The Challenges of Using ERP for Knowledge Management: A Case of Telecommunication Company

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ABSTRACT

Knowledge management (KM) is a major issue often faced by firms.,- Telecommunications companies are no exception. This paper aims to identify and understand the challenges of KM using ERP systems faced by the accounting department in a telecommunications company. This study used interpretive in-depth single case study in order to understand the challenges in the implementation of KM in company. Findings show that each of the ERP users play an important role in managing the challenges of using ERP system, through the understanding of knowledge management proses. This study will contribute further explanation on how KM overcome those challenges in telecommunication company in Malaysia.

Keywords:

Knowledge management (KM); enterprise resources planning (ERP); finance, accounting, case study.

Introduction

Knowledge management (KM) can be defined as the process of creating, sharing, utilizing, and managing an organization's knowledge and information. Another, more concise definition of knowledge management, proposed by world-renowned IT expert Davenport & Prusak (1998), is the process of capturing, disseminating, and effectively applying knowledge. Both definitions provide a clear overview of the activities associated with knowledge management, and either can serve as a good starting point for understanding the role knowledge management plays in an organization. Knowledge management is an important component of modern business strategies because it helps to improve organizational learning, improve organizational practices, that save time and effort for the people involved, all of which leads to better business outcomes. More effective products and campaigns, for example, lower customer acquisition costs, and increased employee productivity. In short, knowledge management assists groups and organizations in achieving their goals by making the best use of the collective knowledge of the organization (Chaudhry, Nawab, & Shafi, 2021).

According to Baker & Yousof, (2017), enterprise resource planning (ERP) projects help SMEs meet the competitive demands of a changing market economy. According to Heredia-Calzado & Duréndez (2019), ERP systems are tools designed to enable the integration of operational processes of business functions in a single system to facilitate the flow of information between different departments in organizations. SMEs invest in ERP systems with

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the goal of reducing waste and costs, increasing profits, and shaping efficient organizations by flawlessly integrating and automating their business processes (Jayawickrama et al., 2019). According to Heredia-Calzado,& Duréndez (2019), the success of ERP projects is dependent on the users' attitude toward the systems as well as their actual use of the system. Successful ERP projects provide firms with benefits such as increased organizational performance efficiency, effective business procedures, and assistance in decision making (Mahar et al., 2020). Without a doubt, knowledge is essential for completing a successful ERP project and dealing with any issues that may arise while managing operations in organizations. According to Ma'arif (2019), if an organization only implements ERP without including a knowledge management (KM) component, the management team may be unable to identify or solve issues that arise within their organization.

According to Metaxiotis (2009), the success of any organization is linked to how well it manages its business processes knowledge, which includes know-how, expertise, skills, ideas, intuitions, and insights. Similarly, in order to achieve productive results, ERP system implementation goes hand in hand with the ability of efficient KM throughout the operation processes. This statement is supported by Saide and Mahendrawathi (2015), who state that in order to provide competitive advantages, ERP system implementation must be combined with social and intellectual resources inorganizations. According to Jayawickrama et al. (2019), despite implementing ERP projects, a high failure rate of ERP implementation projects has been demonstrated in a variety of industries, including SMEs. Furthermore, the researcher explains that one of the critical reasons for ERP failures is a lack of adequate support from KM practices throughout the ERP project lifecycles. In line with this, Mohamed et al., (2007) clarifies that failing to apply appropriate KM approaches to business processes can expose any organization to knowledge leakage, inefficient productivity, and competitiveness.

Several studies have looked at the challenges of ERP implementations for KM approaches in various industries, including small and medium enterprise industries (Baker & Yousof, 2017; Ma'arif et al., 2018; Jayawickrama et al., 2019; Heredia- Calzado & Duréndez, 2019), oil and gas industry (Ma'arif, 2019), manufacturing industry (Acar, 2017), business process outsourcing services industy (Aman, Hamzah, Amirudding & Maelah (2012), education and learning industry (Baslom & Tong, 2019; Kumar & Gupta, 2012). However, no studies in the telecommunications industry have been conducted. Therefore, this study provides a starting point for a new direction for research in the telecommunication industry in Malaysia. The majority of research has been done on challenges and the benefits of ERP for SMEs, but there has been little research on telecommunication (Kadir, Ismail, & Yatim, 2015). The primary goal of this research is to identify the KM challenges that the accounting department faces on a daily basis. However, the cited studies do not focus primarily on the challenges of KM for ERP systems faced by the accounting department in a telecommunications company.

