## INVESTIGATION OF KNOWLEDGE SHARING AND BEHAVIORAL INTENTIONS AMONG PUBLIC SECTOR EMPLOYEES IN MALAYSIA

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Thesis submitted in fulfillment of the requirements for the degree of Master of Business Administration in Technology and Innovation Management

Faculty of Technology Management and Technopreneurship

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#### ABSTRACT

#### Investigation of Knowledge Sharing and Behavioral Intentions among Public Sector

#### Employees in Malaysia

BY

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#### FEBRUARY 2013

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Knowledge sharing has been identified as the key enabler of knowledge management and it recognized as fundamental means through which employees can contribute to knowledge application, innovation and finally give competitive advantage to the organization. Identification of factors that can motivate the employees to share their knowledge for the benefit of other employees and the company is considered as high priority issue for organizations. Thus, the main purpose of this research study was to examine factors that influencing the intention to share knowledge and to identify what are the impacts of their character and personality to the public sector in Malaysia. To meet the objectives, an integrated model which is based on Theory of Reasoned Action (TRA) is developed. The method used in this study is survey using questionnaires and were distributed to 156 respondents from various public sector organizations in Melaka to collect quantitative data for the analysis. The study was conducted for a period of one month from 10 December 2012 to 06 January 2013. 102 (65.8%) questionnaire were returned and 101 were usable and the data was analyzed using SPSS 17.0; only 2 out of 5 hypotheses relationships were supported. Knowledge sharing behavior was predicted by the employee's intentions towards knowledge sharing. The result of this study shows that (i) social trust and collectivism have significant effects on the intention to share knowledge; (ii) rewards/ incentive system, social network and individualism do not have significant effect on the intention to share knowledge. This concurs, with the objectives of the research undertaken. The research findings aids the public sector management in developing a framework in knowledge sharing and identifying the factors that encourage knowledge sharing among their employees.

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## ABSTRAK

Kajian terhadap Perkongsian Ilmu dan Hasrat Perilaku di Kalangan Pekerja Sektor Awam

## di Malaysia.

## OLEH

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Perkongsian ilmu telah dikenalpasti sebagai penggerak utama di dalam pengurusan pengetahuan dan ia telah diiktiraf sebagai perkara asas di mana pekerja boleh menyumbang kepada penggunaan pengetahuan, inovasi dan akhirnya memberi kelebihan daya saing kepada organisasi. Mengenal pasti faktor-faktor yang boleh memberi motivasi kepada pekerja untuk berkongsi pengetahuan mereka untuk manfaat pekerja dan syarikat lain dianggap sebagai isu yang paling utama untuk sesebuah organisasi. Oleh itu, tujuan utama kajian ini adalah untuk mengkaji faktor-faktor yang mempengaruhi hasrat untuk berkongsi pengetahuan dan untuk mengenal pasti apakah kesan watak dan personaliti mereka kepada sektor awam di Malaysia. Bagi mencapai objektif kajian tersebut, sebuah model bersepadu dibina berdasarkan Theory of Reasoned Action (TRA). Kajian ini menggunakan kaedah tinjauan dengan teknik soal selidik untuk mengumpul data dan diedarkan kepada 156 orang responden dari pelbagai organisasi sektor awam di Melaka bagi memperoleh data kuantitatif untuk tujuan analisis. Kajian berlangsung selama satu bulan mulai 10 Disember 2012 sehingga 06 Januari 2013. Sebanyak 102(65.8%) soal selidik dikembali dan 101 boleh digunakan dan data telah dianalisis menggunakan SPSS 17.0; 2 daripada 5 hubungan hypothesis disokong. Tingkah laku perkongsian pengetahuan telah diramalkan oleh hasrat ke arah perkongsian pengetahuan pekerja. Hasil kajian ini menunjukkan bahawa (i) kepercayaan sosial dan kolektivisme mempunyai pengaruh yang signifikan ke atas hasrat untuk berkongsi pengetahuan; (ii) ganjaran dan insentif, rangkaian sosial dan individualisme tidak mempunyai hubungan yang signifikan ke atas hasrat untuk berkongsi pengetahuan. Hasil kajian menunjukkan objektif kajian telah dicapai. Dapatan kaji selidik ini membantu pengurusan sektor awam untuk membentuk rangka kerja dalam perkongsian pengetahuan dan mengenal pasti faktor yang menggalakkan perkongsian pengetahuan di kalangan pekerja.

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Finally, I also would like to express my gratitude to all my friends and colleagues for their assistance, cooperation, encouragement and full support for this report completion, from the beginning until the end.

