



Critical Success Factors of Knowledge Management that Enhance Organizational Performance

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Abstract This research aims to identify the Critical Success Factors of Knowledge Management which are culture, leadership, knowledge sharing, information technology has direct enhancement of organizational performance among the employees within the public sector. Methodology that used in this research is survey research that involves the collection of data from the distributed online questionnaire to the employees of Department Kerja Raya Headquarter in Kuala Lumpur. They will be the target respondents of this research that consists of 150 from 300 employees. Results indicate that the level of culture, leadership, knowledge sharing, information technology and organizational performance are good as perceived by the employees in JKR. This research reveals the Critical Success Factors which are culture, leadership, knowledge sharing, and information technology possible in enhancing the JKR Performance.

Keywords KM, CSFs, Culture, Leadership, Knowledge Sharing, Information Technology, Organizational Performance

Introduction

This chapter comprises of the background of research against the problem statement which to be seen. Some of the research background will be outlined regarding the Knowledge Management (KM) and Critical Success Factors (CSFs). Not to be forgotten, Organizational Performance as important outcome of the research. It also outlines the research questions and objectives which make the researcher more focus to what will be explored. Some of the definitions of terms are presented followed by the scope of study as well as the significance of study to the body of knowledge. The chapter then will be summarized to give the reader brief understanding. According to Hansen [1] the concept of Knowledge management (KM) is nothing new. KM practices always been used in the organizations to make decisions besides to ensure the things be better and more effective. Essentially, Sarvary [2] supported that the new about KM is the development of recognized the factors, techniques and approaches for managing effectively the knowledge resources of an organization. The KM practices that used in the organizations without knowledge and awareness, will not obtain the benefits at all. A systematic and holistic way in managing knowledge will increase the awareness for individuals and also the organizations besides can also increase the organizational performance. Therefore, it is crucial for an organization to understand the concept of KM when implementing the KM initiatives in order to has a succeed organization. When implementing KM in any sectors, the Critical Success Factors of KM are considered as an important issue [3]. Hence, the present study seeks to consider the Critical Success Factors as a significant part of KM implementation to enhance the Organizational Performance (OP). Generally, many organizations fail to implement KM successfully because they are not able to identify the Critical Success Factors for successful KM implementation. As a result, they may face risk when implementing KM. To solve the problems, many



researchers are interested in investigating how the Critical Success Factors contribute to the successful KM implementation, which may lead to enhance the OP. Previous studies have recognized a broad range of factors which are various Critical Success Factors of KM for a different sector. There exist four Critical Success Factors agreed by most researchers. These are the successful factors explored by the researchers have been mentioned which are culture, leadership, knowledge sharing, and Information Technology (IT). Thus, this study tries to examine these Critical Success Factors of KM that can enhance the organizational performance in Jabatan Kerja Raya (JKR). There are still many people like scholars, practitioners and others in the field of business management debating the concepts and definitions that related to KM. A comparative analysis of key KM frameworks has been made by Holsapple and Joshi [4] and they argued that none of the researchers appeared to include all of the KM elements. Thus, according to by Xiaoming Cong and Kaushik V. Pandya [5], there is a need for a broader and unified framework that can describe the nature of KM in helping people to understand the concept of KM. In order to overview regarding this research topic, there are several parts which include about KM in organizations, KM in the public sector, Relationship between KM and Organizational Performance and lastly the Relationship between CSFs of KM and Organizational Performance.

Literature Review

KM in Organizations

Foremost of all, it is really essential to identify the concept of managing knowledge to have comparative advantages over competitors. Von Krogh as cited in Alavi & Leidner [6], indicated that KM is to recognize and influence the collective knowledge inside the organizations to produce organizational competitiveness. There are many considerations about KM from researchers in the various fields, mainly organization science, organizational psychology, strategy and management science, artificial intelligence, computer science, and management information systems [7]. Furthermore, Woitsch and Karagiannis [8] found that KM changed to a serious management discipline that aims to integrate itself into the orchestra of existing management approaches. Organization in KM creates a better environment to knowledge creation, assimilation, and dissemination and knowledge creation and transfer in an organization. It has been related to an organization success and competitiveness [9]. Besides that, there are many industries have considered KM as a competitive asset and transferred a great amounts of money into managing knowledge.

