

Analyze the Impact of Knowledge Management on Organizational Performances

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Abstract- Knowledge management is a process that transforms individual knowledge into organizational knowledge. Many organizations have recognized that knowledge is the most important resource in today's economy. Propelled by the resource- and knowledge-based views of the firm, organizations are actively embracing knowledge management with the expectation of acquiring and maintaining high levels of organizational performance. However, because knowledge management as a formal practice is still in its infancy and not yet well understood, many organizations are unable to attain expected performance.

This study analyze why the intra- organizational knowledge management practices adopted among organizations are not at a satisfactory level and is there any affect for the organization's performances because of the knowledge management. The research sample has 30 respondents. Each of the participants responded to questionnaires which included questions about organization culture, structure and information technology. The data was analyzed using the Statistical Package for the Social Science (SPSS) Graduated pack 17.0. Pearson's Product-Moment Correlation was used to determine the correlation between organization culture, structure, information technology and organization performance. The outcome of the study supports that culture, structure and information technology has greater influence on organization performance.

Index Terms— organization culture, structure, information technology, organization performance

I. INTRODUCTION

Knowledge has become the key economic resource and the dominant and perhaps even the only source of comparative advantage. Therefore, how to manage corporate knowledge is important for organizations.

Knowledge Management (KM) has been defined in different ways in scientific literature (Wiig, 1995) defined it as "a group of clearly defined process or methods used to search important knowledge among different knowledge management operations". Gupta et al., (2000) defined KM as "a process that helps organizations to find, select, organize, disseminate and transfer important information and expertise necessary for activities". Recently, Filemon and Uriate (2008) defined "KM as the broad process of locating, organizing, transferring and using the information and expertise within an organization". Perhaps the simplest definition of knowledge management is "sharing what we know with each other's". In all of these definitions, the emphasis is on human know how and how it brings value to an organization; however, utilizing individual expertise to get maximum return for an organization.

KM is critical organizational capability through which enablers influence the performance of the organization. KM is a process of gathering, managing and sharing employees'

knowledge capital throughout the organization. Knowledge sharing throughout the organization enhances existing organizational business processes, introduces more efficient and effective business processes and removes redundant processes. It is a discipline that promotes a collaborative and integrated approach to the creation, capture, organization access and use of an enterprise's knowledge assets. Internal creation of knowledge is a process of individual learning in a group of individuals as well as the process of "organizational learning".

The knowledge management process aims to support innovation and encourage the free flow of ideas through the company. It helps increasing revenues (because the products and services are delivered to market faster) and reducing costs (because it eliminates redundant and unnecessary business processes). This process increases the time that employees spend in the company, because their knowledge and efforts are valued by the system of rewards. Ultimately, the knowledge management process increases the value of the company and its competitiveness as a whole, because it increases the efficiency and effectiveness, the relationship of all resources and innovation.

Management styles have been modified due to the technological advancement in the current past. Although Technology dependence has increased multiple, but human and his knowledge is considered main competence.

This study is to investigate and study the organization structure, culture, information and communication technology for effective knowledge management practice that would ensure improved organizational performance and knowledge management. To fulfill the objectives and to achieve the goal this research work, selected an organization and a questionnaire was designed to collect the required information. At first, an informal preliminary discussion with the head of the Human Resource Department was held. The purpose of this was to understand the prevailing situation in the sector of knowledge sharing practices, to identify common challenges in effective knowledge sharing and to design the concept, methodology, methods and techniques of the study.

To find out the results for the study, questionnaires were delivered to the 30 permanent employees in Human Resources department, Operations department, Production department, Marketing department and Finance and Administration department of the organization. To identify the impact of knowledge management on organizational performance, first identified some factors which can apply for the selected organization. They are organization culture, structure and information technology.

II. STATEMENT OF THE PROBLEM

More often knowledge lies within an organization implicitly, out of sight, undervalued and underused. Often, it leaves the building when the employees walk out of the company along with them. Managing the flow of knowledge around an organization is a challenge.

The challenge here is to get hold of the information that is around and turn it into knowledge by making it usable. This might involve, for instance, making tacit knowledge into explicit, identifying gaps in the knowledge already held, acquiring and integrating knowledge from multiple sources and acquiring knowledge from unstructured media.

