Factors Influencing Knowledge Management Practices among Multimedia Super Corridor (MSC) organizations
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Abstract

Knowledge management (KM) has emerged as a new discipline in managing organization. It plays important roles in
establishing long term internal strength and supporting external competitive advantage. The purpose of this study is to gauge the level of KM practices in MSC status organizations. It
also shows relationship between demography of respondents with KM influential factors in those organizations. Survey question which consists of 4 main KM influential factors were
distributed. Results of 121 data sets have been collected from 4 MSC-status organizations. Mean score and One Way ANOVA are applied to identify the level of KM practices. This also identifies
the relation between the demography and KM factors. It is found out that KM practices in MSC status organizations are at medium level. There are significant differences in KM
practices with respect to age of respondents and job designation. It can be concluded that sufficient attention should be given to culture, information technology, organization
structure and people to achieve success in KM practices.
Keywords: Influential factors, Knowledge management, knowledge management practices, MSC status organizations, new discipline
Introduction
Knowledge management can be defined as the process of transforming information and intellectual assets into enduring value. It connects
people with the knowledge that they need to take action. By applying knowledge management into organization, it can integrate, identify, manage and share all
of the department’s information assets. According to Darroch (2005), knowledge management has emerged as a new discipline in an organization, and it plays an
important supporting function by providing a coordinating mechanism to enhance conversion of resources into capabilities. Newman (2000) stated that this knowledge
management promotes an integrated approach to identifying, capturing, retrieving, sharing, and evaluating an enterprises information asset. These
information assets may include databases, documents, policies, procedures, as well as the uncaptured tacit expertise and experience stored in individual's heads.
Background
Multimedia Super Corridor (MSC) is the Malaysian government initiative. It was designed to leapfrog Malaysia into the information and
knowledge age. The MSC was initiated as a part of Malaysia’s long term plan to become a knowledge-based and a fully developed country by the year 2020. This
corridor houses core MSC initiatives which include high-technology projects such as e-Government, Telemedicine, Smart School, Multipurpose Smart Card System, Research
and Development Cluster, e-Business and Technopreneur Development.

The MSC is a $50 \times 50$ km$^2$ zone, stretching from the
Petronas Twin Towers (world’s tallest towers) in the center of Kuala Lumpur to the newly built Kuala Lumpur International Airport (KLIA). It comprises several
administrative, industrial and technological development clusters. Among the clusters are: (1) Putrajaya, the newly built seat of the federal government, (2) Cyberjaya, an
intelligent city which will house multimedia industries as well as research centers and the Multimedia University (MMU), (3) Technology Park Malaysia, a park located in the
center of the MSC providing engineering and IT facilities to entrepreneurs, investors and industries. Previous industrial development projects such as the free trade zone in Petaling
Jaya, manufacturing hubs in the outskirts of Kuala Lumpur and the city’s financial centers also fall within the MSC (Ramasamy, et al., 2004).
The idea of the importance of knowledge management in Malaysia was first expressed by the former Prime Minister, Tun Dr. Mahathir in 1991. He highlighted that there is a
need to transform economy of Malaysia towards a knowledge-based economy in order to achieve vision 2020. The common knowledge management approaches in
Malaysia was implemented through knowledge management applications in Multimedia Companies such as the one applied at
Problem Statement
According to Gan (2006), there is lacking of knowledge
management surveys from Malaysian perspectives. Most Malaysians do not understand well about knowledge management and its functions. Furthermore, most companies
do not investigate the implementation of knowledge management. The knowledge transfer and knowledge sharing in an organization may be limited if they do not
apply appropriate knowledge management approaches.

A survey reported that many top executives of firms view knowledge management
resources as critical for a firm’s success (Amlus Ibrahim et al. 2006). This implies that many firms are lacking knowledge management strategy in their firms. The
success of firms is strongly related with managing knowledge. Amlus Ibrahim et al. (2006) stated that there is no single department or function alone
that can deliver corporate objectives. The shifting winds of change in today’s business environment, together with the pressure of the emergence of global knowledge-based
economy, have made organizations realize that the knowledge is their key asset (Chong et al., 2006). Without knowledge-based approach, company may face several
problems and tougher competition in global market.