The remainder of the paper is structured as follows. The next section of this paper which is literature review will give the overview of knowledge management and is followed with the challenges of KM for ERP systems faced by the accounting department in a telecommunications company. Next, the research methodology is presented, followed by the findings of the study with evidence from the extract of the interview transcript. The final section of this paper provides the conclusion of the study.

1. Literature Review

The methodology described by KM applies to even the most basic functions of firms. There are the most commonly occurring business processes that can be implemented with KM. It was assumed that only the structure of work behavior had influence on all aspects of work, including their existence and importance, in the analysis conducted by (Tatar, 2020) while analyzing how certain work characteristics such as innovation and employee development influence one another, Al-Emran et al. (2018), on the other, evaluated the relationship between creation of employee creativity and overall efficiency Once functional and motivational characteristics were found to be the most important, the strengths were not listed in any way, but all of the qualities were still identified as related to the creative generation (Jamal Ali & Anwar, 2021).

The current knowledge economy requires companies to create new business structures and new concepts for the management of its resources to remain competitive. The latest approaches to strategic management (Ferreira et al., 2016) tend to consider strategic alliances (as sources of knowledge) and intellectual capital (human, structural and relational capital) as the main sources for a sustainable competitive advantage. In an increasingly globalized world, the survival of business management depends on their organizational intelligence, which is the result of information and knowledge systems they have, the skills of its employees and how they relate to its stakeholders (Durst & Edvardsson, 2012). Also, as a result, human capital, intellectual property, and intellectual wealth have been recognized as the most valuable company assets. "knowledge is embodied in a person, taught and learned by a person, used or misused by a person," (Sori, 2009). This advice claims that companies should measure the intellectual capital they have and thus, that they should report on that figure. Since any firm in a competitive environment needs to have the ability to identify the most useful knowledge within their employees, they must also have the capability to save and share that knowledge. Firms that fail to store and document critical knowledge will most likely fail to realize their targeted productivity because every company's workforce is made up of people. However, in some organizations, the management of intangible assets is severely constrained Knowledge management relates to the processes and infrastructures organizations use to attain, create and share knowledge for formulating strategy and making strategic decisions (Abubakar et al., 2019). A knowledge strategy defines the overall approach an organization intent to take to align its knowledge resources and capabilities to the intellectual requirements of its strategy. A strategic attitude is necessary to achieve a sustainable competitive advantage.

In the era of an ever-changing competitive business environment, the development of the internet and information technology has put telecommunications organizations on the offensive. More efficient and effective operations of knowledge assets have become ever more important than previously because of the ever-growing internationalization of businesses, leaner organizations, products, and services; also known as convergence and vast development of technologies (Davenport & Prusak, 1998). For this reason, the telecommunications companies in Malaysia must get more involved in shaping and influencing the country's economy in a knowledge-based fashion (Chong, Chong, & Yeow, 2006). In other words, communications firms are realizing that knowledge is the most precious asset in a competitive marketplace (Syed-Ikhsan & Rowland, 2004).

However, it has been discovered that only two studies have been done on knowledge management in the telecommunications industry thus far. In the Malaysian telecommunications

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industry, the majority of firms are at the beginning stages of KM implementation. Meanwhile, Chong et al. (2006) studied how the initial five success factors in a KM initiative, such as organizational structure, business strategy, knowledge team, knowledge audit, and knowledge map, are perceived and put into practice in the Malaysian telecommunications organizations. As proven by the results, the KM organizations realize the necessity of implementing all of the KM preliminary strategies, but this awareness does not yet translate into action, particularly knowledge audit and knowledge map.

Therefore, this paper will focus on the challenges faced by telecommunications organizations in using SAP system and the steps taken to overcome challenges using knowledge management. This paper will review in more detail knowledge management issues using case studies involving accounting department in Malaysian telecommunications organizations.

2. Conceptual framework

Knowledge management is seen as one of the company's strategies as it can help leverage resources knowledge and abilities in organizations (Abu Bakar et al. 2019; Girard & Girard, 2015). Knowledge management is an iterative cycle, especially when new knowledge, whether tacit or explicit, is created (Aman & Nicholson, 2012; Alavi & Leidner 2001). According to Aman & Nicholson (2012) used the cycles of socialization, disclosure, animating and integration to understand knowledge transfer between employees. Alavi & Leidner (2001) use the knowledge management cycle which involves the process of knowledge creation, knowledge storage, knowledge transfers and also knowledge application.