When a knowledge repository gets very large, finding a particular piece of knowledge can become very difficult. There are two related problems to do with knowledge retrieval. First, there is the issue of finding knowledge again once it has been stored. And second, there is a problem of retrieving the subset of content from the repository that is relevant to a particular problem.

The issue of publishing or disseminating can be described as getting the right knowledge, in the right form, in the right place, to the right person. Different users will require knowledge presented and visualized in different ways, and the quality of such presentation is not merely a matter of preference, but can radically affect the value of the knowledge to the user. Getting presentation right will involve understanding the different perspectives of people with different agendas, while an understanding of knowledge content will help to ensure that important related pieces of knowledge get published at the appropriate time.

Organizations may fail to identify, develop, acquire and even to share and distribute that knowledge. One of the major problems of knowledge management in organizational performance is failure to form and develop a culture that embraces learning, sharing, changing and improving of knowledge in an organization. Many companies have attempted to implement knowledge management efforts but have failed due to the lack of appropriate cultural context that creates and nurtures reciprocal trust, openness and cooperation.

Culture of sharing (social interaction) is viewed as reducing production as time is believed to be lost through such socialization hence this is not allowed by managers. Furthermore, creation of knowledge groups may be viewed as too expensive to undertake. Knowledge sharing takes time and because of this, experts in certain fields may not be willing to participate in knowledge sharing as some organizations do not reward them. The structures of the organizations are not willing to change to upgrade the employees' knowledge.

By engaging in KM, organizations expect to be competitive while improving and maintaining high performance levels. They hope to better cope with increased downsizing, high turnover rate, constant change, unpredictable business environments, and shorter business cycles. Organizations also hope to boost productivity, improve profit and revenue, retain talent and expertise, increase customer retention and satisfaction, increase and protect market shares, reduce cost, and develop new product and services.

III. OBJECTIVES OF THE STUDY

- To understand the factors affecting knowledge management in the organizations.

- To assess whether knowledge management has any influence on organization performance.
- To make recommendations for the organizations to enhance their intra – organizational knowledge management practices to improve organization performance.

IV. REVIEW OF LITERATURE

This research with a focus on the characteristics of corporate management based on three aspects: organizational culture, organizational structure, and information technology. From these three aspects it is possible to understand the characteristics and knowledge management.

Knowledge in an organization is the collection of expertise, experiences and information that individuals and work groups use in the execution of their tasks. Guzman & Wilson (2005) view organizational knowledge as socially constructed concepts, methods, routines, techniques, tools and technical processes. They further explain that organizational knowledge involves both people and context. It possesses invisible "soft" features, which are embedded with individuals and the organizational structure. Explicit knowledge refers to the knowledge available in a documented form, with the provision for easy codification. Tacit knowledge means the knowledge the individuals possess that is hidden inside their "black boxes" (O'Dell & Grayson, 1998).

Knowledge management refers to a range of practices and techniques used by organizations to identify, represent and distribute knowledge, know-how, expertise, intellectual capital and other forms of knowledge for leverage, reuse and transfer of knowledge and learning across the organization. The knowledge management framework consists of the components such as identification, acquisition, development, dissemination and use of knowledge (Debowski, 2006).

Knowledge sharing is a set of behaviors that involves the exchange of information or assistance to others. It is separated from information sharing, which typically involves management making information about the organization (e.g. financial statements) available to employees at every level (Connelly & Kelloway, 2003).

The methodology of measuring knowledge management maturity is complex. By combining a set of critical success factors with a set of measurable knowledge management factors; an intersection was made to define a new set of measurable key elements of KM.

According to the literature and the analysis of critical success factors of KM, Information Technology (IT) is one of the three components of KM (Mulaik, S.A et al., 1989). Some authors (S. Moffett, S., McAdam, R. & Parkinson, 2003) say that the most dominant KM paradigms are about IT. Results of research (Sher, P.J. & Lee, V.C., 2004) show that 70% of papers on KM stress the importance of IT systems, developed to manage explicit knowledge. Even authors, whose main field of KM research is not about the importance of IT, state that information technology is crucial for success- full knowledge management. Based on research (S. Moffett, S., McAdam, R. & Parkinson, 2003) two elements form the IT component KM: the first element is the ability of IT to capture knowledge and the second element is usage of IT tools.

