

Critical Success Factors for Knowledge Management Implementation: The Case Study of Thai Parliament

Pakpoom Mingmitr*

Abstract

This paper aims to investigate the critical success factors (CSFs) regarding implementing knowledge management (KM) at the Thai parliament. A huge number of literature reviews, regarding CSFs for KM implementation, is studied. An intrinsic qualitative case study of KM implementation at the Thai parliament is applied with a number of tools to collect the data—survey questionnaires, in-depth semi-structure interviews, critical incidents, and focus-group discussions. The samplings of the study are parliamentary staff members that have been working in the five Bureaus of International Affairs in both Secretariats of the House of Representatives and the Senate at the Thai parliament. The study found that leadership, KM strategy, organizational structure, organizational culture, social networking and information technology have mostly impacted KM implementation effectiveness for the Thai parliament. Importantly, this article is a nascent effort to provide an integrative perspective on CSFs for KM implementation in the Thai parliament. The contribution of this paper is a proposed set of CSFs that can be used when adopting KM in public organizations.

Keywords: Critical success factors, knowledge management, the Thai parliament

* Special Affairs Division, Bureau of Inter-Parliamentary Organizations, the Secretariat of the House of Representatives.
E-mail: pakpoom@parliament.go.th

ปัจจัยแห่งความสำเร็จในการนำการจัดการความรู้ไปปฏิบัติ: กรณีศึกษา รัฐสภาไทย

ภาคภูมิ มิงมิตร*

บทคัดย่อ

การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยแห่งความสำเร็จของการนำการจัดการความรู้ไปปฏิบัติในรัฐสภาไทย ได้ทบทวนวรรณกรรมที่เกี่ยวกับปัจจัยแห่งความสำเร็จในการนำการจัดการความรู้ไปปฏิบัติโดยใช้การเก็บข้อมูลจากแบบสอบถาม การสัมภาษณ์เชิงลึก การสอบถามความคิดเห็น หลังการสัมภาษณ์ และการสนทนากลุ่ม เป็นเครื่องมือในการเก็บรวบรวมข้อมูล กลุ่มตัวอย่างประกอบด้วย ข้าราชการรัฐสภาสามัญในสายงานต่างประเทศ จำนวน 50 คน ที่ปฏิบัติหน้าที่ในสำนักการต่างประเทศ สำนักงานเลขานุการสภาพัฒนราษฎร และสำนักงานเลขานุการวุฒิสภา ผลการศึกษาพบว่า ภาวะผู้นำ กลยุทธ์องค์การในการจัดการความรู้ โครงสร้างองค์การ วัฒนธรรมองค์การ เครือข่ายสังคม และเทคโนโลยีสารสนเทศ เป็นปัจจัยสำคัญแห่งความสำเร็จในการนำการจัดการความรู้ไปปฏิบัติในรัฐสภาไทย ซึ่งในบริบทของรัฐสภาไทย การศึกษาครั้งนี้ถือเป็นปฐมบทของการศึกษาปัจจัยแห่งความสำเร็จที่มีผลต่อการจัดการความรู้อย่างมีประสิทธิภาพในองค์การ ซึ่งสามารถนำไปประยุกต์ใช้ในการศึกษาในเรื่องดังกล่าวกับองค์การภาครัฐอื่น ๆ ได้ต่อไป

คำสำคัญ: ปัจจัยแห่งความสำเร็จ การจัดการความรู้ รัฐสภาไทย

* กลุ่มงานกิจการวิเศษ สำนักองค์การรัฐสภาระหว่างประเทศ สำนักงานเลขานุการสภาพัฒนราษฎร
อีเมล: pakpoom@parliament.go.th

Introduction

To date, knowledge has been treated much like other tangible resources and has become one of the driving forces for any organization's success. Many organizations are becoming more knowledge intensive and the need for leveraging the value of knowledge has increased. Accordingly, the field of knowledge management (KM) has been studied by many organizations so that they can remain effective organizations. Whilst there are a number of studies that have corroborated that KM has been implemented in giant companies, especially in the private sector, i.e. Ernst & Young, Ford, Hewlett-Packard, Siemens, and Unilever (MacGillivray, 2003), it has still been observed that KM is playing a greater role in all types of organizations, especially in private firms, educational institutions, public enterprise, military establishments, hospitals, and governmental and non-governmental organizations (Jasimuddin, 2012). Government agencies have been forced to become more adaptable in grappling with many challenges, for example the globalization of society, rapid advances in science and technology, opportunities facing governments to maintain and improve the quality of life of the citizens, and greater accountability for the actions of government (McNabb, 2007).

Much evidence has shown that public organizations have adopted various kinds of management tools, including KM. As such, KM incorporates the ideas and processes from many different sources and technologies; a wide variety of disciplines, techniques, and processes contribute to the art and science of managing knowledge in the organization (McNabb, 2007). Additionally, some evidence shows that KM is increasingly important for public organizations (Wiig, 1999; Anongkhanatrakul, 2004; Jakawattanakul, 2007). Accordingly, the organization should be aware of the factors that influence the success of KM initiatives. The deliberate study of the critical success factors (CSFs) regarding KM implementation is a crucial project.

This paper aims to review a large number of literature reviews concerning the CSFs for KM implementation. An analysis of the data collection of the CSFs from the Thai Parliament was conducted in order to combine a set of the selected CSFs for KM

implementation at the Thai parliament, which are believed to be more suitable for the organization. Each of the proposed CSFs is discussed, evaluated, and prioritized.

Purposes of the Study

The reasons for which this study was shaped were to investigate the CSFs for KM implementation, and then to propose a set of CSFs that are believed to be more suitable for KM implementation for the Thai parliament.

Scope of the Study

As the Thai parliament is composed of two Secretariats, the unit of analysis was selected from both agencies. That is, the number of the participants in the study at the Secretariat of the House of Representatives was thirty parliamentary staff members, whilst the parliamentary staff members from the Secretariat of the Senate totaled twenty. All of the participants had a number of years of involvement in KM.

Methods

This is an intrinsic qualitative study. According to Strauss and Corbin (1990), qualitative study can be used in circumstances where relatively little is known about the phenomenon, or to gain new perspectives on issues where much is already known. This study is an interpretive one as it seeks to explore people's experiences and their views or perspectives on these experiences, as discussed by Gray (2009). Further, the study is inductive in nature and used the qualitative approach in order to gather and analyze the data.

