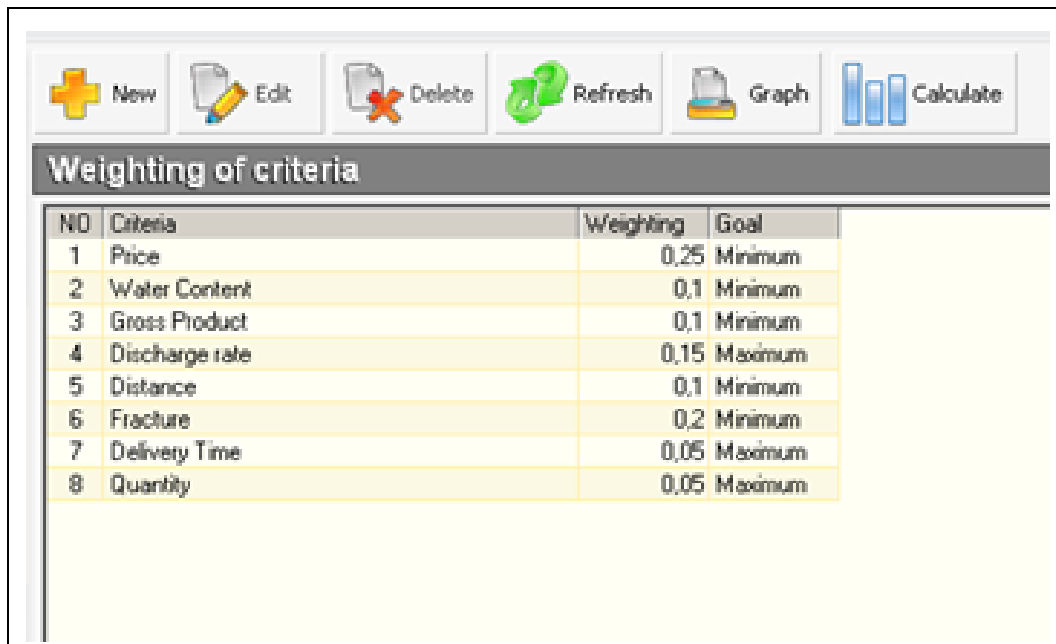


To make the process of selecting a supplier of rice, a variety of criteria values for rice are then incorporated into the program. There are eight criteria to input namely the price of rice, rice moisture content, dirt rice, white rice level, distance of suppliers from PIBC, broken rice, delivery time and quantity of rice from the supplier. In Figure 7, the other required input is the weight of each criteria and objectives of each of the criteria that can be obtained from experts in PIBC. For example, type a value for the price of rice IR64 / III, eg, the price of rice from the Karawang area is Rp. 5100, - / kg, the price of Cirebon is



Rp. 5050, - / kg, the price of Bandung is Rp. 4950, - / kg and price from Cianjur is Rp. 4700, - / kg. For other criteria, it can be incorporated as input into the program and it looks can be seen in Figure 8.

Figure 7. The Rice Variety Criteria Defined By FSTJ



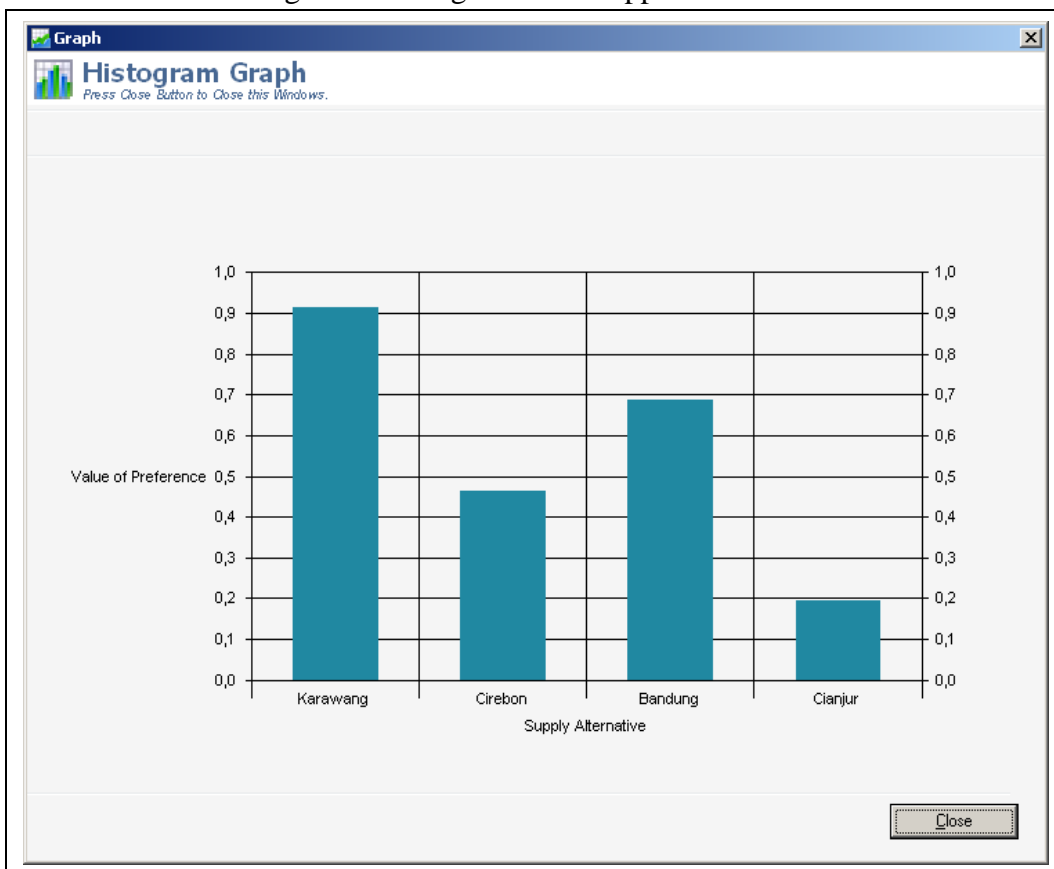
NO	Criteria	Weighting	Goal
1	Price	0,25	Minimum
2	Water Content	0,1	Minimum
3	Gross Product	0,1	Minimum
4	Discharge rate	0,15	Maximum
5	Distance	0,1	Minimum
6	Fracture	0,2	Minimum
7	Delivery Time	0,05	Maximum
8	Quantity	0,05	Maximum

Through a process performed by the TOPSIS method which takes into account all the values on all criteria and on any alternative, then the ranking of the results obtained from the suppliers of rice to the type IR64 / III in the form of bar charts and it can be seen in Figure 9. The resulting ranking of program suppliers respectively Karawang, Bandung, Cirebon and Cianjur. Rice supplier selection program is especially intended for rice businesses in PIBC, however, the program can be used by all actors of rice from farmers, collectors, retailers, importers and government. For example, importers can use these programs to choose from a variety of countries exporting rice.

Figure 8. Assessment Criteria Against the Alternative Suppliers of Rice.

NO	Alternative	Criteria Value	Value	Goal
1	Karawang	Price	5100	Minimum
2	Cirebon		5050	
3	Bandung		4950	
4	Cianjur		4700	
5	Karawang	Water Content	0,015	
6	Cirebon		0,016	
7	Bandung		0,018	
8	Cianjur		0,02	
9	Karawang	Gross Product	0,05	
10	Cirebon		0,06	
11	Bandung		0,06	
12	Cianjur		0,05	

Figure 9. Rating of Local Suppliers of Rice



## V. CONCLUSION

From this research, it can be concluded as follows:

1. Supply of rice into PIBC largely supplied from three district, from Karawang, Cirebon and Bandung with the average percentage of 74.8% and the rest 25.2% supplied from Central Java, East Java and outside Java.
2. Supply of rice out of the PIBC largely distributed to the Jakarta area by 66.1%, distributed to the outer island of Java, at 16.5%, distributed to the Bogor, Depok, Tangerang, Jakarta and Banten by 15.1% and distributed to West Java, Central Java and East Java by 2.3%.
3. Rice supplier selection program can be used also by all the actors of rice from farmers, collectors, retailers, importers and government.
4. For further research, we can see the relationship between rice trade area of each province in Indonesia so that supply and demand in the national rice can be mapped more comprehensively.
5. For rice suppliers selection modelling, it can be developed into a data base that can accommodate the rice trade of historical transaction data with suppliers so that the analysis of rice supplier from each criteria and each alternatives can be done more carefully.

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# TRANSACTIONAL ANALYSIS: NEW WAYS OF COMMUNICATIONS

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**Tahira Nazir**

Assistant Professor

COMSATS Institute of Information Technology,  
Wah, Pakistan.

**Syed Fida Hussain Shah**

Assistant Professor

COMSATS Institute of Information Technology,  
Abbottabad, Pakistan.

**Khalid Zaman (corresponding author)**

Assistant Professor, Department of Management Sciences,  
COMSATS Institute of Information Technology,  
Abbottabad, Pakistan.

E-mail: [khalidzaman@ciit.net.pk](mailto:khalidzaman@ciit.net.pk)

## ABSTRACT

The communication is a major tool to understand the interpersonal relationship while transactional analysis (TA) is considered a technique to interpret and analysed the process of communication. Distinct behaviours and feelings are measured through different ego states that represent the attributes of parent, adult and child. As TA is exchange of expression, so it may be categorized in terms of complementary, crossed and ulterior transaction, where one can find to stay, move or break the communication. Psychological games are not played for fun but they have some hidden course of actions that reveal later, while life position is assumptions that dictate the way we adopt throughout our life. As ego states helps us

to understand the attitudes, behaviours and conflicts of others so the situation and real life scenarios from educational organisation is taken and analysed with the help of TA. All the discrepancies, hidden emotions, envy, aggression, prejudice address and analysed through TA technique. Conclusion is based upon the application of the theory. The aim of recommendations is to present a rationale solution in order to improve the interpersonal communication within an organization and purposed to follow and implement certain training development programs and workshops. Finally an action plan is given for the implementations of certain actions.

**Keywords:** Communication; Transactional Analysis; Education sector; Ego states.

## **1. Introduction**

The study in hand is designed to understand and improve the quality of interpersonal communication and relationship by using transactional analysis theory. Communication is not only transmitting the messages and receiving the feedback but it includes the interpretation of all the covert messages that reflect through body language i.e. facial expression ,gestures and postures etc. (Treece, 1983). TA, on the other hand, is a technique that has been used by the experts to understand and analysed the process of interpersonal communication. Transactional analysis has taken its name from the analysis of the way people usually communicate to each other. As TA deals both personality pattern and interaction between people so it has been considered very useful theory to understand organizational behaviour (Makin et. al. 1996).

### **1.1. Background of the Theory**

Transactional analysis is a theory presented by a psychiatrist Erick Berne during the late 1950s. TA is

considered a neo-Freudian theory that seemed to be influenced by Sigmund Freud 's three ego states i.e. id , ego and super ego , but Berne's model of three ego states i.e. parent , adult and child is more practical and easier to use i.e.,

#### **a) Ego states**

Berne defined an ego state as," A consistent pattern of feelings and experience directly related to a corresponding consistent pattern of behaviour." Ego states are termed as Parent, adult and child and each person has these three states which show a diverse source of behaviour. The description of three ego states is given below i.e.,\_

- **The Parent ego state**

It deals with the attitudes and behaviour integrated and influenced from the external sources primarily from parents if some one shows prejudice, and critical behaviour and some time nurturing attitude that reflects from his old parental message but it continuously influence his inner child (James and Jongeward, 1971). So the parent ego state can be further divided into two parts i.e. controlling parent and Nurturing parent. Controlling parents laid down the restrictions, rules and regulations while the nurturing parents are more caring, protective, kind and forbearing.

- **Adult ego state**

The adult ego possesses the attributes of feeling; thinking and behaving which actually relate to the environment as it now present itself (Hewson and Turner 1992), so it deals with testing reality very tactfully .Adult ego state is adaptive and organized.

- **Child ego states**



Child ego states consist of all the natural instincts that a child can portray spontaneity. So when a person is behaving the way when he was a child is his real child state which is further divided in to two parts i.e. free natural child and adaptive child. Although Berne in his later life introduced Rebellious child .The natural child is more spontaneous and believe the world as felt so he is genuine ,fun loving aggressive, curious and inquisitive. While adaptive child adapts the situation and wants to meet the expectation of others. Table 1 shows different ego states in action.

**Table 1: Ego States**

	Critical Parent	Nurturing Parent	Adult	Free Child	Adapted Child Complaint [C] Rebellious [R]
Words:	Never Should Ought Do/don't	Let me Don't worry Be careful Well done	Correct Where? Why? What?	Hi Fun Wow Great	Sorry [C] Please [C] Won't [R] No [R]
Voice:	Critical Condescending	Sympathetic Encouraging	Confident Inquiring	Excited Free	Apologetic [C] Defiant [R]
Expression:	Frowning Pointing	Accepting Smiling	Thoughtful Interested	Spontaneous Uninhibited	Helpless [C] Sullen [R]
Attitude:	Judgemental Authoritarian	Understanding Caring	Open Evaluative	Curious Changeable	Agreeing [C] Rebellious [R]

Source: Makin et. al. (1996).

Transaction is considered an exchange of expressions by passing smile, greeting and sometimes by lifting eye brows or frowning. All such kinds of Prescott are called strokes .Two or more than two strokes make a transaction so all transactions include the following three communication rules (James and Jongeward,

1971) i.e.,

**a) Complementary Transaction :** Berne describes the complementary transaction as .”Appropriate and expected and follows the natural order of healthy human relationship.” Communication can continue here as both parties have positive agenda.

**b) Crossed Transaction:** Breaking down of communication is considered cross transaction where an inappropriate ego state is activated and ultimately become crossed.(James and Jongeward, 1971).

**c) Ulterior transaction:** Ulterior communication is disguised under a socially acceptable transaction. It tends to represent the counterfeit or deception that is not easily measured.

According to Berne a psychological game is “a recurring set of transaction, often repetitive, superficially rationale, with a concealed motivation; or,, more colloquially, as a series of transaction with a gimmick”.

Psychological games always have an ulterior purpose so they are not only played for fun. Hay defines games as a repetition of sequences of ulterior and complementary that results in a negative payoff for all parties (Hay, 1995).

Our life positions referred to the beliefs, observations .ambitions. Interactions and expectations that we learn from our childhood. These assumptions are called life positions as they determine and dictate the way we adopt throughout our lives. They can be classified in to four positions as : I'm not ok –you are ok or I'm not ok-, you are not ok . I’m ok – you are not ok – I’m ok –you are ok.

## 2. Different Scenarios and Analysis

- **Scenario 1**

Dr. XYZ currently did her PhD from china and returned back to serve their university i.e., ABC as she was on scholarship so she had to serve the organisation for a specific time period. In the following situation she wanted to avail the opportunity for post doctorate for this reason she just needed a reference letter from the senior HOD(**Head of Department**) who was very reluctant to give her reference letter .so she started his conversation from an adult and ended it by presenting an ulterior transaction. Both parts are representing

1<sup>st</sup> phase: when Dr.XYZ asked for reference letter.

**Dr. XYZ:** I need a reference letter to apply for post doc.

**HOD:** good job, it will definitely enhance your knowledge.

**Analysis:** In the above scenario complementary adult to adult transaction is taking place asking for information and receiving the feed back but this transaction turns in another mode, although it seems an adult to adult conversation but in the next meeting it reveals a hidden agenda (ulterior) from senior HOD when finally Dr. XYZ asked her to sign on the reference letter .The conversation is as follows:

**Dr. XYZ:** I need your signature on reference letter today (as it will be late to upload the application form).

**HOD:** You must think over it as you have family to look after (shows his reluctance to sign up the reference letter)

**Analysis:** Now this conversation becomes more difficult to understand because apparently people say

something but meaning another, so there is a hidden agenda in the above conversation as HOD doesn't want her to get the opportunity for higher studies and even he doesn't want to reveal his intentions to her so he is playing a psychological game with her by making her realise the responsibilities on her shoulder, so the transaction is ulterior which starts from adult to adult and ends up from adapted child to taking up a hidden agenda where one can hardly judge the intentions of others.

**Dr. XYZ:** Sir one can not have such opportunities always.

**HOD:** but you already have got, it now leave it for others.

**Analysis:** Here HOD has changed his tone and reminded her that she already had availed the scholarship. He is behaving like a critical parent and communication is crossed as it is moving from a wishful adapted child to a sarcastic controlling parent

**Dr. XYZ:** You are not helping me in my further academic growth then I should better leave the organisation.'

**Analysis:** Here, complementary transaction ends up with breaking down of communication because HOD is not agreeing at any cost to favour his employee so the out come of the transaction is hostile withdrawal that forced Dr. XYZ to leave the job, as people played games with different strength from socially approved to the criminal homicide level (Jongeward, 1971) so Dr. XYZ has to sacrifice a long commitment of her organization as a payoff.

