INFLUENCE OF ORGANIZATION CHANGE TO KNOWLEDGE ASSETS

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ABSTRACT

The purpose of this study is to determine the impact of organization change to the organization knowledge assets. The conceptual framework developed for this study examine the relationship of sharing culture, individualism, organization structure, employees’ turnover and training to organization knowledge, itself is divided into tacit and explicit knowledge. This study focused on descriptive and quantitative data obtained from survey forms distributed based on stratified sampling to the employees of Hitachi Global Storage Technologies, Samajaya Free Industrial Zone in Kuching. These data were analyzed using Pearson’s Correlation and Multiple Regression to understand the relationship between the variables. Based on the findings, training activities were found to have a strong influence in increasing the knowledge assets especially on tacit knowledge after the organization change. Organization structure post change may have been simplified by elimination of overlapping positions which allow or ease the flow of information from the source to the receiver. Increase in turnover seems to contribute to the explicit knowledge, which is against the indication that employees’ outflow causing a decrease in knowledge. A lean organization gives the opportunity for employees to be specialized and focused on their work area. In future research, it is suggested to include an in depth study on training which may include type of trainings and development programs which are considered value adding to the company. It should include larger scale surveys to allow more systematic analysis of the causalities resulted from organization change and also considering the inclusion of qualitative data to uncover unexplained factors.
ABSTRAK

CHAPTER 1: INTRODUCTION

1.0 Introduction

Organization’s life cycle consist of introduction, growth, maturity and decline. At the beginning, the high growth in an organization is contributed by entering new market and product development. The growth is then stabilized (withdrawal of external financing due to generating bigger profits) followed by a decline stage where the sales and profitability decrease (Mietlewski and Walkowiak, 2007).

In a competitive industry, there is a need for organization to be distinctive in the area which helps it to be competitive within the rivals. Creating and transferring knowledge is one of the critical factors in becoming more successful and competitive. In a fast growing industry, organization is facing possibility of internal brain drain resulted from employees leaving and exposure to no continuity in knowledge transfer. In knowing the importance of knowledge in an organization, there is a need to identify ways to increase the use of knowledge that has already being owned and at the same time identify the factors that discourage knowledge transfer. Knowledge in this context is referring to two dimensions namely tacit and explicit knowledge. Girard (2009) stated that the distinction of related terms of data, information and knowledge are hierarchical in nature with data being the foundation upon which information builds to an apogee of knowledge.

Organizations are forced to make strategic choices in responding to change drivers such as social, economic, political and technological. They may decide to introduce new product or service, opening a new plant or facility and operation expansion into a new market. In going
through this change, the nature of the firm and work itself is rapidly evolving which make it essentials for flexibility, innovations, process improvements and speed. Firms are becomes more dependent on the skills, knowledge, ideas and leadership capabilities of workers.

In an industry where the change in product cycle is high, the approach of knowledge management is very specifically designed to solve a specific problem and cannot be adapted to other general purposes. In the ever changing scenario (internal and external) involving the organization, specific knowledge tend to be obsolete even though they can still be used as a fundamental references.

Sharing culture is fundamental for any organizations that are implementing knowledge management strategy and deciding on what knowledge to share, whom to share it with and how to share the knowledge should be a major task to which an organization should give priority (Syed-Ikhsan and Rowland, 2004). Advancement in technology especially on the World Wide Web in the past decades has significantly made it easier in managing knowledge especially for global operating organizations. However, the transferring of knowledge could only happen if individuals or entities within the organization are willing to include themselves in the sharing culture.

1.1 Background of Study

From a global perspective, corporate restructuring is often seen as harm to those people whom the company no longer wishes to employ with the possibility of exception to those who are in the position to receive or bargain for a significant severance or retirement package.
However, restructuring may also result in superior employment conditions for those who remain in the company or improvement of employment for people who are hired by other companies \textit{(Lazonick, 2003)}. Manufacturing organizations are transforming from only being a producer to a learning organization in which technological forecast plays a very important role for selecting and implementing the applicable technologies in aiding the first mover advantage in the market place \textit{(Mishra et al, 2002)}. The history of hard disk drive was invented in the early fifties by IBM (International Business Machines Corporation) and started to be used commercially in the mid fifties. As of 2011, the five major players in the hard disk drive manufacturing are Seagate, Western Digital, Toshiba, Samsung and Hitachi Global Storage Technologies (HGST).

For nearly 16 years, one of the premise at Sama Jaya Free Industrial Zone, Kuching has been the home to 3 giant manufacturers of hard disk drive in the world namely KOMAG (USA) which was later acquired by Western Digital and Hitachi Global Storage Technology (HGST). The change in management also resulted in the change of organizational structure and culture. The laid off of employees due to downsizing of worldwide production for Western Digital in early 2009 left less than a quarter of its original employees in Sarawak to ramp up the plant operation under the management of Hitachi Global Storage Technology (HGST).