A number of tools for collecting the data were applied to the study - survey questionnaires, in-depth interviews, critical incidents, and focus group discussions. At the outset, the questionnaires were distributed to all of the participants in phase one in order to obtain general data regarding the participants' views of the factors involved in KM success at the Thai parliament. Then, in phase two, a number of participants

in phase one were invited to take part in in-depth interview process to provide more details. Along with phase two, after the interview process was completed, critical incident forms were distributed to the interviewees in phase three. In the final phase, some of the interviewees in the previous phases were asked to participate in focus group discussions. For the analysis, much effort was made to categorize the appropriate set of the proposed CSFs for the Thai parliament from the rich information garnered in the four phases of the data collection. Lastly, trustworthiness, confidentiality, and privacy were given careful consideration in the study.

To demonstrate the essence of this qualitative study, the researcher used the notion of a “stranger approaching a new culture” (Holliday, 2002). Like a stranger learning about a new culture, nothing was taken for granted in this study, as the researcher acted like a stranger who was holding up everything for scrutiny, accounting for every action, and seeing how the individuals spoke (in the in-depth interviews and focus-group discussions) and wrote (in the survey questionnaires and critical incident forms) for what they have done as integral to the whole.

Review of the Critical Success Factors for KM Implementation

The contribution from several scholars revealed that the CSFs for KM success could be in the form of many different factors. In the meantime, gaining an understanding of the role of the organization in shaping the success or failure of KM in public organizations depends on a number of factors. Accordingly, it has been recommended by a number of scholars that CSFs can be critical areas of managerial planning and action that must be practiced in order to achieve effectiveness of KM (Sarah et al., 1989; Skyrme & Amidon, 1997; Davenport et al., 1998; Liebowitz, 1999; Hasanali, 2002; Slusher, 2003; Chong, 2005).

Liebowitz (1999) proposed six key factors for KM success in organizations: KM strategy, leadership, CKO, KM infrastructure, KM systems, and culture. Further, Hasanali (2002) proposed six factors for KM success: leadership, culture, roles and responsibilities,

organizational structure, IT infrastructure, and measurement. Slusher (2003) presented twelve critical factors regarding KM implementation: leadership, resources, project management, communication, training, measurements, incentives, technology, process, people, value system, and strategy. Most of these factors have been studied in Chong (2005), as he proposed eleven factors for KM success as follows: top management leadership and commitment, employee training, employee involvement, open and trustworthy spirit of teamwork, employee empowerment, IT infrastructure, performance measurement, knowledge-friendly culture, benchmarking, knowledge structure, and the elimination of organizational constraints.

Additionally, Skyrme and Amidon (1997) proposed seven factors for KM success in organizations: business imperative, vision, leadership, culture, continuous learning, IT infrastructure, and systematic knowledge processes. Davenport et al. (1998) proposed five factors for KM success, collected from a number of studies of projects at more than twenty companies: economic performance, clear proposes and language, friendly knowledge structure, organizational infrastructure, motivation and management supported by senior.

To sum up, the following have been discussed as important factors for KM accomplishment: culture (Morgan, 1977; Davenport et al., 1998; Pan & Scarbrough, 1998, Alter, 1999; Schein, 1999; Hasanali, 2002; Martensson, 2000, Rao, 2005; Dalkir, 2005; Tiwana, 2000) and leadership (Chard, 1997; Davenport et al., 1998; Pan & Scarbrough, 1998; Liebowitz, 1999; Martensson, 2000; Storey & Barnett, 2000; Tiwana, 2002; Davenport & Probst, 2002; Wood et al., 2002; Salleh & Goh, 2002; Hasanali, 2002; Frappaolo, 2002; Blumentriff & Hardie, 2000; Slusher, 2003; Rao, 2005; Debowski, 2006). Further, strategy (Liebowitz, 1999; Slusher, 2003), networking/community of practice (CoP) (Dalkir, 2005; Tiwana, 2002), information technology (Alavi & Leidner, 2001; Slusher, 2003; Bock & Qian, 2005), human resource management (Brelade & Haarman, 2000; Robertson & Hammersley, 2000; Davenport & Volpel, 2001), organizational structure (Davenport et al., 1998; Hasanali, 2002), chief knowledge officer (CKO) (Earl & Scott, 1999; Liebowitz, 1999; Davenport & Volpel, 2001), measurement (Ahmed et al., 1999; Hasanali, 2002), processes

(Holsapple & Joshi, 2000; Alavi & Leidner, 2001; Slusher, 2003), and motivation (Yahya & Goh, 2002) and training (Yahya & Goh, 2002; Slusher, 2003) have been discussed.

The Proposed CSFs for the Thai Parliament

As most of the early adopters and performers of KM options were in large and multinational corporations, previous studies of the CSFs for KM implementation have dominantly focused on such large companies. Although the said factors have not been grouped into categories, the existing factors can still reflect the specific situations and needs of the organizations. Nevertheless, there are still very few studies on the CSFs in the public sector. Most have not considered the features, characteristics, and situations of the private sector. Moreover, they have not explored the CSFs that could be more important for the public sector when adopting KM. Hence, without any understanding of the specific conditions of those large multinational companies, the aforementioned CSFs can directly apply to the Thai Parliament.

In this study, the author has integrated the aforementioned common factors and proposed twelve factors for KM implementation in a comprehensive manner. Each of them will be discussed in detail below.

Organizational Strategy/KM Strategy

Quinn defines “organizational strategy” as the pattern or plan that integrates an organization’s major goals, policies, and action sequences into a cohesive whole. It is one of the driving forces for KM success in the organizations (Liebowitz, 1999). In terms of KM, a KM strategy is what challenges a business and KM is set to address the three-way strategic alignment between the organization, knowledge, and technology used to support the first two. Further, KM strategy is a general, issue-based approach to defining operational strategies and objectives with specialized KM principles and approaches (Srikantajah & Koenig, 2000 cited in Dalkir, 2005). The result is a way to identify how the organization can best leverage its knowledge resources. Once this is defined, baseline and technology options may be explored. It will help to address two questions: Which KM approach will bring the most value to the organization?

and how can the organization prioritize alternatives when any one or several of the alternatives is appealing and when resources are limited? In addition, some scholars have mentioned that “imperative businesses” should be added to organizations in terms of KM strategy (Skyrme & Amidon, 1997).

Organizational Structure

Organizational structure is another factor in KM implementation. In this respect, it implies establishing a set of roles and teams to perform knowledge-related tasks, according to Davenport et al. (1998). Organizational structure functions to control variations in the behavior among individuals, to determine positions that have decision-making authority, and to direct the flow of information among these positions.

Leadership

Leadership is a subject that has long excited interest among people, as it represents images of powerful, dynamic individuals (Yukl, 1989). According to Rao (2005), leadership refers to the top management. KM requires strong leadership. Leadership has a fundamental role in directing and shaping an organization by providing a sense of direction, vision, and purpose for all members (Debowski, 2006). The characteristics of good leaderships tend to reflect four key themes: a) the capacity to explain and clarify the organizations’ purposes and priorities; b) development of the culture within which workers operate; c) creation and maintenance of good people practices to facilitate effective work; and d) encouragement of high standards and high performance in the work setting (Debowski, 2006).