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## **DECLARATION**

I declare that this thesis entitled "Investigation of Knowledge Sharing and Behavioral Intentions among Public Sector Employees in Malaysia" is the result by my own research except as cited in the references. The thesis has not been accepted for any degree and it is not concurrently submitted in candidature of any other degree.

Signature

: ....

: SITI NUR'AIN BINTI AB AZIZ

Name

Date

: 18 APRIL 2013

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## **DEDICATION**

This thesis is dedicated to my husband, Mohd Shukur Bin Ahmad, without his support and encouragement it would not have been possible, and to my parents, Ab Aziz Bin Othaman and Harina Binti Harun, who passed on a love of reading and also respect for knowledge and the importance of education.

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## LIST OF ABBREVIATION

MITC	Melaka International Trade Centre
ICT	Information and Communication Technology
KMS	Knowledge Management System
TRA	Theory of Reasoned Action
ТРВ	Theory of Planned Behavior
KM	Knowledge Management

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## **CHAPTER 1**

## **INTRODUCTION**

## 1.1 Background of Research

Datuk Seri Najib Tun Razak has said, in the move to transform Malaysia into a knowledge-based economy as envisioned in Vision 2020, knowledge management is very important and is a requirement for the growth of the economy (Bernama, 2006). Knowledge Management engage with the systematic management of vital knowledge resources and related processes of creating, gathering, organizing, diffusion, utilizing and exploiting the information (Daegeun Hong, Euiho Suh & Choonghyo Koo, 2011). Specifically, knowledge management is the creation of processes and behavior that let people to transform or change the information in the organization and create and share the knowledge. Thus, it should include people, process, culture and technology (Silvia Massa & Stefania Testa, 2009).

Today, knowledge is increasingly recognized as an important resource by all types or organizations and institutions, whether private or public, service oriented or production oriented in order to reduce the time and cost of business, and

to develop the quality of life in general. In addition, knowledge that the organization acquire is a dynamic resources which need to be nourished and managed carefully. However, public sector organizations have often been less inclined to fully explore the benefits of knowledge management than the private sector.

In the past, innovation and R & D, efficient processes, permanent productivity gains and optimized allocation of resources, state-of-art marketing practice are some of the traditional ingredients had helped build the company's strength and success. In contrast, today the businesses continue to face the never ending challenge of improving their productivity regardless of significant advancements over the several decades (Rikio Maruta, 2012). The competitive environment is no longer linear or predictive. Survival and success depend entirely on the organization's ability to adjust to the dynamics of the business environment. According to Rikio Maruta (2012), only knowledgeable workers who have good insight can realize the innovations and improvement in the business, thus can indeed gain competitive advantages over its rival.

Earlier on, "the new global environment has led many experts and writers in management science to stress the significance of two operational models which are the knowledge era and the networked economy" (Lengrand & Chatrie, 1999, p. 9). The evolution from the industrial era to the knowledge era had progressed in-line with the competitiveness of a company's success. These changes such as from physical assets to intangible assets, mass marketing to just-in-time products, fragmented tasks to integrated tasks, etc were among the outcomes of the knowledge era. As a consequence, a broad range of knowledge-based issues, such as new methods and processes, identification and dissemination of best practice, technology information, market analysis, industry knowledge, knowledge sharing and knowledge transfer are much needed in response (Lengrand & Chatrie, 1999).

As one of the components of knowledge management, knowledge sharing culture is an essential key success factor, which is also crucial to the development of the knowledge-based economy (Mathi, 2004). Additionally, as one of knowledgecentered activity, knowledge sharing recognized as fundamental means through which employees can contribute to knowledge application, innovation and finally give competitive advantage to the organization (Sheng & Raymond, 2010). According to Hsiu-Fen (2007), knowledge sharing can be define as a social interaction culture, which linking with the exchange of employee knowledge, experiences, and skills throughout the entire department and organizations. Moreover, knowledge sharing can occurs or take place at the individual and organizational level. For individual employees, knowledge sharing involves talking to colleagues in order to help them get something done better, more quickly and more efficiently. One example is, sharing knowledge between employees and within and across teams allows organizations to exploit and capitalize on knowledge-based resources (Sheng & Raymond, 2010). On the other hand, for an organization, knowledge sharing consist of capturing, organizing, reusing and transferring experience-based knowledge that exist inside the organization and at the same time make the knowledge available to others in the business (Hsiu-Fen, 2007).

However, knowledge sharing among employees in the public sector in developing countries such as Malaysia is still in **infancy stage** and it's also similar in both the evolution and implementation of knowledge management (Eftekharzadeh, 2008). Many organizations have implemented the policies and programs on codification of knowledge to become explicit knowledge but giving only little emphasis on the knowledge that resides in individuals, which is known as tacit knowledge. Thus, it is actually not an easy task to implement and create a suitable knowledge management framework especially in the government sector.