To achieve these objectives, this study refers to the conceptual framework proposed by Alavi & Leidner (2001) because it is a systematic and structured method of managing knowledge in organizations that can improve the quality and efficiency of employees in assignments. Alavi & Leidner (2001) state that knowledge management refers to a specific systematic and managed process of obtaining, handling and communicating both tacit and explicit knowledge acquired from an employee so that other employees can also use it to increase the efficiency and productivity of their tasks. (Alavi & Leidner, 2001). Alavi & Leidner (2001) suggested that knowledge management involves four main processes, namely the creation, storage, transfer and application of knowledge (Figure 1).
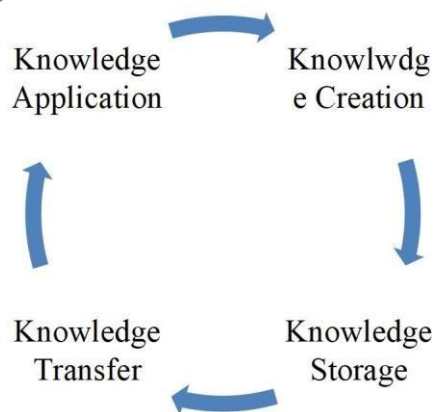

Figure 1. Knowledge Management Process (Alavi and Leidner, 2001)

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The conceptual framework presented by Alavi & Leidner (2001) is enhanced by examining previous studies on the challenges and methods used to overcome those challenges (Table 1). However, in studied conducted by Alavi & Leidner (2001) only discuss on the knowledge management process can be apply by company. By recognizing the importance of knowledge management process, this study describes in detail the challenges faced by SAP user in telecommunication company.

Table 1: Stages of Knowledge Management

Stage of Knowledge Management	Knowledge Management Process (Alavi and Leidner 2001)	Knowledge Management Processes(Current)
Knowledge Creation	Suggested that flexibility of modern information systems and their capabilities for communication, collaboration, coordination can enhance knowledge creation: socialization, externalization, internalization, and combination by facilitating their corresponding	As ERP systems possess the capabilities and functionalities to facilitate collaboration and communication among the individuals through its modules and integrates information across various functional areas of organization to facilitate coordination and flexibility in the organization the system can contribute to the knowledge creation.
KnowledgeStorage	Knowledge storage involves the process of developing organizational memory It is "the meansby which knowledge isstored for future use" andit plays a critical role inmanaging organizational knowledge through theproper storage and retrieval of knowledge	It is very important to ensure certain knowledge it is stored in various forms, including documents, written, structured information storage in electronic databases, and documentation processes company, as well as the tacit knowledge gained from a person and a network of other individuals
KnowledgeTransfer	After knowledge obtained and stored to enable it to be used, it must be disseminated or transferred to that party need it to be used.	The process ensures the sharing of knowledge among organizational units and members for promoting new and better understanding and insight. In order to overcome the challenges faced by SAP such as formal and informal channel of communication and training, interactive IT

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		network systems that support dispersed individuals to access the same stored information and to interact together in an organizational setting
Knowledge Application	The application of knowledge becomes a determinant of either an organization can apply knowledge which is up to them to be more competitive	Organizational decision-making and problem solvinggreatly depend on the quick and easy access of right information and knowledgewhich could be easily facilitated by effective storage and retrieval mechanisms of information technology. It is now evident that effective management of transformed information and knowledge through information systemslike ERP systems leads to speedy, accurate and qualitydecision making and proper responses to the business process requirements across the organization

3. Research methodology

In this study, the researcher used qualitative research method. Qualitative research method was developed in the social sciences to enable researchers to study social and cultural phenomena: observe feelings, thoughts, behaviors and the belief of the mass society. For this research, data collection involved interviews, document reviews and observation. The interview is a mean of gauging the awareness. Interviewing of selected individuals is a very important method often used by qualitative researchers. The rationale for using the interview methods is to enable the researcher to find out what is on their mind, what they think and how they feel about something.