- **Scenario # 2**

The given scenario is also taken from the same organisation i.e., ABC university, where a student was rusticated for three weeks because of his misbehaviour with a teacher.

**Teacher:** (by yelling) why are you leaving from the examination hall without permission?

**Student:** I need not to take permission when I would have to go to receive my urgent call.

**Analysis:** Conversation starts from controlling parent and ends up free natural child. Here student knows that mobiles are not allowed in examination hall but nevertheless he teased the teacher. So transaction is crossed and here it is also noticeable that crossed transaction often leads to a partial break down where discrepancy is involved to identify the real ego state.

**Teacher:** Don't you switch your mobile off? It's not allowed to receive your calls during exam.

**Student:** (Rushing out side of the room by saying, can you stop me when I have an urgent call to receive? and that is more important than your rules.

**Analysis:** A free child is communicating in response of controlling parent: here the student is deliberately giving negative stroke to the teacher because inwardly he doesn't like him ,so he is trading a stamp game with him where people provoke others by manipulating the situation (Jongeward, 1971 )

(After some time the student come back and tries to take the exam again but the teacher doesn't let him to sit in exam)

**Teacher:** now you may leave the room. No need to continue your paper.

**Student:** You can't play with my future by depriving me to attempt the paper. I had an urgent call to receive .as my father was in hospital)

**Analysis:** Now the student is blaming the teacher and actually is playing a game where player accuse the other person rather to accept the responsibility of his own mistake (Jongeward, 1971). Here again a free child ego is addressing a controlling parent. (A representative of controller examiner suggests the teacher

to let the student stay in the exams by taking a confession note)

**Teacher:** ( in response of controller exam ) I don't let him to stay in my room he may better choose another exam room to finish his paper as I can never tolerate him any more .

**Analysis:** Here the adult attempt by (the controller examiner) is nullified by teacher's critical parent as he is projecting his covert feelings that he is been misbehaved by a student, and he retaliated by sending him out of his room.

(Student was shifted to other room but after the exam discipline committee investigated and found the student guilty as he lied that his father was in hospital and he had to attend the call so he was rusticated for 3 weeks)

### **3. Conclusion**

TA is considered a most valuable technique to understand the interpersonal communication and deals with the human problems in an appropriate way (Bown and Nath, 1995). Understanding of ego states helps us to comprehend the situation. In both scenarios diverse conflicts and ego states has been observed., in former scenario an educated employee is not reinforced positively just because of the envy of a senior manager (HOD) .while in the later scenario a mischievous act of the student results an ultimate punishment because his lie was detected he just lied to satisfy his inner as he wanted to hurt the teacher and he pushed back the serene implications that could cause a big loss in his academic. Although both scenarios end up with an aversion but it is found that TA can help to understand and measure the attitudes of others in a very tactful manner and make others understand in which ego state are they mostly exist.

#### **4. Recommendations**

In order to improve the environment of the organisation following steps are most likely to be implemented. As in 1<sup>st</sup> scenario senior manager plays a destructive psychological game that ultimately cause a serious loss of a productive faculty so that matter must be addressed in a very rational manner because psychological games are not only loss the organization but also harm the individual's potential (weihrich,1976). In top management there must be an open option to address the problems. Monopoly must not be allowed in any department. There must be an ontological (quality assurance) department that observe and rationalise the problem and justify the behaviours (Bennett 1996). Training and development must not confine only for junior level faculty but senior faculty development programme must be introduced delicately .prejudice and organizational politics is inevitable stereotype that is inculcated in every individual naturally it can be reduced only if some mentoring programs are introduced where employees can address their problems informally. If an employee has some problem there must not be only one channel to communicate as in case of Dr.XYZ.

Similarly, keeping in view the 2<sup>nd</sup> scenario there must be a close interaction between the teacher and student. A counselling and guidance must be provided to the student so that they can share their problems and shun from serious damages. There must be a forum where young faculty must be given lectures as how to effectively make a rapport with the students , prejudices and incompatible behaviour can be

addressed through different workshops .Small gap student development programs should be introduced .

Table 2 shows some recommended action plan for transactional analysis.

**Table 2: Recommended Action plan**

<b>Stimulating challenges</b>	<b>Recommended action</b>	<b>Effect</b>	<b>Responsible authority</b>	<b>Times limit</b>	<b>Cost</b>
Power and politics	Handling the situations in rationale manner	Reduction of frustration	HR	Urgent	Free
	Training of top managers	Satisfaction at junior level management	HR	Immediate	
	Seminars on personality grooming	Self awareness	HR	No gap policy should be maintained	
<b>Action Plan for Scenario 2</b>					



Offensive behaviour	Student counselling centre	Improvement of student's behaviour	HR	immediately	Free
Game playing by Students	Training on effective communication	Self awareness		Instant	Nominal
	Faculty development program	Self control behaviour	HR	Instant	Average

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## Some banking activities of the Islami Bank Bangladesh Ltd.

Dr. Abu Zafar Mahmudul Haq

Assistant Professor & Head, Dept. of Business Administration, City University,

Banani, Dhaka 1213, Bangladesh

E-mail: [zafarhaq34@gmail.com](mailto:zafarhaq34@gmail.com)

### Abstract

Banking sectors of Bangladesh are not going well in terms of investment. Among different banks in Bangladesh, Islami Bank Bangladesh Limited (IBBL) is running good for the modes of investment. So this study is conducted of the investment modes of this bank. Study is based on secondary information of the IBBL and opinion survey among twenty clients which has been done through convenient sampling on a purposively selected branch. It concludes that trend of investment of the IBBL runs well.

Key Words: Bangladeshs' Banks, IBBL, Investment.

### 1. Introduction

Banks in Bangladesh passed a critical year, suffering through an anti business climate both at home and abroad in 2011(Daily Star 2011). Amide changes the banking industry witnessed a major change-deregulation in some major areas including the interest rate and exchange rate in the 2011. Soaring inflation, huge bank borrowing by the government, sliding foreign investment, aid and remittances, a bearish stock market and lack of infrastructure were the main barriers at the local that out banks in a tight spot. The liquidity crisis was the most discussed issue in 2011.

After hefty profits in 2009 and 2010, driven by a surge in investment demand and whooping gains from capital market, banks felt the pinch in 2011. The banking sector's operating profits rose by over 47 percent to Tk 17092 crore in 2010 from Tk 11625 crore a year ago. Net profits also increased by nearly 54 percent to Tk 8328 crore in 2010 from Tk. 5415 in the previous year (Table 1).

Table 1 Banking Sector's Net Profit

	Years	Net Profit in Taka
Crore		

2008	3930
2009	5415
2010	8328

Source: The Daily Star, December 29, 2011.

The industry's return on assets and return on equity also increased alongside net profits. In 2010, the ROA increased by 34 basis points to reach 1.72 percent, while the ROE increased by 3 basis points in 2010 to reach 19.89 percent (Table 2). The capital adequacy ratio (CAR) which sets the minimum cushion of capital a bank must keep absorbing losses and promoting stability, was 9.3 percent in Bangladesh at the end of 2010 while the CAR in Indian banking industry was 14.6 percent as of end March 2010, 14 percent in Pakistan and 14.9 percent in Sri Lanka.

Table-2 Banking Sector: Selected Ratios in Percentage

Years	Ratios		
	2009	2010	
	Return on assets		1.38
	1.72		
	Return on equities	19.86	19.89
	Net interest margin		2.59
	3.05		
	Asset turn over		4.18
	5.90		
	Interest income to total assets	6.90	6.63
	Net interest income to total assets	2.16	2.50
	Non interest income to total assets	3.01	3.40
	Non interest expense to total income	42.71	40.32
	Capital adequacy ratio	11.74	9.31
	Classified loans to total loans	9.21	7.05
	Classified loans to capital	79.68	54.77
	Provision to classified loans	61.31	65.08

Original source: Bangladesh Bank's Financial Stability Report, 2010 in The Daily Star, 2011.

Banks investment opportunities were limited in 2011 due to a gas crisis. The housing sector and all consumers' credit were also squeezed in 2010. Banks also faced a lot of other challenges such as asset liability management, deposit mobilization, managing interest rates after withdrawal of the cap and declining remittance and volatility in the exchange rate were the major ones (Daily Star 2011). Despite these challenges banks tried to diversify lending to potential areas such as power, construction and ship building (Daily Star 2011). The IBBL showed a remarkable growth in 2010. Its asset base grew by 27.35 percent, deposits by 25.69 percent and investment by nearly 30 percent in 2010 than 2009. With this regard, an attempt has been made to examine the investment modes of Islami Bank Bangladesh Limited. Several studies have been conducted by considering several topics of banks (Haq, 2011). It is not easy to pinpoint the source of the difference in the previous studies because their data, location, objects and model specifications are quite different. The one important objective of the banking institutions is to raise investment. But the information of previous studies with this respect is scant in order to evaluate banks. For example, whether or not the banks actually contributing among the clients and if yes, whether the benefits of the system are homogeneously distributed among them have not been clarified enough. Investigating those issues toward developing further banking services that are more efficient are of prime importance. Therefore, the current paper, based on IBBL working in the banking sectors of Bangladesh, has major objective: 1) to assess the modes of investment. The contribution of the present study can be summarized in the following points: First, it examines the sector wise investment. Second, modes wise investments. Third, opinions of clients about their willingness to link with this bank. Still no comprehensive studies have been done by considering the above issues. Therefore, from the above

discussions, it seems that the actual study of investment modes of banks tends to be too narrow from many previous studies. This may be confused in banking policy making for development with a view to achieve the economic self sufficiency in the LDCs like Bangladesh or developed countries. To remedy this situation, serious studies on the investment situations of banks are necessary. Hence this study clearly differentiates itself from the past studies. It is expected that this study will be useful for professionals and planners who are directly or indirectly involved in planning and implementation of development works relevant with banking sectors in Bangladesh or elsewhere.

Data of the present study came from various secondary sources. An opinion survey is conducted on twenty clients of the IBBL Elephant Road Branch, Dhaka purposively through survey questionnaires.

Data were used for 2009 and 2010 financial years due to convenient of the resource availability.

## **2. History of Islami Bank Bangladesh Ltd.**

In the late seventies and early eighties, Muslim countries were awakening by the emergence of Islami Bank which provided interest free banking facilities. There are currently more than 300 interest free institutions all over the world. In 1974, Bangladesh signed the Charter of Islamic Development Bank and committed itself to reorganise its economic and financial system as per Islamic Shariah (legal framework of Islamic Ideology). In 1981, President of the Peoples Republic of Bangladesh addressed the 3rd Islamic Summit Conference held at Makkah and Taif suggested, "The Islamic countries should develop a separate banking system of their own in order to facilitate their trade and commerce."

Islami Bank Bangladesh Limited (IBBL) is considered to be the first interest free bank in Southeast Asia.

It was incorporated on March 13, 1983 as a Public Company with limited liability under the companies Act 1913. The bank began operations on March 30, 1983, with major share by the foreign entrepreneurs. At present 17% of total banking business owned by the Islamic Banks in Bangladesh.

IBBL is a joint venture multinational Bank with 63.92% of equity being contributed by the Islamic Development Bank and financial institutions. The total number of branches in 2008 stood at 196. Now the authorized capital of the bank is Tk. 5000 million and subscribed capital is Tk. 3801.6 million.

## **2.1 Islamic Banking**

Islamic bank is a financial institution whose status, rules, and procedures state its commitment to the principles of Islamic Shariah and to the banning of receipt and payment of interest on any of its operations.

## **2.2 Objectives of Islamic Bank**

The primary objective of establishing Islamic Bank all over the world is to promote, foster and develop the application of Islamic principles in the business sector. More specifically, the objectives of Islamic bank when viewed in the context of its role in the economy are listed as following:

- To offer contemporary financial services in conformity with Islamic *Shariah*;
- To contribute towards economic development and prosperity within the principles of Islamic justice;
- Optimum allocation of scarce financial resources and
- To help ensure equitable distribution of income.

The distinguishing features of the conventional banking and IBBL are shown below:

Conventional Banks	IBBL
The functions and operating modes of conventional banks are based on manmade principles.	The functions and operating modes of IBBL is based on the principles of Islamic <i>Shariah</i> .
The investor is assured of a predetermined rate of interest.	In contrast, it promotes risk sharing between provider of capital (investor) and the user of funds (entrepreneur).
It aims at maximizing profit without any restriction.	It also aims at maximizing profit but subject to <i>Shariah</i> restrictions.
It does not deal with <i>Zakat</i> .	In the modern IBBL system, it has become one of the service-oriented functions of the IBBL to collect and distribute <i>Zakat</i> .
Leading money and getting it back with interest is the fundamental function of the	Participation in partnership business is the fundamental function of the IBBL.



conventional banks.	
Its scope of activities is narrower when compared with IBBL	Its scope of activities is wider when compared with a conventional bank. It is, in effect, a multi-purpose institution.

### 3.0 Investment Modes of IBBL

When money is deposited in the IBBL, the bank, in turn, makes investments in different forms approved by the Islamic *Shariah* with the intention to earn a profit. Not only a bank, but also an individual or organization can use Islamic modes of investment to earn profits for wealth maximization. Some popular modes of IBBL's Investment are discussed below.

#### 3.1 BAI-MURABAHA (Contract Sale on Profit)

"Bai-Murabaha" means sale for an agreed upon profit. *Bai-Murabaha* may be defined as a contract between a buyer and a seller under which the seller sells certain specific goods permissible under Islamic *Shariah* and the law of the land to the buyer at a cost plus an agreed upon profit payable today or on some date in the future in lump-sum or by installments. The profit may be either a fixed sum or based on a percentage of the price of the goods.

#### 3.2 BAI-MUAJJAL (Deferred Sale)

The Bai-Muajjal may be defined as a contract between a buyer and a seller under which the seller sells certain specific goods, permissible under *Shariah* and law of the country, to the buyer at an agreed fixed

price payable at a certain fixed future date in lump sum or in fixed installments.

### 3.3 HIRE-PURCHASE UNDER SHIRKATUL MELK

Hire-Purchase under Shirkatul Melk has been developed through practice. Actually, it is a synthesis of three contracts: (a) Shirkat; (b) Ijarah, and (c) Sale. These may be defined as follows:

#### Definition of Shirkatul Melk:

‘Shrkat’ means partnership. Shirkatul Melk means share in ownership. When two or more persons supply equity, purchase an asset and own the same jointly and share the benefit as per agreement and loss in proportion to their respective equity, the contract is called Shirkatul Melk. In the case of Hire Purchase under Shirkatul Melk, IBBL purchase assets to be leased out, jointly with client under equity participation, own the same and share benefit jointly till the full ownership is transferred to the client.

#### Definition of Ijara:

The term ‘Ijara’ has been defined as a contract between two parties, the lessor and the lessee, where the lessee enjoys or reaps a specific service or benefit against a specified consideration or rent from the asset owned by the lessor. It is a lease agreement under which a certain asset is leased out by the lesser or to a lessee against specific rent or rental for a fixed period.

#### Definition of Sale contract:

This is a contract between a buyer and a seller under which the ownerships of certain goods or asset are

transferred by the seller to the buyer against agreed upon price paid by the buyer. In the case of Hire Purchase under Shirkatul Melk, the lessor bank sells or transfers its title to the asset under a sale contract on payment of sale price.

#### 3.4 MUDARABA (Investment made by the entrepreneur)

The term Mudaraba refers to a contract between two parties in which one party supplies capital to the other party for the purpose of engaging in a business activity with the understanding that any profits will be shared in a mutually agreed upon. Losses, on the other hand, are the sole responsibility of the provider of the capital. Mudaraba is also known as Qirad and Muqaradah.

##### Meaning of Musharaka:

The word Musharaka is derived from the Arabic word Sharikah meaning partnership. At an IBBL, a typical Musharaka transaction may be conducted in the following manner. One, two or more entrepreneurs approach an IBBL to request the financing required for a project. The bank, along with other partners, provides the necessary capital for the project. All partners, including the bank, have the right to participate in the project.

##### BAI-SALAM (Advance payment):

Bai-Salam is a term used to define a sale in which the buyer makes advance payment, but the delivery is delayed until sometime in the future. Usually the seller is an individual or business and the buyer is the

bank.

