

THE EFFECT OF ORGANIZATIONAL CULTURE ON KNOWLEDGE
SHARING AMONG ADMINISTRATIVE STAFF IN UNIVERSITI
TEKNOLOGI MALAYSIA

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DEDICATION

I dedicate my thesis work to my loving mother, whose words of encouragement and push for tenacity ring in my ears; she has been great source of motivation and inspiration.

I also dedicate this thesis and give special thanks to my wife who has supported me throughout the process. I will always appreciate what she has done.

I dedicate this work to my wonderful daughter Tina, and my very special uncle Mumtaz Haidary

Finally, this dissertation is dedicated to all those who believe in the richness of learning

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ABSTRACT

Knowledge sharing is the primary source of gaining competitive advantage and achieving long term success. Knowledge sharing is affected by many factors and the foremost of them is the culture of an organization. Organizational culture helps develop knowledge sharing practices among the members of the organization and achieve organizational objectives. The aim of the present study is firstly, to find out how the culture affects knowledge sharing in UTM and which of the cultural factors are more prevalent in developing knowledge sharing practices; secondly, to determine the level of knowledge sharing among the academic staff holding administrative positions in various faculties and departments of the university. Using quantitative approach, data was collected through survey questionnaire from a sample of 132 respondents. The analysis was carried out using descriptive and inferential statistics. Three of the dimensions of OC, workgroup support, information technology, and social interaction are found to be most significant in UTM, while reward system is found to be insignificant. Knowledge sharing is found to be high among academic staff holding administrative posts. The study concludes that organizational culture factors, workgroup support, information technology and social interaction are the most important factors that are helping in enhancing knowledge sharing in UTM. Finally, some recommendations related to the future studies are also included like investigating all levels and incorporating both administrative and academic staff, comparison with other public sector universities and between public and private sector universities.

ABSTRAK

Perkongsian pengetahuan adalah sumber utama untuk mendapatkan kelebihan daya saing dan mencapai kejayaan dalam jangka masa panjang. Perkongsian pengetahuan dipengaruhi oleh banyak faktor dan yang paling penting daripadanya adalah budaya dalam sesebuah organisasi. Budaya organisasi membantu membangunkan amalan perkongsian pengetahuan di kalangan ahli-ahli organisasi dan mencapai objektif organisasi. Tujuan pertama bagi kajian ini adalah untuk mengetahui bagaimana budaya akan mempengaruhi perkongsian pengetahuan di UTM dan mana satu faktor budaya yang lebih luas dalam membangunkan amalan perkongsian pengetahuan ; tujuan kedua adalah untuk menentukan tahap perkongsian pengetahuan di kalangan kakitangan akademik yang memegang jawatan pentadbiran di pelbagai fakulti dan jabatan universiti. Dengan menggunakan pendekatan kuantitatif , data dikumpulkan melalui kajian soal selidik daripada sampel 132 responden. Analisis dibuat dengan menggunakan statistik deskriptif dan inferensi. Terdapat tiga dari dimensi OC dimana terdiri daripada sokongan kumpulan kerja, teknologi maklumat dan interaksi sosial telah didapati paling penting di UTM, manakala sistem ganjaran didapati bahawa tidak signifikan . Perkongsian ilmu didapati tinggi di kalangan kakitangan Kumpulan Pengurusan akademik. Kajian ini menyimpulkan bahawa faktor organisasi budaya , sokongan kumpulan kerja , teknologi maklumat dan interaksi sosial adalah faktor yang paling penting yang membantu dalam meningkatkan perkongsian ilmu di UTM. Akhirnya, beberapa cadangan yang berkaitan telah diberikan untuk kajian masa depan seperti menyiasat semua peringkat dan menggabungkan kedua-dua kakitangan pentadbiran dan akademik, perbandingan dengan universiti-universiti sektor awam yang lain dan antara universiti sektor awam dan swasta.

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LIST OF ABBREVIATIONS

AS	-	Academic Staff
CoE	-	Center of Excellence
CAB	-	Charnwood Citizens Advice Bureau
GFMIS	-	Government Fiscal Management Information System
IT	-	Information Technology
K-Economy	-	Knowledge-Economy
KM	-	Knowledge Management
KS	-	Knowledge Sharing
OC	-	Organizational Culture
MPU	-	Malaysian Public Universities
MNC	-	Multinational Corporation
MSC	-	Multimedia Super Corridor
RA	-	Research Alliances
RS	-	Reward System
SECI	-	Socialization, Externalization, Combination and Internalization.
Si	-	Social Interaction
SPSS	-	Statistical Package for the Social Sciences
UTM	-	Universiti Teknologi Malaysia
WS	-	Workgroup Support

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter includes research backgrounds, organization background problem statement, purpose of the study as well as research objectives and research questions. The significance of the study scope of the study and limitations of the study will also be discussed. Finally, operational and conceptual definitions will be highlighted.