Following Table 2 showing the details of the interview. It involves one manager and eleven executives from department of finance of the firm and takes between 30 minutes to two hours. Interviews used open -ended questionnaires and questions the questions covered cover each other's experiences as well the most frequent challenges encountered in implementing daily work. Each interview was recorded and transcribed to be analyzed in detail. The results of the interviews followed cross -checked with data obtained from website report documents and study observations case to guarantee the validity of the data. Each documented transcript of the interview will analyze using specific codes based on questions studies and elements in the conceptual framework

Table 2: Interview Details

	Respondent	Frequency	Duration
1	Finance Department Executive	1	30 minutes
2	Finance Department Executive	1	30 minutes
3	Finance Department Executive	1	30 minutes
4	Finance Department Executive	1	30 minutes
5	Finance Department Executive	1	30 minutes
6	Finance Department Executive	1	30 minutes
7	Finance Department Executive	1	30 minutes
8	Finance Department Executive	1	30 minutes
9	Finance Department Executive	1	30 minutes
10	Finance Department Executive	1	30 minutes
11	Finance Department Executive	1	30 minutes
12	Finance Department Manager	1	1 hour

Interpretation of study interview data also involved elements of the researcher's experience and understanding as well theory in relation to things being interpreted (Walsham 1995; 2006). Table 3 shows an example of how interpretation of quotations made in this study

Table 3: Interpretation of Interview Transcripts

Excerpts of respondents	Interpretation	Matching theory
"We have procedures and documents as material for help us carry out work. We	Steps required tocarry out daily activities has been documented and improved whenever	Knowledge storage is concerned withdescribing, representing, organizing, discovery, selection, and retrieval of concepts and of knowledge in a wide variety of contexts. As a practical matter,
"..will too improve the document if necessary. "	required	it does this through the manipulation of "representations" of concepts and of knowledge, through documents (Buckland, 1991a,1991b).

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4. Result of the study

This section will explain about the challenges of using ERP for Knowledge Management on within the organization. Among the aspects that will be discussed under knowledge management process such as knowledge creation, knowledge storage, knowledge sharing and knowledge application.

4.1 Knowledge Creation

A previous study conducted by Alavi & Leidner (2001), stated that knowledge creation is a process of formation of new knowledge by an individual during the process of social and collaboration with other individuals. Knowledge creation can involve the formation or replacement of tacit and explicit knowledge in an organization (Baker & Yousof, 2017; Alavi & Leidner, 2001). As a result of the findings in this study, the study creation process occurs when there is a need to overcome a challenge. This study found that communication difficulties are a challenge that must be faced by employees in the central accounting department during the knowledge creation process. The following is a further explanation of this finding.

4.2 Challenges in knowledge creation

The study found that central accounting departments face challenges to communicate with information technology departments as well as with their own departments when it comes to ERP systems. For difficult communication challenges, it will be seen from various perspectives. The difficulty of communicating is due to the expertise possessed by an individual (Al-Sabri & Al Saleem, 2013). Within the company, any development or improvement of the SAP system, discussions need to be done between the information technology department and the stakeholders (the applying department). The development team from the information technology department is responsible for carrying out activities to study, analyze, develop application systems and perform system testing.

While the applying department or stakeholders are those who are directly or indirectly involved in an organization to determine the extent of initiatives taken by the organization to make change and transformation to achieve success in the long run. In the development or improvement of an organizational system, among the stakeholders involved are such as the organization's superiors (approving and providing for system development), project owners (heads of divisions who have functions and authority over the policies and procedures of the application system being developed and responsible for ensuring the developed system meets departmental requirements), project team members (user team involved in stating system requirements, involved in system design and system testing), project advisor (department top management advising on user needs and throughout administration and project management is implemented).

Here it can be seen that differences in areas of specialization will cause difficulties in communication. For example, employees working in the finance department will need more knowledge of ERP systems as well as other areas of business such as accounting, production, finance and others. Similarly, with the information technology division, their employees need to know more different subject areas in order to adapt the system to business needs and configure ERP in order to operate optimally. It is therefore very important to ensure that both divisions understand and respond to changes in business processes and SAP systems. Acknowledging this, the respondents stated that:

"...there are difficulties in requesting amendments to the SAP system. We in the finance department often have exchanges of standards, business -related policies that bring the need for a modified SAP system. However, the system modification process will take quite a long time, especially in the process of discussion with the IT department to order provide a clearer explanation to the IT staff ..."

According to Respondent 2, Finance related changes are very frequent and requesting for such change in SAP is very difficult. Furthermore each change has to be applied as a small project so its require involvement of proper project team and long duration for each change. Furthermore IT department takes long time to understand the change requirement.

"...the discussion period took quite a long time to discuss the need for addition and modification of system functions according to the needs of our department. Each time a discussion is held the IT staff will state that the existing system already has that function. But in fact the function does not yet include what we want..."