#### 4.0 Investments

Table 3 Sector-Wise Investment  
(Amount in MillionTaka)

SL. No.	Sectors	2009		2010	
		Amount	% of Total Investment	Amount	% of Total Investment
(1)	Industrial	99233	55.11	78788	54.37
(2)	Commercial	51332	28.51	43887	30.28
(3)	Real Estate	10172	5.65	8588	5.93
(4)	Transport	4082	2.27	2656	1.83
(5)	Agriculture	9110	5.06	6485	4.47
(6)	Others	6125	3.40	4527	3.12
	<b>Total</b>	<b>180,054</b>	<b>100%</b>	<b>144,921</b>	<b>100%</b>

Source: [www.ibbl.bd.org](http://www.ibbl.bd.org)

The above table shows the investment on different sectors over a period of two years. In the year 2009, the investment on industrial sector was Tk.99233 million the second largest amount whereas the investment was highest in the real estate sector and it was an amount of Tk. 10172 million. In 2010, the aforementioned investment was Tk.78788 million and Tk.8588 million on industrial and real state sectors respectively. It has been clearly viewed that the investment in those sectors decreased sharply. The particular reasons behind the decrease of investment specified due to economical recession through out the world. In 2009 the investment on transport was Tk.4082 million and 2010 the same amount was Tk.2656 million. Apparently, as per the table this investment has been sharply decreased 2009 to 2010 due to industrial degradation around the world and the reducing of foreign currencies reserve. At the agricultural trends, the above table shows that like industrial sector as well as transport sector the number

of investment has stridently decreased in 2010.

Table-4 Mode-wise Investment

(Amount in Million Taka)

Modes	2009		2010	
	Amount	% to Total Investment	Amount	% to Total Investment
Bai-Murabaha	96216	53.44	73833	50.95
Hire Purchase under Shirkatul Melk	63159	35.08	50201	34.64
Bai-Muajjal	6550	3.64	6546	4.52
Purchase & Negotiation	9047	5.03	11040	7.62
Quard	2151	1.19	1955	1.35
Bai-Salam	1719	0.95	1135	0.79
Mudaraba	-	-	50	0.03
Musharaka	35	0.02	143	0.10
<b>Total</b>	<b>180,054</b>	<b>100.00%</b>	<b>144921</b>	<b>100.00%</b>

Source: [www.ibbl.bd.org](http://www.ibbl.bd.org)

According to the above table it is clearly viewed that in 2009 the amount of mode-wise investment in Bia-Murabaha was Tk.96216 million whereas, in the year 2010 it reached on Tk.73833 million and had been decreased sharply. It can be said that during this period the global recession and due to its negative impacts some of the depositor's withdrawal their bank deposit to maintain such economical needs, as a result they could not enhance their bank investment on the mode of Bai-Murabaha. As a result as per the rules and regulation stated by the Bangladesh Bank and in order to the ratio of deposit the amount of investment had been declined in Bia-Murabaha sector. Likewise, having the inadequate knowledge as to Musharaka and also for the degrading of morality of countries people they actually could not mind set to investment for Musharaka mode. The amount of investment on Musharaka mode was Tk.35 million in 2009 and it reached the peak to Tk.143 million as amount of investment in 2010. The amount of

aforementioned investment rate actually increased in 2010 than the previous year. Nevertheless, in 2010 bank proclaimed seriously among the investors regarding the Musharaka mode and this had contributed to make understand the investors well as the prospects of this mode of investment. Moreover, in the mode of Mudaraba there is a provision where a group provides the required money for investment and another group ensures the labor, here bank is recognized as Mudarabi. Finally, it can be evaluated that world wide recession enormously kept a bad impact in the mode wise investment in the banking sector.

5. Opinions of clients about the IBBL

Motivations behind taking Investment from Islami Bank:

Table-5

Items	Frequency	Total Respondents	Percent
Islami Shariah	16	20	80
Interest free Processing	3	20	15
Spreading of Islami Banking in the world	1	20	5
Total	20	20	100

Source: Opinion survey

The survey has been done on 20 persons of the Clients of IBBL. Out of this 80% are motivated to collect investment money from IBBL. On the other hand 15% are motivated by interest free processing while 5% people think IBBL is the new phenomenon in the world. The said group thinks it so, because IBBL runs its business through Islamic Shariah and Sunnah. On the other hand, the operative systems dealing with its clients are very frequent transparent and faster and people can open a transactional account under this bank very with a low cost.

Opinions about the differences between conventional banking & Islamic banking in case of investment:

Table: 6

Response	frequency	Percent
Yes	20	100
No	0	0
Total	20	100

Source: Opinion survey

It is seen that out of total respondents, 100% respondents believe there are differences between conventional bank & Islami Bank. Generally, 100% people think there is a difference between Conventional banking and Islami Banking. Islami Bank takes the profit but not interest. Moreover this bank announces the profit on the basis of contract where it doesn't mention the percentage specifically. In the provision of Islami Banking each client has to share the profit. However, conventional banking system refers the percentage specifically.

Views about the different service charge taken by Islami Bank:

Table: 7

Items	Frequency	Percent
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Very excessive	0	0
Excessive	0	0
Justified	16	80
Less	4	20
Very less	0	0
Total	20	100

Source: Opinion Survey

The above table provides that eighty percent respondents are motivated to justify and 20% was less, because the service charge that Islami Bank takes on service is very nominal rather than the other existing banks in the banking sectors.

## 5. Conclusion

Islami Bank Bangladesh Limited (IBBL) is trying to establish the maximum welfare of the society by maintaining the principles of Islamic Shariah which is based on “Quran” and “Sunnah”. Since 1983, IBBL is the pioneer in welfare banking in Indo Subcontinent and it is trying to do all its activities for the betterment of its depositors. For the greater interest of the depositors the investment policy of IBBL is to invest on the basis of profit and loss sharing in accordance with the tents and principles of Islamic Shariah. Profit earning is not the only motive and objective of the bank’s investment policy rather emphasis is given in attaining social good and in creation employment opportunities.



IBBL is not secular in its orientation. IBBL does not finance any project which conflicts with the moral value system of Islam. IBBL does not strictly consider the credit worthiness of the entrepreneur. IBBL receives a return only if the project succeeds and produces a profit. IBBL considers the soundness of the project and business acumen and managerial competency of the entrepreneur. Therefore, the rate of return of investment of IBBL is greater comparing to that of conventional banks.

Finally, Islami Bank Bangladesh Limited (IBBL) has been established with a view to conduct interest free banking to establish participatory banking instead of debtor-creditor relationship and finally to establish welfare oriented banking through its investment operations that would lead to a just society.

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## **Emotional Intelligent managers are required...**

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**Zeeshan ahmad khan**

**[Zeeshan.khan687@gmail.com](mailto:Zeeshan.khan687@gmail.com)**

**UCP business school**

**University of Central Punjab, Lahore Pakistan**

**Sehrish Butt**

**[sehrish.butt786@gmail.com](mailto:sehrish.butt786@gmail.com)**

**Department of Commerce**

**University of Central Punjab, Lahore, Pakistan**

### **ABSTRACT**

The objective of this research is to explore relationship between Emotional Intelligence (E.I.) and financial performance of banks. The results of this study concluded that empathy shown by managers has significant relationship with financial performance while social skills and self motivation of manager has a weak but positive relationship with financial performance. However, empathy of managers shows a significant impact on financial performance of banks.

**Keywords:** Emotional Intelligence, Financial Performance, Banking Sector of Pakistan,

### **INTRODUCTION**

One of the biggest achievements of any organization is to satisfy the needs of organization and its employees. Therefore, heavy responsibility lies on the shoulder with top management to maintain the healthy relationship with employees. Thus the persons holding a key position in an organization must be emotionally intelligent because it is his responsibility to get maximum benefit from staff.

The first academic use of the term “Emotional Intelligence” (E.I) was by Wayne Leon Payne in his

doctoral dissertation in 1985. Mayer and Salovey (1990) defined term Emotional Intelligence as the ability of monitoring feelings of own and others. Goleman (1995) redefined the concept of Emotional Intelligence as, to be aware of emotions and having the ability to manage emotions in healthy and productive way.

Daniel Goleman constructed a framework which described the Emotional Intelligence with the help of five main components. The first component of this framework is Self Awareness; which means understanding one's own emotions and knows their strengths and weaknesses. Many researchers argue that self awareness is the most important component of the Emotional Intelligence. The Second component of the Emotional Intelligence framework is Self regulation, which means the ability to control one's own emotions and feeling. Self regulated people do not become angry or feel jealous of somebody and they do not make any hasty and careless decisions in their life. The third component of Emotional Intelligence framework is motivation. Emotional Intelligent people are usually motivated. The fourth component of Emotional Intelligent framework is Empathy. It is an ability to identify and understand the feelings and emotions of other persons. People who are highly empathetic are excellent in managing relationships. The last component of the Emotional Intelligence is social skills which mean that how well people interact with other team members.

Emotional Intelligence has now become the essential parameter for the success in the modern business world. Most of the managers in organizations are intelligent, but not emotionally intelligent. Today, the organizational culture has changed significantly. Open communication, teamwork and mutual understanding among personnel and managers is the main features of modern workplace. Working with

Emotional Intelligence allows managers to understand the feelings of employees and helps the manager to motivate his subordinates. (Daus & Ashkansay, 2005)

In modern workplaces, a manager has to work with many teams along with people having different opinions and ideas. Emotional Intelligence plays a vital role in such situations. The managers have to learn to control and manage their emotions and moods because if the emotions are effectively used it will help them to use skills and knowledge effectively. Emotions and mood swing have a significant influence on the problem at hand. If the manager controls their impulses and emotions, they can find a creative and reasonable solution of problem whereas if the managers fail to do so, there is a chance that they give unrealistic or difficult solution of that problem. (Gardner & Stough, 2002)

In modern complex organizations, tough decisions are often made by management. The best decision made by any manager is a blend of self awareness and social skills and knowing the impact of their decisions on the organization. Such managers are supposed to be emotionally intelligent. Research has shown that Emotional Intelligence is a key factor which determines the success of failure of the management and organization.

Emotional Intelligence affects almost all areas of organizational effectiveness. The influence of Emotional Intelligence starts with the organization hires a new staff. In big companies, the Emotional Intelligence of candidates is evaluated before hiring because the performance of the employees is heavily influenced by the Emotional Intelligence. However, different jobs demand various levels of Emotional Intelligence. There are very few numbers of jobs in which a very good level of Emotional Intelligence does not confer

advantage.

Research has been conducted on Emotional Intelligence and its impact on organizational performance in developed countries however there is a need to explore the area of Emotional Intelligence in developing countries like Pakistan. This study is an attempt to identify those factors which can be used by top management of an organization so that the organizational performance can be increased.

Pakistan has very heterogeneous economy i.e. Agriculture industry, textile industry, sports sector and services sector etc. Banking sector of Pakistan is one of the well developed services sector and its growth is increasing day by day. After the privatization reforms, this sector has become more energetic and competitive than ever. <sup>1</sup>Banking sector of Pakistan has shown 23% increase per annum and overall size of banking industry is reaching to approximately more than 5 trillion rupees over the past five years. This clearly shows that the banking industry is now most lucrative industry with sound growth in Pakistan.

### **Emotional Intelligence in the eye of Islam**

Islam is a complete way of live which covers all features of human life. The teaching of Islam guides us to live a balanced and modest life in all conditions of life. When we closely observe the teaching of Islam, we will find thousands of examples which will teach us a lesson of Emotional Intelligence. (Rauf, 1988)

Islam has laid great stress on Emotional Intelligence. In the Holy Quran,

*“Those who spend in prosperity and in adversity, who repress anger, and who pardon men; verily, for Allah loves those who do good.” (III: 134) (Rauf, 1988)*

Allah shows His love for those who fulfill their promises and show empathy on other people.

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<sup>1</sup> Economic Survey of Pakistan 2008-2009

*“.....But forgive them, and ignore (their misdeeds): for Allah loveth those who are kind.” (V: 13)*

(Rauf, 1988)

In the Holy Quran, Allah dislikes those persons who do not show empathy.

*“.....For Allah loveth not those who do wrong.” (XLII: 40)* (Rauf, 1988)

Islam has shown the perfect guidance leadership and justice. In Holy Quran Allah says,

*“O Dawud! Verily! We have placed you as a successor on earth, so judge you between men in truth (and justice) and follow not your desire for it will mislead you from the path of Allah. Verily! Those who wander astray from the Allah (shall) have a severe torment, because they forgot the day of Reckoning.”*

*(XXXVIII: 26)* (Rauf, 1988)

All of the above verses from Holy Quran show the competencies of Emotional Intelligence. There is a need to develop the people with quality because organizations will become a quality organization when it will have quality people. The teaching of Holy Quran and the life of our Prophet Muhammad (P.B.U.H.) is the perfect example of the emotional intelligence moreover we can develop our emotional intelligence by following their teachings. Western philosophers like Bernard Shaw and Michael Hart have also suggested that Prophet Muhammad (P.B.U.H.) is the one and only perfect example of Emotionally Intelligent personality of the world who has set an example of empathy, self awareness, self regulation, motivation and interaction with people throughout his life.

### **LITERATURE REVIEW**

Researchers have conceptualized the Emotional Intelligence as indicator having the capability to

contribute towards the positive behaviors and effectiveness. Mayer, Caruso & Salovey (1999) & Ciarrochi, Chan & Caputi (2000) conceptualized Emotional Intelligence as the personal ability while Schutte & Malouff (1999) conceptualized Emotional Intelligence as the personality traits.

Lam & Kirby (2002) redefine the definition of Emotional intelligence given by Mayer and Salovey as “the ability of a person to control and monitor his emotions as well as emotions & feelings of people around him and using the emotions and feelings of persons to guide them.” Multi-Health Systems has also briefly explained the term Emotional Intelligence as “the ability of a person to handle daily pressures and demands of surrounding.”

Ashkanasy, Hartel & Daus (2002) presents both narrow interpretation and broader interpretation of Emotional intelligence. In narrow interpretation, Emotional Intelligence was limited to the different abilities of human perceptions, identifying emotions understanding and managing the emotions. Whereas in broader interpretation, Emotional intelligence was expanded to empathy, making right decisions and team work. Both interpretations support the definition of Emotional Intelligence which identify the fact that Emotional Intelligence is different from the Traditional Intelligence (I.Q.) because unlike traditional intelligence (I.Q.), Emotional Intelligence can be developed and its level can be increased through trainings and workshops. Researchers of Emotional Intelligence also claim that Emotional Intelligence accounts more than

70% than traditional Intelligence in determining the success in life.

Goleman & Cherniss (2001) argues in their book “The Emotionally Intelligent Workplace” that Emotional Intelligence affects the effectiveness of organization in many areas. Following are some areas of



organizational effectiveness which are influenced by the Emotional Intelligence.

- Attaining and Retaining the employees
- Grooming the talent of employees
- Boosting up the morale of employees
- Job commitment of employees
- Productivity of the organization
- Sales and revenue of the organization
- Customer loyalty

Dulewicz & Higgs (2000) argues that current literature on Emotional Intelligence has focuses on psychological based research and educational based research. However during the last decade researchers have focused on the organizational needs and today the importance of Emotional Intelligence in the modern workplace has been explored. Weisinger (1998) study shows that people having high level of Emotional Intelligence have more success in their careers. Jordan, Ashkanasy, & Hartel (2002) argues that people having a significant level of Emotional Intelligence have less job insecurity and can lead other people more effectively and efficiently. Prati, Douglas, Ferris, Ammeter & Buckley (2003) study found that highly emotional intelligent people can be a star leader and can increase the effectiveness and performance of their team.

Chrusciel (2006) states that it is the responsibility of management to tackle the continuous changes and increasing demands of the external and internal environment of organizations. This usually results in the evaluation of management techniques and evaluating more innovative tools and techniques. Eisenbach,

Watson & Pillai (1999) study explains the two leadership styles i.e. Transformation leadership and Transactional leadership. Now it is the decision of the management which strategy they adopt i.e. whether they go for transformation leadership style or Transactional leadership style. Gardner & Stough (2002) examined the impact of Emotional Intelligence and senior level managers in organizations and found that there is a strong relationship between Emotional Intelligence and transformational leadership style. Leban & Zulauf (2004) further argues that there is also a third style of leadership i.e. laissez-faire but there study shows that transformational style is more appropriate in order to enhance the effectiveness and performance of organizations. Rozell, Pettijohn & Parker (2001) argues that Emotional Intelligence has capabilities which can derive the organization for success and it can be developed by appropriate training. The phenomenon that the Emotional Intelligence can be developed is helpful for organization in order to excel towards prosperity within the desired staff.