Traditional disciplinary knowledge is limited in its ability to support challenging
decisions that lie ahead. This causes organizations to have urgent measure for seeking fundamental insight to help them immense potential of their knowledge asset for
capability to excel at the leading edge of innovation (Syed Z. Shariq, 1997).
Research Questions

• What is the level of knowledge management practices among MSC status organizations?
• What is the relationship between demographic elements and knowledge management factors that can influence the implementation of
knowledge management practices in MSC status organizations?
Objectives

- To measure the level of knowledge management practices in MSC status organizations.
To identify the relationship between demographic elements and knowledge management factors that can influence the
implementation of knowledge management practices in those organizations.
Significance of the Research
The purpose of this study is to provide a clear understanding of knowledge management research. Besides that, this study is to find out the current
levels of knowledge management practices among Multimedia Super Corridor companies in Malaysia. It allows better understanding of knowledge management
practices in these companies. Apart from that, it also allows organizations to understand all the process which is needed in knowledge management to build
appropriate knowledge management strategies for competitive advantage.
Scope of Research
This research will be conducted in Pahang, more specifically in the area of Kuantan. Research will be conducted in MSC status.
organizations in Kuantan. The samples of this research will be carried out on organizations which were registered under the category of MSC-status organizations.
Literature Review
Subsequent sections highlight the basis of this study such as background of KM, definitions, and theories.
Definitions of Knowledge
At the fundamental level, knowledge is defined as information possessed by individuals within the organization. We change the
information into knowledge form in an individual, and then distribute and sharing the knowledge within the organization. Systems designed to support
knowledge may not appear to be radically different from other forms of information systems, but will be aimed towards enabling users to assign meaning to information
and to capture their knowledge (Randeree, 2006).

Drucker (1993) describes knowledge as the only meaningful resource in a
knowledge society. He further stresses that “…knowledge is not impersonal like money. Knowledge does not reside in a book, a data bank, a software program. They
contain only information”. Knowledge is always embodied in a person, taught and learned by a person, used or misused by a person (Drucker, 1993, p. 191).
Sharifuddin and Rowland (2004) clearly shown that knowledge transfer, capture and dissemination and organizational knowledge are
some of the important elements in knowledge and knowledge management (p. 239).
According to Greiner (2007), knowledge emerges from the processing of the perceived information and contextualization of a person. This shows that knowledge
can only exist in the context of person and his beliefs and experience. “Knowledge is a fluid mix of framed experience, values, contextual information, and expert
insight that provides a framework for evaluating and incorporating new experiences and information” (Davenport and Prusak, 1998). Thus, knowledge can
also be defined as the ability of persons to evaluate information and act efficiently (Sveiby, 1998). Knowledge can provide added value if it results in actions and
decisions (O’Dell and Grayson, 1998).

Types of Knowledge
People possess slightly different types of tacit and
explicit knowledge and apply their knowledge in unique ways. There are two main types of knowledge, namely tacit knowledge and explicit knowledge. Explicit
knowledge is formalized and written knowledge, expressed in the form of data, scientific formula, specifications, manuals, or textbooks. It can be articulated, explained, and
may sometimes help individual articulate what they know. Smith (2001) explained that most of explicit knowledge is technical or academic data or information
that is described in formal language, like manuals, mathematical expressions, copyright and patents. This “know-what,” or systematic knowledge is readily
communicated and shared through print, electronic methods and other formal means (p. 313). While tacit knowledge is action-based and unformulated, highly
personal and hard to transfer. Tacit knowledge is automatic, requires little or no time or thought and helps determine how organizations make decisions and influence the
collective behavior of their members (Smith, 2001; Liebowitz and Beckman, 1998).
Definitions of Knowledge Management

Knowledge management was defined as an organizational capability that allows people in organization working as a
individual, or in teams, project, or other such communities of interest, to create, capture, share, and leverage their collective knowledge to improve
performance (Lakshman, 2007). By applying knowledge management in organizations, it can increased globalization of competition, speed of information and knowledge
aging, dynamics of both product and process innovations, and competition through buyer markets (Greiner et al., 2007).
Malhotra (2005) argued that knowledge management is a function of the generation and dissemination of information, developing a shared understanding of the
information, filtering shared understandings into degrees of potential value, and storing valuable knowledge within the confines of an accessible organizational mechanism.
Knowledge management systems must connect people to enable them to think together and to take time to articulate and share information and insights they
know are useful to others in their community (Josephine Lang C.Y. 2001).