(Respondent 6, Finance Department Executive)

According to Respondent 6, Finance related changes are very frequent and requesting for such change always being rejected by IT department with excuse that information already available in the system. In actual fact, IT department doesn't understand the requirement clearly. It's very difficult to get IT department to agree to new changes.

"...It is quite difficult to explain to the IT staff about the business activities carried out in our department. They cannot describe the whole process of activities in the finance department and there are often errors in the SAP system produced and it needs to be improved further and will take time..."

(Respondent 7, Finance Department Executive)

According to respondent 7, IT department doesn't understand finance related business process and effort to make them understand the process also in wain. There are so many error messages in the system which requires fix but yet IT department doesn't work to fix it. Very disappointing and its delaying lots of other work for finance department.

We deduce that we are on the brink of solving the same question posed by persuasion practitioners: "What else can be done to change people's minds?" Finally, the trait theory, which has been given a significant amount of attention in this tradition, explores one's attitude and their communication's connection to personality. In a way, the collaboration between communication and psychology is simple to understand, as people's personalities and personal values impact how they react to messages, with one accepting them or the other ignoring them, and the way they communicate.

Structural communication is an instructional strategy that allows students to work together in a virtual classroom to complete worksheets on a simulated store with an author of instructional materials. An interactive method for improving comprehension is referred to as "interactive approach" (Egan, 1976). knowledge usage and knowledge structuring demonstrate competence, and if a student demonstrates competence in using and structuring knowledge, the capacity to deduce can be deduced (Egan, 1972). The technique was developed to help learners embrace abstract ideas, providing them with a framework for learning as opposed to only memorizing facts. Structural Communication was developed with the aim of fostering social action learning. constructivists, along with many current constructivists, believe that learning in the social context is important for teaching transfer to practical contexts (Egan, 1976). Bennett and Hodgson demonstrated in the Structural Communication approach how knowledge learning and social action learning are distinguishable.

> *"...I also face challenges in answering questions related to ERP systems when they are asked by staff from my own department. I also need to learn in more depth about any recent changes to the SAP system that have been submitted to ensure I am able to answer questions from my staff..."*
>
> *(Respondent 12, Finance Department Manager)*

4.3 Innovation in Knowledge Creation

User Manual Documentation is a document that acts as a guide and reference for users to understand and use the completed application. It contains information on the steps of use and operation of the application in detail. When there are any changes or improvements to the SAP system, the existing user manual documents need to be updated. All changes made to the user manual document must be recorded and the version of the document must also be updated (Jayawickrama et al., 2019). This is as stated by:

> *"... Among the steps that I myself do if I have problems with the use of the SAP system, I will first try to look back at the user manual documentation given to me via email. I will try to relate the work process to system changes and use the modules provided. I will try to study on my own first. If I still have problems, I will call the IT department's help desk..."*
>
> *(Respondent 1, Finance Department Executive)*

> *"... User manual is very important in helping my daily work. If I have a problem in using the system, I will try to solve it first by looking at the documentation that has been provided before. If there is a system change, I will test the system first to make sure the SAP system can really be used to record the company's accounting transactions..."-*
> *Respondent 4, Finance Department Executive.*

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"... I will ask my staff to look at the user manual first if there are problems in entering accounting data into the system before dealing with the IT department. I have in 30 staff in my department, so I will ask the others if they are having the same problem or not. If there is, I will call our team involved in system development to discuss before communicating with the IT department..."

(Respondent 12, Finance Department Manager)

According to Jayawickrama et. al., (2019), it is important for the financedepartment to prepare and document the SAP system development plan. The process of preparing this plan should be provided when the department wants to develop or change the organizational system. In addition to Jayawickrama et. al., (2019), the purpose of preparing a plan is to identify and identify the scope of business needs, to ensure that planning can be done accurately. In the system development plan, the department must justify the importance and goals of the function to the company, the interests and goals of the department (efficiency & benefits) and also the importance and goals of quality (quality of products or services). This is to facilitate the discussion process with the information technology department. The information technology department will do its best to understand the needs of each change desired by other departments in the organization.

"... I have been involved in the SAP system development process related to taxation. In 2015 there were changes in the Malaysian taxation system (SST - GST). To facilitate the communication process with the IT department, we need to prepare an SAP system development plan. In this plan there should be new requirements, expansion (roll-out) or improvement of the process/service. Prepared as required by the finance department. Sometimes, we need to draw in the form of "flowchat" to make things easier..."