1.2 Research Background

In many organizations, knowledge is considered as one of the primary sources of competitive advantage and it plays a great role in the long term sustainability and success of any organization. It is therefore essential for organizations to manage intellectual capital in order to promote the success of their business (Walczak, 2005).

It is essential to gain competitive advantage yet it is inadequate for organizations to rely on staffing alone which focuses on selecting employees who have specific knowledge, skills, abilities and competencies or helping employees acquire them (Petrides, 2004). Organization must also consider the transferring of expertise and knowledge from experts to learners. This is what obliges the researchers to confirm that

organizational culture is the main factor affect knowledge sharing efficiency, since an organization which encourage and support knowledge sharing culture, this assist the organization to see their members how to share knowledge unlimitedly, without to be required in involving of knowledge sharing process (Roziana, 2004).

Due to current changes and rapid global developments and its role in the knowledge intension, made a transformation into a science in the literature, with modular organizational large in modern institutions, through continuity in innovation and flow a lot of information with subspecialties in the speed communications revolution in free transmission of information, integration and reproduction and invested by the Internet and the availability of the competition with the magnitude of informational heritage of humanity continued development due to the rapid modernization (Al-Alawi *et al.*, 2007).

Mohd Ghazali, (2007) in a research involving seven public and one private universities in Malaysia, found that, UTM have above average scores in the level of involvement in knowledge management practice (individual- academic staff). Also had the highest level of knowledge management practice comparison with the seven universities for the practices of knowledge generation, acquisition and dissemination. These indicators, which act as predictor of the current level of knowledge management application, could be used by the university to take appropriate actions in the continuity process of increasing the level of knowledge management application. In addition in scores for socio-technical components of each university, UTM had the lowest score for each of socio-technical components.

According to Roziana, (2013) knowledge sharing in Universiti Teknologi Malaysia (UTM) is still low because the focus is on sharing knowledge with their 'clique' rather than with everyone. Knowledge sharing is preferred just with whom they trust and like, meaning that the understanding of the significance of knowledge sharing process is limited to the receiver of the knowledge and not absolutely based on sharing of knowledge with others freely.

UTM is applying information technology (IT) by providing many web-based systems. In addition, there are other online application systems such as E-learning system and online registration system which are Web 1.0-based systems. Various models have been developed for adaptation of Web 2.0 technologies in higher education toward reduce the cost of learning, offer easier and faster access to information, and share collected knowledge by using Blogs, LinkedIn ,Wikis, Flickr, Facebook, Twitter, and YouTube (Saeed *et al.*, 2012).

All these attempts to overcome the barriers faced by sharing of knowledge among academic staffs due to the lack of the required knowledge sharing culture at the University and to try to create a modern atmosphere that assist relatively to overcome the existing constraints.

Prerequisite for this process is the effective and efficient knowledge sharing between knowledge workers. Due to decentralized organizational structures and the need for complex solutions to customer problems together with other actors within and outside the company, as well as with customers create as extended enterprise, IT support is in this context indispensable. The intensity and effectiveness of knowledge sharing through the open-network largely depends on the friendliness of the IT system created, the incentive system as well as the organizational culture of the institution (Cheng *et al.*, 2009).

Knowledge sharing is the corner-stone of many organizations' knowledge-management (KM) strategy. Hence the growing significance of knowledge sharing's practices for organizations' competitiveness and market performance. Adequate resources to support knowledge flows and collaboration need to be allocated. Further, the success or failure of a knowledge sharing strategy is dependent on its integration into the goals and strategy of the organization. It is the responsibility of senior management to communicate those goals and strategies to all employees in a transparent fashion to obtain support, It is very important that developing an information and knowledge strategy come before developing an IT strategy, when applying IT, it should not be assumed that the design of the original process is

satisfactory. This implies that before developing an IT strategy, firms must develop a knowledge strategy to provide the basis for the IT strategy (Riege, 2005).

In the meantime information technology improves the efficiency of organizational management processes (knowledge generation, knowledge sharing, and knowledge codification and storage) and provides new ways of improving the capacity of response to environmental requirements, those technology systems serve a variety of functions such as storing large amounts of information, making information accessible to individuals, providing means of communication, generating records of interactions and transactions, and automating processes (López *et al.*, 2009).