Rosmaini Tasmin and Woods (2007) argued that,
knowledge management as a socio-technology-based system that supports the collaboration and integration among interlocking organizational function to
create more innovation and value-added products and services for the market. According Amlus Ibrahim *et al.* (2006), knowledge management is a more
detailed and ‘everyday management approach than intellectual capital management; it focuses on facilitating and managing knowledge-related activities.
SECI Theory
(Refer to appendix 1 in full version pdf)
SECI theory can be expressed as the interaction between tacit and explicit knowledge.
According Nonaka and Takeuchi (1995), SECI consist of four different modes of knowledge conversation which is Socialization,
Externalization, Combination and Internalization.
Knowledge Management Model
The Socio-Technical Model
(Refer to appendix 2 in full version pdf)

- Infoculture (organizational and social culture in knowledge sharing),
Infrastructure (technological systems for networked communications), and
Infostructure (protocols for knowledge exchange and a means to measure).
Lindsey Model
(Refer to appendix 3 in full version pdf)
Lindsey proposed a knowledge management effectiveness model by
combining the contingency-perspective theory and the organizational capability perspective theory (Rosmaini Tasmin and Woods, 2008). The knowledge management
effectiveness model has two main constructs, namely knowledge infrastructure and knowledge process capabilities (Rosmaini Tasmin and Woods, 2008).
Knowledge Management Framework
(Refer to appendix 4 in full version pdf)
The KM Framework considers three layers as the most important for KM:

a) Business Focus
b) Core Knowledge Activities
c) Enablers
Knowledge Management in Malaysia

Knowledge management only really began to take off in the late 1990s. Malaysian government through its
“Knowledge Economy Master Plan” had inspired government agencies as well as local companies to adopt knowledge management. There is very few Malaysian
companies have initiated any knowledge management programs in Malaysia.

Government agencies are among the earliest
organizations to initiated knowledge management approaches in Malaysia. Government Linked Companies (GLCs) are in advanced stage in term of
knowledge management practices. Only few private companies have taken advanced approach in knowledge management initiatives.
According to some researchers, in order to launch knowledge management successfully, Malaysian companies need to develop strategic perspectives.
Multimedia Super Corridor
The Malaysian government set up the Multimedia
Development Corporation in 1996 to oversee the development of a Multimedia "Super Corridor" (trade zone). The idea was to make Malaysia a major production
and service sector for high tech and multimedia industries. By the year 2020, the MSC will be extended to the whole country, transforming Malaysia to a
knowledge-based economy and society, as envisaged in Vision 2020.

The Government recognizes local and international
companies that undertake ICT activities in the MSC by awarding them with a MSC Status. MSC-status companies enjoy a host of incentives and benefits from the Malaysian
Government that is backed by the ten-point Bill of Guarantees. These MSC status companies are actually involved in software development, software design,
internet-based solution and content development (MDC).
Knowledge Management Practices in Malaysia

One of the earliest studies on knowledge management in Malaysia indicated that Malaysian organizations tend
to be slow in uptake of knowledge management and that levels of knowledge management is still in the infancy stage (Goh, 2006). The knowledge sharing among
manufacturing was found that at a moderate level, electrical and electronics-based organizations revealed that there is no clear and identifiable knowledge
management strategy in place (Goh, 2006).

There are several causes that influence the implementation of knowledge management
practices in Malaysia. According to Goh (2005), the primary challenge faced by organizations in Malaysia is changing the employees’ behavior and practices.
Organizations in Malaysia tend to be highly bureaucratic and have a centralized decision-making structure with lower levels of knowledge management.
applications and system in place (Ramanathan Narayanan et al., 2003).
Issues in Knowledge Management
- Cultural Issue
According Suresh and Egbru (2004), organisational culture is an important factor to
consider in the context of KM, as its boundaries may often restrict the flow of information and knowledge among employees. Gupta and Govindarajan (2000)
described a social environment as a social system, or organisational culture, in which people operate.
- Who Should Share What Issues

Suresh and Egbu (2004) stated that in making knowledge available and usable across the whole
organisation, the critical questions are: Who should know what, to what level of detail, and how can the organisation support these processes of knowledge
sharing? This is because not everyone needs to know everything.
- **Technological Issues**

Technology can make the exchange of knowledge become faster, easier, and smoothly.
Leadership Issue

Asoh et al. (2002) concluded that the success of any organization depends on leadership and the success of any leader depends on
his/her assigned roles and how the roles are performed.