### **Emotional Intelligence and Workplace**

Carmeli (2003) suggested that satisfied employees lead the organization towards profitability. Satisfaction of employees is also considered as well being of employees at their workplace. After studying the behaviors of senior managers Carmeli (2003) concluded that there exists a significant relationship between job satisfaction and Emotional Intelligence among senior managers.

Abraham (1999) argues that the Emotional Intelligent persons are optimistic which enables them to concentrate on resolution rather than focusing on reasoning. The tough and ambiguous environment may results in the frustration and disturbance; however Emotional intelligent employee would know that organization is not responsible for any kind of frustration and they will be able to push them from the bad

state of mind to good state of mind which was validated by the study conducted by (Carmeli, 2003) that Emotional Intelligence is the key factor in making a manager to star manager because he is managers are the people who reconcile the feelings of frustration of different groups inside and outside the organizational environment. Griffeth, Hom & Gaertner (2000) explains that high level of Emotional Intelligent decrease the intentions of employees to quit their jobs as Emotional Intelligence enable them to handle their emotions and feelings. Emotionally Intelligent persons are capable of pushing themselves in a positive state of mind.

### **Emotional intelligence in Service Sector**

Ashkanasy, Hartel & Daus (2002) argues that the changing trends of the service based sector are emphasizing on needs to provide quality services to customers. Pritchett & Pound (2005) explains that internal and external environment of the organization may be changed gradually but one thing which always remains same is increasing demands and expectations of the clients. Bardzil & Slaski (2003) says that the importance of service based environment is gaining more and more importance and is considered as having a significant impact on profitability of organization. In order to gain the competitive advantage, organizations look at management strategies and it is strongly recommended that one core area which is yet to be completely explored is Emotional Intelligent and its techniques & methods which can be used by management in order to increase the level of Emotional Intelligence.

The key benefit gained by the management in promoting the emotionally intelligent environment in organizations is that the staff becomes able to regulate and control their emotions when they interact with their clients. Bardzil & Slaski (2003) and Prati M. , (2005) called this as “emotional labor” while Lam &

Kirby (2002) called it as “buffering”. The major focus in “emotional labor” is on the relationship of the customer and staff person i.e. if the staff person is emotionally intelligent and reflects the right emotions when dealing with customer, it will show a positive impact on the relationship of customer and organization which will eventually increase the financial profitability of organization. Lam & Kirby (2002) says that an organization can get a competitive advantage over its competitors when employees are able to squelch their feelings and emotions in order to meet the expectations of their customers.

Deeter-Schmelz & Sjoka (2003) found a positive relationship between sales performance and Emotional Intelligence which was further verified by (Higgs, 2004) who conducted a research on the English call centers. Heffernan, O’Neill, Travaglione & Droulers (2008) found in his research that profitability of banking sector is positively related with the level of Emotional Intelligence of relationship managers. Palmer, Walls, Burgess & Stough (2001) argues that higher the higher level of Emotional Intelligence in service sector leads the organization to the higher profitability.

### **Rationale**

As evident from the introduction, banking sector is the fastest growing service sector of Pakistan showing growth more than 20%. If we are able to show the relationship and impact of Emotional Intelligence of managers on the financial profitability of banks, banking sector will be able to increase profitability by increasing emotional intelligence on management level.

### **RESEARCH QUESTION**

How the manager’s emotional intelligence affects the financial performance of banks?

### **Research Hypothesis**

Based on above literature, we proposed following hypothesis:

*Hypothesis 1:* Manager's social skill is positively correlated to financial performance of banks.

*Hypothesis 2:* Manager's self motivation is positively correlated to financial performance of banks.

*Hypothesis 3:* Manager's empathy is positively correlated to financial performance of banks.

*Hypothesis 4:* Manager's self regulation is positively correlated to financial performance of banks.

*Hypothesis 5:* Manager's self awareness is positively correlated to financial performance of banks.

## **METHODOLOGY**

### **Population**

The population size of this study consists of all public sector private banks, specialized scheduled banks, private local banks, foreign banks, development financial institutions and micro finance banks.

### **Sample**

Sample consists of 120 respondents from six banks working in Pakistan. In order to get the diversified observations, we collected data from Islamic banks, conventional banks, central bank, and Islamic branches of conventional banks. 5-point Likert scale Questionnaire was used to gather data from employees of banks. Out of 120 employees, 105 responded to the questionnaire and rests of 15 questionnaires were excluded from study due to incomplete and inappropriate responses. The response rate of questionnaire was 75% of total sample. Random sampling method was adopted in order to collect the data from respondents.

### **Data Collection**

This study uses two kinds of data collection methods i.e. primary data collection method and secondary

data collection method. Primary data collection method was used to gather information about the Emotional intelligence and questionnaire was used as a tool in order to collect the primary data, whereas the secondary data collection method was used to determine the financial performance of banks. Secondary data was collected from the annual reports of banks which are available on websites of respective banks.

### **Research Instrument**

In order to achieve the objectives of this research, questionnaire was designed. Questions were designed in order to measure the emotional intelligence. The questionnaire consists of two sections. Section 1 consists of demographic information i.e. age of respondent, gender of respondent, education of respondent, total work experience of respondent and work experience of respondent within that specific bank. Section 2 consists of questions relevant to management and Emotional Intelligence. Management performance was asked in terms of efficiency and effectiveness. Emotional Intelligence questions were designed to measure the Social Skills, Motivation, Empathy, Self awareness and Self Regulation.

### **Measuring Organizational Financial Performance**

(Qureshi, Human Resource Management as performance tool, A managerial Approach Towards Excellence, 2010) uses financial ratios in order to examine the impact of human resource practices and its impact on financial performance. Financial ratios like ROE, ROA, Tobbin's Q ratio and Morris equation etc were used for this purpose. (Alrgaibat, 2010) examines the profitability of banks by using Return on Equity (ROE) and Return on Assets (ROA). In order to measure the financial performance banks in this study, we have used two types of financial ratios i.e. Return on Equity (ROE), Return on Assets (ROA) and

Earning per Share (EPS).

### **Return on Equity**

Return on equity is used to measure that how efficiently management uses its assets to generate profit. It shows that how much profit is generated by organization by using its shareholder's investment. It is calculated as follows;

$$ROE = (Net\ income / Shareholder's\ Equity) * 100$$

### **Return on Assets**

Return on assets (ROA) is also known as Return on investment (ROI). It determines the profitability of a firm relative to its total assets. It shows the efficiency of management in generating revenue form its assets. It is calculated by dividing the total earnings of a firm by its total assets (current assets + long term assets)

$$ROA = (Net\ income / Total\ Assets) * 100$$

### **Earning per share**

Earning per share (EPS) is the amount which organization earns on each share. It is another indicator which determines the profitability of organizations. It is calculated as follows.

$$EPS = (Net\ Income - Dividend\ on\ preferred\ stocks) / Average\ outstanding\ shares$$

### **Procedure**

In this study, we gather data with the help of questionnaire which contains questions about the financial performance of organization and Emotional Intelligence. Few bank employees were requested to gather

data from their respective branches. (Rahim & Malik, 2010) explains such kind of employees as Research Moderator. All data was analyzed through Statistical Package for Social Sciences (SPSS v.16). Relationship of dependent and independent variables was checked by running regression analysis. Organizational Financial Performance was the dependent variable while Social Skills of manager, self motivation of manager, empathy of manager, self awareness and self regulation of managers were the independent variables.

### **Reliability**

In order to evaluate the reliability of the scale, Cronbach's alpha was used. In this study,  $\alpha$  was equal to 0.707 which is good and satisfying because it is more than the acceptable value of 0.70

## **DATA ANALYSIS AND INTERPRETATION**

### **Characteristics of Sample**

#### **Age of Respondents**

24.4% of sample is of the age between 20-25 years, 37.8% of sample is of the age between 26-30 years, 12.2% of sample is of the age between 31-35 years, 16.7% of respondents are of the age between 36-40 years and 7.8% of respondents are of the age between 41-45 years.

#### **Gender of Respondents**

63.3% of sample consists of male and 36.7% of sample consists of female.



**Education of Respondent**

48.9% of sample is graduates, 14.4% of sample is post graduates, 25 27.8% of sample is masters and 8.9% of sample are having other qualifications.

**Total Work Experience of Respondent**

43.3% of sample has work experience of 1-3 years, 20% of sample has work experience of 4-6 years, 12.2% of sample has work experience of 7-9 years, 13.3% of sample has work experience of 10-13 years, 5.6% of sample has work experience of 14-16 years, 3.3% of sample has work experience 17-19 years and 2.2% of experience has work experience of 20 years or more.

**Total work experience with present organization**

48.9 % of sample is working with for his present organization for 1-3 years, 30% of sample is associated with their present organization for 4-6 years, 10% of sample is associated their present organization, 7.8% of sample is associated with their present organization for 10-13 years, 1.1 % of sample is associated with their organization for 14-16 years while 2.2% of sample is associated with their present organization for 20 years or more.

**Regression analysis**

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**Regression Table**  
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Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	
	B	Std. Error				
1	(Constant)	1.920	.474	4.051	.000	
	SS	.125	.084	.165	1.485	.141
	MT	.147	.105	.204	1.404	.164
	EM	.337	.136	.285	2.480	.015
	SA	-.046	.106	-.057	-.432	.667
	SR	-.047	.128	-.058	-.366	.715

a. Dependent Variable: OFP

Regression analysis is used to examine the impact of one variable on other variable. In this study, regression analysis is used to examine the impact of social skills, motivation, empathy, self awareness and self regulation of managers on financial performance of banks. Regression table shows the Social skills (SS) and Motivation (MT) have insignificant impact on the organizational financial performance ( $\beta=.125$ ,  $t=1.485$ ), ( $\beta=.147$ ,  $t=1.404$ ) respectively. Whereas, Empathy (EM) has a significant impact on the organizational financial performance ( $\beta=.337$ ,  $t=2.480$ ). Self awareness and self regulation also have insignificant impact on the organizational financial performance.

### **Correlation Analysis**

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**Mean, Standard Deviation, Correlation Table**  
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	Mean	Std	OFP	SS	MT	EM	SA	SR
OFP	3.713	0.48626	1					
SS	3.589	0.64188	.247*	1				
MT	3.473	0.67519	.228*	0.102	1			
EM	3.393	0.41048	.339**	.286**	.243*	1		
SA	3.369	0.60627	0.18	.350**	.361**	.471**	1	
SR	3.327	0.60287	0.136	0.001	.718**	.263*	.490**	1

Note: \*p<.05; \*\*p<.01

The gathered data is indicating that all responses are tilt towards indifferent and agree option with low standard deviation values. In this study, Pearson's correlation is used to find the correlation between dependent variable (OFP) and independent variables (SS, MT, EM, SA and SR). Table 4 shows the descriptive statistics which consists of Mean, Standard Deviation, Variance, Minimum and Maximum values. Table 5 shows the correlation between dependent and independent variables. The Positive correlation between organizational financial performance and manager's social skills ( $r = .247$ ) and with mean and standard deviation values ( $M = 3.5889$ ,  $SD = .48626$ ) is showing that both variables are moving in same direction. So, our first hypothesis is true i.e. manager's social skill is positively correlated with financial performance of banks. There is positive correlation between organizational financial performance and motivation ( $r = .228$ ) and with mean and standard deviation values ( $M = 3.4733$ ,  $SD = .64188$ ) is showing that both variables are moving in same direction. So, our second hypothesis is true i.e. manager's self motivation is positively correlated with financial performance of banks. There is a positive correlation between manager's empathy and organizational financial performance ( $r=.339$ ) and with mean and standard deviation values ( $M =3.3933$ ,  $SD=.41048$ ) is showing that both variables are going in same direction so our third hypothesis is correct that manager's empathy is positively correlated with financial performance of banks. There is a positive correlation between organizational financial performance of banks and self awareness ( $r = .180$ ) and with mean and standard deviation values ( $M=3.3689$ ,  $SD=.60627$ ) is showing that both variables are moving in same direction. So our fourth hypothesis is correct i.e. manager's self awareness is positively correlated with financial performance of banks. There is a positive correlation between Self regulation and organizational financial performance

(.136) with mean and standard deviation value (M=3.3271, SD=.60287) is showing that both variables are moving in same direction.

Among other variables, Self regulation is significantly correlated with motivation (r = .718) Self awareness (r = .490) at 0.01 significance level which shows the strong relationship among self regulation, motivation and self awareness. Self awareness is significantly correlated with social skills (.350), motivation (.361) and (.471) at 0.01 significant level showing strong relationship among them. Empathy is significantly correlated with social skills (r=.286) at 0.01 significance level and significantly correlated with motivation (r = .243) at significant level of 0.05.

**Financial performance of Banks**

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**Financial Performance of Banks**  
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		2005	2006	2007	2008	2009
Bank Alfiah Limited	ROE	30.65%	20%	25.72%	9.17%	5.22%
	ROA	0.84%	0.67%	1.04%	0.34%	0.24%
	EPS	3.92	2.91	3.92	1.41	0.71
National Bank Of Pakistan	ROE	43.00%	38.00%	19.00%	21%	18.00%
	ROA	2.25%	2.81%	2.72%	1.96%	2.07%
	EPS	11.81	15.81	17.68	14.36	16.92

Allied Bank Limited	ROE	28.00%	30.00%	24.00%	21.00%	30.50%
	ROA	1.78%	1.98%	1.42%	1.21%	1.81%
	EPS	4.35	6.18	5.73	5.85	10.02
Meezan Bank Limited	ROE	16.70%	15.64%	18.39%	10.30%	13.29%
	ROA	1.67%	1.57%	1.70%	0.82%	0.98%
	EPS	1.46	1.88	1.96	1.22	1.71
Bank of Punjab	ROE	42.03%	43.64%	34.50%	-1.00%	-
	ROA	2.65%	2.76%	2.22%	-0.05%	-
	EPS	10.01	13.14	10.51	-19.02	-

In order to calculate the financial performance of banks, three types of ratios has been used i.e. (i) ROA (ii) ROE and (iii) EPS. All these financial ratios are used world wide as profitability ratios. Those banks are selected for determining the financial performance which are included in sample size. However two banks are excluded in determining the financial performance because of unavailability of data. Secondary data has been used to calculate these financial ratios.

It is clear from table 6 that there is a decline in financial performance of banks from 2008 onwards because there was a recession period all over the world. That is why, in regression analysis, only one variable shows a significant impact on financial performance of banks. Moreover in correlation analysis only one variable becomes significant at 0.01 levels while two variables becomes significant at 0.05 levels. All three ratios are showing the decline in profitability of banking sector. Therefore it can be

concluded that due to recession period of 2008, there is a decline in financial performance of banking sector and moreover, there is no significant impact of emotional intelligence on the financial performance of banking sector in that specific period of time.

### **CONCLUSION**

This study examines the role of manager's Emotional Intelligence on the financial profitability of banks.

The conclusions of this study are as follows.

1. Social skills of manager is positively correlated ( $r=.247$ ) with financial performance of banks. The relationship between these two variables is significant at 0.05 level
2. Self motivation of managers is positively correlated ( $r=.228$ ) with financial performance of banks. The relationship between self motivation and financial performance of banks becomes significant at 0.005 level
3. Empathy has a positive relationship( $r=.339$ ) with financial performance of banks. The relationship between empathy and financial performance of banks becomes significant at 0.01 level
4. Empathy of managers ( $\beta=.337$ ,  $t=2.480$ ) has a significant impact on the financial performance of banks

Carmeli (2003) found the positive relationship between Emotional Intelligence of senior level managers and organizational performance which validate the findings of this study.

5. Self awareness of managers have a positive correlation ( $r=.180$ ) with financial performance of banks but this relationship is not found significant
6. Self regulation of managers have a positive correlation ( $r=.136$ ) with financial performance of banks but this relationship is not found significant.

7. Social skills of managers, self motivation, self awareness and self regulation of managers have no significant impact on the financial performance of banks.

This happen because the scenario of banking sector of Pakistan is somewhat different from the western countries (Qureshi, Akbar, Khan, Sheikh, & Hijazi, 2010). Moreover, due to the recession period, the impact of Emotional Intelligence on the financial performance of banks becomes insignificant. As this study is an attempt to explore the influence of non financial factors on the financial performance, the findings of study has shown that Emotional Intelligence of managers is explaining 11.6% ( $Adj. R^2 = .116$ ) of total financial performance of banking sector.