Through a study on Malaysian Public Universities (MPU) in order to analyze the organizational issues in knowledge sharing, particularly work environment, social interaction and superior support, with an investigation of the level of knowledge sharing practices and the level of organizational factors, to determine the relationship between organizational factors and knowledge sharing practices, outcome showed that knowledge sharing is moderately practiced by academic staffs. The relationships between organizational factors and knowledge sharing practices show high score in this correlation, which reflecting that Managing environment for social interaction and collaboration is essential for knowledge sharing practices (Roziana *et al.*, 2013b)

Before considering problem statement it is important to note, the transformation of modern world business from production based economy to a knowledge based economy has major implications for Malaysia. Malaysia established the Multimedia Super Corridor (MSC) to spearhead the country into the information technology era. The advantage is that it enables Malaysia to realize its dream of becoming a developed nation by the year 2020; and a total structural change of the country's industrialization plan. In fact, through the three institutions in Malaysia (universities, public schools and public or private sector institutions) that are responsible in developing people, universities seemed to be the most important institution that could close the gap between current levels of knowledge and skills and the future level that is required in achieving Vision 2020 (Roziana, 2004).

In addition, vision 2020, inspired by the former Prime Minister, Tun Dr. Mahathir Mohamad, aims to make Malaysia a developed nation by year 2020. Even more, in September 2002 the Government of Malaysia has launched the K-economy Strategic Master Plan. This plan aims to give Malaysia the competitive advantage needed to compete in today's complex and dynamic environments. The plan asserted the importance of knowledge and suggests a creative plan to increase and promote the numbers of knowledge workers in Malaysia. This plan is most important due to the price of knowledge held in today's world. Meanwhile, knowledge acts as the primary resource of the new economy. As a result, the government tried to be dependent very heavily on Higher Education Organizations (HEO) especially universities. On the other hand, towards achieving the objective of Vision 2020, Malaysian Public Institution of Higher Education has their own role in supporting Vision 2020 by producing knowledgeable manpower or knowledge worker to the country. As other non-profit organizations, Malaysian Public Institution of Higher Education has make steps on the implementation of Knowledge Management in their organization (Sani, 2008).

Through previous research on investigating the effect of certain factors in organizational culture in the success of knowledge sharing, such factors as workgroup support, reward system social interaction, and technologies...etc, play an important role in defining the relationships between staff, which providing opportunities to jump over barriers in sharing knowledge (Al-Alawi *et al.*, 2007).

Most researchers agree on the general definition of organizational culture as a common system of values and beliefs leading to the rules and ethics of control behavior; thereby find a special method of the organization working, through contribute to the formulation and composition personal patterns to organization individuals through knowledge and concepts publishing, that lead to determine the information and environmental, including enhancing social interact among through promote social relationships (Liu & Fang, 2010) , that it has become part acceptable and priority in many organizations, and managers, with control and sovereignty and consolidated and interdependence of culture in organization, which proved to be a fundamental element of quality that leads to success more companies (Donate & Guadamillas, 2010).

1.3 Organization Background

Universiti Teknologi Malaysia (UTM), an innovation-led and graduate-focused research University, has two campuses; one in Kuala Lumpur (the capital city of Malaysia) and the second in Johor Bahru, (the southern city in Iskandar Malaysia, which is a vibrant economic corridor in the south of Peninsular Malaysia). UTM has academic staff strength of over 2,000 of which more than 200 are foreign graduate faculty members. UTM continuously strives to develop and enhance quality academic and professional programmes of international standard and global recognition. The student population consists of more than 15,000 full-time undergraduate students, over 6,000 enrolled on distance learning programmes as part-time students and more than 8,000 postgraduate students in various fields of specialization; out of which over 2,000 are foreign students.

UTM has also established a reputation for cutting-edge research undertakings and innovative education, proven by becoming the three-time winner for the National Intellectual Property Award for organization category. A stimulating research culture exists in UTM through 10 Research Alliances (RA) in strategic disciplines namely Sustainability, Infocomm, Water, Cybernetics, Biotech, Construction, Materials & Manufacturing, K-Economy, Energy, Transportation and Nanotechnology. In addition there are 28 Centers of Excellence (CoE) in addition to academic faculties to service technological education and research needs of the university (UTM, 2013a).

1.4 Problem Statement

Knowledge sharing is an important issue to knowledge management. Because knowledge is considered as a resource of organization competition and a kind of strategic capital, the more the knowledge is expanded in an organization, the more the capacity of competition is (Yang & Wu, 2006).

The effective knowledge sharing is achievable throughout of socialization process within supportive organizational culture. However, academic staff's non-supportive beliefs in sharing knowledge in either formal or informal ways can cause knowledge management efforts fail in an organization, as well as the nature of sharing knowledge that will direct into the understanding of its awareness and readiness, through focusing on its perceptions or views in the university administration (Shaari & Alias, 2007).