Some organizations have integrated “knowledge leadership” responsibility into many strategic roles, which creates “strategic knowledge leaders” (SKLs). These leaders may operate across many different levels of the organizations and fulfill a range of roles, depending on their placement in the organizational hierarchy (Debowski, 2006). Whereas SKLs may provide a strategic picture and a vision of where the organization should focus, the responsibility for putting that vision into practice lies in the hands of the “core leaders” (Blumentriff & Hardie, 2000). Wood et al. (2002) define “core leaders” as a group of persons that are at the hub of the KM process in that they act

as gatekeepers to new processes and strategies. Davenport and Probst (2002) pointed out the difference between “SKLs” and “core leaders” in that the “core leaders” loyalty may focus more on their unit needs than on those deemed to be important by the organization.

CKO

Leadership helps construct a “knowledge vision” and translate it into practice. Some organizations allocate responsibility for coordinating and leading KM to a person, for example the chief knowledge officer (CKO). Although Frappaolo (2002) mentioned that most CKOs have little in the way of staffing or line management responsibility, Tiwana (2002) also pointed out that CKOs focus on correcting knowledge flow and eliminating related deficiencies and inefficiencies that exist within the organization. Tiwana also stated that the CKOs job descriptions are: a) optimizing the process design for KM, b) creating channels for leveraging untapped knowledge and competencies within the organization, c) integrating KM, d) breaking barriers and eliminating impediments, e) watching the learning loop, f) creating financial and competitive value, and g) supporting IT and eliminating knowledge flow gaps.

Process

The KM process can characterize the KM discipline in many ways. According to Johannsen (2000), it refers to things that can be done with knowledge in the organization. A number of authors have suggested processes or activities associated with KM (Holsapple & Joshi, 2000; Jasimuddin, 2012; Alavi & Leidner, 2001; Slusher, 2003; Karadsheh et al., 2009). For example, Jasimuddin (2012) proposed five KM processes: knowledge acquisition, knowledge creation, knowledge storage, knowledge transfer and knowledge application, whilst Karadsheh et al. (2009) proposed that there are eight KM processes: knowledge infrastructure, knowledge combination, knowledge evaluation, knowledge filtering, knowledge repository, knowledge sharing, knowledge application, and knowledge performance.

The coordination of KM processes in performing activities is crucial work so that employees can co-operate with each other through daily work and then it becomes a common practice in the organization (Holsapple & Joshi, 2000).

Culture

Dalkir (2005) stated that first thing to do regarding KM is changing the organizational culture to a learning one. In this respect, it implies that the culture within the organization influences the success of KM (Brown & Woodland, 1999). A large number of scholars have studied organizational culture (Morgan, 1977; Davenport et al., 1998; Pan & Scarbrough, 1998; Alter, 1999; Schein, 1999; Martersson, 2000; Tiwana, 2000; Hasanali, 2002; Rao, 2005; Dalkir, 2005).

For example, Alter (1999) defined organizational culture as shared understanding about the relationship and work practices that determine how things are done in the workplace. Morgan (1977) presented some of the key elements of organizational culture as follows: 1) stated and unstated values, 2) overt and implicit expectations regarding member behavior, 3) customs and rituals, 4) stories and myths of the group, 5) shop talk - typical language used in and about the group, 6) climate - feelings evoked by the way members interact with one another, with outsiders, and with their environment, including the physical space they occupy, and 7) metaphors and symbols - may be unconscious or embodied in other cultural elements.

Culture is a pattern of basic assumptions, developed by a given group which has worked well to be valid and taught to new members as the collect way to think in relation to the problems (Schein, 1999). In this respect, culture refers to the underlying values, beliefs, and codes of practice that make a community what it is and becomes one of the foundations of KM, accordingly (Dalkir, 2005). Hence, KM Implementation in any organizations always requires a cultural change, which is a significant influence on the knowledge adoption in the organization.

Social Networking/Community of Practice (CoP)

KM networking is a communication system that transmits information between nodes. Managing a successful KM network requires making sure that all of the major components of the networks are functioning at their best (Groff & Jones, 2003). The network can constitute both a technological network and the underlying social and organizational network, in terms of the operation of technology. The social networking tools are used to analyze groups and to find how members interact with each other, whilst CoP refers to the process of social learning that have a common interest in some problem to share ideas, and find solutions. Now, it is an accepted part of organizational development (Dalkir, 2005).

Information, Communication and Technology (ICT)/Knowledge Management System (KMS)

KM draws on technologies and approaches developed in virtually every field of computer science (Bergeron, 2003). ICT can support KM and influences the users' acceptance of the knowledge philosophy, whilst KMS provides a technological basis for efficient KM. Although KM may operate without a formal technology-based process, particularly in small organizations, a well-planned and relevant system does greatly help users to contribute to KM (Debowski, 2006). Thus, a good KMS can be a major contributor to successful KM implementation.

Todd Stephen stated that the requirement of KM is KMS (Lytras et al., 2008). The KMS is a class of applied information, which is managed to organizational knowledge (Bock & Qian, 2005). Also, the KMS can be viewed as a networked whole, comprising data sources, information exchange-enabling networks, knowledge flow channels, static and mobile intelligent agents, and integrative technologies that bind them all together.

Measurement

Measurement enables organizations to ensure the tracking of the KM processes and determines benefits and effectiveness. It acts like a data-collection system that provides data and information for an activity or a situation. According to Ahmed et al. (1999), it provides a basis for organizations to improve, evaluate, control, and compare

their KM performance. It is needed to demonstrate the value and worthiness of the KM initiative to management.

Training

In general, each organizational member must be aware of the need to manage knowledge and to use it as a key asset for the viability of the organization. In this respect, it implies that a number of proper training programs should be provided to the members of the organization. Through these training programs, organizational members can learn about the concept of KM, and it will help them to frame common perceptions of how they will think about, define, and manage knowledge. According to Yahya and Goh (2002), training can be performed in terms of creativity, team building, and problem solving, which have a positive side in the KM processes.

Motivation

In order to create a knowledge-based organization, motivational aids should be focused on incentive systems, which concentrate on knowledge sharing, teamwork, and innovation. If an organizational member is motivated to practice KM, it will bring about effective intervention in terms of infrastructure and investment. The motivational aids will help to stimulate the positive performance of the organizational members and provide a culture that brings about effective KM in the organization. If incentives are given to a group of organizational members, it will encourage them to exchange their knowledge in the group (Yahya & Goh, 2002).