KM in the Public Sector

Syed Ikhsan & Rowland [9], mentioned research on KM in the public sector has been limited even it has been widely analysed by many academics and industry professionals. Syed Ikhsan & Rowland [9] also revealed that benchmarking of KM, knowledge sharing, KM initiatives and KM practices have been done in public organizations. The success of a public organization depends on how effectively it can collect, deposit, and retrieve knowledge sharing among employees at all government levels [10]. Liebowitz [11] found that sharing of knowledge is challenging usually in hierarchical and bureaucratic organizations. This is because it has some unique challenges. Besides that, most of employees in government agencies are unwilling to share knowledge as they have thought that having knowledge at their hands means having a power as they move through the upper positions. Luen and Al-Hawamdeh [12] exposed that many organizations in the public sector are knowledge-intensive organizations but high costs come from inadequate knowledge management practices, including lost institutional memory, knowledge gaps, and poor decisions. The researchers realized that the public sectors also have high competition in funding and alternative services, as to make KM to gain competitiveness. Governmental policy has continuously changed due to the organizational environment, thus no public sectors can be said to have in a stable condition even they were born to have less competitiveness compared to the private sector.

Relationship between KM and Organizational Performance

Organizational performance is comparing the expected results to actual results, investigating deviations from plans, assessing individual performance and examining progress being made toward meeting the targeted objectives [13]. The researchers only implicated that the more knowledge organizations can capture the higher



are their performance. But there has not been many researches done to link organizational performance and KM. T. Kalling [14] stated the knowledge not only be managed but also should be linked to utilization and development of an organization to gain better performance. The concept of KM is very familiar but only a small number of organizations are capable to link KM to enhance organizational performance [15]. Syed Ikhsan and Rowland [9] stated that organizations can transfer knowledge from one unit to another to gain an overall performance. The ability to apply knowledge to achieve important activities is noticed as a source of competitive advantage. Only KM can be used to improve performance when knowledge is managed to improve development and subsequently utilized by individuals.

Relationship between CSFs of KM and Organizational Performance

Critical Success Factors (CSFs) are also KM of organizational Performance that has positive result which has been tested from several previous studies. This is because Wei et al. [16] mentioned that the CSFs of KM is regarded as a major issue to achieve OP improvement. In the previous study, the researchers have identified CSFs of KM are important for successful KM implementation in order to improve Organizational Performance (OP). In this regard, D.A. Asoh, S. Belardo, and J. Crnkovic, [17] stated that there is a strong relationship between CSFs of KM and OP. As Yang et al. (2009) stated CSFs of KM as the soul of OP improvement, it could increase the knowledge resources in an organization in order to achieve high OP [18]. Thus, there is more need for future studies in this field with different countries and samples. After all, this study wants to identify the Critical Success Factors of KM that can enhance Organizational Performance in JKR.

Culture

According to the article that quoted by Shahizan Hassan & Laith Ali Yousif AL- Hakim [19], the previous researchers mentioned that culture is an important element in directing and monitoring efforts towards KM implementation. It is a model of common basic assumptions that is taught to the group as a way to solve its troubles of external adaptation and internal integration. Therefore it is showed to the new members as the right way to realize, believe and feel that related to those troubles. Another researcher defined culture as a crucial building block to making a knowledge friendly culture which leads to positive outcomes such as more innovation and improvement of OP [20]. For instance, Park et al. [21] found the characteristics of culture like stability; flexibility, trust, sharing knowledge freely, and support of employees have a positive relation with KM implementation. Too, Tseng [20] noted that culture characteristics like trust, common cultures and broad ideas of productive work have major contributions in the successful KM implementation. Culture also determines the basic beliefs, values, and norms regarding the why and how of knowledge generation, sharing, and utilization in an organization. Thus, culture played a crucial role in implementing KM besides improve the organizational performance. Lastly, Yang et al. [22] also regarded CSFs of KM as the heart of OP improvement. For this framework, there are three articles that supported the organizational culture have positive relationship with organizational performance. Many researchers stated the relationship between CSFs of KM and OP is essential for future studies. Therefore, in the recommendations of the research there is a suggestion for conducting more research in this area with more samples.

Leadership

Leadership is defined as the support of top management for achieving KM activities [17]. At the same time, it is regarded as an important component of successful KM implementation. A leader is a role model for others in continuous learning. KM needs an unusual manner of leadership to guide others to achieve the highest levels of OP [23]. Several researchers have investigated the relationship between leadership and KM. In this regard, Lakshman [24] considered leadership role as a key variable in the relationship between KM and OP improvement. Moreover, Singh [25] emphasized that the leadership is a key role in the KM processes for gaining competitive advantage. In sum, according to Migdadi [26], leadership has recently received unique attention in KM because of the effect of this style on employees' motivation to create and share knowledge. He suggested the needs for future research to investigate the relationship between leadership styles and KM. Hence, this study will focus on the importance and the role of the leadership in the implementation of KM that can



enhance OP. Lastly, for this study, there are three articles that supported leadership has positive relationship with organizational performance. Many researchers stated the relationship between CSFs of KM and OP is essential for future studies. Therefore, in the recommendations of the research there is a suggestion for conducting more research in this area with more samples.