- Security, Privacy and Standards Issues
Suresh and Egbu (2004) argued that, identifying and locating experts, knowing what organizations and individuals know, and knowledge sharing have
significant security and privacy implications. Standards play a significant role which includes agent communication, meta-data representation, business
integration, interoperability, multi-channel and cross-channel success, portals, and advanced collaboration (Satyadas and Harigopal, 2001).
Challenge of Knowledge Management
- Management Challenge

Management involves having the right leader doing the
right activities to provide the thorough analysis of the status quo and the appropriate changes that will improve the system and yield
- Economic Challenge

Information and knowledge products seem to be governed
by a different law of economic return: investment in every additional unit of information or knowledge created and utilized could result in
progressively higher returns (Suresh and Egbu 2004).
Implementation Challenge

According to Bygstad (2008), Kwon and Zmud argued that Implementation is mostly seen as an acceptance. The
spread of the knowledge-based, less hierarchical organizations with both more powerful and knowledgeable user has accelerated this development.
Influencing Factors

- Culture

According Rosmaini Tasmin and Woods (2007), knowledge culture constitutes of the accumulation and
combination of common expectation, tacit rules, shares experiences and social norms that shape our attitudes and behaviors. Successful organizations empower
employees to want to share and contribute intellectual information, by rewarding them for such actions (Mathi, 2004).
Informational technology
According Chourides et al. (2003), Ruggles and Leug argued that knowledge building is dependent upon IT.
In order to build knowledge sharing capabilities, the organization must develop a comprehensive infrastructure that facilitates the various types of knowledge and
communication (Kim and Lee, 2004).
Organization Structure
Gan (2006) articulated that the structure of the organization impacts the ways in which organizations...
conduct their operations and in doing so, affects how knowledge is created and shared amongst employees. The hierarchical structure of an organization affects the
people with whom individuals frequently interact, and to or from whom they are consequently likely to transfer knowledge (Wei et al., 2006).
- People

Goh (2006) articulated that people are the heart of creating organizational knowledge as it is people who create and shared knowledge.
People are said to be true agents in business where all tangible and intangible assets are result of human action and depend ultimately on people for their continued existence.
(Syed Omar Sarifuddin and Rowland, 2004).
Methodology and Research Design

According Chua (2006), the outcome of research is determined by method and the research design. While the
research design is determined by the objective of the research. In this research, a quantitative research methodology will be used. Chua (2006) stated that not all
the research designs can be used in all the research, but a research can use several types of research design (Chua, 2006). There are two types of research, which are
experimental and non-experimental. This research will apply non-experimental research design. Sampling
Sampling is a process of choosing a number of subjects from a population to become research respondents (Chua, 2006). According Saunders et al. (2007), sampling technique
provide a range of method that enable research to reduce the amount of data need to collect by considering only data from a subgroup rather than all possible cases or
elements. There have two types of sampling method which is probability sampling and non-probability sampling (Saunders *et al.*, 2007). In this research, the sampling
method will be use is non-probability sampling. Non-probability sampling provides a range of alternative techniques to select samples based on subjective
judgement (Saunders et al., 2007).

Sampling Method
The sampling method in this research is non-probability
sampling. The technique will be choosing is purposive sampling. Purposive sampling is a sampling which is a group of respondents will be choose have same characteristic and
enable answer research question and meet the objective.
Research Population and Research Sample
The population of this study will be the employees in Multimedia Super Corridor (MSC) Status organizations.
The sample of this study is the employees in the Multimedia Super Corridor (MSC) Status Companies in Kuantan. While the target respondents in this research are knowledge-
based workers and academic staffs. In this research, the total number population is 340 people and the size sample is 180 people.
Research Instrument

Research instrument is a tool that specially to collect data for the research. The method data collection use in this research is survey.
Survey
The survey question will distribute randomly to the employees of MSC status companies in Kuantan. The survey will be divided into
two parts. The first part of survey is the personal information of the respondents. The second part of the survey is the questionnaire of the critical
success factors to be defined with the Likert-scale.
Data Analysis

• Reliability and Validity

• Descriptive Analysis
• One Way ANOVA

Reliability Test Analysis Table (see full version pdf)
Feedback Rate

180 sets of questionnaires have been distributed to employees and knowledge-based worker in Cosmopoint College, OPEN University,
UMP, and IKIP College. The total set of questionnaires that have been collected is 121 sets which is equivalent to 67.2%, while, 59 sets of questionnaire cannot be
collect because the researcher has distributed the questionnaires during the semester break when most of the employees were on holiday.
Demographic Analyses
The subsequent section reports the basic findings of the research in terms of demographics of respondents. It consists of respondents’
age, gender, designation, number of years working in current firms, overall working experience, and familiarity with KM.
(Fig. 1-8 and Tables 2-10, see full version pdf)
Discussions, Suggestion and Conclusion

From the findings in the previous chapter, it shows that the level of knowledge management in MSC status
organization in Kuantan were of medium range. According Chong et al. (2006), there are many organizations have just started implement knowledge management initiatives.
However, they are not aware of the whole spectrum of knowledge management implementation.
Another reason that may lead the knowledge management level of this study to be in the medium range is because of human behavior. Lee and Fariza Hanum (2008) stated
that Malaysians do not seem to practice sharing of knowledge in their environment. Malaysians tend to keep their knowledge to themselves rather than
sharing it with another person. Besides that, the reason knowledge management in Malaysia is not that successful is due to the fact that most of the
Malaysians are quite self-centered or indulge in Chinese-man culture. Most of the people do not teach their skills to another person as they are scared that once they
teach their specific skills to the other person, they will lose their specialty.