Organizations tend to forgo the impact of cultural factors on facilitation as traditionally they are tasked with improving knowledge sharing which focused on the information technology and technology-driven aspects of managing information (Davenport, De Long and Beers, 1998). Consequently, technology, as the sole solution to facilitating knowledge sharing, has not proven to be the answer and has turned out to be an ineffective approach to knowledge management in general and knowledge sharing in particular (Ford and Chan, 2003).

Additionally, another study done by Garavelli *et al*, as cited in Kim, 2007 noted that most failures in the field of knowledge sharing in particular occurred due to the organization's act of exaggerating on building technology infrastructures while uniformly overlooking the cultural factors. These failures have led to increasing recognition that the key to successful knowledge sharing requires focus on organizational culture and how it may be impacting knowledge sharing.

The issue of knowledge sharing is important for a knowledge-based institution, such as a university, where knowledge production, distribution and application are ingrained in the university. Though there is no direct way to measure the outcome of knowledge sharing in knowledge institutions, the impact of knowledge sharing could be larger than those created by the business organizations (Cheng et al., 2009).

According to a survey conducted to address the barriers that exist in sharing of knowledge in an academic environment in Malaysia by Jain and Sidhu (2007), academic staffs would be more willing to share their knowledge if they felt that top

management wants it, and there is a strong argument of linking knowledge sharing with rewards and performance appraisal. Besides, they feel a strong need to encourage staff to publish knowledge on its website and newsletters to disseminate the knowledge, and they feel that there is a lack of knowledge sharing strategies, a lack of knowledge storage, and also a lack of awareness on the benefit of knowledge sharing in their organization (Jain *et al.*, 2007).

Universities in Malaysia should take proactive measures specifically to enhance the emotional bonding among academics toward enhance the existence of this factor. In addition university administrators have to develop social activities to improve interpersonal connection among academics as well as build better outlook of trust among them, to promote a climate of common interaction and open communication might support the affect-based trust among academics in the university, furthermore universities may possibly encourage more teamwork collaboration in research projects or consultancy works or academic teachings (Goh & Sandhu, 2013).

The main issues in knowledge sharing practices are university structure and designation and title. The academia awareness in sharing knowledge is also influenced by culture. Furthermore the concept of reciprocal relationship of sharing knowledge may hinder knowledge sharing awareness among academia all this was highlighted through a study by S. Roziana, (2013) investigated the issues and challenge that academia are faced with in knowledge sharing at a research university in Malaysia.

This study will examine the relationship between organizational culture and knowledge sharing among academic staffs who hold administrative posts in Universiti Teknologi Malaysia (UTM), to identify the level of knowledge sharing among them, with a focus on determine the factors of organizational culture which influencing knowledge sharing among academic staffs, having the mind that knowledge sharing will assist Universiti Teknologi Malaysia (UTM) to strengthen its research, business performance and teaching activities.

Even with the significance of knowledge sharing, many academic staffs still hoard their knowledge, these factors need to be addressed, disclosing a world of knowledge among academics, and making their work more visible to the rest of the world.

1.5 Purpose of the Study

The purpose of this research is to study how the organizational culture effect on knowledge sharing among academic staffs that holds administrative posts in Universiti Teknologi Malaysia (UTM), with highlight on the level of knowledge sharing and to understand the factors that influences the university's knowledge sharing process.

1.6 Research Objectives

- i. To determine the organizational culture prevailing among academic staffs who hold administrative posts in Universiti Teknologi Malaysia (UTM).
- ii. To identify the level of knowledge sharing among academic staffs who hold administrative posts in Universiti Teknologi Malaysia (UTM).
- iii. To study the relationship between organizational culture and knowledge sharing among academic staffs who hold administrative posts in Universiti Teknologi Malaysia (UTM).

1.7 Research question

- i. What is the prevailing organizational culture among academic staffs that hold administrative posts in Universiti Teknologi Malaysia (UTM)?

- ii. What is the level of knowledge sharing among academic staffs that hold administrative posts in Universiti Teknologi Malaysia (UTM)?
- iii. What is the relationship between organizational culture and knowledge sharing among academic staffs who hold administrative posts in Universiti Teknologi Malaysia (UTM)?

1.8 Significance of study

A considerable number of researches related to knowledge sharing have been performed, however most of them only dealt with some specific factors associated with knowledge sharing. According to Wasko and Faraj (2005), factors affecting the knowledge sharing behavior have been enormously investigated; however most of the studies have been directed either on social or technological dimension. Therefore there is a gap in the literature in regards to testing most of the important factors together in one research.

Definitely most researchers believe that Knowledge is an important input in most organizations Knowledge is seen as an important input in most organizations since it allows the development and creation of competitive advantage. Thus, an organization that wishes to leverage their knowledge must create a culture that thrive knowledge sharing. Consequently, this paper addresses the importance of cultural factors in determining the effectiveness of knowledge sharing in (UTM). The study can help the organization exploit the use of knowledge successfully and remain competitive.