Human Resource Management (HRM)

The role of HRM in KM has been discussed by a number of authors (Brelade & Haarman, 2000; Davenport & Volpel, 2001). For KM practitioners, HRM is one of the important factors for KM implementation success. This paper focuses on the issues of recruitment, development, and retention. For recruitment, it is important to look for employees that fit the organization's culture. For development, it is important to develop the employees and enhance their personal values. For retention, it is important to maintain knowledge and to prevent them from loss.

The proposed CSFs for KM implementation and the researcher's propositions are summarized in Table 1.

Table 1. The Researcher's Proposed CSFs for the Study

The CSFs	Scholars	Researcher's Propositions
Strategy	Liebowitz (1999), and Slusher (2003)	To challenge business and to address the three-way strategic alignment between the organization, knowledge, and technology used to support the first two.
Leadership	Chard (1997), Davenport et al. (1998), Pan and Scarbrough (1998), Liebowitz (1999), Martensson (2000), Storey and Barnett (2000), Tiwana (2002b), Davenport and Probst, (2002), Wood et al. (2002), Hasanali (2002), Salleh and Goh (2002), Frappaolo (2002), Blumentriff and Hardie (2000), Slusher (2003), Rao (2005), and Debowski (2006)	To play the key role in KM.
CKO	Earl and Scott (1999), Liebowitz (1999), and Davenport and Volpel (2001)	To play the leading role in KM implementation.
HRM	Brelade and Haarman (2000), Robertson and Hammersley (2000), and Davenport and Volpel (2001)	To search for employees that fit the organization's culture.
Measurement	Ahmed et al. (1999), and Hasanali (2002)	To provide a basis for organizations to improve, evaluate, control, and compare KM performance.

Table 1. The Researcher's Proposed CSFs for the Study (continued)

The CSFs	Scholars	Researcher's propositions
Motivation	Yahya and Goh (2002)	To stimulate positive performance for organizational members and provide a culture that brings about effective KM in the organization.
Process	Holsapple and Joshi (2000), Alavi and Leidner (2001), and Slusher (2003)	To characterize the KM discipline in many ways.
Organizational structure	Davenport et al. (1998), and Hasanali (2002)	To help identify “who is who” in the organization.
IT/KMS	Alavi and Leidner (2001), Slusher (2003), and Bock and Qian (2005)	To bind them together - data sources, information exchange, enabling networks, knowledge flow channels, static and mobile intelligent agents, and integrative technologies.
Training	Yahya and Goh (2002), and Slusher (2003)	To help the staff frame common perceptions of how they will think, define, and manage knowledge.
Culture	Morgan (1977), Davenport et al. (1998), Pan and Scarbrough (1998), Alter (1999), Schein (1999), Hasanali (2002), Martensson (2000), Rao (2005), Dalkir (2005), and Tiwana (2000)	To be “first things first” in the Thai parliament to innovate for KM success.
Networking/CoP	Tiwana (2002b), Groff and Jones (2003), and Dalkir (2005)	To transmit information between nodes.

Empirical Assessment of the CSFs at the Thai Parliament

The participants in the empirical study were thirty foreign affairs officers from the House of Representatives, who were working at the Bureau of Inter-parliamentary Organizations (ten participations), the Bureau of International Relations (ten participations), and the Bureau of Languages (ten participations), and twenty foreign affairs officers from the Secretariat of the Senate that were working at the Bureau of Foreign Affairs (ten participants) and the Bureau of Foreign Languages (ten participants). All of the participants were selected because of their background knowledge and experience regarding the KM at the Secretariats.

The tools for collecting the data were survey questionnaires, in-depth interviews, critical incident forms, and focus-group discussions. First, a set of questionnaires was distributed to fifty participants. The returned rate was ninety-four percent, collected from forty-seven of fifty staff members, which was a satisfactory rate for the study. Second, ten participants that participated in the previous phase were selected to provide more details. Third, each of the informants in the interview process continuously took a chance to freely express his or her opinions in critical form about what the researcher had not asked them. Fourth, five participants from each Secretariat that participated in the interview and critical incident processes were invited to discuss issues related to the CSFs for KM implementation at the Thai parliament.

The findings of the study showed that the CSFs based on the parliamentary staffs members' views were the following: leadership/CKO, KM strategy, culture, networking, organizational structure, motivational aids, ICT, training, HRM, measurement, and process.

Leadership/CKO

Of the survey questionnaires, ninety-five percent of the returned ones or forty-four out of forty-seven participants agreed that leadership was the most important of all factors for KM success. Most of the participants also mentioned that CKOs should demonstrate their leadership through KM in the Secretariat so that the parliamentary

staff can learn from them. In other words, leaders are important in acting as “role models” to illustrate behavior for KM. Leadership plays a key role in the success of KM implementation at the Thai parliament, accordingly. Most of the participants in each process agreed that leadership, especially CKOs, can perform their role in terms of KM implementation at the Thai parliament. This confirmed the notion of Debowski (2006), who stated that leadership has a fundamental role in directing and shaping an organization. This view, from the interview process, was summed up by a participant.

“I have these facts about leadership should lead the role of KM, but I have not seen it yet here. ... I do not even know that if we have the CKOs in the organization. If so, who are they? ... Above all, they should have shown us the way we can effectively learn from KM in this office.”

Interestingly, a critical incident form from a participant, in phase three, showed that leadership, by the CKO in particular, should play a role as the leaders in KM. The participant also mentioned the idiom “wag the dog,” which is a metaphor indicating that the CKOs are like “the dog” and more important than the parliamentary staff—its tail. The participant’s assumption was that “the dog is smarter than its tail,” so the CKOs should show the parliamentary staff what it should have learned in this matter of KM and how to apply the findings to its work. Additionally, one of the participants thought that the CKOs were leaders that set the KM policy for implementation in the organization; it was considered the most important factor, accordingly. This idea goes along with the notion that CKOs will focus on correcting knowledge flow and eliminating the related deficiencies and inefficiencies that exist within the organization (Tiwana, 2002).

More interestingly, it is worth noting here that some of the participants revealed their opinions of the leadership of both Secretariats through the critical incident forms, where their names were not mentioned for ethical reasons. For these participants, seven of twenty-four critical incident forms were returned to the researcher. The participants indicated that they did not think that the leaders at the Secretariat can

be “role models” for them in terms of KM. It also should be noted that, according to the returned critical incident forms, this means that seventeen other participants still believed that the leaders at the Secretariats could be their “role models” for KM success.

KM Strategy

Most of the participants, eighty-nine percent of the returned survey questionnaires or forty-one of forty-seven participants, agreed that a KM strategy is one of the important factors for KM success in the organization. This suits well the idea of Liebowitz (1999).