(Respondent 5, Finance Department Executive)

"...During the process of developing SST to GST, we faced problems to communicate with the IT department. There are a number of discussions that need to be held to ensure IT staff understand the required system. We provide one of the alternatives to help the communication process by providing SAP system development proposals..."

(Respondent 6, Finance Department Executive)

"... our department needs to prepare an SAP system development proposal if it wants to make changes in the current SAP system to increase understanding in each process. For example, in the "Account payble" section which is responsible for making payments to suppliers and other creditors. If we want to add new processes in the SAP system, we

need to make sure IT staff understand the payment process starting with the creation,

recording, and approval of invoices and the individuals involved are different people..."

(Respondent 7, Finance Department Executive)

Social skills as the way people are able to successfully manage their professional interactions are critical to career advancement (Aman & Risman, 2012). Human interactions are an important aspect in determining the success or failure of professional performance, including teachers, nurses, doctors, social workers, managers, lawyers, and counsellors (Fontana, 1990). It is common for definitions to treat social skills as either a strength that someone may have more or less of, or as a competency that the individual may possess to various degrees. Socially competent persons are defined as those who possess the abilities essential to achieve desirable results in social contexts (Argyle & Henderson, 1984). These definitions centre on the capacity to perform behaviours that heighten the chances of success. In addition to facing this difficulty to communicate, the study found that companies also build interpersonal skills in their employees. This skill isimportant because it is a tacit knowledge that involves expertise in performing a task.

"...During the process of developing Sales and Services Tax (SST) to Good and Services

Tax (GST), many disagreements occur and unable to settle the challenges amicably. IT

department staff disagree to listen. We must tone down in order to avoid further clashes

as our motive is to communicate our needs. It would be good if the IT department people

improve their interpersonal skill..."

(Respondent 6, Finance Department Executive)

"...I have problems using the new steps created in the SAP system, notice the

documentation provided by the IT department didn't reflect the changes in the system.

During the discussion some disagreement occurred. IT people are known generally are

not strong with interpersonal skill. They are very technical. I'm unable to understand the

jargons. I'm forced to learn all the jargons in hardway in order to communicate with

the IT department..."

(Respondent 1, Finance Department Executive)

4.4 Knowledge storage

The knowledge storage stage refers to the organizational memory formation process, in which knowledge is formally stored in physical memory systems and informally retained as values, rules and beliefs that are associated to culture and organizational structure (Alavi & Leidner, 2001). Lin (2007) explains that knowledge storage implies in a conversion process involving organization, structuring, storage and, finally, the combination of knowledge in order to facilitate future use by those concerned. Findingsat the research stage can be found in this

process, and this company faces a challenge since it must collect and store knowledge because there is no place to store all unique knowledge.

4.5 Challenges in knowledge storage

This study found that companies stand on the brink of financial ruin without any surplus funds to save everything they have developed. This being said, it is a single system, built from scratch, which is being referred to as an application (Alavi & Leidner, 2001).

"... I received too many emails in a days and there are time I missed reading some unintentionally which is related to changes in SAP system. It's takes long time to go thru all the old emails and there are time I'm unable to identify the email..."

(Respondent 7, Finance Department Executive)

"...Even though there's user manual to use SAP system via email, I only download the content if its related to my task. There was once in the past problem occurred when I was internal transferring to another department where I'm unable to find the user guide and I had to ask around from new team mates and seniors to execute my task. Individual department didn't take initiative to gather all SAP related documents in single location for everyone's usage. Thus, we had to work by asking around for relevant documents continuedly which is not very helpful..."

(Respondent 3, Finance Department Executive)

"...Always have to ask around for documents related to SAP whenever have to execute some task. Its creating dependable and unable to do work independently..."

(Respondent 8, Finance Department Executive)

According to Respondent 8, often staff do not have any printed copies. Allknowledge is recorded online in the company's database. There is no use of paper, all the information created will be stored directly into the database or employee email. This is because each storage method depends on the respective division manager, as mentioned by the manager, Finance Department:

"...We have provided some documentation but it is not always updated because when dealing with the system it is often changed. However, the basic usage of the system will be kept for the reference of new staff or anyone who wants to use it (staff exchange in the department)..."

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(Respondent 12, Finance Department Manager)

"...Our department does not emphasize on keeping relevant documents that are sent to all staff. No staff is assigned to collect any documentation on changes to the SAP system..."-

(Respondent 9, Finance Department Executive)

"...Managers need to emphasize the storage of knowledge of each employee. This is because each of their employees performs a different task. Problems will be faced when there is a "job rotation", when the staff who are transferred do not know to use the module to perform tasks..."