This research also hopes to provide a useful insight to (UTM) into how important it is to maintain a culture that supports knowledge sharing within the university where academic staff can be motivated to share all that they know in order to

improve their knowledge sharing efforts and be competitive. This study will also help (UTM) to realize that instilling a culture which supports knowledge sharing is thus a necessary prerequisite for the organization to significantly differentiate them. It is vital to realize that knowledge is an organization's only resource that increases in value, which sets it apart from other company resources that depreciate over time.

1.9 Scope of the Study

The study will focus on the relationship between organizational culture and knowledge sharing, with determine the factors of organizational culture which influencing knowledge sharing, in result to identify the level of knowledge sharing among academic staffs that hold administrative posts in all faculties and some departments at Universiti Teknologi Malaysia (UTM) Johor Bahru campus, to show how the relevance and engagement of academic administrators in the process of knowledge sharing is?.

1.10 Conceptual Definitions

1.10.1 Knowledge Sharing

Knowledge as defined by Nonaka and Takeuchi (1995) is a product that results from the interaction between explicit and tacit knowledge, through conversion process of the creating knowledge results in a twirling of knowledge acquisition.

According to Fernandez and Sabherwal, (2004), knowledge sharing occurs when an individual is willing to assist as well as to learn from others in the development of new competencies. Schwartz, (2006) define knowledge sharing process

as exchange of knowledge between at least two parties in a reciprocal process allowing reshaping and sense-making of the knowledge in a new context.

More recent definition by (Wang and Noe, 2010) described knowledge sharing as a process of capturing knowledge or moving knowledge from a source unit to a recipient unit.

1.10.2 Organizational Culture

It is a common system of values and beliefs that lead to the rules and ethics of control behavior; by creation a special way of organization working, through contribute to the formulation and composition personal patterns to organization individuals by using distribution of knowledge and concepts (Schein, 2006).

1.10.3 Culture

Culture is a pattern of shared basic assumptions that a group learns as it solves its problems of external adaption and internal integration, which 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, 2006).

(i). Workgroup Support

According to Zárraga-Oberty and De Saá-Pérez, (2006) a workgroup consists of two or more individuals who routinely function like a team, are interdependent in the achievement of a common goal, and may or may not work next to one another or in the same department. Therefore workgroup support refers to supporting one another in a work group.

(ii). Reward System

According to Cornelia S, (2006), a reward system is the procedures, rules and standards associated with allocation of benefits and compensation to employees, and it is an easy and effective way to inspire, encourage and repeat a behavior.

(iii). Social Interaction

Is the way that individuals as social beings talk and act or having some kind of involvement with others on a personal basis in society through conversation, individuals are able to form groups and coordinate behavior (Noorderhaven & Harzing, 2009).

(iv). Technologies/ Information Technological Infrastructure

According to Carr and Lu, (2007) The technical and information management systems which enable capturing, retaining, transmitting, sharing of organizational data and knowledge, influencing the nature of information flow (synchronous or asynchronous) and format (e.g., text, audio, video).

1.11 Operational Definitions

1.11.1 Culture

Culture can be defined as a pattern of shared fundamental assumptions learned by a group to solve problems of external adaptation and internal incorporation that has worked well enough to be considered applicable and, therefore, to be taught to new members as the precise way to recognize, think and feel in relation to those problems (Bush & Middlewood, 2005).

1.11.2 Organizational Culture

Organizational culture determines what is done, how it is done and who does it in every organization and all members of that organization subscribe to that way of doing things, at all times and in all contexts (Al-Alawi *et al.*, 2007).

1.11.3 Academic Staffs

Academic staffs are the important engine to gear the universities in dealing with barriers, in order to categorize as knowledge workers. They count on knowledge rather than experiences and skills, through possess of intelligent input, creativity ability and the authority to perform a job (Roziana *et al.*, 2013a).

1.11.4 Knowledge Management

Knowledge Management (KM) is the systematic management of processes enabling vital individual and collective knowledge resources to be identified, created, stored, shared, and used for the benefit of the actors involved (F. A. Uriarte, 2008).

Is a systemic and organizationally specified process for acquiring, organizing and communicating knowledge of employees with the purpose of other employees to be more effective and productive in their work (Kankanhalli *et al.*, 2005).

1.11.5 Knowledge Sharing

Knowledge sharing is the method whereby the explicit and tacit information and knowledge is communicates to other individuals. Knowledge sharing occurs while an individual is willing to assist as well seeing that to find out from others in the progress of latest competencies (Yang & Farn, 2009).

“knowledge sharing is defined as the practice of knowledge exchanging (skills, experience, and understanding) amongst researchers, policymakers, and service providers” (Tsui *et al.*, 2006)p5.