The result of critical incidents showed that most of the participants mentioned that the KM strategy is also an important factor and should be set by the top management or CKOs. During the interview process, one participant stated that strategy was one of the important things in the organization, but the problem was that most of the participant’s fellow workers do not even know about the said strategy, which impacts their daily work. Another participant believes that once the strategy is defined, the KM options should be explored to address the KM approach that brings the most value to the organization. In this respect, it helps the organization to prioritize the right alternative among these KM options.

“I think that after we have CKOs in the office; I hope that they will set and announce the strategy to all staffs so that we would find the way, the right way, to apply it to our tasks.”

Further, a KM strategy is what challenges the business and KM is set to address the three-way strategic alignment between the organization, knowledge, and technology used to support the first two. This view by Tiwana was best described in the focus-group discussions.

“I agree with my friend who says that once the strategy is defined, we can apply it to our work. I would like to elaborate this that we also can link it into our ICT. At present, we have knowledge storage where we can find the needed information, especially the legislative issues from Bureaus of the Committee.”

Culture

Most agree that culture is an important factor for KM success, whilst some ask for the concrete culture in this organization. However, eighty-five percent of the returned survey questionnaires or thirty-eight of forty-seven participants agreed that the Thai parliament should be the first to create the staff's attitude towards the “sharing of knowledge” approach in the organization. This view suits well that of Dalkir (2005), who stated that the first thing to think about regarding KM is changing the organizational culture to a learning culture.

“...When we talk about ‘culture’, I think of ‘the learning organization day’ that all staffs can come to share what they know. ... If we do not have this event, I think we will never learn to share and never be able to create our own knowledge.”

More interestingly, one participant stated during the focus group discussions that the organization has to create a concrete or tangible culture that fits KM implementation; that is, all of the staff loved to share knowledge and learn from each other, for example.

“I think we come on the right track for ‘the LO day’, where we can present what we know and learn what others know. ... It is a good start to make this as our organizational culture.”

The above view reflects what Schein (1999) stated about “culture” in terms of a pattern of learning to cope with the problems of external adaptation and internal integration, which has worked well enough to be valid and taught to new members

as a collective way to think, perceive and feel in relation to those problems. In this respect, on the learning organization (LO) day, the parliamentary staff members can learn from each other, which is considered as internal integration, whilst one of the expected outcomes is that the staff can learn to cope with the problems with external adaptation, i.e. the Ministry of Foreign Affairs, the Ministry of Commerce, and the Ministry of Social Development and Human Security, as the main external sources. This implies that the culture within the organization influences the success of KM (Brown & Woodland, 1999).

Surprisingly, the matter of culture, which is supposed to be one of the important factors, was not a concern of any participant in the responses with the critical incident forms.

Social Networking/CoP

Half of the participants, seventy-seven percent of the returned survey questionnaires or thirty-six of forty-seven participants, expressed their view via the questionnaires survey—that they thought that social networking was one of the important factors for KM success. It is a communication system that transmits information among the staff. One participant said that the “social networking” between the two secretariats was as important as in the secretariat. In this respect, success KM needs a communication system as a network for all.

“I think we need connection – both with other bureaus in the secretariat and another secretariat.... It is much easier to get the needed information through our friends who are working at that bureau or another secretariat.”

This goes along well with the idea that managing a successful KM network requires making sure that all of the major components of networking are functioning at their best (Groff & Jones, 2003).

The social networking tools are used to analyze groups and to find how members interact with each other, whilst the community of practice (CoP) refers to the process of social learning that occurs when people that have a common interest in some subject or problem collaborate over an extended period to share ideas, find solutions, and build innovations. This view suits well the work of Dalkir (2005), as the CoP is associated with KM as people have begun to see them as ways of developing social capital, nurturing new knowledge, simulating innovation, or sharing existing tacit knowledge with an organization.

“It is on the right track when I see our staff attend the CoP activities set by each bureau, i.e. Bureau of Inter-Parliamentary Organizations, Bureau of International Relations, and Bureau of Languages. ... For example, in my case, I learn about the protocol – how to do courtesy calls, from Bureau of International Relations.”

Such activity of CoP above is an example of stimulating innovation because there is no explicit or concrete activity of transmitting knowledge between the staff members. In other words, this is an account of organizational development, in terms of KM implementation.

Organizational Structure

Most of the participants, fifty percent of the returned survey questionnaires or twenty-three of forty-seven participants, agreed that the organizational structure was one of the important factors for KM implementation. One participant thought that the Thai parliament was a large and important organization in the country, but the size of the both secretariats still did not matter regarding how far the parliamentary staff can make KM a success. Intrinsically, this view goes along with other participants' opinions.

“I do not think that size of the organization for both houses has any impact on our KM; communication among staffs matters. ... If the secretariat is smaller than this, it does not prove that the parliamentary staffs will share their knowledge more than today.”

“For me, knowledge sharing is the most important factor for KM success. So, I do not see the significance of the size of our office or secretariats – both houses – it does not matter for the size at all. ... It is all about people’s mind and attitude to share their knowledge to other staffs, including what they have made the mistakes so that the prevention can be made.”

Only one participant mentioned the advantage of organizational structure, which suits well Hall’s views of organizational structure.

“I agree with all my friends that KM success does not depend on the secretariats’ size. However, it is still good to have such structure because it helps us to know ‘who is who? in this office. Thus, we can go on for KM implementation, especially for communication because now we know who (and how) to contact.”

Motivation

In order to create a knowledge-based organization, motivational aids should focus on incentive systems, which focus on knowledge sharing, teamwork, and innovation. It goes well with half of the participants’ views expressed through the questionnaires—the same rate as with the networking/CoP.

From the survey questionnaires, twenty-three of forty-seven participants or fifty percent of the returned survey questionnaires agreed that motivation was quite an important factor for KM success. If an organizational member is motivated to practice KM, it will bring about effective intervention in terms of infrastructure and investment. One participant believed that if incentives are given to a group of organizational members, it will encourage them to exchange their knowledge in the group.

“I think the secretariat should have provided some incentives, i.e. extra-money, bigger chance for promotion, or an opportunity to go abroad for the staffs who actively participate in KM at the office. ... They lack of motivation, like me; I see no advantages for me to take part in KM, because my life is still the same.”

This statement from the interview process shows that motivational aids will help to stimulate positive performance for organizational members and provide a culture that brings about effective KM in organizations, as indicated by Yahya and Goh (2002).

It is worth noting that, in the critical incident forms, some of the participants mentioned extra money or other benefits to persuade people to join the KM activities set by the secretariat. This is useful information because this view reflects that some need extra payment to become involved with KM.