Knowledge sharing

Van Den Hooff, B., & De Ridder, J. A. [27] conceptualization of knowledge sharing portrayed it as a process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge. Haas and Hansen [28] claimed that knowledge sharing has been shown to improve individual and organization performance and innovativeness. They improved that knowledge sharing is a practice that has become increasingly important to organizations as most organizations are now considered to operate in a knowledge economy. Knowledge sharing is a continuous, interactive process that facilitates the transfer of employees' tacit knowledge to business processes through effective communication by using a channel for acquiring new experience in the knowledge context, a new view of a process, and knowledge discovery. Thus, knowledge sharing is a journey from having to sharing [29]. To create a KM environment and to be competitive organization, it is necessary to choose the appropriate desirable environment in which the organization can adopt the changing concepts [30]. Assimilation of KM and adopting a culture that supports knowledge sharing can bring change in organizational performance [31]. Therefore, there is a significant contribution of knowledge sharing in any organization could improve performance. For this study, there are previous researches that supported knowledge sharing has positive relationship with organizational performance. Many researchers stated the relationship between CSFs of KM and OP is essential for future studies. Therefore, in the recommendations of the research there is a suggestion for conducting more research in this area with more samples.

Information Technology

Modern information technology (IT) has a critical role in KM implementation because it can provide important tools to organizations, such as the use of information of clients and competitors, technical databases, decision support systems, management models, successful solutions to competitive situations, and access to specialized sources of knowledge. The previous researcher mentioned that IT will facilitate and expedite the KM implementation in organizations. In addition, it can help employees in organization to reduce time of transfer knowledge. It also helps achieve higher efficiency, quality and employees participation of transfer knowledge. Technology is an important aspect to successfully organize and share knowledge. With the help of technology, organizations can build the infrastructure and tools to support the expansion of KM [32]. IT facilitates organizations to use knowledge for organizational efficiency and effectiveness. Furthermore, IT provides suitable environment for learning and interaction among the employees of an organization. Systems like expert systems are used in organizations to capture and manage knowledge [33]. The above studies reveal that KM could partially accelerate obtaining competitive advantage for an organization by assimilating the skill and application of IT knowledge. IT knowledge is a key tool to facilitate KM practice in organization for better performance. Lastly, for previous study, the researchers explored the Information Technology has positive relationship with organizational performance. Many researchers stated the relationship between CSFs of KM and OP is essential for future studies. Therefore, in the recommendations of the research there is a suggestion for conducting more research in this area with more samples.

Methodology

Research methodology that will be used in this study. It started with the justification of research context that emerged from the literature review in Chapter two of the research and followed by the elements of the methodology which are the research paradigm and approach, followed by research design that includes operational definition and measurement, population of the study and sampling technique, data collection technique, time horizon and lastly the chapter summary. The research context for this study is focused on department Kerja Raya Malaysia (JKR). The challenges that faced in JKR is most of their employees did not



know aware the KM as Critical Success Factors that can enhance their organizational performance for better quality service. Therefore, the aim of this study is to identify whether KM as Critical Success Factors of organizational culture, leadership, knowledge sharing and information technology that can influence the employees of JKR in enhancing their organizational performance. A research paradigm in this study is positivism research paradigm. This is because the role of the researcher is limited to data collection and interpretation through the objectives that have been set. This study is use quantitative research for research approach. According to Creswell [34], quantitative research relies on methods based on cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation and the test of theories. For quantitative approach, this study use survey research. Survey research is a specific type of field study that involves the collection of data from a sample of element drawn from a well-defined population through the use of a questionnaire. Before more details about the research design for this study, this table that has shown below is the summarization about the research design of this study: This purpose of this study will use hypothesis testing and the type of investigation is using correlational investigation. This study also use individual unit of analysis. Last but not least, the data collection method is using questionnaires.