1.11.6 Universiti Teknologi Malaysia (UTM)

Is a leading innovation-driven entrepreneurial research university in engineering science and technology located both in Kuala Lumpur, the capital city of Malaysia and Johor Bahru, the southern city in Iskandar Malaysia (UTM, 2013a).

1.12 Limitations of the Study

This study is limited to focusing only on academic staff that hold administrative posts in faculties of Universiti Teknologi Malaysia. The literature selected for this study focuses only on the relationship between organizational culture factors and sharing of knowledge, for example, technology factors like some of organizational culture factors are the enablers of knowledge sharing process (Lin, 2007). This study also did not consider the actual step an organization may take to create and sustain an environment conducive to knowledge sharing. Finally, this study also has a limitation in sample size that is small in comparative to all academic staff in UTM since its over two thousand academic staff.

REFERENCE

- Al-Alawi, A. I., N. Y. Al-Marzooqi and Y. F. Mohammed (2007). Organizational culture and knowledge sharing: critical success factors. *Journal of knowledge management* 11(2): 22-42.
- Alhammad, F., S. Al Faori and L. Abu Husan (2009). Knowledge Sharing In The Jordanian Universities. *Journal of Knowledge Management Practice* 10(3).
- Ardichvili, A., V. Page and T. Wentling (2003). Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management* 7(1): 64-77.
- Babbie, E. (2012). *The practice of social research*. Belmont, USA, Wadsworth, Cengage learning.
- Becerra-Fernandez, I. and R. Sabherwal (2010). *Knowledge management: systems and processes*. New York, USA, ME Sharpe.
- Bechina, A. A. and T. Bommen (2005). Knowledge sharing practices: Analysis of a global Scandinavian consulting company. Proceedings of the 2nd International Conference on Intellectual Capital, Knowledge Management and Organisational Learning (ICICKM 2005), Academic Conferences Limited.
- Bush, T. and D. Middlewood (2005). *Leading and managing people in education*. London. UK, Sage.
- Carr, P. and Y. Lu (2007). Information Technology and Knowledge Worker Productivity: A Taxonomy of Technology Crowding. *Information Technology* 12: 31-2007.
- Casimir, G., Y. N. K. Ng and C. L. P. Cheng (2012). Using IT to share knowledge and the TRA. *Journal of knowledge management* 16(3): 461-479.
- Chatzoglou, P. D. and E. Vraimaki (2009). Knowledge-sharing behaviour of bank employees in Greece. *Business Process Management Journal* 15(2): 245-266.
- Chaudhry, A. (2005). *Knowledge Sharing Practices in Asian Institutions: A multi-Cultural Perspective from Singapore*. World Library and Information Conference and Council: Libraries—a voyage of discoveries. Oslo, Norway.

- Cheng, M.-Y., J. S.-Y. Ho and P. M. Lau (2009). Knowledge sharing in academic institutions: a study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management* 7(3): 313-324.
- Christensen, P. H. (2007). Knowledge sharing: moving away from the obsession with best practices. *Journal of Knowledge Management* 11(1): 36-47.
- Cornelia S, K. J. (2006). Rewards for knowledge sharing. *National Science Foundation* 4(1): 9.
- Davis, F. D. and V. Venkatesh (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human-Computer Studies* 45(1): 19-45.
- Davison, R. M., C. X. Ou and M. G. Martinsons (2013). Information technology to support informal knowledge sharing. *Information Systems Journal* 23(1): 89-109.
- Donate, M. J. and F. Guadamillas (2010). The effect of organizational culture on knowledge management practices and innovation. *Knowledge and Process Management* 17(2): 82-94.
- Engle, C. and N. Engle (2010). The 2020 federal knowledge worker. *VINE* 40(3/4): 277-286.
- F. A. Uriarte, J. (2008). *Introduction to Knowledge Management*. Jakarta, Indonesia, ASEAN Foundation.
- Fernandez, I. B., Gonzalez, A and R. Sabherwal (2004). *Knowledge Management: Challenges, Solutions and Technologies*. USA, Pearson Education, Inc.
- Fowler Jr, F. J. (2008). *Survey research methods*. SAGE Publications, Incorporated.
- Gavin, H. (2008). *Understanding research methods and statistics in psychology*. London. UK, Sage.
- George, D. (2003). *SPSS for Windows Step by Step: A Simple Study Guide and Reference, 17.0 Update, 10/e*. Pearson Education India.
- Goh, S. K. and M. S. Sandhu (2013). Knowledge Sharing Among Malaysian Academics: Influence of Affective Commitment and Trust. *Electronic Journal of Knowledge Management* 11(1).
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal* 17: 109-122.
- Hoegl, M., K. P. Parboteeah and C. L. Munson (2003). Team-Level Antecedents of Individuals' Knowledge Networks*. *Decision Sciences* 34(4): 741-770.