### **PRACTICAL IMPLEMENTATION FOR BANKS**

From the findings of this study, it can be derived that Emotional Intelligence of managers has a positive relationship with financial performance of banks. Banks operating in Pakistan should give due consideration for developing and training of Emotional Intelligence. This study can be helpful for management of banking sector as well as helpful for other financial institutions in order to achieve the high profitability. This issue of Emotional Intelligence is of great importance because banking sector of developing nation like Pakistan will have to focus on the higher profitability in order to survive in today's challenging global village. There is a need for higher management of banking sector to organize and design the training and workshops of Emotional Intelligence.

High Emotional Intelligence of managers is not the only indicator for guaranteed profitability or making better financial performance of banks or attaining greater market share because the banking structure is too complex and by improving one aspect will not cure every ill.

### **LIMITATIONS OF RESEARCH**

The purpose of this study is to explore the relationship of emotional intelligence of managers and financial performance of banks is also a limitation because it does not include the relationship of Emotional Intelligence of non managerial employees and financial performance of banks. The limitation of this study is that it does not focus on the impact of mediating and moderating variables on the depending variable and it is only focusing on the manager's emotional intelligence. This research is only

limited to the banks of Lahore while only limited number of banks are selected for this study. Moreover limited number of correspondents was contacted for data gathering. This study determines the financial performance of banks through only three financial ratios.

### **DIMENSIONS FOR FUTURE RESEARCH**

In European countries, there are many training programs and workshops for developing and improving the level of Emotional Intelligence, however there is a need to research and develop training programs of Emotional Intelligence which are according to norms and values of culture of Pakistan. In developing country like Pakistan there is need for exploring the relationship of Emotional Intelligence on the financial performance of organizations. Moreover, the impact of Emotional intelligence on the financial performance of organizations can also be examined on other sectors. Relationship of Emotional Intelligence of non managerial employees and organizational financial performance can also be evaluated as future research. Some mediating, moderating and control variables can also be used in future. The financial performance of banks can also be measured by using other profitability ratios like Tobin's Q ratio and Morris Ratio etc.

Other cities of Pakistan along with increased number of banks and employees can be used as a sample size.

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# **An Empirical study on Factors influencing Competency development with special reference to Accurate Data Convertors Pvt Ltd, Coimbatore**

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## **Authors:**

**V.Uma**

**P.Manonmani**

Assistant Professor

Associate Professor

PPG Institute of Technology

PPG Business School

Coimbatore

Coimbatore

## **Abstract**

The competences are defined in terms of what job holders should be capable of doing. They can then be used as the basis for obtaining evidence of what they can do and they have done (performance management). The gap between what people should be able to do and what they can actually do indicates the area for personal development –learning and training activities. This paper deals with Non-Voice based BPO industry where the competition in the field is increasing because of new entrants. This situation poses an issue whether the present workforce is competent enough to meet the global demands and to know whether the working environment is conducive to improve the same. So, a study is needed to analyze the prevailing factors influencing the competency level of data entry operators at Accurate Data convertors Pvt Ltd, Coimbatore

## **Introduction**

A competency is an underlying characteristic of a person which enables them to deliver superior performance in a given job, role or situation. The concept of competence is more meaningful in practical terms than that of competency because it is about people have to do to achieve results .It is not about how they do it ,which may or may not results in the required performance and tends to lists of generalized personality characteristics such as persuasiveness ,assertiveness and achievement motivation .



The competences are defined in terms of what job holders should be capable of doing. They can then be used as the basis for obtaining evidence of what they can do and they have done (performance management). The gap between what people should be able to do and what they can actually do indicates the area for personal development –learning and training activities. This paper deals with Non-Voice based BPO industry where the competition in the field is increasing because of new entrants. This situation poses an issue whether the present workforce is competent enough to meet the global demands and to know whether the working environment is conducive to improve the same. So, a study is needed to analyze the prevailing factors influencing the competency level of data entry operators at Accurate Data convertors Pvt Ltd.,

### **Objectives of the Study**

- To identify key/core competency factors of operators.
- To rank the competency factors prevailing at Accurate Data Convertors Pvt Ltd
- To test the demographic factors have any significant influence on overall satisfaction level of factors prevailing to improve the competencies.

### **Review of Literature**

**Girrbach and Charmaine J.Claus, Richard N.[2004]**,in their article "Competency Testing :A Review of the Literature .Evaluation Report" states that " The Board of Education of the School District of the City of Saginaw requested the Department of Evaluation Services to review the literature relative to competency testing, especially for the elementary grades. This review on competency testing programs and competency based education (CBE) covers several areas. The emphasis on educational accountability has increased during the past 28 years.CBE consists of three elements .Minimum competencies should be defined by how effectively students can function in life roles. The attainment of specific competencies should be a standard for graduation. A summary of what constitutes successful performance of competencies should be included in the certification process. Activities of other school districts in this

area are discussed. The alternatives to be tested in a competency based testing program include basic skills ,school subjects , like role competency areas ,and basic skills applied in school subjects and life role competency areas. The various methods to assess minimum competency in these areas is discussed. An illustration is given of how one district began its program as well as a listing of benefits and problems. Recommendations for competency program design conclude the review.

**Hong J-C, Yang S.D. [2007]**, in their article states that the "Current business and educational environments are mandating the identification, building, and assessment of specific critical competencies for the workforce. However, traditional approaches to competency analysis are often slow, expensive, and backward looking. This article presents several new computer-aided approaches to competency analysis and provides examples of their use, including a detailed case study analyzing curricula and skills for professionals who provide benefits and work incentives planning and assistance to persons with disabilities"

**Beykan Cizel, Nilgun Anafarta and Fulya Sarvan [2010]**, in their article state that "One of the ways of improving organizational performance is to focus on individual performance and to analyze the knowledge and skills needs for effective job performance. Relevant literature suggests that needs should be studied as gaps in competencies. This study reports findings from data relating to the perceptions of middle - level managers about the importance and current state of managerial competencies in the tourism sector. Data was collected through a questionnaire survey conducted in the hospitality facilities in Antalya, the so-called capital city of tourism on the Mediterranean coast of Turkey .Respondents were asked about the importance and also present level of managerial competencies (technical and generic) required for effective job performance .Gaps were measured by subtracting the importance value ascribed to be the competency from the value ascribed to the present competency level.

### **Universe of the study**

Universe of the study refers to the all the employees at Accurate Data Convertors Pvt Ltd, Coimbatore. The total strength of the universe is 160. The sample size used for the study is 80. The

respondents were selected by using Random sampling technique. The primary data was the first hand information's collected through Interview Schedule. The following relevant statistical tools were compatibly used to test the hypothesis and the results were interpreted. 1.Simple Percentage Analysis,2.Chi –Square Analysis, 3.ANOVA and Weighted Average Analysis

## Findings

### Simple Percentage Analysis

- Majority (64%) of the respondents were female.
- Majority (45%) of the respondents belongs to the age group 26 to 32 years.
- Majority (23%) of the respondents were HSC qualified.
- Majority (41%) of the respondents were unmarried.
- Majority (41%) of the respondents belongs to the Monthly Income Level of Rs.5001 – 8000.
- Majority (44%) of the respondents are having 6 - 9 years of Experience.
- 30% of the people expressed that their competency level is more than expected level.
- 11% of the people expressed that their competency level is less than expected level.

### • Identification of Key/Core Competency

COMPETENCY FACTORS	SA	A	NN	DA	SDA
Operational knowledge of materials and tools used	14	47	11	19	9
Level of attitude to learn new things	17	47	13	13	10

Team spirit	20	43	16	11	10
Time management	18	44	15	13	10
Information about job description	19	43	16	11	11
Decision making committee	26	35	18	9	12
Communication level	24	35	19	10	10
Goal achievement	26	41	16	9	10
Respondents' Initiativeness	24	36	19	6	13
Career development	29	36	18	6	11
Effective management of time	20	43	17	11	9
<b>Average</b>	<b>19</b>	<b>41</b>	<b>16</b>	<b>11</b>	<b>10</b>

### Chi – Square Analysis

#### **Influence of demographic factors and overall satisfaction level on factors prevailing to improve the competencies.**

- Department and overall satisfaction level are independent. (TV:36.41;CV:26.34)
- Gender and overall satisfaction level are dependent. (TV:9.48;CV:11.19)
- Age and overall satisfaction level are dependent. (TV:26.29;CV:38.68)
- Educational Qualification and overall satisfaction level are independent. (TV:36.41;CV:30.68)
- Marital Status and overall satisfaction level are independent. (TV:26.29;CV:25.76)
- Income and overall satisfaction level are dependent. (TV:21.02;CV:23.62)

- Total Experience and overall satisfaction level are independent. (TV:21.02;CV:19.04)
- Experience in the present company and overall satisfaction level are dependent. (TV:21.02;CV:21.55)

**ANOVA**

**Influence of demographic factors and overall satisfaction level on factors prevailing to improve the competencies.**

- Department and overall satisfaction level had no significant difference between them.(TV:2.51;CV:1.46)
- Gender and overall satisfaction level had no significant difference between them.(TV:7.71;CV:7.01)
- Age and overall satisfaction level had significant difference between them.(TV:2.51;CV:4.70)
- Education Qualification and overall satisfaction level had significant difference between them.(TV:2.51;CV:3.28)
- Marital status and overall satisfaction level had significant difference between them.(TV:2.51;CV:5.31)
- Monthly Income Level and overall satisfaction level had significant difference between them.(TV:3.49;CV:4.95)
- Total Experience and overall satisfaction level had significant difference between them.(TV:3.49;CV:5.68)
- Experience in the present company and overall satisfaction level had significant difference between them.(TV:3.49;CV:4.42)

**Weighted Average Analysis**

**Ranking of the competency factors prevailing in Accurate Data Convertors Pvt Ltd.**

<b>RANK</b>	<b>COMPETENCY FACTORS</b>
1	CAREER MOTIVATION
2	FREEDOM TO INITIATE
3	LEADERSHIP

4	DECISION MAKING PROCESS
5	TRUSTWORTHINESS AND ETHICS
6	TEAM SPIRIT
7	COMMUNICATION LEVEL

It is appreciable, that the above said competency factors are ranked top range by the existing employees which is prevailing in Accurate Data Convertors Pvt Ltd which is the positive sign to develop the competencies of employees.

## Conclusion

As the study revealed that the level of satisfaction towards the factors prevailing to improve the competency level of employees is based on the selected demographic and socio-economic factors. It is suggested that, the necessary motivation need to be given to enhance loyalty towards the management which in turn increase the competency level of workers.

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# Effective environmental performance as a part of a model for organizational perfection

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prof. Ivo Kuzmanov, PhD.<sup>1</sup>, prof. Silvana Angelevska, PhD.<sup>2</sup>, prof. Zore Angelevski, PhD.<sup>3</sup>

<sup>1</sup>*Faculty of Technical Science, Ivo Lola Ribar n.n., Bitola, R. Macedonia*

<sup>2</sup>*Faculty of Technical Science, Ivo Lola Ribar n.n., Bitola, R. Macedonia*

<sup>3</sup>*Faculty of Technical Science, Ivo Lola Ribar n.n., Bitola, R. Macedonia*

## *Abstract*

**The main problem for entities who have implemented ISO 14001 is the inefficient tracking of the environmental performance (and pollution). One of the basic problems during the process of application is the process of environmental performance evaluating in the initial phases.**

**The main objective of this paper is to represent the model of organizational performance in aim to mitigate the effect of inefficient, newly installed environmental system (or/and as a part of integrated QMS).**

*Keywords – ISO 14001, environmental management system, environmental performance evaluation, model of organization performance.*

## **1. Introduction**

Numerous business entities in R. Macedonia, and worldwide, aren't capable of paving its own way to functional environmental system, who will contribute to the environmental performance. Taking in consideration system such as REK Bitola, systems that have a numerous negative effects on the environment (pollution of the air, water, ground) it's more that obvious that environmental programs can't be achieved only with efficient management of elements of the business activity that have a significant negative influence on the environment.

First of all, the so-called Deming cycle, must be the main activity in every single process. Planning and environmental performance evaluation represents an internal management process in every single business entity, no ether huge or small the same one is. This process must be projected in a way that secures an interrupted management, reliable and confidential information, with aim to establish uninterrupted achievement of the company goals.

The basic aim of this paper is to represent the planning of the environmental evaluation as a part of the Deming's cycle and as a part of the created model for organizational perfection.

## **2. Representing the environmental performance**

As it is previous represented, the process of environmental performance is a key element for successful environmental system. The main problem in this area is that the organizations sees on the environmental performance evaluation as an internal process in the company which is used only to acquire information. The acquired information must be compared to the previous one so it could represent the company's environmental performance, with criteria benchmarking with similar company.

The process of environmental performance evaluation itself always is with accordance to the Deming's cycle, as a model of "plan – do – check - act".

The Deming's model, mentioned before is represented in the next Figure 1.

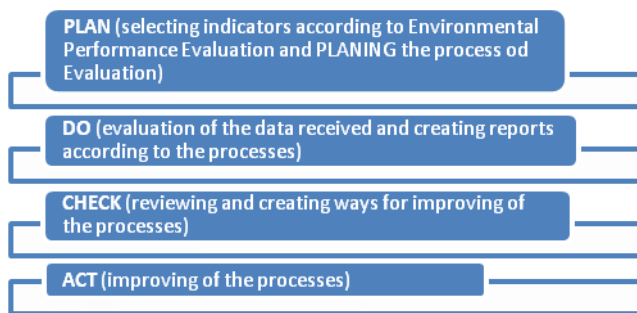


Figure 1. Environmental evaluation according to Deming's cycle

According to the above mentioned ISO 14001 international standard, or the ISO 14031:1999 standard, there are two main indicators for environmental performance evaluation. The both indicators indirectly have influence to the process of planning of the environmental performance evaluation. These two indicators mentioned before are the:

- Indicator for the actual environmental performance
- Indicator for the state of environment

The first ones, according to the demands of the mentioned standard can be considered as management indicators and operational indicators.

In this moment, first of all the operational performance indicators are the ones who should be taken into consideration. The reason is more than obvious. The business operations are the one who pollute the environment (water, ground, air). They gave us the information about the actual state of the environment in and around the business entity. Seeing this point, many consultants that work on the environmental management, will say that only continuous measurements can produce actual steps and actual improvements, and they are actually right. The information about the state of the environment in and around the company, are the most important information to the company's management team. Based on this information, the management team of the entity can better understand the real and the potential influence of their own capacities to the environment. This information is the most valuable one, because they are the so-called basic entrance in the process of planning. Every planning on the measures and the processes must be based on real information gathered in the past period of work.

On the other hand, there are the management performance indicators. Both of the mentioned indicators are very interesting and precious in the planning process. I must say that every planning must be based on real gathered information about the past operations, and according to the management strategies and perspectives. The management performance indicators represent the wishes of the management, and they represent the efficiency of the implemented environmental system according to the international ISO 14001 standard, and its demands.



Speaking of management wishes, it's very important that they are real representation of the company's possibilities and momentarily company situation. The wishes must be a real represent of the wishes of every management level according to the company's hierarchy.

On the other hand, the company's wishes are the key element for implementation, maintenance and improvement on the environmental system according to ISO 14001, and on the integrated QMS it the company have one.

The wishes, can be transformed into a realization of a planned purchase of equipment such as: filters etc. For example, the company's activities in REK Bitola, as a key generating company for production of electricity, and management wishes, were gathered together with the implemented filter systems on the chimneys of the company. This activity, together with the projected wind (the chimneys are built so they can transport the polluted air to 'not populated places'), reduce the pollution up to 25%.

The above stated information (wishes) are really important because the other levels of the company, represent an image of the wishes of the management (either the management wants to make the system alive or not). This implies the greater motivation of all in the company according to the hierarchy (management and other structures in the company).

According to the mentioned before, the operational performance indicators also represent the result of the measurement (of the performance). According to the given example (REK Bitola), such as parameters could be concentration of substances (NO<sub>2</sub>, CO<sub>2</sub>, SO<sub>2</sub>) before and after some activities are done with aim to reduce the hazardous chemical substances. For other entities, such as parameters could be: the total amount of waste, the total amount of water used so could be produced a product, etc.

### **3. The model for organizational perfection**

There are many ways so companies can be more efficient and more effective. The given model for organizational perfection is implemented as a test model in 82 business entities in R. Macedonia, as a part of the survey on the key indicators. The ISO 14001 standard, mentioned before, is one of the key aspects of the model.