ICT/KMS

ICT can support KM and influences the users' acceptance of the knowledge philosophy, whilst KMS provides a technological basis for efficient KM. According to the returned survey questionnaires, twenty-two of forty-seven participants or forty-seven percent of the survey questionnaires saw that KM can be implemented without IT support, but it is difficult for it to be a total success. Nevertheless, it is worth noting here that some were confused with what ICT and KMS were. This corroborated with Debowski (2006), who stated that KM itself may operate without a formal technology-based process, particularly in small organizations; a well-planned and relevant system does greatly help users to contribute to KM. In this respect, one participant stated during the in-depth interview that a well-planned and IT system set by the Bureau of Information Technology at the Secretariat of the House of Representatives can deliver huge assistance for KM success.

“... I do not see how the two elements (ICT and KMS) are inter-connected. Personally, I think we can do KM without ICT support. ... At the moment, our office provides KM storage in database of the secretariat (by Bureau of Information Technology), but it does not matter if all staffs do not acknowledge this existence and even worse most of them have never accessed into such database to looking for the needed data.”

A fact is the base of KM is the KMS. Thus, it is useful to employ KMS as a link between ICT and KM for KM implementation. More than half of the participants had never heard about the concept of KMS before, so they did not know how KMS could assist KM implementation for a huge success. KMS is a class of applied information which is managed to organizational knowledge, and can be viewed as a networked whole, comprising data sources, information exchange-enabling networks, knowledge flow channels, static and mobile intelligent agents, and integrative technologies that bind them all together (Bock & Qian, 2005). In this respect, a few staff members, three of the twelve informants, delivered their views through the focus group interview—that they completely did not understand what KMS was or how it can contribute to KM success.

“I have no idea what KMS is, but it does not matter because I see IT support here in the organization is sometimes useless as I personally cannot find what I am looking for from that junk.”

“... as discussed, I partly agree that ICT and KMS can be plus to the success of KM, but I still believe that many staffs in this secretariat, including the Secretariat of the Senate, do not understand ‘what the KMS is’, like me. ... However, nobody will say it is not important, but it is not the most important factor.”

Training

From the survey questionnaires, forty-four percent of the returned ones or twenty-one of forty-seven participants agreed that organizational members must be aware of the need to manage knowledge and take it as a key asset for the viability of the organizations. This implies that a number of proper training programs should be provided to all organizational members so that they can learn about the concept of KM, and help them to frame a common perception of how they will think about knowledge. In an in-depth interview, one participant asserted that training is a tool that connects KM and the staff.

“The secretariat already provides a huge number of training programs, but the essence of KM is seemingly very limited. I think that most staffs are assigned from their boss to join the training and learn nothing from such programs, especially the KM. ... However, I see all training programs as a ‘tool’ to fill the gap between staffs’ ignorance to join the activities and the essence of KM existed in the secretariat.”

The above views from a participant corroborates that training should be performed among the parliamentary staff members for team-building and problem solving. This saying corroborated well with Yahya and Goh (2002).

HRM

For KM practitioners, HRM is one of the important factors for KM implementation success. However, the result of the survey questionnaires showed that sixty-eight percent of the returned survey questionnaires or thirty of forty-seven participants saw that HRM as less important for KM implementation. This means that fifteen of forty-seven participants or thirty-two percent of the returned survey questionnaires saw that HRM could be one of the potential factors for KM success.

“I do not think that HRM will take an important role in KM, at least in this secretariat. ... I understand that HRM is all about searching for the right people to work, developing them for more skills and keeping them to stay here until retirement. These are not involved about KM.”

The interview process showed that most of the participants had very limited understanding of the HRM, especially in terms of three basic functions - recruitment, development, and retention; but a few still understood the concept. Hence, they were able to express their views that it was useful to have HRM in terms of recruitment for KM success.

“HRM is good for recruitment. I think the secretariat can recruit people who fit our organization’s culture; that is, they should have service mind. ... As we are the secretariat, all staffs should do more for deliver best service to the MPs.”

“I agree with that. Moreover, I think HRM can help to screen people who will be new comers for the secretariat. As our job is all about service, all staffs should have positive attitude to work with MPs and try their best to support these honorable MPs.”

In the final stage of the data collection – the focus group discussions, it finally obtains some conclusion that HRM can help to find the right people to work at the right place – each bureau. However, “the right people” should enter the secretariat with “the right attitude,” especially to learn to exchange and share their knowledge in order to support and deliver best service to the MPs, who are the representatives of the Thai people.

“As discussed, HRM can find the right people to work here, systematically. ... I hope they (new comers) will be more positive with working under pressure and eagerly and willingly learn and share their knowledge, always.”

The above statement agrees with the work of Robertson and Hammersley (2000), who proposed that effective recruitment should focus on the candidates' ability and competency to fit the organization's culture, rather than looking at job descriptions merely.

Measurement

Measurement enables organizations to ensure their ability to track the KM processes and to determine their benefits and effectiveness. Twenty-five percent of the returned survey questionnaires or eleven of forty-seven participants agreed that measurement is an important factor for KM success. One participant stated that measurement can help the secretariat evaluate and improve KM performance.

“Measurement is one way to measure our performance. I think it is okay to have measurement to evaluate what we have done. Probably, this is the way to improve our performance. ... If we do not have such a thing, how can we know that we are right or wrong for our performance?”

The above statement was corroborated by Ahmed et al. (1999), who stated that measurement provides a basis for organizations to improve, evaluate, control, and compare KM performances. It is needed to demonstrate the value and worth of a KM initiative to management.

Process

Surprisingly, the results from the returned questionnaires showed a very low rate of seeing the KM process as a very important factor for the KM success, although the KM process is intrinsically an important element. From the survey questionnaires, fifteen percent of the returned survey questionnaires or seven of forty-seven participants agreed that the KM process is an important factor for KM success. From the in-depth interviews, all of the participants accepted that they did not know about the KM processes; even worse for some, this was the first time to know that KM has a number of processes to follow up on.

“I have never known before that KM has its processes; at least I never know that this organization has KM processes. ... I do not understand how any processes we have and where we are now at the moment. What we should do next for KM success.”

“... I think the problem is the secretariat has never told us what we have done and how many processes we have to go.... As a friend talks about CKOs, I do not even know who they are and how they are appointed or selected. The secretariat never tells us so that the staffs know how to react. ... A serious problem in my view is if you are none of them, I mean a group of KM team who work for the secretariat, you will know nothing. ... I used to know a lot when I am a part of KM team, but when my boss assigned others to do; I then become an outsider and get nothing to participate in.”

The above statements from in-depth interviews and focus group discussions show that most of the staff still does not understand what KM processes are or how they have been carried out, so far, at the Thai parliament. Nevertheless, it does exist and is an important factor in accomplishing KM in the organization. As Holsapple and Joshi (2000) mentioned, KM processes should be conducted to perform crucial works so that staff members can coordinate with each other through daily work and then it becomes a common practice in the organization. Then, every staff worker will acknowledge such KM processes, accordingly.