- Iqbal, M. J., A. Rasli, L. H. Heng, M. B. B. Ali, I. Hassan and A. Jolaei (2011). Academic staff knowledge sharing intentions and university innovation capability. *African Journal of Business Management* 5(27): 11051-11059.
- Islam, Z., I. Hasan, S. Ahmed and S. Ahmed (2011). Organizational culture and knowledge sharing: Empirical evidence from service organizations. *African Journal of Business Management* 5(14): 5900-5909.
- Ismail, M. A. and L. Chua (2005). Implication of Knowledge Management (KM) in higher learning institution. *International Conference on Knowledge Management, PWTC, Kuala Lumpur*.
- Jackson, S. E., C.-H. Chuang, E. E. Harden and Y. Jiang (2006). Toward developing human resource management systems for knowledge-intensive teamwork. *Research in personnel and human resources management* 25: 27-70.
- Jain, K. K., M. S. Sandhu and G. K. Sidhu (2007). Knowledge Sharing Among Academic Staff: A Case Study of Business Schools in Klang Valley, Malaysia. *Journal for the Advancement of Science & Arts* 2: 23-29.
- Jashapara, A. (2004). *Knowledge management: An integrated approach*. Harlow, England, Pearson Education.
- Jennex, M. E. (2008). *Current Issues in Knowledge Management*. Hershey, PA, USA, IGI Global.
- Kankanhalli, A., B. C. Tan and K.-K. Wei (2005). Contributing knowledge to electronic knowledge repositories: an empirical investigation. *MIS quarterly*: 113-143.
- Kbar, G. (2010). Role of ICT and Science Park in building Effective Knowledge that leads to knowledge based Economy and Strong Knowledge Society. *International conference on Communication Technologies. Riyadh. , ICCT2010 & Saudi Telecommunication Society STS*.
- Kim, S. and H. Lee (2006). The Impact of Organizational Context and Information Technology on Employee Knowledge-Sharing Capabilities. *Public Administration Review* 66(3): 370-385.
- Krejcie, R. V. and D. W. Morgan (1970). Determining sample size for research activities. *Educational and psychological measurement* 30(3): 607-610.
- Lin, H.-F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower* 28(3/4): 315-332.
- Liu, W.-C. and C.-L. Fang (2010). The effect of different motivation factors on knowledge-sharing willingness and behavior. *Social Behavior and Personality: an international journal* 38(6): 753-758.

- López, S. P., J. M. M. Peón and C. J. V. Ordás (2009). Information technology as an enabler of knowledge management: an empirical analysis. *Knowledge Management and Organizational Learning*, 4th edition. 111-129. New York, Springer USA.
- Mohd Ghazali, M., M. Nor Azirawani, K. Norfaryanti and M. Mar Idawati (2007). The application of knowledge management in enhancing the performance of Malaysian universities. *Electronic Journal of Knowledge Management* 5(3): 301-312.
- Moorthy, K., O. O. Voon, B. Samsuri, M. Gopalan and K. Yew (2012). Application of Information Technology in Management Accounting Decision Making. *International Journal of Academic Research in Business and Social Sciences* 2(3).
- Nonaka, I. and H. Takeuchi (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press, USA.
- Noorderhaven, N. and A.-W. Harzing (2009). Knowledge-sharing and social interaction within MNEs. *Journal of International Business Studies* 40(5): 719-741.
- Okyere-Kwakye, E. and K. M. Nor (2011). Individual factors and knowledge sharing. *American Journal of Economics and Business Administration* 3(1): 66.
- Petrides, L. A. (2004). *Knowledge Management, Information Systems, and Organizations*. educause.edu 2004(20): 12.
- Ragsdell, G. (2007). Inhibitors and enhancers to knowledge sharing: lessons from the voluntary sector. *Proceedings of International Conference on Intellectual Capital, Knowledge Management and Organisational Learning*, University of Stellenbosch.
- Rahgozar, H., F. Afshangian and K. z. ehteshami (2012). The Relationship between Organizational Culture and Knowledge Management (A Case Study at the University of Shiraz). *Journal of Basic and Applied Scientific Research* 2(4): 3198-3207.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of knowledge management* 9(3): 18-35.
- Roziana, S. (2004). A Practice Of Knowledge Sharing : A Case Study In A Public Service Organization. *Jurnal Kemanusiaan Bil.3(Jun)*: 6.
- Roziana, S., A. R and A. R. Hamidah (2013a). What Deter Academia to Share Knowledge within Research-Based University Status. *World Academy of Science, Engineering and Technology* (73): 4.