(Respondent 11, Finance Department Executive)

Each department head plays an important role in assisting the knowledge storage process. The way knowledge storage is implemented depends on the creativity of each division head. This is because there are no standards set by the company for storing this knowledge. According to Jayawickrama et al, (2019), it is important for every departmentespecially department heads to figure out ways to store the knowledge of their staff. This shows each staff member has the knowledge and they know to delve into their tasks in their own way. Therefore, it is very important for companies to store their knowledge in the future. The next section will discuss the innovations that have been implemented by employees to address this problem.

4.6 Innovation in Knowledge Storage

Since the department does not have a centralized special space, the department has its own method to store the knowledge of their employees. The study found that each and manager has their own method of storing knowledge, one of the methods used is to record all discussions in the form of group emails.

"...Even though there are too many emails in the inbox, and sometimes I don't read the emails, but I really like it because all the documents can be searched at any time..."

(Respondent 1, Finance Department Executive)

"...When the finance department wants to make changes to the system, we need to prepare a proposal and fill in the system development form, as well as the business requirements form. The scanning process is done on the document for future reference..."

(Respondent 9, Finance Department Executive)

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"...When the finance department wants to make changes to the system, we need to prepare a proposal and fill in the system development form, as well as the business requirements form. The scanning process is done on the document for future reference..."

(Respondent 10, Finance Department Executive)

According to Jayawickrama et al, (2019), simple software applications such as group email are one of the methods of knowledge management using the help of information and communication technology (ICT). The head of the department once asked his assistant to document all the documents received via email. He will print the document and keep it in the department cupboard for future reference. Considering that it is a large company, there are often changes to business processes, system usage processesand others. However, over time he refused to document his knowledge in hard copy even though he himself still felt the importance of hard copy as a result of company progress. He also added that through the use of email, it is easier and more practical for his employees. In the meantime, the finance department also built a website (http://ixxx.xxxxx.com.my/SSOPotal) for their own group to hold discussions and store details in the website. Usually when the finance department holds discussions with the information technology department or other departments, each discussion will be recorded for storage purposes. All of these discussions will be stored on our own departmental group website.

"...We have our own website for our department which allows us to include any notes and often videos about the use of the system related to our duties to other members of the department..."

(Respondent 2, Finance Department Executive)

"...Pn XXX (head of department) instructed a staff from our department to collect, compile and insert documents - documents related to the SAP system received from the IT department into the site..."

(Respondent 3, Finance Department Executive)

"...head of department instructed staff to summarize and document the process of using the system according to their respective fields of work and include it in the department's website..."

(Respondent 6, Finance Department Executive)

"...Besides that videos - videos shown by the IT department staff or the department staff themselves are also placed on the website. This is to ensure that each employee refers to the same material in order to simplify matters. Apart from that, it is used as a storage place which will make it easier to find, access and develop new knowledge..."

(Respondent 7, Finance Department Executive)

According to Aman & Risman (2012), the website is one of the methods of interaction that use ICT facilities. The website is one of the ICT -based interactions that has been developed by the department to enable every employee in his department to store all the knowledge that exists. Any knowledge created will be stored in this website and it can only be accessed by members in the same department only. In addition, the finance department also utilizes software provided from ICT facilities such as share driveand drop box software that are already in their computers. They can take advantage of these available resources and it is enough to help them store knowledge and share it with other colleagues. This was also acknowledged by.

"...One of the ways I use to store all the information related to my work process is by using a share drive..."

(Respondent 1, Finance Department Executive)

"...My department head often orders to insert all documents related to financial tasks into the share drive so that it can be viewed, reviewed and used more quickly and easily..."

(Respondent 2, Finance Department Executive)

"...We use the share drive to include all documents related to the SAP system such as system development plans, system requirements specification documents, business requirements specification documents and others. All documents start from the application, development and maintenance process..."

(Respondent 4, Finance Department Executive)

"...Share drive is used to enter documents related to the department. Each staff in the department will have their own files. We can include all the important documents and they can be used by other colleagues..."- Respondent 10, Finance Department Executive.

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According to the head of the finance department, by using existing applications in employee computers such as this share drive, it is very helpful for employees to referback to what is necessary. Among the advantages of share drive is to provide storage space for all files related to the company's financial business processes, saving time to upload files at once, allowing documents and files to be shared to colleagues and department heads easily, can store files in various formats, such as word, pdf, photo, power point, video, and various other types of files and more.