When assessing the relationship between knowledge management and organizational performance, it is important to

know that the results depend on the used research methodology (DeLong & Fahey,2000).Organizational performance one could be gauged in many different ways, with financial or non-financial indicators.

There are several approaches to organizational performance measurement which include different stakeholders' perspectives. The Balanced Scorecard (BSC) is a performance management tool for measuring whether small – scale operational activities of a company are aligned with its large-scale objectives in terms of vision and strategy (Porter, M.E ,1985) and includes four perspectives: financial, customer, internal process and innovation and learning perspectives.

The Zacketal,(2009) lay out that culture has impact on organization performance. The organizations which have realized and comprehended its importance completely awarded value to their employees and incentives for knowledge sharing and creating an atmosphere which is beneficial for successful knowledge management systems.

The Chong and Choi (2005) have designed the analytical evaluation factors in the implementation of knowledge management systems to succeed and have cited numerous preceding researches which approved that knowledge friendly culture should be developed or established if in order to acquire successful implementation of knowledge. TheWeber(2007) researched and highlighted the factors which cause the failure of knowledge management and examined carefully and methodically that when processes and culture are not properly adjusted system ends to fail the implementation of knowledge management ,while input is not taken from all stakeholders in developing. The Management doesn't with stand it and responsibilities are not effectively implemented. The knowledge is not effectively distributed in the right way because there in not enough conscious awareness about knowledge management within the organization system.

The Davenport and Prusak (1998,2000) defined that knowledge is acquire from information and information come in to possession from data. If is to be developed knowledge is to be developed from information; human are required to do massive amount of the work on it. The process have identified for that. We collate that information, and atomize the consequences and create relationship between what is present information and what is known. A decision will be taken on what would be based upon experience and expertise. On the basis of its experience and expertise human alone can do, what works on ground and what doesn't work on ground. The Malhotra (2003, 2005) determined as an equation built around human, process and technology in knowledge management.

The process of creating, sharing, and its effective utilization of knowledge is built around human beings (Malhotra,2003,2005).Davenport and Prusak (1998,2000)justify that at human level sharing must be in initiated and once it works its application on technology will generate positive consequences. Many preceding models failed due to the reason that their focus was on technology not on humans but not on humans. The human has that ability to dissect and inter- relate the information provided to it, while technology has no capability to examine the information. The effective management obligation is to ensure that decisions are taking effectively and timely.

Hamid (2008),research was based on knowledge creation and identification. He draws out the conclusion that fundamental social interaction is done with management and

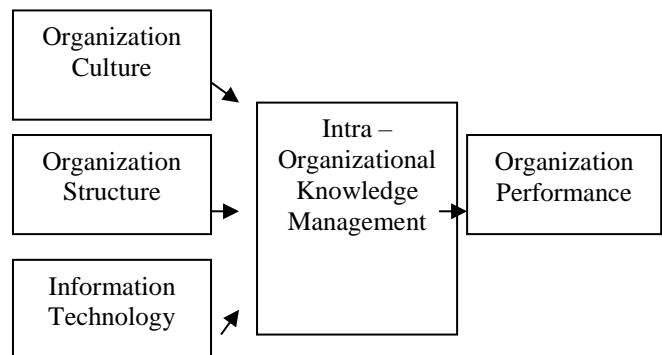
identification of knowledge by employees and employees are bucked up to not only enhance their knowledge data base, but also distribute it for the advantage of both the organization and themselves. The sense of security, healthy reward system cannot be achieved without motivation.

Chong and Choi (2005) after critically analyzing success factors suggested that employee involvement and training in decision making process is very important. There is always need to provide them with sense of security, motivation through different incentives, training and empowerment with authority which is to ensure successful knowledge management system in organization.