Population & Sampling

With reference to Sekaran [35], population refers to the entire group of people, events of things of interest that can be a focus for the researcher to investigate. The employees of department Kerja Raya Headquarter in Kuala Lumpur will be the target population of this research. On the other hand, according to Cavana et al., [36] sampling refers to the process of choosing enough elements form population of study that can help the researcher to understand the characteristics of sample and generalize to the element. A sample is defined as a set of respondents selected from a target population for the survey purpose. The element mentioned here refers to each employees of headquarter JabatanKerja Raya Malaysia in Kuala Lumpur. This study will use simple random probability sampling which consists of 300 employees. To determine the sample size of this population in JKR, this study uses Raosoft Software which show the sample site that consist of 150 of employees.

Data Collection

In this study, the researcher use survey by distributing the questionnaires as a data collection technique. According to Saunders et al. [37], time horizons are needed for the research design independent of the research methodology used. There are two types of time horizons namely Longitudinal and Cross-sectional. This study is using cross- sectional research method, whereby the research will gather data once the employees answers the study"s research questioners (answers questionnaire). Cross sectional studies can be carried out in which data are collected only once, perhaps during a period of days or weeks or months to be able to answer a research question. Longitudinal study makes a researcher constant to follow up where the outcomes of interest are not yet happening in baseline. So because of this research have do not have to follow up the answers and have limited of time, thus officially this study is using cross-sectional design.

Chapter Summary

The justification of research context that emerged from the literature review in Chapter two of the research and followed by the elements of the methodology which are the research paradigm and approach, followed by research design that includes operational definition and measurement, population of the study and sampling technique, data collection technique and time horizon. As mentioned earlier, a quantitative approach was used to answer the research objectives and research questions by deep understanding in the analysis of data collection. The method used for data collection is questionnaires. This research design started with a survey questionnaire to strengthen the data by providing more details questions. On the other hand, the sampling research study is all employees of headquarter department Kerja Raya Malaysia in Kuala Lumpur.

Leadership

The findings of this research show that leadership has moderate strength in enhancing the organizational performance in JKR. So, it still correlates with dependent variable. Leadership is defined as the support of top management for achieving KM activities [17]. At the same time, it is regarded as an important component of



successful KM implementation. A leader is a role model for others in continuous learning. KM needs an unusual manner of leadership to guide others to achieve the highest levels of OP [23]. It shows leadership is an important part in JKR. JKR Officer, Mrs Aida mentioned they will plan to develop second batch KM team in JKR. It proved their KM team lead to develop another KM team. Hence, it proved that they have developed leadership either for individual or group in JKR at the same time. Thus, leadership can be one of the CSFs that can enhance Organizational Performance.

Knowledge Sharing

The findings of this research show that knowledge sharing has the strongest impact in enhancing the organizational performance in JKR. This results is not something that is weird but it something that is expected to be gained in this research. Haas and Hansen [28] claimed that knowledge sharing has been shown to improve individual and organization performance and innovativeness. They improved that knowledge sharing is a practice that has become increasingly important to organizations as most organizations are now considered to operate in a knowledge economy. In JKR, they can share their knowledge either face to face or online. In JKR, in order to promote the knowledge sharing culture within the all people in the organization, workshop is one of the Knowledge Management practices that have been conducted in the organization. A workshop is currently named as *Bengkel Pemantapan* (Consolidation Workshop). This kind of approach is organized along the aim of the workshop is to promote and encourage sharing knowledge among the staff in the organization. In the *Bengkel pemantapan* (Consolidation Workshop), people are able to discuss on the content in any subjects. Sr. Dr. KhairilHizar, JKR Officer mentioned that the workshop will be conducted regularly three times in a year. During the workshop, staffs are gathering in discussing on the related content in any disciplines. This executes the tacit knowledge among the staff and later able to transfer it into explicit knowledge where, the product of the workshop will be documented, organize and store in JPedia. Hence, based on the evidence above, it shows that knowledge sharing is crucial part in JKR either face to face or virtual which can make it as one of the CSFs that can enhance Organizational Performance.