But before the model (the part about the ISO 14001 standard) is represented there are several steps that companies must do so they can get full benefits from the model. The steps are represented into the given notes in addition:

- Evaluation of the previous work
- Evaluation of the strategies (short-term and long-term)
- Monitoring and GAP analysis on the operations and processes
- Creating electronic base (using MS Access 2007 and/or MS Visual Studio), where the documentation could be documented and the result, performances, measurements also
- Implementing integrated QMS (ISO 9001, ISO 14001, OSHAS 18001)
- Benchmarking model (comparison with similar business entities), in this case regarding the pollution and the prevention measures taken
- Evaluating the results and validation of the implemented model
- Creating a PDCA cycle (continuous improvements)
- Following the results from the improvements

According to the given steps, the process of implementation of the ISO 14001 standard is only a part of the integrated management system. The appropriate implementation of the same, no ether it's a part of an integrated system, or its implemented as a separate system, should be done according to the given steps in Figure 2.

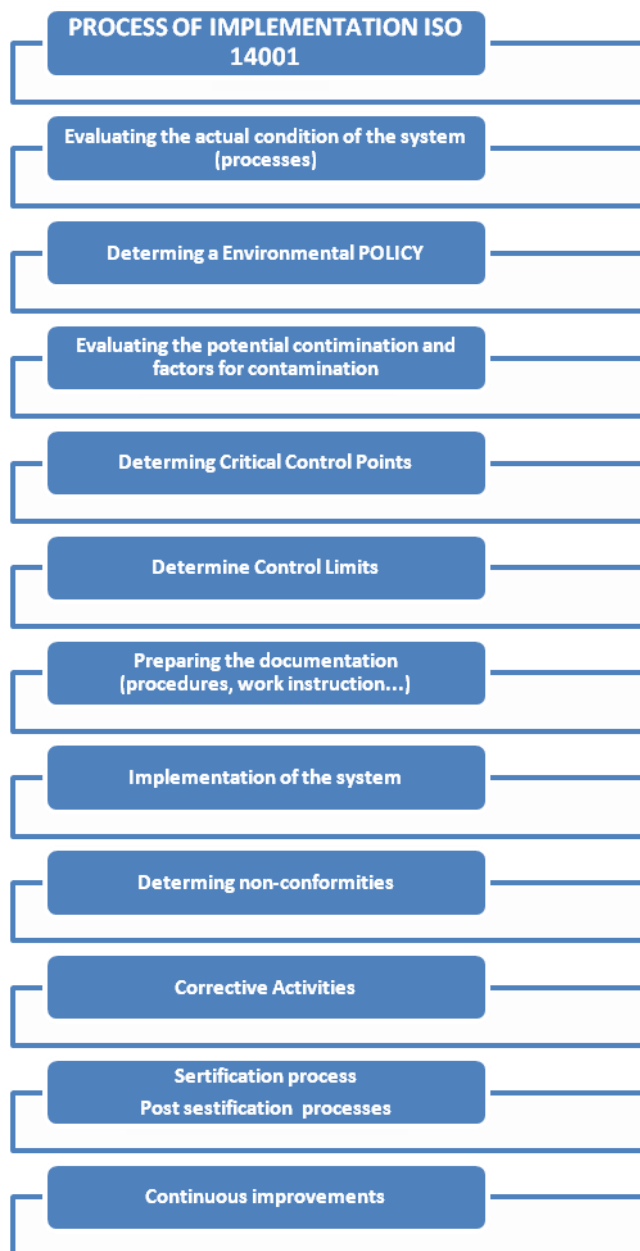


Figure 2. Process of implementing ISO 14001 in real business entity

Seeing figure 2, in can be concluded that the main objective of the implemented environmental system is the reduced contamination of the environment (reduced waste, reduced pollution, reduced air contamination) and continuous improvements of the processes and the system itself.

**4. Process of planning the performance, evaluation and improvements of the systems**

The process of planning is a continuous process, that should be based on three main objectives such as:

- Significant aspects of the environment (aspects that can be controlled), and such aspects that are expected to be controlled,
- Criteria (given by the business entity) that have influence on the environment, environmental performance evaluation, and on the contamination of the environment and
- The wishes/demands of the interested stakeholders (partners, municipality, inspections, other bodies and stakeholders)

Considering all the previous objects, for every single business entity (no matter if it is private or state) it's very important to determine which are those significant aspects that have influence on the environment. This is a main activity because, the organization cannot take responsibility for every single aspect that has an influence on the environment. This would be unreasonable spending on the company's resources (financial, material, human...).

This is the reason, that only significant aspects are taken into consideration when the environmental performance is planned. The aspects that are significant are determined by numerous factors such as: inspections, aspects that have influence on the environment, aspects that are the weak points of the company regarding the environment, etc.

The criteria of the environmental performance are placed by the company itself but above all, with regard to the legal regulatory, local and state inspections.

Considering the above mentioned, every business entity must assess the achieved environmental performance in relation to the adopted policy and the set of goals that have been set. During the process of determining control points, and during the process of evaluation of the process of environmental management, entities must consider several points. As most of the authors and consultants say, companies must pay attention to several of the points that are given in addition:

- The organizational structure. (main view – more complex structure will lead to less efficient system)
- Business entity strategy with environmental goals to reach in long or short term
- All the business activities, products, services
- The policy that is suitable for the environmental system first of all, and then to the environmental performance evaluation
- All the information necessary to fulfill legal, local and systems demands
- Total expenses necessary to implement environmental system
- Exact periodical information related to the company effects on the environment
- Other relevant factors

The above stated leads to the conclusion that there are a lot of things and work to do for every entity that has environmental management. For that reason, the entity must provide the necessary financial, material, and above all human resources. But the situation is more complex than only providing the necessary financial, human and material resources. Not every business entity can execute the entire plan for environmental evaluation immediately. For different entities, the time line is different. It's related to many factors, but above all the sector in which the company is working.

So these cases, are the most main to the management. In these cases, the management must choose several significant indicators to follow, and when the goals are reached, and then company's activities can be expanded to its

plans for environmental tracking (these are the less important indicators of the environmental performance, but not irrelevant).

Taking in consideration the situation into R. Macedonia, but taking in consideration and the world wide experiences, during the process of environmental planning and evaluation, there are several significant indicators shown in addition, such as:

- Emissions of gases (NO<sub>x</sub>, SO<sub>2</sub>, CO<sub>2</sub>, CO...)
- Pollution of the air
- Risks and risk factors (depending from the industry)
- The momentarily state of the environment and pollution of the same one
- The legal demands
- The possibility for environmental incidents and risks
- Regulatory demands
- The consumption of energy (gas, oil, etc.)

## 5. Conclusion

The aim of this paper was to represent the way for environmental evaluation, and at the same time the process of planning for the environmental evaluation. As it's represented, the process is a very complex activity, which depends from numerous factors. First of all, the best way to make a mistake (from real experiences) is only to implement the environmental system and to thing then the work is done. It's the Macedonian reality. Numerous companies have an environmental management system, but they still pollute around them.

On the other hand, the Macedonian reality is that the companies are faced with limited resources (first of all material, financial, and then human), and that is the main reason why they try to follow only the significant aspects. Unfortunately this is where the work stops. For the companies it is ok if they have fulfilled the legal demands and they don't have any more inspections, but if they still pollute.

This is of course not forgivable from the perspective on environmental protection, but on the other hand it is the current situation in every single company in the Balkans.

In the past few years, several steps are made, and the situation is improved and still is improving from year to year.

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*Corresponding author: Ivo Kuzmanov, PhD.*

*Institution: Faculty of Technical Science*

*E-mail: ivo\_kuzmanov@yahoo.com*

# **A Study On Student Engagement And Its Linkages To Traditional And Reported Measures Of Performance**

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Jatin Pandey\* B.E.(C.S. & Engg),P.G.C.C.L., MSc.-IT, M.B.A.

“OAK COTTAGE”, Near Church

Almora 263601

Uttarakhand

+919410362888,

pandey.jatin@gmail.com,

J.R.F., G.E.U. Dehradun

Dr. P. Nagesh

B.E (Mech) M.Tech(Magt) Ph.D (Operations)

JSSCMS, Manasgangotri,

Mysore 570001

Karnataka

pnagesh1973@rediffmail.com

Asst. Prof., Department of Management Studies,SJCE,Mysore

•Corresponding Author

## **Abstract**

This study tries (1) To find the association between student engagement and experimental and traditional measures of academic performance, (2) To develop a model to predict the student performance through student Engagement, (3) To find the Best forms of student engagement, The sample consisted of 51 students of MBA department of SJCE colleges. Many measures of student engagement were linked positively with desirable learning outcomes and grades.

Keywords: Student Engagement, Student performance, SGPA, Gains

## 1. Introduction

School and College are central to the daily life of many youths. A significant portion of their day is spent in college learning new concepts which is put to test through various exams. These exams measure the level of learning and have been used since very long hence in this study they are considered as the traditional measures of performance. Apart from the factual information a student also gains a lot of knowledge which he/she experiences to be as an enrichment to his/her knowledge base which is an observed measure and depends on the person but is very valuable since it indicates the actual value addition to a student.

Student engagement is measured through surveys in many countries on a national scale like the National Survey on Student Engagement conducted in United States. India being a huge country where education is the pillar for future developments needs to monitor the mass of students it is training and producing.

Researchers have recently used the term *engagement* to refer to the extent to which students identify with and value schooling outcomes, and participate in academic and non-academic school activities. Student Engagement is therefore a critical feature for any institution for better understanding of the student mass.

The motivation of this paper stems from the problematic gap existing between traditional learning and teaching practices the need to engage students in order to facilitate successful learning outcomes.

The Accounting Education Change Commission (AECC) in 1990 stated: “Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require use of multiple information sources. Learning by doing should be emphasized. Working in groups should be encouraged. Creative use of technology is essential”

## 2. Literature review

The *Oxford English Dictionary* defines engagement as “the fact of being entangled; involved or entangled conditions. *Obs.*” The definition does not clearly bring out the meaning of engagement in the context of student engagement. The use of entanglement in the definition shows it in a negative light as per understanding in the Indian education system which views

Student engagement is frequently used to, "depict students' willingness to participate in routine school activities, such as attending class, submitting required work, and following teachers' directions in class."<sup>2</sup> However, the term is also increasingly used to describe meaningful student involvement throughout the learning environment, including students participating curriculum design, classroom management and school building climate.<sup>3</sup> It is also often used to refer as much to student involvement in extra-curricular activities in the campus life of a school/college/university which are thought to have educational benefits as it is to student focus on their curricular studies.<sup>4</sup>

George Kuh's<sup>5</sup> definition illustrates the complexity of student engagement: "The engagement premise is straightforward and easily understood: the more students study a subject, the more they know about it, and the more students practice and get feedback from faculty and staff members on their writing and collaborative problem solving, the deeper they come to understand what they are learning and the more adept they become at managing complexity, tolerating ambiguity, and working with people from different backgrounds or with different views."

Newmann, F describes student engagement<sup>6</sup> occurs when students make a psychological investment in learning. They try hard to learn what school offers. They take pride not simply in earning the formal indicators of success (grades), but in understanding the material and incorporating or internalizing it in their lives.

The term "student engagement" has been used to depict students' willingness to participate in routine school activities, such as attending classes, submitting required work, and following teachers' directions in class.<sup>7</sup> That includes participating in the activities offered as part of the school program and student participation in school reform activities<sup>8</sup>.

Students who are engaged show sustained behavioural involvement in learning activities accompanied by a positive emotional tone. They select tasks at the border of their competencies, initiate action when given the opportunity, and

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<sup>2</sup> Chapman, E. (2003) "Assessing student engagement rates," ERIC Clearinghouse on Assessment and Evaluation. ERIC identifier: ED482269.

<sup>3</sup> Fletcher, A. (2005) *Guide to Students as Partners in School Change*. Olympia, WA: SoundOut. Retrieved 2/20/08.

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<sup>5</sup> George D. Kuh, "The National Survey of Student Engagement: Conceptual and Empirical Foundations," *New Directions for Institutional Research*, vol. 2009, no. 141 (March 9, 2009), pp. 5–20.

<sup>6</sup> Newmann, F. (1992) *Student Engagement and Achievement in American Secondary Schools*. Teachers College Press. pp. 2–3.

<sup>7</sup> Chapman, E. (2003). "Alternative approaches to assessing student engagement rates." *Practical Assessment, Research & Evaluation*, 8(13). Retrieved 7/2/07.

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exert intense effort and concentration in the implementation of learning tasks; they show generally positive emotions during ongoing action, including enthusiasm, optimism, curiosity, and interest.<sup>9</sup>

Indicators of the absence of student engagement include unexcused absences from classes, cheating on tests, and damaging school property.<sup>10</sup>The opposite of engagement is disaffection. Disaffected [students] are passive, do not try hard, and give up easily in the face of challenges... [They can] be bored, depressed, anxious, or even angry about their presence in the classroom; they can be withdrawn from learning opportunities or even rebellious towards teachers and classmates.<sup>11</sup>

A study identified five indicators for student engagement in college. They included the level of academic challenge, active and collaborative learning, student-faculty interaction, enriching education experiences and a supportive learning environment.<sup>12</sup>

Student engagement represents two critical features of collegiate quality. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organizes the curriculum and other learning opportunities to get students to participate in activities that decades of research studies show are linked to student learning.<sup>13</sup>

The present study makes the use of indicators as identified by Kenny, G. Kenny, D. and Dumont, R. To be measured in the students of JSSCMS. The two features of colligate quality have also been measured viz student effort and the role of the institution.

### **Measuring student Engagement**

There are several methods to measure student engagement. They include self-reporting, such as surveys, questionnaires, checklists and rating scales. Researchers also use direct observations, work sample analyses, and focused case studies. [22]

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<sup>9</sup> Skinner, E.A., & Belmont, M.J. (1993). "Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year." *Journal of Educational Psychology*, 85(4). p. 572.

<sup>10</sup> Chapman, E. (2003) "Assessing student engagement rates," ERIC Clearinghouse on Assessment and Evaluation. ERIC identifier: ED482269.

<sup>11</sup> Skinner, E.A., & Belmont, M.J. (1993).

<sup>12</sup> Kenny, G. Kenny, D. and Dumont, R. (1995) p. 37

<sup>13</sup> NSSE

National Survey of Student Engagement<sup>14</sup>, Community College Survey of Student Engagement<sup>15</sup>, High School Survey of Student Engagement (HSSSE), and Hope Survey for Schools<sup>16</sup> are widely used in the U.S.

The present study takes the portions of the NSSE to be administered to students of JSSCMS with slight modifications. Since there exist no study for student engagement for Indian students the analysis has been done to suit the Indian education system.

### **3.Research Methodology**

The study uses questionnaire as a tool to access student engagement at JSSCMS. The questionnaire measures the vital dimensions of student engagement as identified in the NSSE.

**Choice of Institution:** - JSSCMS was selected because of the proximity of the researcher to the College, the ability of the researcher to have control of the study, and the availability of research materials and subjects

**Unit of analysis:**-Students of JSSCMS

**Scale Used:**-Interval Ratio scale have been used

### **Variables used**

Independent Variables:-

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<sup>14</sup> <http://nsse.iub.edu/>

<sup>15</sup> <http://www.ccsse.org/>

<sup>16</sup> <http://hopesurvey.org>

Student Engagement:-

The questionnaire administration focuses on four NSSE benchmarks of student Engagement, including Level of Academic Challenge, Active and Collaborative Learning, Student Interactions with Faculty Members, Student Effort.

Dependent Variables:-

Performance:-

Performance is measured by the SGPA and the reported gains.

Satisfaction

A state where expectation matches or is less than the experience.

The questionnaire basically tries to gather information about

Active and Collaborative Learning, Level of Academic Challenge, Gains in Personal and Social Development, Student-faculty Interaction Concerning Coursework, Satisfaction, Student Effort, About the Institute, Student Information

**Conceptual Model:-**

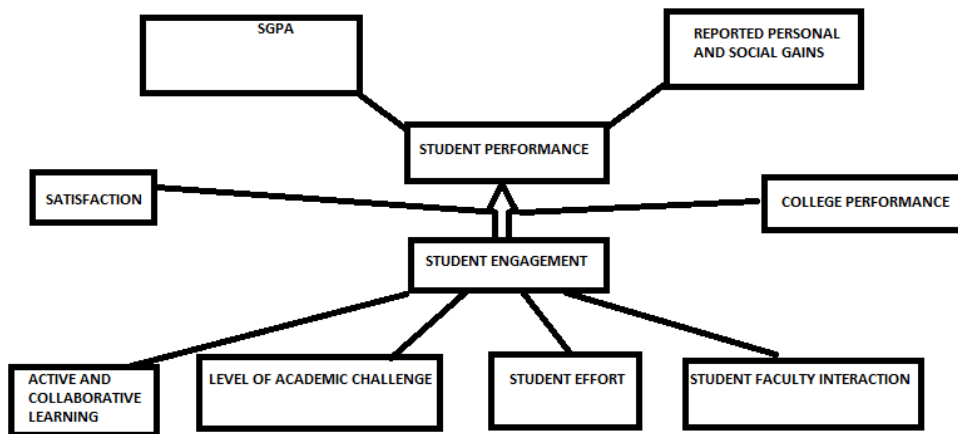


Figure1: Conceptual Model

The model depicts that student performance is influenced by student engagement. Student engagement is measured by four dimensions viz active and collaborative learning, level of academic challenge, student effort, and student faculty interaction. The student performance is measured in two ways first is the traditional measure through SGPA and the other is experimental through the gains reported by the students.