Malhotra (2003, 2005) determined that humans and processes are extremely significant for knowledge management system. The Processes has to be established by humans who bring about comparison, connection, conclusion and derivation of knowledge from database. It is crucial for the success of knowledge management that in decision making process all the stakeholders should be involved.

The Weber (2007) suggested without proper combination the approach will deficient to generate required results. Hamid (2008), Weber (2007) approved that knowledge has to be updated continuously in order to stay in the competitive race. Due to this bring revision and change in processes; it will help to keep the competitive advantage intact. The Malhotra (2003, 2005) determined an equation that is built around human, process and technology in knowledge management.

V. CONCEPTUAL FRAMEWORK



Hypothesis

- H1** Information Technology positively influence to Intra – Organizational Knowledge Management
- H2** Organization Culture positively influence to Intra – Organizational Knowledge Management
- H3** Organization Structure positively influence to Intra – Organizational Knowledge Management
- H4** Intra – Organizational Knowledge Management positively influence to Organizational Performance

VI. ANALYSIS AND FINDINGS

The data obtained were analyzed using SPSS for Windows 17.0 program. Descriptive and inferential statistics were used to analyze the data. Pearson-product moment correlations, multiple regression, and hierarchical multiple regression analysis were performed to test the research hypothesis.

Employee Profile

The sample contained 66.67% (20) male employees while 33.34% (10) were females. The average age category was 16 – 25 years with 26.67 % (8) of the sample within this age range, while 43.33% (13) was within the age range of 26 - 35 and 16.66 % (5) in the age range 35 - 45 and the rest 13.33 % (4) in the age category of 45 - 55. The sample was distributed among the five departments which are Human Resources, Operations, Production, Marketing and Finance and Administration. The sample consisted of 36.67 % graduated level employees while the remaining 63.33% was either Diploma or GCE Ordinary Level educated or Advanced Level educated employees.

Employees perception on Organization culture, Organization structure and Information Technology

When analyzing the responses as shown in the following tables, the factors which affect to the knowledge management is measured by calculating mean and standard deviation of each question under each variable.

VII. HYPOTHESIS TESTING

The correlation was used to measure the strength of the relationship between the study variables. A cut-off point of $p < 0.05$ was considered to indicate whether the relationship between the two factors is 'statistically significant'. A practical effect size of r as ($< +/- 0.20$ weak, $< +/- 0.35$ moderate, $< +/- 0.6$ strong, and $\geq +/- 0.8$ very strong) was also considered for the correlation analysis to interpret the practical significance of the findings (Hair et al., 2006).

Hypothesis 1

The correlation between information technology and the knowledge management is $r = 0.069$ and thus it proves that there is significant positive weak relationship between the two variables. So, there is a sufficient evidence to prove hypothesis 1 that is there is a positive correlation between information technology and the knowledge management. It indicates that there is a significant impact of information technology on knowledge management.

Hypothesis 2

The correlation between organization culture and the knowledge management is $r = 0.284$ and thus it proves that there is significant positive weak relationship between the two variables. So, there is a sufficient evidence to prove hypothesis 2 that is there is a positive correlation between organization culture and the knowledge management. It indicates that there is a significant impact of organization culture on knowledge management.

Hypothesis 3

The correlation between organization structure and the knowledge management is $r = 0.052$ and thus it proves that there is significant positive weak relationship between the two variables. So, there is a sufficient evidence to prove hypothesis 3 that is there is a positive correlation between organization structure and the knowledge management. It indicates that there is a significant impact of organization structure on knowledge management.

Hypothesis 4

The correlation between organization performance and the knowledge management is $r = 0.312$ and thus it proves that there is significant positive moderate relationship between the two variables. So, there is a sufficient evidence to prove

hypothesis 4 that is there is a positive correlation between organization performance and the knowledge management. It indicates that there is a significant impact of knowledge management on organization performance.

VIII. SUMMARY OF FINDINGS

The intention of this study was to investigate and prove the existence of a positive impact of knowledge management on organizational performance. So to measure it, created conceptual frame work by using some variables. First identified the factors affect to the intra – organization knowledge management. According to the study identified that information technology, organization culture and organization structure affect to intra - organization knowledge management. A direct result of this research defined that knowledge management has impact on organization performance.

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