The complete organizational transition has left the retained employee to be left with very less knowledge due to the ownership of all documentation or online management systems were no longer accessible for future reference. \textit{Daim et al (2008)} discussed that the increase on publications by hard disk drive manufacturers indicates continuous development to increase the penetration into the consumer’s market by providing a new type of data storage product. The
race for innovation has significantly increase publication by companies as shown in Figure 1.1 which saw Hitachi Global Storage Technology leading the research for hard disk drive.

![Figure 1.1 Number of publications on Hard Disk Drive by company each year (Daim et al, 2008)](image)

1.2 Problem Statement

Employees turnover resulted from acquisition and competition from other industries have created high potential for brain drain especially if those leaving are the pioneers in the industry. The absence in the continuity of knowledge transfer between the retained employees and those who have left is giving the risk to the new management to reinvent the wheels which created waste in time, resources and energy. New organization is faced with the challenge on how to continuously bringing the entire organization’s knowledge to overcome the hurdles while creating a supportive work environment (Boateng, 2011). The impact of organization change
may influence the product development and rate of innovation in the industry, as indicated by Daim et al (2008) based on Figure 1.1.

Merging and acquisition of companies are considered as a strategy to grow, gaining market share or a short cut to enter new markets with reduce costs for research and development. They are also a form of response to economic or competitive threats. Shook and Roth (2011) stated that workplaces could become chaotic and stressful after a merger or acquisition which may be induced by the process of identifying and eliminating overlapping positions.

Aldrich (1999) defines organizational transformation as a major change in an organization involving a break with existing routines and a shift to new kinds of competencies that challenge organizational knowledge. Occurring along with the transformation are the change in goals, expansion involving members or other organizations and changes in the activities that would contribute to major effect on the organizational knowledge.

The impact of organizational change on its knowledge demonstrates the need to concentrate on organizational knowledge during restructuring in order to achieve an improved outcome by giving more attention to the way the employees perceived the decisions and processes. The knowledge present in the organization could also be retained by focusing on the retention of key individuals possessing certain knowledge (Sitlington and Marshalls, 2011).
1.3 Objective Statement

1.3.1 General Objective

The general objective of this study is to examine the influence of organizational change to the organizational knowledge (knowledge assets) by looking specifically into the elements involving the culture of sharing, individualism, organizational structure, training activities and employee turnover.

1.3.2 Specific Objectives

The specific objectives are to study:

1. The relationship of sharing culture with organizational knowledge.

2. The relationship of individualism with organizational knowledge.

3. The relationship of organizational structure with organizational knowledge.

4. The relationship of training with organizational knowledge.

5. The relationship of employee turnover with organizational knowledge.

6. The level of all the independent variables in influencing the organizational knowledge.
1.4 Scope of Study

This study will look into how the change in organization affects the knowledge assets in an organization. The reasons for restructuring have a major influence in the outcome of a new organization in which the impact in turn may have significant effects on organizational effectiveness. It involves the elements as per the specific objectives of the study and how they could contribute to the preservation of knowledge in the organization. Based on this study, we will try to derive a conclusion on how this organization is able to undergone a multiple changes in nearly 20 years span. Suggestions will be made base on the outcome on what the management could do to preserve the knowledge within the organization to prevent knowledge loss over time due to change of management.

1.4.1 Theoretical Framework

The conceptual framework for this study is presented in Figure 1.4.1 which contains five independent variables consisting of sharing culture, individualism, organization structure, employee turnover and training. The dependent variables are tacit and explicit knowledge.

Figure 1.4.1: Theoretical framework
Base on the framework, the study will specifically focus on the relationship of organizational culture, organizational structure and the human resource with the knowledge of the organization. This framework is the guideline to form the hypotheses for this study.

1.4.2 Independent Variables

i. Organizational Culture

Organizational activities such that relates to knowledge management are very much influenced by the organizational culture. The culture could be more complex due to the fact that it could differ in different areas within the organization. Du Plessis (2006) defines knowledge management as making knowledge sharing as a norm in an organization and in creating the knowledge sharing culture; the organization needs to encourage effective teamwork, collaboration and sharing to make it more productive. Cultural clashes could occur resulted from sub-cultural and countercultural resistance which surfaces during emotional times, especially during merger and acquisition activities (Weiss, 2000). If an organization does not have a knowledge creating and knowledge sharing culture, the process for change will be very slow and difficult due to the fact that the value of the organization and the people need to be changed prior to knowledge creating and sharing (Du Plessis, 2006).

The importance of organization culture after an organization change on the knowledge asset is tested in the following hypotheses:

H1: Sharing culture is positively related to tacit knowledge.

H2: Sharing culture is positively related to explicit knowledge.
H3: Individualism is positively related to tacit knowledge.

H4: Individualism is positively related to explicit knowledge.

ii. Organizational Structure

An organization typically consists of three levels of management, namely top, middle and lower. Organizational structure contains the organizational hierarchy that can be considered as a mean of coordination and reporting relationship which can be directed towards organization effectiveness (Herath, 2007). It provides task and authority relationships which predetermine the way to work. Mergers and acquisition involves the elimination of positions that are overlapping and with the change in the workload and interruption of the norm in the daily working practices, it may increase the stress of those who are being retained. Shook and Roth (2010) discussed on the breaking of social fabric during organizational change where it eliminates long term relationships that employees have established over a long period of time. It may indicates lost of knowledge, giving the possibility of increasing stress level resulting in declining in job satisfaction, lower the motivation and increased employees’ turnover. In facing organizational change, building a new structure require the consideration of core competencies, skills retention and maintenance of the institutional knowledge storage.