The proposed CSFs for the Thai parliament selected and prioritized by the parliamentary staff members and the researcher's propositions are summarized in Table 2.

Table 2. Summary of the Proposed CSFs at the Thai Parliament

The proposed CSFs	Mostly agreement from the survey questionnaires (percent)	Were mentioned in the critical incidents	Dominant views from participants from in-depth and focus group interviews	Researcher's proposition to the Thai parliament
Leadership / CKO	95	✓	<ul style="list-style-type: none"> - CKOs should set a clear KM policy and explicitly demonstrate their leadership through KM processes. - Be a role model for parliamentary staff how to effectively perform KM. 	<ul style="list-style-type: none"> - To demonstrate the key role in KM accomplishment and in directing and shaping an organization by providing a sense of direction, vision, and purposes for all members.
KM Strategy	89	✓	<ul style="list-style-type: none"> - The KM strategy should be communicated to all the staff to bring about its participation in the KM activities in the secretariats. 	<ul style="list-style-type: none"> - To address the three-way strategic alignment between the two secretariats, knowledge and technology.
Culture	85	✓	<ul style="list-style-type: none"> - Keep on going for “the LO Day” as a culture of knowledge sharing (KS) in the secretariats. 	<ul style="list-style-type: none"> - To set a pattern of learning for all the staff to think about, feel, and perceive the KM conducted in the secretariats.
Networking /CoPs	77	X	<ul style="list-style-type: none"> - KM networking between the two Secretaries and among the Bureaus in each Secretariat should be strengthened. 	<ul style="list-style-type: none"> - To nurture new knowledge.

Table 2. Summary of the Proposed CSFs at the Thai Parliament (continued)

The proposed CSFs	Mostly agreement from the survey questionnaires (percent)	Were mentioned in the critical incidents	Dominant views from participants from in-depth and focus group interviews	Researcher's proposition to the Thai parliament
Organizational Structure	50	X	- Organizational structure does not matter for KM accomplishment, but knowing "who is who" in such a structure is a much more important matter for KM success.	- To help the staff to make the best of communication.
Motivation	50	✓	- Motivational aids, i.e. extra payment or promotions, should be made to all that participate in the KM activities in the Secretariats.	- To help stimulate a positive performance and provide a culture that brings about effective KM.
ICT/KMS	47	X	- ICT is seen, but KMS should be made more tangible.	- To provide KMS as base to link KM and IT? the secretariats.
Training	44	✓	- A number of training programs should be provided to all the staff, regarding the matter of KM.	- To be a tool to fill the gap between the staff's ignorance and KM activities.
HRM	32	X	- In HRM, recruitment should be focused on finding new staff members to love to share their knowledge and experience.	- To use recruitment in HRM for screening the right staff members that fit the organization's culture.

Table 2. Summary of the Proposed CSFs at the Thai Parliament (continued)

The proposed CSFs	Mostly agreement from the survey questionnaires (percent)	Were mentioned in the critical incidents	Dominant views from participants from in-depth and focus group interviews	Researcher's proposition to the Thai parliament
Measurement	25	X	- It helps to measure the KM performance that has been achieved.	- To provide a basis for the secretariats to control, compare, evaluate, and improve KM performance.
Process	15	X	- The KM processes should be clarified to all stakeholders in the secretariats so that they will know how to act and react.	- To perform the KM processes as crucial work so that the staff can acknowledge and find a way to participate in each process as a common practice in the secretariats.

Limitations and Future Research

Whilst the general CSFs in this study were treated as those internal factors that are controlled by the organization, the output of this qualitative study sheds some light on some limitations of the study.

First, the context of KM implementation in this study has been viewed by a large number of parliament staff members that have been working in the field of international affairs, at both secretariats of the Thai parliament. This is an acceptable unique case because the Bureau of Inter-Parliamentary Organizations of the Secretariat of the House of Representatives is also responsible for the matter of inter-parliamentary conferences for the Secretariat of the Senate. For the matter of languages, each secretariat can manage its own responsibility. Therefore, it is recommended that, for future research, a number of staff members working for other Bureaus, i.e. the Bureau of General Administration,

the Bureau of Parliamentary Proceedings, the bureau of Academic Services Affairs, and the Bureau of Public Relations, should be added as samples for study.

Second, as the Thai parliament has a huge number of parliamentary staff members, who are working in twenty-three bureaus, plus five groups at the Secretariat of the House of Representatives and nine bureaus in three groups at the Secretariat of the Senate, it is possible and compelling for researchers in the future to consider the empirical testing of other variables and factors in quantitative study. For example, as leadership was the selected most important factor, it is highly recommended that “a full range of leadership styles” should be focused on and the “organizational climate” between the two secretariats should be studied.

Concluding Remarks

KM implementation is governed and facilitated by a number of factors. This study has proposed a group of CSFs that are believed to be much more suitable for KM implementation. In this respect, it can benefit from more understanding of the factors that they will be CSFs for KM implementation. The proposed CSFs have been improved from the study’s integrated insights and the ideas of the CSFs drawn from them. Based on this ground, an empirical assessment was conducted to evaluate the range of the proposed CSFs, in terms of the context of the Thai parliament. As a result, in the participants’ views, leadership/CKO is the most important factor among the proposed CSFs. The rest of them were KM strategy, culture, networking/CoP, organizational structure, motivation, ICT/KMS, training, HRM, measurement, and process. This study, in essence, is a nascent effort to provide an integrative perspective on CSFs for KM implementation at the Thai parliament.

As proposed, the CSFs are important factors in themselves, as they can be used as a list of KM options to address and deal with when accomplishing KM implementation. As such, the contribution of the study is to help ensure that the essential factors will be covered when the Thai parliament plans to develop KM implementation. In the meantime, it can be used as guidance for the study of KM implementation for public organizations in the future.

References

Ahmed, P. K., Lik, K. K., & Zairi, M. (1999). Measurement practice for knowledge management. *Journal of Workplace Learning*, 11(8), 304-311.

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.

Alter, S. (1999). *Information Systems: A Management Perspective*. 3rd ed. Boston, MA: Addison-Wesley.

Anongkhanatrakul, A. (2004). *An Analysis of Knowledge Management in a Development Organization: A Case Study of the Regional Officer for Asia and the Pacific, International Labor Organization*. Ph.D. Dissertation, Graduate School of Public Administration, National Institute of Development Administration, Bangkok.

Bergeron, B. (2003). *Essentials of Knowledge Management*. New Jersey: John Wiley & Sons.

Blumentriff, R., & Hardie, N. (2000). The role of middle management in the knowledge focused service organization. *Journal of Business Strategies*, 17(1), 37-48.