Satisfaction and the college performance act as moderating variables in this relation.

### 1. Operational Definitions

#### Active and Collaborative Learning

**Active learning** is an umbrella term that refers to several models of instruction that focus the responsibility of learning, on learners.

**Collaborative learning** is a situation in which two or more people learn or attempt to learn something together.<sup>17</sup>

Students learn more when they are actively involved in their education and have opportunities to think about and apply what they are learning in different settings. Through collaborating with others to solve problems or master challenging content, students develop valuable skills that prepare them to deal with the kinds of situations and problems they will encounter in the workplace, the community, and their personal lives.

**Student Effort** Students' behaviours contribute significantly to their learning and the likelihood that they will attain their educational goals. "Time on task" is a key variable, and there are a variety of settings and means through which students may apply them to the learning process. Student Effort indicate how frequently students engage in a number of activities important to their learning and success are associated with this benchmark.

**Level of Academic Challenge** Challenging intellectual and creative work is central to student learning and collegiate quality. Ten survey items address the nature and amount of assigned academic work, the complexity of cognitive tasks presented to students, and the standards faculty members use to evaluate student performance. This indicator measures how far the students think the following are present in their present course of study in the college

**Memorizing:** - Remembering facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form

**Analyzing:** - the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components

**Synthesizing:** - organizing ideas, information, or experiences into new, more complex interpretations and relationships

**Application:** - Applying theories or concepts to practical problems or in new situations

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<sup>17</sup> Dillenbourg, P. (1999). Collaborative Learning: Cognitive and Computational Approaches. Advances in Learning and Instruction Series. New York, NY: Elsevier Science, Inc

**Making Judgements:** - about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions

**Student-Faculty Interaction** Students learn firsthand how experts think about and solve practical problems by interacting with faculty members inside and outside the classroom. As a result, their teachers become role models, mentors, and guides for continuous, life-long learning. It measures the amount of interaction between student and the faculty.

Satisfaction identifies how they perceive their present college by asking to rate their overall educational experience and if they would be willing to study in the same institute again.

About the institute tries to measure the performance of the institute based on the expectations and experience of students. It asks the students to rate their expectations before the commencement of the course for a set of factors and then the same factors are rated based on the experience they had after joining the college

The student Information section collects data on Name gender, SGPA.

SGPA identifies the traditional measures of academic performance through SGPA. Since some students wished not to disclose their identity therefore the name field has been marked as optional

**Abbreviations used in the report: -**

ACL stands for Active and Collaborative Learning

LAC stands for Level of Academic Challenge

SFI stands for Student Faculty Interaction

SGPA stands for Student Grade Point Average

Analysis and Interpretation

Reliability

Table1: Reliability Statistics

<b>Dimension</b>	<b>Number of item</b>	<b>Question Number</b>	<b>Cronbach's Alpha</b>
Active and collaborative learning	5	Q1 to Q5	0.785
Level of Academic Challenge	5	Q1 to Q5	0.707
Gains in Personal and Social Development	10	Q1 to Q 10	0.897
Student-faculty Interaction Concerning Coursework	3	Q1 to Q 3	0.81
Satisfaction	2	Q1 to Q2	0.767
Student Effort	4	Q1 to Q4	0.752
Performance Evaluation	14	Q1 to Q14	0.885

Since all the question groups have a reliability statistics of greater than .7 therefore they are reliable.

**Normality Test**

<b>Table 2: Tests of Normality</b>			
	Shapiro-Wilk		
	Statistic	df	Sig.
Gender	0.637	51	0
Active_Collaborative_Learning	0.964	51	0.129
Level_Academic_Challenge	0.971	51	0.236
Student_Faculty_Interaction	0.975	51	0.361
Student_Effort	0.952	51	0.438
Gains	0.986	51	0.804
Satisfaction	0.983	51	0.68

**Inference:-**The above table presents the results from well-known test of normality, Shapiro-Wilk Test. It can handle sample sizes as large as 2000<sup>18</sup>. For this reason, we will use the Shapiro-Wilk test as our numerical means of assessing normality.

We can see from the above table that for all the variables data was normally distributed. Since If the **Sig.** value of the Shapiro-Wilk Test is greater the 0.05 then the data is normal. If it is below 0.05 then the data significantly deviate from a normal distribution.

**Objective 1:** To find the association between student engagement and experimental and traditional measures of academic performance.

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<sup>18</sup> Normal probability plots and tests for normality by Thomas A Ryan, Brian L Joiner



Let Student performance is denoted by Y

The performance is measured by observed gains (y1) and traditional methods (y2)

Let Student Engagement is denoted by X

Student Engagement is measured by Active and Collaborative learning(x1), Level of Academic Challenge(x2), Student Faculty Interaction(x3), and Student Effort (x4)

Here we wish to find association as

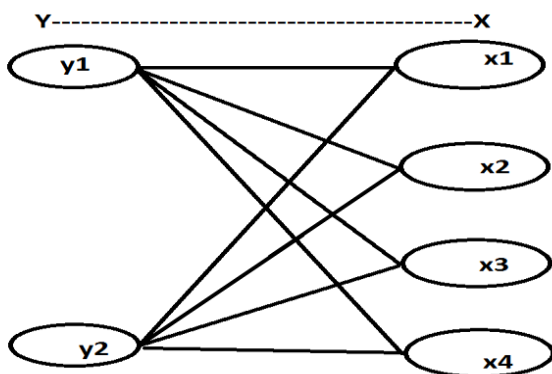


Figure 2: Conceptual Map

**Test:** - Pearson's correlation

The Pearson's correlation is used to find a correlation between at least two interval variables. The value for a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect correlation) It is a parametric test. Here it is used to find association between the Student engagement and student performance (traditional and experimental)

**SPSS output:**

Table2:Correlations

Correlations							
		SGPA:	Gains	Active_Collaborative_Learning	Level_Academic_Challenge	Student_Faculty_Interaction	Student_Effort
SGPA:	Pearson Correlation	1	.395**	.296*	.442**	.385**	.680**
	Sig. (2-tailed)		.004	.035	.001	.005	.000
	N	51	51	51	51	51	51
Gains	Pearson Correlation	.395**	1	.743**	.645**	.523**	.302*
	Sig. (2-tailed)	.004		.000	.000	.000	.031
	N	51	51	51	51	51	51

**Inference:-**

Since the p value of all the correlation values are less than .05 therefore there exists correlation between the measures of student performance (i.e. SGPA and GPS) with all the dimensions of student engagement.

All correlations are positive

SGPA is weakly correlated with ACL, LAC, SFI and moderately correlated with SE

Gains are weakly correlated with SE and SFI.

Gains are moderately correlated with ACL and LAC.

**Objective 2:** To devise a model to predict the performance through Engagement

**Test: - Regression analysis**

A statistical measure that attempts to determine the strength of the relationship between one dependent variable (usually denoted by Y) and a series of other changing variables (known as independent variables).

**Model for traditional measure of Student Performance through Student Engagement**

$$SGPA = .263 * SE + 4.477$$

$$SGPA = .104 * ACL + 5.620$$

$$SGPA = .094 * ACL + .258 * SE + 3.016$$

**Model to predict gains through engagement**

$$Gains = 1.114 * ACL + 17.043$$

$$Gains = .498 * SE + 29.542$$

$$Gains = 1.097 * ACL + .448 SE + 12.531$$

**Objective 3:** To find the best forms of student engagement

**Analysis:-Factor Analysis**

**Factor analysis** is a statistical method used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called **factors**. In other words, it is possible, for example, that variations in three or four observed variables mainly reflect the variations in fewer such unobserved variables. Factor analysis searches for such joint variations in response to unobserved latent variables. The observed variables are modeled as linear combinations of the

potential factors, plus "error" terms. The information gained about the interdependencies between observed variables can be used later to reduce the set of variables in a dataset.

<b>Table 3:KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.548
Bartlett's Test of Sphericity	Approx. Chi-Square	50.639
	Df	6
	Sig.	0

**Inference:-**Since Kaiser-Meyer-Olkin Measure of Sampling Adequacy is above .5 therefore the data can be used for Factor Analysis.

Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix. For factor analysis to work we need some relationships between variables and if the R- matrix were an identity matrix then all correlation coefficients would be zero. Therefore, we want this test to be significant (i.e. have a significance value less than 0.05). A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis. For the data, Bartlett's test is highly significant ( $p < 0.05$ ), and therefore factor analysis is appropriate.

<b>Table 4: Communalities</b>		
	Initial	Extraction
Active_Collaborative_Learning	1	0.649
Level_Academic_Challenge	1	0.721
Student_Faculty_Interaction	1	0.544
Student_Effort	1	0.212
Extraction Method: Principal Component Analysis.		

Principal component analysis works on the initial assumption that all variance is common; therefore, before extraction the communalities are all 1. The communalities in the column labelled Extraction reflect the common variance in the data structure. So, for example, we can say that 64.9% of the variance associated with ACL is common, or shared variance.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	2.126	53.145	53.145	2.126	53.145
2	0.994	24.843	77.989			
3	0.612	15.305	93.294			
4	0.268	6.706	100			

Extraction Method: Principal Component Analysis.

Above table lists the eigenvalues associated with each linear component (factor) before extraction, after extraction and after rotation.

The eigenvalues associated with each factor represent the variance explained by that particular linear component and SPSS also displays the eigenvalue in terms of the percentage of variance explained (so, factor 1 explains 53.145% of total variation)

	Component
	1
Active_Collaborative_Learning	0.849
Level_Academic_Challenge	0.806
Student_Faculty_Interaction	0.737

Student_Effort	0.461
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

The factor loading of ACI is highest hence it is the best form of student engagement.

### **Conclusion and scope for future**

The source of Management Education have been in the student engagement during their graduation and post graduation courses, the study gives insight into the optimal levels of student engagement for best performance.

The institute’s performance can be assessed and the areas of dissatisfaction can be identified and rectified.

The present study explores the relationship between student engagement and their performance as measured from traditional methods and the reported gains. There exists ample scope for the future studies by having a bigger sample size and including many colleges. A standard index can be developed against which the performance of each college can be gauged.

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<sup>12</sup> NSSE

<sup>13</sup> <http://nsse.iub.edu/>

<sup>14</sup> <http://www.ccsse.org/>

# Managing museum learning: A Marketing Research of Family Visit Experience at the British Museum

**Chia-Han Chou**

Gallery Assistant, A & J Speelman Oriental Art, London

Email: ch.chou@hotmail.com

## 1. Background of the marketing research

The British Museum (hereinafter referred to as BM) holds in trust for the nation and the world a collection of art and antiquities from ancient and living cultures. The building of the BM is one of Britain's architectural landmarks, the collection is one of the finest in existence, spanning two million years of human history. The BM was founded in 1753 to promote universal understanding through the arts, natural history and science. Since its foundation, the BM has been guided by three important principles: that the collections are held in perpetuity in their entirety; that they are widely available to all who seek to enjoy and learn from them; and that they are curated by full-time specialists. The BM's international standing and its key role in the display of the world's and nation's heritage make it one of the most-visited public buildings in London. In addition, the access to the collections is free. As a social enterprise the BM is exceptional prosperous. It creates a context in which cultures can be seen, experienced and studied in depth or compared and contrasted across time and space to inspire and delight over five million visitors a year. (British Museum, 2007) In addition, the BM is mainly funded by the governmental organization, Department for Culture, Media and Sport (hereinafter referred to as DCMS), every three years the DCMS has the funding agreement with museum, setting out certain targeted audiences for the Museum to reach out. And the child is one of the Museum's targeted groups with the target child number of visit 900,000 for the year 2006-07.

Through its public, curatorial, exhibition and education programmes the BM engages with the public to advance understanding of the collections and cultures they represent. (British Museum, 2007) The BM has a Department of Schools and Young Audiences Education which is in charge of School and Family programmes, moreover the Museum provides a wide range of family learning provisions, shown as below:

<b>BM Family Learning Provisions</b>	<b>Content</b>
Hamlyn Family Trails (Funded by the Helen Hamlyn Foundation)	Six free self guided trails for different parts of the Museum and for different age groups. Currently available: <b>Dancing with Shiva</b> (age 2-4)



	<p><b>Chasing Rainbows with Mama Wata</b> (age 2-4)</p> <p><b>Exploring Britain:</b> take a journey into the past (age 6+).</p> <p><b>Hunting for Dragons:</b> a trail about fantastic creatures; (age 6+).</p> <p><b>Sailing on the Nile:</b> a voyage through ancient Egypt (age 6+).</p> <p><b>Travelling in Time:</b> ancient Greece through the ages (age 6+)</p>
Ford Activity Backpacks (Sponsored by the Ford Motor Company)	<p>Seven different backpacks full of games puzzles and other activities to do in the galleries.</p> <p>Currently available: Africa, Ancient Egypt, Greece, Mexico, Asian Faiths and Ancient Near East.</p>
Events Programme	Workshops, performances, worksheets, craft activities, demonstrations and film shows.
Reading Room	Storytelling sessions.
Hamlyn Children's Library (Funded by the Helen Hamlyn Foundation)	A wide range of books for all ages.
The Museum Online (Sponsored by the Ford Motor Company)	<p><b>Family online tours</b></p> <p>Online family Tours, with activities and games to print out. Currently available: Unusual Jewellery, Toys and Games and A Queen's Tour.</p> <p><b>Children's COMPASS and Ancient Civilization websites.</b></p>
Family Audio Tour	(£3.50) Join Stephen Fry on the trail of bodies, beasts and board games.
Art Materials	Borrow crayons, coloured pencils and pads to do pictures in the Museum.
Hands On	Hands On tables to handle some real ancient objects in the Museum.

Through a formal semi-structured interview with the Head of Department of School and Young Audiences Education, Mr. Woff (2007), he claimed that 'the BM wants to make sure there is always something for family to do over the year and they are free. The Museum doesn't have the build-in interactive galleries like the science museum. Thus the Museum has to provide programmes and events as parts of the exhibitions.'

Some evidence suggested that the BM is getting a wide range of family audience since the last five years. These families included domestic and overseas family visitors. However, in terms of evaluation and monitoring, the BM has not really started to count the family visitors, so the Museum doesn't know the exact portion of family visitors. The Museum doesn't have any visitor survey specifically for family groups. The Department of School and Young Audiences Education doesn't do evaluation on family learning provisions regularly, and does questionnaire survey occasionally. The BM does take parents perspectives into account rather than children's perspectives in the evaluation process. The Head of School and Young Audiences Education, Woff (2007) said that 'we did some evaluations on family trails and backpacks after their first issue, and the evaluation results were quite good. Eventually, we stopped evaluating them. Basically, we don't evaluate if we can't change any provisions at the moment.' Woff (2007) further explained that 'we don't evaluate family learning provisions regularly; my team depends on the experiences of working with family. We really know what we are working and who we are working with. We know what family expects and what is feasible to offer. Try an error is our principle; we try things out and got things wrong. My team over the years has learned from errors and we has open mind. We are also conscious that the research survey is quite useful to prove you in some way.'

Providing the current practices of the BM in relation to evaluation and monitoring of the family learning provisions; and the Museum itself as one of the world renowned museums in terms of outstanding exhibits and provisions to the public, this research used the BM as the single case study context. This research aimed at critically analyzing, assessing and evaluating the current practices of the BM, drawing from the findings of this research.