Malaysian employees are willing to share knowledge but some are still holding their knowledge (Chowdhury, 2006). A few factors enable knowledge sharing behavior of individuals with their work group. According to the research by Iskandar, Ridhuan, Abdullah, Abdur Rahman, Zulqarnain Azelin & Azrai (2011), there are five basic problems which may arise when sharing the knowledge or information among people. First, people feel that their job might be threatened if they share all that they know with colleagues, thus no longer making them the ones who have the knowledge and understanding. Therefore, this can result in a defensive attitude or self-protective when they are asked to contribute to knowledge sharing activities. Second, some people hold to the perception that they should able to exchange the information with other things, for instance, promotion, financial reward and etc. Third, some people afraid that someone else will take credit for their work and ideas, thus it can lead to a sense of distrust. Fourth, any exchanged of information may be used by other person, and the person who had the original idea will be held responsible if anything goes wrong as a result of convey or inform that knowledge. Finally, there is a fear among some that by asking people to share the knowledge and ideas it will make them appear inadequate and incapable of doing their job appropriately.

Sharing knowledge in any organizations including government and public sectors has its significance. Everyone in the public sector, from technical departments to managerial departments will benefit from the knowledge being shared. Besides, the importance of knowledge sharing in the public sector can increase the individual and organization performance. Besides, Tung & Terrence (2011) indicate that government agencies nowadays, are aware of the importance of knowledge sharing for addressing the policy issues. Halimah (2008), has suggested to the Malaysian Government is that in order to practices sharing knowledge, managers ought to have personality intelligence to utilize employees' intelligence (tacit knowledge) in order to increase performances. Moreover, Kang, Kim, Chang, (2008), claim that both knowledge sharing activities and creations of new knowledge have become increasingly important for building sustainable and competitive governments.

In the long run, many scholars believed that the value of knowledge will rapidly grow in the changing environment organization, particularly in knowledge sharing and skills among employees (Oliver & Kandadi, 2006). In order to utilize knowledge in government organizations through sharing tacit knowledge, managers should understand individual differences. Employees' differences can be seen in terms of characteristics and behaviors that simply known as personality (Maccoby, 2009). Indeed, employees have different capabilities and varying perceptions of their work and these factors influence their job performance. Therefore, the integration of sharing tacit knowledge and personality traits is expected to contribute to government's performance. In addition, the organizations can share the tacit knowledge through some methods include trial of error, work with experts, create the environment for employees to create tacit knowledge, the innovative project team systems and promote conversion of tacit knowledge to explicit knowledge (Liu Zhi & Cui-Jian, 2012). However, sharing tacit knowledge is more challenging, but incurs vast impact on individual characteristics and job performance. Hence, the government needs knowledge workers to constantly upgrade their knowledge and skills that are gained from daily work (Zainuddin, 2000).

The success of knowledge management initiatives depends on knowledge sharing. According to Sheng & Raymond (2010), research has shown that knowledge sharing and its combination is positively related to such benefits including reduction in production costs, faster completion of new product development projects ,team performance, firm innovation capabilities and firm performance like sales growth and revenue from new products and services (e.g., Lin,2007; Magnus & Dechurch, 2009). Moreover, due to the potential benefits that can be recognize from knowledge sharing, many organizations have decided to invest the considerable time and money into knowledge management initiatives

which comprise the development of knowledge management systems (KMS) which use state-of-the-art technology to assist on the collection, storage and distribution of knowledge (Sheng & Raymond, 2010).

What will happen if knowledge sharing is not being implemented in such companies? If knowledge sharing is not being implemented, there would be no transfers of knowledge and thus, there would be limitation to improve or worst still to be stuck not knowing how to engage in the problem (Hendriks, 1999). Unnecessary and wrong steps might be taken, which may eventually lead to extra expenditure on labor, time and cost on material being used. These extra expenses may affect the company in financial terms especially if the wastage is in a very large scale depending on the company's size.

Various plans have been implemented to foster knowledge sharing. Knowledge repositories, buddy systems, incentives structures have been used to encourage knowledge sharing. However, these approaches are still inadequate to extract knowledge from individuals and to promote knowledge transfer among employees (Sherry, John, Bashorat & Victor, 2010).

The following sections of the chapter one will provide more details on the value and importance of sharing knowledge and the objective of this study towards the government and public sector.