Bock, G., & Qian, Z. (2005). An empirical study on measuring the success of knowledge repository systems. In *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*. Kona, HI: Institute of Electrical and Electronics Engineers, Inc.

Brelade, S., & Haarman, C. (2000). Using human resources to put knowledge to work. *Knowledge Management Review*, 3(1), 26-29.

Brown, R. B., & Woodland, M. J. (1999). Managing knowledge wisely: A case study in organizational behavior. *Journal of Applied Management Studies*, 8(2), 175-198.

Chard, A. M. (1997). *Knowledge Management at Ernest and Young: Case S-M-291*. Stanford, CA: Graduate School of Business, Stanford University.

Chong, S. C. (2005). *Implementation of Knowledge Management among Malaysian ICT Companies: An Empirical Study of Success Factors and Organizational Performance*. Doctoral Dissertation, Multimedia University, Malaysia.

Dalkir, K. (2005). *Knowledge Management in Theory and Practice*. Amsterdam: Elsevier Butterworth-Heinemann.

Davenport, T. H., De Long, D. W., & Beers, M. C. (1998). Successful knowledge Management projects. *Sloan Management Review*, 39(2), 43-57.

Davenport, T. H., & Probst, G. J. B. (2002). *Knowledge Management Case Book: Siemens Best Practices*. Berlin: Wiley.

Davenport, T. H., & Volpel, S. C. (2001). The rise of knowledge towards attention management. *Journal of Knowledge Management*, 5(3), 212-221.

Debowski, S. (2006). *Knowledge Management*. Singapore: Seng Lee Press Pte Ltd.

Earl, M. J., & Scott, I. A. (1999). What is chief knowledge officer? *Sloan Management Review*, 40(2), 29-38.

Frappaolo, G. (2002). *Knowledge Management*. Oxford: Capstone Publishers.

Gray, D. E. (2009). *Doing Research in the Real World*. London: Sage.

Groff, T. R., & Jones, T. P. (2003) *Introduction to Knowledge Management: KM in Business*. London: Butterworth-Heinemann.

Hasanali, F. (2002). *Critical Success Factors of Knowledge Management*. Retrieved on April 10, 2015 from www.kmadvantage.com/docs/km_articles/Critical_Success_Factors_of_KM.pdf.

Holliday, A. (2002). *Doing and Writing Qualitative Research*. London: Sage.

Holsapple, C. W., & Joshi, K. D. (2000). An investigation on factors that influence the management of knowledge in organizations. *The Journal of Strategic Information Systems*, 9(2/3), 235-261.

Jakawattanakul, W. (2007). *An Analysis of Knowledge Management Implementation Effectiveness: A Case Study of Thai Revenue Department*. PhD Dissertation, Graduate School of Public Administration, National Institute of Development Administration, Bangkok, Thailand.

Jasimuddin, S. M. (2012). *Knowledge Management: An Interdisciplinary Perspective*. Singapore: World Scientific Publishing Co. Pte. Ltd.

Johannsen, C. G. (2000). Total quality management in a knowledge management perspective. *Journal of Documentation*, 56(1), 42-54.

Karadsheh, L., Mansour, E., Alhawari, S., Azar, G., & El-Barthy, N. (2009). A theoretical framework for knowledge management process: Towards improving knowledge performance. *Communications of the IBIMA*, 7(2009): 67-79.

Liebowitz, J. (1999). Key ingredients to the success of an organization's knowledge management strategy. *Knowledge and Process Management*, 6(1), 37-40.

Lytras, M. D., Russ, M., Maier, R., & Naeve, A. (2008). *Knowledge Management Strategies: A Handbook of Applied Technologies*. New York: IGI Publishing.

MacGillivray, A. (2003). Knowledge management education at Royal Roads University. *Competitive Intelligence Magazine*, 6(4), 37-40.

Martensson, M. (2000). A critical review of knowledge management as a management tool. *Journal of Knowledge Management*, 4(3), 204-216.

McNabb, D. E. (2007). *Knowledge Management in the Public Sector: A Blueprint for Innovation in Government*. New York: M.E. Sharpe.

Morgan, G. (1977). Bureaucratic organizations. In Brown, C., De Mouthoux, P. G. & McCullough, A. (eds.) *Research Access*. Sweden: THS Co.

Pan, S. L., & Scarbrough, H. (1998). A socio-technical view of knowledge-sharing at Buckman Laboratories. *Journal of Knowledge Management*, 2(1), 55-66.

Rao, M. (2005). *Knowledge Management: Tools and Techniques*. Delhi: Butterworth-Heinemann.

Robertson, M., & Hammersley, G. O. (2000). Knowledge management practice within a knowledge- intensive firm: Significance of the people management dimension. *Journal of European Industrial Training*, 24(2/3/4), 241-253.

Salleh, Y., & Goh, W. K. (2002). Managing human resources toward achieving knowledge management. *Journal of Knowledge Management*, 6(5), 457-468.

Saraph, J. V., Benson, P. G., & Schroeder, R. G. (1989). An instrument for measuring the critical factors of quality management. *Decision Sciences*, 20(4), 810-829.

Schein, E. (1999). *The Corporate Culture Survival Guide: Sense and Nonsense about Cultural Change*. San Francisco: Jossey-Bass.

Skyrme, D., & Amidon, D. (1997). The knowledge agenda. *Journal of Knowledge Management*, 1(1), 27-37.

Slusher, J. A. (2003). *Knowledge Management Offering and Lessons Learnt During Their Implementation*. Retrieved April 15, 2015 from http://www.providersedge.com/does/presentations/KM_offering_and_Lessons_Learnt_During_Their_Implementation.

Storey, J., & Barnett, E. (2000). Knowledge management initiatives: Learning from failure. *Journal of Knowledge Management*, 4(2), 145-156.

Strauss, A. L., & Corbin, J. (1990). *Basic of Qualitative Research*. Thousand Oak, CA: Sage.

Tiwana, A. (2000). *The Essential Guide to Knowledge Management: E-Business and CR Applications*. Upper Saddle River, NJ: Prentice Hall.

_____. (2002). *The Knowledge Management Toolkit: Orchestrating IT, Strategy, and Knowledge Platforms*. 2nd ed. New Jersey: Prentice Hall.

Wiig, K. M. (1999). Introducing knowledge management into the enterprise. *Knowledge Management Handbook*, New York: CRC.

Wood, L., Thomson, R., & Mcleod, F. (2002). *Hearts, Minds, Bottom Lines: Investing in Social Capital*. London: McGraw-Hill.

Yahya, S., & Goh, W. K. (2002). Management human resources toward achieving knowledge management. *Journal of Knowledge Management*, 6(5), 457-468.

Yukl, G. A. (1989). *Leadership in Organizations*. 2nd ed. Upper Saddle River, NJ: Prentice Hall.