Communication can also be the factor that influences
knowledge sharing in Malaysia. Language is one of the tools for communication. The usage of different languages when communicating with another
person may cause a problem in the sharing of knowledge. Apart from that, most of the people do not share their knowledge in order to avoid being asked by people.
Some other reason that may be linked to knowledge management in Malaysia to be placed in the medium stage the idea of inferiority
complex. In comparison with their western friends, Malaysians is not outgoing, hardly proactive and they commonly feel inferior to those from advanced nations.
They are afraid that their knowledge might not be accurate enough to share. They are scared that once they share their knowledge, others may
find fault in it and label him or her as wrong.

When someone regards themselves as not computer savvy, it might serve as a
barrier for these people to share their knowledge. The most important tool for knowledge management is information technology. If the person is not computer savvy,
is hard for the person to share his or her knowledge by using computers.

The above are few reasons or barriers that lead to the
knowledge sharing is not very success in Malaysia. To ensure the success of the implementation of knowledge management in Malaysia, organizations must develop
ways to share their knowledge. Improving the efficiency of knowledge sharing is a highly desirable goal because it offers a promise of compounded
returns as the organization works harder and smarter.

The second objective of this study is to find out the relationship between
demography factors and knowledge management influential factors that can influence the implementation of knowledge management practices in MSC status
organizations in Kuantan. From table 4.25 in Chapter IV, it shows that job designation of respondent is the most important demography factors that can influence the
implementation of knowledge management practices and it is followed by age of respondent.
From that table, job designation has significant relationship with culture and information technology. There is a significant difference between job designation of
respondent and culture, because, respondent with different job designation has different thinking pattern regarding sharing of knowledge. For example,
lecturer is the one whom teach or share their knowledge with student. Thus, lecturer is the one whom have the culture to share with everyone.
On the other hand, there is a significant difference between job designation of respondent and information technology infrastructure. This happened
because the use of information technology strongly depends on the type of work.
From the same table, there is also significant difference between age of respondent and organization structure. This occurred because top posts in an organization are
usually held by older and knowledgeable workers. Organization structure can influence top and bottom employees to share their knowledge among each other.
The successful of knowledge management practices are strongly depend on human behavior. If there is some members in the organization
do not cooperate in term of sharing their knowledge, no matter how good and how strong are their information technology, culture, organization structure and the
people, the knowledge management is cannot be success. In order to make sure knowledge management can be successfully implemented, all the members in the
organization must work together to achieve it.

Limitation of the Study
There are several limitations from this study when
researcher decided to conduct this study. First, the number of responses obtained from the survey was small. The second limitation of this study is that it has primarily focused
on knowledge management practices in higher education institutions. The findings obtained may be not clear to represent the knowledge management practices in all
MSC status organizations. The third limitation faced when conducting this study is the time constrain. The time given to accomplish this study is too short involving only around
seven months. Lack of adequate time given to accomplish this study may cause the findings or results to be affected or not in its ideals.
Suggestion
Suggestion can be used to improve organizational operation and can be beneficial to future researchers. From the
findings and discussion, few suggestions were proposed. The first suggestion proposed is that the future researcher can increase the scope of study so that the future
findings and results are more accurate. The second suggestion proposed for future researcher is to focus on different fields; not only focused solely on one field so
that the future findings can cover all the entire population.
Conclusion
As a conclusion, the current knowledge management level among MSC status organization in Kuantan is in the medium range and the
most important factor ranked is information technology which is identical to the findings of Syed Omar and Rowland (2004). It also shows that there is relationship
between some demography factors and knowledge management factors which is represented by the relationship between job designation with culture and
information technology and the relationship between age and organization structure. To have successful knowledge management in an organization, one must see it
as a total. Although information technology plays an important role in knowledge sharing in an organization, without proper attention paid to culture,
organization structure and people, knowledge sharing in an organization cannot be successfully implemented. Thus, information technology, culture, organization
structure and people should always be taken into considerations.
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