The perceived relationship of organization structure after organization change to the knowledge is proposed through the following hypotheses:

H5: Organization Structure is positively related to tacit knowledge.

H6: Organization Structure is positively related to explicit knowledge.
iii) Human Resource

People tend to seek for information in a certain situations in which they may perceive there is a gap in their knowledge, thus will try to seek for more. In problem solving, people may try to find information in validating their interpretation. *Aldrich (1999)* describes how interactions between members will create a pool of shared information or a trans-active memory system and when widely shared, the information can be relied on as reference in daily working. An organization’s interpersonal network creates a cooperative environment and could become a shield for members in facing crises. When a part of the organization possesses such valuable and unique human capital, it constitutes to the human capital advantage. Knowledge, skills and expertise have the tendency to be obsolete if not being practiced by certain types of Human Resource Management procedures (*Boxal, 1996*).

Human Resource practices are applied individually to employees where each may possess certain kinds of knowledge and skills to form the human capital in an organization (*Subramaniam and Youndt, 2005*). Training aims to change employees’ behavior from functioning as a competent but also engaging in continuous improvement activities. *Snell (2011)* suggested that by ensuring access to the key employees and special skills is a way to align with talent intelligence to drive business outcomes. The talent data may consist of employees’ experiences prior and during employment, carrier ambitions that can be applied to the development plan, succession plan or individual development.

The study to investigate that Human Resource plays a role in organizational knowledge after organization change is tested through these hypotheses:
H7: Employee turnover is positively related to tacit knowledge.

H8: Employee turnover is positively related to explicit knowledge.

H9: Training is positively related to tacit knowledge.

H10: Training is positively related to explicit knowledge.

1.4.3 Dependant Variables

i. Organization Knowledge

Knowledge is a power which is becoming more valuable especially when the power is collective within an organization compared to knowledge hoarding which centered to a certain individuals (Haldin-Herrgard, 2000). It is through experience and deeper knowledge that lead to higher tacit knowledge. Unlike tacit, explicit knowledge is easier to recognize and often it becomes a natural part of our behavior or way of thinking. Davenport and Prusak (1998) also described knowledge as a mixture of experience, values, contextual information, experts’ insight that provides a framework for evaluating and incorporating new experiences and information. In an organization, these elements are included not only in documents but routines, processes, practices and norms. Knowledge in general does not obey the law of diminishing returns, in which the more it is dispersed and shared, the more productive and effective it becomes (Mohamed and Stanskosky, 2004).

The significance relationship of organization change through the elements in the independent variables to the organization knowledge is proposed through the hypothesis of:

H11: There is a significant relationship between independent variables and tacit knowledge.

H12: There is a significant relationship between independent variables and explicit knowledge.
1.5 Importance of the Study

The result from this study is expected to contribute to existing literature on organization change through mergers, acquisitions or other restructuring activities. This will further enhance our understanding on the effect of specially selected internal factors of the organization’s knowledge asset. Another importance of this study could also include the understanding the managing of existing knowledge towards the development of the organization after the change.

This study was conducted among the employees of one of the electronic manufacturers in the Samajaya Free Industrial Zone, Kuching which had undergone multiple organization changes within the last five years. Some of the characteristics of the organization as the subject for this research could offer are:

i) The knowledge within the organization and among the employees is unique for the storage industry which is being dominated by few players or organizations worldwide.

ii) Due to the different geographical locations of manufacturing plant worldwide, the influence of the Socio-culture on the working environment of the Sarawak plant may differ from other plants such as in Thailand, Philippines, China or Japan. Beliefs, norms and values are said to be the core in national culture which create variation in practices and attitudes towards organization development. Korean companies is said to be reluctant to invest for training while Malaysian preferred structured and formal training (Hassi and Storti, 2011).
CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter contained theoretical and findings from previous research in relation to organization and factors influencing the knowledge assets. The review aims to give a better understanding of objective of this study.

2.1 Organization and Organization Change

Aldrich (1999) defines organization as goal directed, boundary maintaining and socially constructed systems of human activity which focus on the social processes that involve in the formation and continuation of an organization. Goals direction and boundary maintenance demonstrate themselves as actions for coordination, control and as authorities to construct arrangements and resources allocation for the work flow. The Industrial Revolution between the 18th to 19th centuries contributed to the changes in agriculture, manufacturing, mining, transportation and technology. It has created a profound effect on the socioeconomic and cultural conditions of the time.

In the present of competitive economics, the survival firms depend on the satisfaction of shareholders. The failure to satisfy the shareholders may prompt them to remove their capital or using their power to influence the change of top management by replacing them with those who are better aligned with their interests. A change in an organization creates pressure coming from the environment, discovering a variation of standards, new purpose or vision for the future of the