- Roziana, S., A. R and M. Y. R. (2013b). The Organizational Issues of Knowledge Sharing among Academic Staffs in the Malaysian Public Universities. *International Journal of Knowledge, Culture and Change Management* 10(6): 133-148.
- Saeed, F. A., N. A. Iahad and N. A. Gazem (2012). Web 2.0-based Communication and Knowledge Sharing Model in Higher Education Institutes (Case Study: Universiti Teknologi Malaysia). *Journal of research and innovation in information systems* 1.
- Salkind, N. J. (2009). *Exploring research* NJ, Prentice Hall, Upper Saddle River.
- Sani, M. A. M. (2008). Mahathir Mohamad as a cultural relativist: Mahathirism on human rights. 17th Biennial Conference of the Asian Studies Association of Australia, Melbourne.
- Schein, E. H. (2006). *Organizational culture and leadership*. San Francisco, USA, John Wiley & Sons, Inc.
- Schwartz, D. G. (2006). *Encyclopedia of knowledge management*. USA, IGI Global.
- Shaari, R. and R. A. Alias (2007). Human resource development (HRD) strategies for knowledge sharing in a higher learning institution. *Jurnal Teknologi Maklumat* 19(2): 57-66.
- Sharratt, M. and A. Usoro (2003). Understanding knowledge-sharing in online communities of practice. *Electronic Journal on Knowledge Management* 1(2): 187-196.
- Supar, N. (2012). Technological factors affecting knowledge sharing among academic staff in selected Malaysian higher educational institutions and the effect on performance. *Journal of Education and Vocational Research* 3(7): 234-241.
- Sveiby, K.-E. and R. Simons (2002). Collaborative climate and effectiveness of knowledge work—an empirical study. *Journal of Knowledge Management* 6(5): 420-433.
- Syed-Ikhsan, S. O. S. and F. Rowland (2004). Knowledge management in a public organization: a study on the relationship between organizational elements and the performance of knowledge transfer. *Journal of Knowledge Management* 8(2): 95-111.
- Tiwana, A. (2003). *The Knowledge Management Toolkit: Orchestrating It, Strategy, And Knowledge Platforms*, 2/E (With Cd). Pearson Education India.
- Tsui, L., S. A. Chapman, L. Schnirer and S. Stewart (2006). *A Handbook on Knowledge Sharing: Strategies and Recommendations for Researchers*,

Policy Makers and Service Providers. Edmonton, Canada, Community-University Partnership for the Study of Children, Youth, and Families.

UTM. (2013a). "about Universiti Teknologi Malaysia." from <http://www.utm.my/>.

UTM (2013b). List of Faculties. Johor, <http://www.utm.my/faculties-schools/>.

Walczak, S. (2005). Organizational knowledge management structure. *Learning Organization*, The 12(4): 330-339.

Wang, S. and R. A. Noe (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review* 20(2): 115-131.

Wasko, M. M. and S. Faraj (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS quarterly*: 35-57.

Wickramasinghe, V. and R. Widyaratne (2012). Effects of interpersonal trust, team leader support, rewards, and knowledge sharing mechanisms on knowledge sharing in project teams. *VINE* 42(2): 214-236.

Yang, H.-L. and T. C. Wu (2006). Knowledge sharing in an organization—Share or not? *Computing & Informatics*, 2006. ICOCI'06. International Conference on, 6-8 June 2006 Kuala Lumpur, Malaysia, IEEE.

Yang, J.-t. (2007). The impact of knowledge sharing on organizational learning and effectiveness. *Journal of Knowledge Management* 11(2): 83-90.

Yang, S.-C. and C.-K. Farn (2009). Social capital, behavioural control, and tacit knowledge sharing—A multi-informant design. *International Journal of Information Management* 29(3): 210-218.

Yi, L. W. and S. Jayasingam (2012). Factors Driving Knowledge Creation among Private Sector Organizations: Empirical Evidence from Malaysia. *Journal of Organizational Knowledge Management*. Article ID 199983.

Zárraga-Oberty, C. and P. De Saá-Pérez (2006). Work teams to favor knowledge management: towards communities of practice. *European Business Review* 18(1): 60-76.

Zhang, J., S. R. Faerman and A. M. Cresswell (2006). The effect of organizational/technological factors and the nature of knowledge on knowledge sharing. *System Sciences*, 2006. HICSS'06. Proceedings of the 39th Annual Hawaii International Conference on, IEEE.

Zhang, X. and Y. J. Jiang (2012). Who shall I share my knowledge with? A receiver perspective of knowledge sharing behavior. *Management of Innovation and Technology (ICMIT)*, 2012 IEEE International Conference on, IEEE.

Zulkifli, I. (2010). Knowledge worker training in Malaysia. PhD. University of Nottingham Nottingham