## **2. Methods of data gathering**

This research utilized methods including structured qualitative questionnaire with some open-end questions; structured qualitative questionnaire; semi-structured interview with elite; structured short interview with some open-end questions; and informal interviews. The contacts of the field work was made to the Learning & Information Department in February, 2007, before the formal interview with Mr. Woff, the Head of Department of School and Young Audiences Education was arranged and finally carried out on 9<sup>th</sup> of March, 2007. After this interview, the research field work schedule was agreed and arranged by the manager and head of the Department of School and Young Audiences Education and supported by the staff of the Hamlyn Children's Library and Antenna Audio. The researcher was introduced by Mr. Woff to several staff, including the Antenna Audio, the company which was in charge of the Family Audio Tour at the BM, and the purpose of the research was clearly explained. With a relatively small sample size, the subjects for the structured qualitative questionnaires, structured short interviews and informal interviews were purposively selected, according to whether they used the family learning provisions or not; if they used the family learning provisions, what kind of family learning provisions they had used, and approached as they were walking out of the Museum; and when they were exploring galleries, wandering the Great Court and walking out of the Hamlyn Children's Library. Where

possible the families were approached and interviewed in the part of the Museum that they were actually visiting, such as the Hamlyn Children's Library, along the Family Trails or where the activities associated with the Atlantic Encounters Theme. Only those family visitors who wanted to voluntarily participate were asked to fill out the questionnaire or interviewed. The research aimed at obtaining an evaluation of a cross section of programmes and facilities provided by the BM, and so chose to interview a number of parents at different points in the Museum, who had experienced those programmes or provisions.

In advance of the main qualitative questionnaire surveys and interviews, two pilot tests, consisting of five different family learning provisions and one for Family Simply Visit were carried out on the 31st of March, and the second of April, 2007 at the BM. Through these two pilot tests, the six questionnaires and interview questions were refined to minimize the ambiguity of the questions; some open-end questions were revised into close-end questions due to the fact that parents didn't have sufficient time to provide much information when they were with children; a few open-end qualitative questions were added to interview questions as supplement for questionnaire. After the pilot tests, the formal questionnaire surveys and interviews were conducted during the Easter school half-term from the second to the fourteenth of April, 2007. In addition, questionnaire sheets having insufficient information were excluded from the study. Because the researcher was the only administer of questionnaire sheets in this research, during the busy day it was difficult for the researcher to administer all the questionnaire sheets by herself. Although some questionnaire sheets were participant self-administered, the researcher always checked the returned questionnaire sheets and only when the special occasion occurred such as the questionnaire sheets were returned by participants' children or participants were in a hurry to leave that the researcher didn't ask participants to provide revised sufficient information.

There were two structured qualitative questionnaire surveys conducted for this research. These two questionnaires' questions were modified from the previous BM's Chinese half-term family visitor questionnaire sheet. The First questionnaire was designed to find out parents' perspectives of the museum's five different family learning provisions (Family Backpack; Family Trail; Family Audio Tour; Atlantic Encounters Family Activities and Performances; and the Hamlyn Children's Library) This questionnaire consisted of closed and open-end questions. The closed questions established the basic patterns of: 1) the nature of the visitation of the family visitors; 2) parents' satisfaction of the general provisions; 3) parents' satisfaction of the family learning provisions; 4) parents' perceptions of the family visit experience; 5) the reasons of the family visit; 6) the best descriptions of the family visit experience; 7) the important aspects of the family visit experience; 8) the least enjoyable aspects of the family visit experience; and 9) preference of the family learning provisions. The open-end questions were designed to assess perceptions, expectations and needs of the parents without prompting and allowed the research to use a qualitative approach. The open-end questions were transcribed into a database and then went through a process of content analysis. Answers were initially sorted and grouped into categories. For example, *didn't pay attention, don't know anything about it* were classified under the heading '*Lack of awareness,*' according to the shared concepts. The researcher collected 18 questionnaire sheets and 16

were finally analyzed, including 3 Family Backpack; 2 Family Trail; 3 Atlantic Encounters Family Activities and Performances; 3 Family Audio Tour; 2 Hamlyn Children's Library; and 3 Family Simply Visit. In addition, the structured short interviews with some open-end questions were based on the previous six formal questionnaire sheets and 9 structured short interviews were carried out, including 3 Family Simply Visit; 3 Family Audio Tour; 1 Family Backpack; 1 Family Trail; and 1 Atlantic Encounters Family Activities and Performances.

The second structured qualitative questionnaire was a follow-up questionnaire survey after the first one was carried out; the questions of the second structured qualitative questionnaire were mainly based on the section of *'The least enjoyable aspects of the family visit experience'* on the first structured qualitative questionnaire, adding extra questions *'Will you keep the trail and review it with children at home?; Will you keep the trail for school projects?; and Do you think using family learning provisions improves visit experience at the museum?'* The second questionnaire aimed at further investigating these inquiries, without any pilot test, 12 families were surveyed on the thirteenth of April, 2007, including 3 Family Backpack, 3 Family Trail and 6 Family Simply Visit. In addition, 18 informal interviews with parents were conducted, including 3 Family Backpack, 3 Family Trail, 6 Family Simply Visit, 2 Hamlyn Children's Library and 2 Atlantic Encounters Family Activities and Performances. Although the 18 informal interviews were more like conversation between the researcher and parents who were surveyed, these informal interviews still provided parents' insight views of the family visit experience at the BM for this study.

In addition, the research aimed at representing the diversity of the ethnic backgrounds of the family visitors in the BM and striving to take these parents' perceptions into account; however, this 'equal opportunity procedure' experienced difficulty in practical terms. It was clear that the Museum's white family visitors outnumbered other ethnic families. In addition, families of White British background tended to be more cooperative with the researcher. Other ethnic families, including the Black, Asian and Middle East families, were short in visitor numbers and difficult to gather data from. In particular, the most unapproachable ethnic family groups in this research were Asian families, including China, Korea and Japan; the museum's Asian family visitors were mainly overseas tourists. When the researcher tried to approach them, these Asian parents' reactions were either scared or doubted, without any attempt to listening to the purpose of the research. Overall, Asian families' reactions were very negative and the researcher guessed that this negative response might be due to the cultural difference and also the increased awareness of safety issues when traveling abroad. In Asian, this may be a cultural phenomenon that sales people try to sell products/ insurances by dragging people on the streets; by approaching people in public settings; and by making phone calls. The phenomenon that these Asian families who were approached by the researcher refused to provide their opinions might be resulted from the concerns of being asked to buy items or being cheated. Black and Middle East families were very cooperative with the researcher in terms of understanding the purpose of the research. However, on the one hand, the Middle East families were either too busy with children or in a hurry to leave to fill in questionnaire

sheets or be interviewed. On the other hand, most Black families 'lacked awareness' of the family learning provisions in the Museum, even after the researcher introduced the family provisions to them, most families still showed 'a lack of interest' to use any of these provisions. All the questionnaire sheets given to the Black families were not returned, and only the informal interviews which the research took into account of the Black families perspectives successfully. There was a Black mother with 3 children who found out about the Hamlyn Children's Library through the guidance of the Museum staff, the mother was not sure about what her family could do at the museum and she was busy taking care of children too. In addition, throughout the research, there were a large portion of family visitors from overseas and from British counties; these families visited the BM for all kinds of reasons.

### **3. Discussion of findings**

#### **3.1 The biggest child age group**

The BM staff is aware that they have not got their family provision quite right yet. According to Mr. Woff (2007) 'The families don't come as a neat age, the vast majority children visiting the Museum came from the 6-11 age range. And within this, the age group 6-9 is the biggest child group for the museum. Some activities in the museum are more for the 7-11 age group. Hence, the Museum needs to reassess its provisions for families.' The research finding further reinforced this concern, the age group 5-11 which significantly outnumbers other age groups, comprised 66.67% of the total children who came with the research participants.

#### **3.2 Out of sight, out of way- Clear signs for family visitors**

Providing effective signage and orientation aids to enable families to quickly and easily identify which parts of the museum are appropriate for and appealing to them and which are not. Families like to be self-directed and independent. 'What's on' information should be readily available. (Martin, 1999a) Woff (2007) said that 'the BM hasn't taken the need for creating big signage for family visits into consideration. The Museum doesn't have signs for families to find out activities where activities take place. The Museum isn't willing to build clear signs for families.' The findings of this research confirmed the concerns of the Head officer; there is a need for the Museum to provide clear signs and information for family visitors given all the respondents' appeals. Although the research didn't provide statistically significant evidence on parents' perspectives on how hard it is to find out about family activities, throughout the study, 'lack of clear signs for family visitors' and 'didn't see any signs for family visitors at all' were frequently mentioned by the majority of respondents and other parents whom the researcher encountered. In the structured short interviews, one Swedish family even suggested that the Museum should put bright colored signs with big letters at the obvious upper space in the Great Court.

#### **3.3 Bigger size, bigger need- Adequate sitting and rest space**

Bear in mind that providing adequate seating, child-friendly toilets, refreshment areas, picnic spaces, baby changing facilities and spaces for buggies are essential for enjoyable family visits. Remember that families are motivated to visit museums as much by pleasure and enjoyment as learning and enlightenment. (Martin, 1999a) However, the research revealed that half the respondents expressed 'The sitting and rest space' was mainly bad/poor especially for family visitors, cited by 50 % of respondents. This dissatisfaction of '*The sitting and rest space*' was further reinforced by the informal interview, one father who has visited the Museum occasionally with 3 children explained that the Museum is 'lack of children's eating and seating areas, especially the height of seats is not child-friendly.' Another family also expressed that 'it is hard for family to find seating space in the Museum.' In addition, the research also indicated that family visitors especially concerned about '*Food and drink*' as well. Only 12.5% of respondents satisfied with this provision and several parents stated that 'lack of child-friendly food' when interviewed.

### **3.4 Time to go interactive?**

The pressures on museums of all kinds to become more interactive are greater than ever before. Visitors now want to do something in museums. (Swift, 1997) There is a considerable body of research which suggests that interactive exhibits are popular especially with family groups. (Blud, 1990) The popularity of interactive exhibits, especially with families and schools, is beyond doubt - visitor research consistently shows that they are one of the most enjoyable and memorable aspects of museum visits. Interactive exhibits could be regarded as a reaction against the traditional, stereotypical 'don't touch' philosophy of museums. It is also important to remember the importance of enjoyment and play in motivating and facilitating learning, as Edeiken (1992) pointed out: 'Play is a critical way to find out about new things for children and adults alike. (Swift, 1997) The most interesting finding to emerge from this study was parents' perspectives of the interactive exhibits. According to Woff (2007) 'The BM doesn't have the established self-contained interactive galleries like the science museum. Thus the Museum has to provide programmes and events as parts of the exhibits.' However, the research finding didn't agree well with these ideas. The study found out that the majority of parents (37.5%) held a neutral view on this provision, while the rest tended to have more two-divided perspectives on this provision. On the one hand, some parents (31.25%) valued learning history, culture and arts and thought not every museum need to be interactive. They thought interactive exhibits didn't really matter. On the other hand, some parents (31.25%) did expect the Museum to provide interactive exhibits for children. Further visitor studies into the interactive provisions will be crucial to the Museum's future development.

### **3.5 Family visit vs. Family Online Tour**

Museums are increasingly making objects and exhibitions, educational offerings and services available beyond the halls of the main museum building. Digital and electronic media and geographically dispersed branches and facilities provide additional distribution channels. (Kolter, N and Kotler, P, 1998)

In 2005-06, the BM had 8.8 million website visits (The British Museum Review April 2004- March 2006, 2007), many children use the collection on the internet, where there is a special children's version of the Museum's object database COMPASS sponsored by the Ford Motor Company. Without a doubt, museums expect some significant portion of cyberspace visitors to become converts to real-time and real-space Museum visitors. Surprisingly, the research findings showed that the real-time and real-space visitors were not certainly to be online users. Because, the findings told a totally different story, the majority of parents (15 out of the sample size of 16 parents) who were surveyed have never used the Museum's online tour with children before, the reasons were either 'Lack of awareness' or 'Lack of interest' or even both! In addition, Woff (2007) claimed that 'we do have children who use the Family Online Tour at home after their family visits. If families can use the online programmes to review their visit, it would reinforce their learning with children.' Given the range of electronic information products and distributional channels, however, the BM needs to consider which products and vehicles are appropriate to its targeted family audiences and which are most cost-effective in achieving the goals of education and public service. In another word, opportunities offered by ICT, electronic access and digitization needs to be fully utilized for the benefit of existing users and to reach out to non-users. (Museums Association, 2007)

### **3.6 Accessible languages and overseas families**

A goal of universal access may seem difficult to achieve, but unless museums make some attempt to be more inclusive in their approach, some people will continue to feel excluded and stay away. Some museums are already committed to becoming more inclusive organisations and are aware that their written and spoken information makes a crucial difference to whether exhibitions are inclusive or exclusive. (Coxall, 2000) Another interesting finding of this research was that Museum text and language had a significant impact especially on overseas family visitors. Also these overseas parents expected the BM to provide a wide range of languages in terms of museum text, labels, information packs, family audio tour, and family activity. Inability to read or understand the language used for the exhibition because it is their second language (or they cannot speak or understand it all), the language barrier made these overseas families' visits less enjoyable. Given the fact that the Museum is certainly a must-see hot spot for overseas visitors and helping adults in family groups to feel confident and equipped with the knowledge to support children's learning will improve the family visit experience, the Museum's information, language and text should therefore be more accessible. This finding further reinforced what Martin (1999a) proposed 'it is important to recognise that adults support and facilitate children's learning through prompting, asking and answering questions...It is vital to think about the learning needs of adults in family groups.' (Martin, 1999a) In addition, from interviews, overseas families who don't speak English/ don't speak English well would love to pay for £10 for these provisions, therefore further in-depth marketing research could be taken into concern.

### **3.7 Admission free, the reason for visit?**

In December 2001 free admission for the majority of the core collections was introduced. The English government took the responsibility to educate, entertain and inspire (future) generations of all social classes. The 'admission free' policy has changed the landscape of most museums ever since and has made efforts to social inclusion. The research findings further confirmed this policy's impact on family visitors. The mass majority of respondents (87.5%) all well agreed and stated that '*The museum is free of charge*' was their reason for visit. Besides, 62.5% of respondents stated that their family museum visits were '*Value for money.*'

### **3.8 Serving the needs of children, increasing knowledge or to relax?**

Hood (1983) identified three major psychological attributes that influence how non-visitors choose to spend their leisure time: the desire to be with people, or for social interaction; the need to feel comfortable and at ease in one's surroundings; and the desire for active participation. Museum visitors, on the other hand, rank these attributes much lower, valuing instead 'the opportunity to learn'; 'the challenge of new experiences' and 'the chance to do something worthwhile.' The findings to emerge from this study agreed well with Hood's previous claim by providing the figures that '*Serving the needs of children,*' '*Increasing knowledge,*' '*Doing something worthwhile*' and '*Having fun*' were the four most important aspects of the respondents' family museum experience. In particular, the findings also indicated that how parents prioritize and value the aspects of '*Serving the needs of children*' and '*Increasing knowledge*' had something to do with whether they used the family learning provisions or not. In addition, in terms of '*To relax*' as a reason for the family museum visit, only 31.25% of respondents agreed with this idea, through interviews, some parents even stated that they could not really feel relaxing, because they had to keep an eye on children all the time.

## **4. Conclusions**

This research provided an in-depth understanding of parental views of family visit experience at the BM, although without any statistically significant generalization. The evaluation, assessment of the current family facilities/ family learning provisions pinpointed some solid evidence which could be pointers of the improvements of current Museum practices in relation to the open hour of Hamlyn Children's Library; audience development of Family Online Tour; publicity of family activity & facility; access of information & language; and parents' diverse needs of learning provisions. The analysis of parents' motivation, satisfaction and expectations indicated parents' needs and concerns behind their family Museum visits. Besides, unexpected findings such as the parental views of interactive exhibits; follow-up learning; the family online tour; and accessible languages all shed light to the overlooked current Museum practices. In terms of the monitoring of the learning provisions, the BM staff are clearly very well aware of the links between the Museum collections and the requirements of the school curriculum, and have already worked on producing excellent teaching packs for school visits, but the family market receives



less attention and less educational resources than the school visits programme; this is partly dictated by the requirements of government funding which needs visible and measurable indication of educational effectiveness and provision. School visits provide easily quantifiable data, with the possibility of evaluation sheets and other forms of feedback from teachers; the family market is a much more difficult section to evaluate and demonstrate effective results. Indeed, the results of this small scale survey indicated how difficult it is to assess parental views and levels of satisfaction. Therefore, this research would be useful to the BM itself to add a new dimension to some of their own in-house study on visitor satisfaction, but could also be an important pointer for further research in the area, in other museums, which would enable further generalisations to be made. Finally, this research has added knowledge to the existing but underdeveloped literature body of family visitor studies, especially from the parental views.

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