## **1.2** Problem of Statement

As noted above, the concept of knowledge sharing is getting more attention in research and practice of knowledge management because of its potential benefits to both individuals and the organizations. Similarly, knowledge management also became a hotly discussed issue in the last century; therefore, a set of knowledge management related concepts, its activities and procedures has been developed. Moreover, knowledge management plays a vital role in almost aspect of our lives, especially in production activities (Yang Xu & Alain Bernard, 2011). It also includes Malaysian Public Sector which assumed as a significance role in the economic and social development in the country. To date, the Malaysian Public Sector has staff strength of 1.4 million employees. Besides, the government and public sector has a vital role in policies introduced and implemented in the industrial, agricultural and social sectors through the various 5-Year Plans and the New Economic Policy which help to maintain the balance between rural and industrial development and increase the economic growth. This is the reason why the research on knowledge sharing in the public sector is important to the developing countries like Malaysia.

Knowledge sharing has been recognized as a positive force for the survival of an organization and at the same time help the organization to sustain the competitive advantage. Identification of factors that can motivate the employees to share their knowledge for the benefit of other employees and the company is considered as high priority issue for organizations (Anitha, 2006). Although there

have been various studies on knowledge sharing context, most of the contexts in these researches are different in terms of culture. However, each research completed has limitations in terms of culture and types of organization involved. To date, little empirical research exists on what environments and mechanisms are conducive and favorable to knowledge sharing.

Quoted the growing significance knowledge sharing to the success of knowledge management and to organizational survival, a number of researchers have called for further investigation of the factors that shape the knowledge sharing behaviors in the organizational context. In addition, even though knowledge sharing barriers also has been discussed, there are still limited researches in terms of knowledge sharing based on Malaysian culture. The objective of this study is to examine the knowledge sharing behavior intention among public sector employees in Malaysia.

## 1.3 Aim

The aim of this research is to identify what are the factors influencing the intention of knowledge sharing behaviors among employees in the organizations and the impacts of their character or personality to the public sector in Malaysia.

## 1.4 Research Questions

In order to achieve the aims of this study, the following research questions were addressed:

• What are the impacts of the rewards/incentives, social networks, social trust, collectivism and individualism on the intention to share knowledge?

• Does behavioral intention vary across various demographic profiles of the respondents, such as age, gender, race, and education level?

## 1.5 Research Objectives

• To determine the impacts of the variables (rewards/incentives, social networks, social trust, collectivism and individualism) on the intention to share knowledge.

• To determine the behavioral intention on various demographic profiles such as age, gender, race, and education level.

### 1.6 Importance of Study

Currently there is limited empirical research on knowledge sharing in the public sector, thus with this study the researcher hopes to offer the management and employees of the public sector a **perspective on knowledge sharing**. Besides, the roles of the individuals and the organization as a whole in making sure that

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knowledge sharing are conducted effectively. This study also, will be able to contribute to a greater understanding of types of knowledge shared in public sector. Apart from that, it would help to motivate employees to share knowledge and to learn from one another as well as working as a team. Being in the modern organization, knowledge has become the most valuable resource of today and employees are the human capital for the public sector. In view of that, the researcher hopes that the result from this study can help managers identify and create suitable knowledge management for the sector to achieve sustained competitive advantage.

Looking back at the set goals to achieve Vision 2020, one should be able to visualize the importance of knowledge sharing for the country. Many companies have invested a lot in achieving the goal of having a knowledgeable culture. The ultimate plan is to increase the job and organizational performance and at the same time benefit the entire organization. Sharing knowledge among the employees, who are experts in their own fields, would step up the process of achieving the companies' objective. However, if the company not started to formalize the collection of valuable knowledge, the consequences includes wasting resources by in-venting the knowledge, spend more time locating difficult to find knowledge and unsuccessfully absorbing and using the growing volume of new knowledge flowing in the organization every day.

Besides, if the organization decided to implement knowledge management in their organization, there are many positive results that the organization will get from it. Research information and best practices are shared, experts are identified and

cost savings are realized as employees spend less time locating or reinventing knowledge and more time being productive. Overall, organizations or public sector are more competitive and more effective as they integrate Knowledge Management practices into the fabric of their organization. They had realized higher value from the assets and capital they have used to obtain knowledge.

By answering the research questions in section 1.3, this study will help the organizations in the following ways:

• To be aware of the impacts of rewards/incentives, social networks, social trust, collectivism and individualism on the intention to share knowledge.

• To clarify whether the behavioral intention are varies according to demographic profiles of the respondents including age, gender, race, years of experience, education level and etc.

## 1.7 Scope of Study

The scope of study for this research includes the employees of public sectors in the area of MITC, Ayer Keroh, and Hang Tuah Jaya. Each of the organizations have different functions, carry out different activities and offered different services. The employees, who are involved in this research ranges from junior to the higher executive level. The emphasis on the problems in creating and sharing knowledge is to help the researcher to identify the main factors of knowledge sharing behaviors that could encourage knowledge sharing.

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