Information Technology

The findings of this research show that Information Technology has weaker correlation with organizational performance in JKR. Even IT has weaker strength but it still correlate with dependent variable. Moreover, technology is an important aspect to successfully organize and share knowledge. With the help of technology, organizations can build the infrastructure and tools to support the expansion of KM [32]. IT facilitates organizations to use knowledge for organizational efficiency and effectiveness. Furthermore, IT provides suitable environment for learning and interaction among the employees of an organization. Systems like expert systems are used in organizations to capture and manage knowledge [33]. The above studies reveal that KM could partially accelerate obtaining competitive advantage for an organization by assimilating the skill and application of IT knowledge. IT knowledge is a key tool to facilitate KM practice in organization for better performance. JKR proved that IT plays an important role in the organization. According to the collected data, there are several platforms that have been used in the JKR in order to share, manage and use the knowledge. These platforms are attached in the organization official portal. This portal is connected with the internet connection within the organizational departments. This is due to the reason that the user-friendliness of the portal make it easier where all staff is able to access to the portal at anytime and anywhere. Moreover, JKR actively used these few medium for instance JPedia, Yellow pages of JKR, JCop, Project Lessons Learned Systems, E-Learning, Knowledge Café and Exit Interviews. Each of the platforms has its own specific purposes. There are some elaborations about the platforms.

Recommendations and Conclusion

The recommendations that been suggested by the researcher regarding the topics. This chapter will give the suitable recommendation applied by organization for future used or what the organization could improve in maintaining its competitiveness in global. Other than that, there are also recommendations for the future researcher to work on in order to ensure more convincing result and in order to give idea for the next researcher



to do deeper investigations regards the topics. Lastly, there is also conclusion prepared at the last session. Knowledge Management team is required to identify the relevant CSFs of Knowledge Management that can be implemented to support in managing of knowledge in JKR besides can enhance the organizational performance in JKR. The purpose of this will required is to solve the budget problems and use the budget and cost in an effective way. JKR is one of the government agencies, so they are required to manage and used the budget allocation in a proper way. In addition, the Knowledge Management team also responsible to do some research. This is to ensure that every activity and Knowledge Management initiatives that they had been planned to be put into practice must have a good impact to their organization as well reducing the cost needed. In order to ensure that CSFs embedded well in JKR there are several recommendations that could be made through this research where all of the recommendations could be applied by any organizations or it also could help the management to improve their existing approaches. Every year JKR will conduct the workshop or *bengkel pemantapan* to identify the critical knowledge from every department and branch. Therefore, this organization can conduct Knowledge Audit Exercise. It is because through this exercise they will identify the core business activities every department and the types of knowledge such as documentation, relationship, experience, method, skill, and nature talent. From the statement above to build a culture which can enhance performance in JKR, promotional and marketing strategy like road shows, *bengkel pemantapan*, seminar must be organized continuously from time to time to create continuous awareness and to develop staff interest before managing knowledge besides can enhance JKR performance. In JKR *bengkel pemantapan* was successfully organized by KM team and the goal of this program is to identify the critical content and knowledge from each department and every branch so that the Knowledge Management team will collect and store this information and knowledge into JPedia system and also can get the latest update of information content. Thus, Knowledge Management team will explain all the information contains in the system easily which can help them to solve the working problem and also can increase their performance. Leader who is establish, create the required conditions for the effectiveness of Knowledge Management [4]. Leader will guide the others to do their work efficiently. Above and beyond that, KM team also can guide or lead the staffs regarding on how to use, upload and update the content of JPedia system and the other platforms. In addition, an officer in JKR also mentioned that through this activity they can hand over the exposures and encourage staffs use those systems as platforms or mediums to manage, stored and retrieve their explicit knowledge effectively. Knowledge Management team also will explain that through the systems that they can receive the information and knowledge that they needed in easier and faster ways. Thus, leadership plays an important role in order to achieve an effectiveness organization. Knowledge sharing is basically the act of making knowledge available to others within the organization [38]. Moreover, in order to help the organization to face and reduce the challenge in managing their knowledge the one of the initiatives that can be taken by conducting a training workshop to all staff in order to make sure the staff are aware and have the capability to use, share and manage the explicit knowledge in the organization. For instance, the Knowledge Management Department can have the workshop in the way to explain the purpose of the JPedia as the function of sharing the knowledge and also teach the staff in the way how the can use the system. As to make sure the process of capturing the explicit knowledge is smoothly conducted in the organization, the organization should have a regular training to their staff as to ensure the staffs are aware to any change to the system and make the able to use the system effectively. Hence, the existence of knowledge sharing is necessary in any organization which is actually as a daily routine in organization formally or informally. Last but not least, based on the findings, Knowledge Audit Exercise can recognize and identify the knowledge gap and knowledge required by staff to support their working task. In this exercise, they can use Aithin Software System to capture and identify the knowledge assets, knowledge gap and knowledge required. The user must key in the current and latest information. Thus, through this exercise, the consultant will provide the recommendation to improve their KM initiative to manage the critical explicit knowledge in their organization. The result and recommendation can be referred for three years period hence can enhance JKR performance.



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