The results of this study in line with the study conducted by Jayawickrama et al, (2019), stated that simple software applications such as share drive is one of the methods of knowledge management using information and communication technology (ICT). This is because knowledge storage is documenting the recording and storage of knowledge according to the objectives to be achieved, either for one's own needs or for others. Therefore, as a result of knowledge storage, it ensures that knowledge is maintained in the organization and easily accessible when needed.

4.7 Knowledge transfer

Knowledge Management is the development and distribution of knowledge across an organization. Once knowledge is acquired and stored to enable it to be used, it must be disseminated or transferred to that party require it to be used (Sikombe & Phiri, 2019; 2021). The main challenge faced is the problem of differences in employee backgrounds such as education and work experience (Aman & Risman, 2012). They suggested that a period of acquaintance among employees be allocated before they begin to discuss employment matters. This is to ensure that each employee understands the background ofthe other employee which in turn will make it easier for them to transfer or teach some knowledge.

4.8 Challenges in Knowledge Transfer

According to Respondent 3, often the expectation during knowledge transfer is very high. Sender and receive are from different background and expertise which take toll on the receiver mostly. In order to bridge the gap, the receive have to do self-study in his own time and place. Also sometime have to buy sap related book with his own money.

"...As a junior to the department and in experience in the SAP system, I really had difficult to understand the system. As the person whom did the knowledge transfer is very senior person with 15 years of experience in implementing SAP system, the expectation towards the knowledge transfer receiver was very high. Expected to understand and execute immediately. As I'm new and I was struggling to understand and do my day to day task. I had to do extra hours of personal study by buying books to understand the sap system..."

(Respondent 3, Finance Department Executive)

This is because each roll out or system upgrade carry out in short time and new comers are expected to put more effort to learn as mentioned by the manager, Finance Department:

"...We have provided some SAP book but it is not always sufficient if wanted to speed up the learning. New comers from different background are expected to struggle but once they learn, its easy for them to carry out dialy work..."

(Respondent 12, Finance Department Manager)

" I was from non-SAP working experience and moved to SAP role during the internal transfer as part of my promotion. Due to my inexperience in SAP, which is an automated system, i really had to struggle to understand the system even after multiple knowledge transfer session. I even though about request to retransfer and take the demotion. During my discussion with my manager, i raised my concern but he didn't agree and asked me to reconsider by giving myself room to learn as part of growth plan..."

(Respondent 4, Finance Department Executive)

According to Respondent 4, He felt like quiet and move back as he's unable to understand the SAP system even after multiple knowledge transfer session. My manager advises me to take the learning as part of growth plan for the year. This is because there's potential in respondent 4 so the manager advised him to stay back and learn. In long run respondent 4 show progress as mentioned by the manager, Finance Department:

"...respondent 4 promoted and moved to Finance department as there's potential in him and putting him to learn SAP can give time to understand the gap between SAP and none-SAP where he can suggest improvement in future. Learning is life long and SAP has high demand in the job market..."

(Respondent 12, Finance Department Manager)

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"... In my previous role i wasn't using any application to do my job. All my job was done manually. But in this depart i have to use SAP system and is computerized all the financial process and steps. Even though I understand the process during the knowledge transfer but I'm strolling to remember short cut to move around the page and next page. Due to may lack of experience in automated system, during the knowledge transfer i struggle to remember the steps..."

(Respondent 11, Finance Department Executive)

According to Respondent 11, his previous job wasn't involved any application where he does all his work manually. During the knowledge transfer he understands the business process but he was struggling to understand the steps as the SAP screen is full ofwords and he's scared to click any button unnecessary. This is because, he has the business knowledge and he's a asset to the organization. Putting to learn and work in automated environment and using SAP is good for him and the organization mentioned by the manager, Finance Department:

"...a few of my staff has years of business knowledge and he was with company very long. Putting him in this team where he can use SAP to do the same job but in automated environment. It's matter of time he learns and perform as good as people with experience..."

(Respondent 12, Finance Department Manager)

4.9 Innovation in Knowledge Transfer

The study found that each department head and manager has their own method of working on brining innovative idea for effective knowledge transfer. One of the way is tospace out knowledge transfer activities according project phases. This method is as implemented by Respondent 2:

"...As a project manager, i plan knowledge transfer activities at the end of every project phases of SAP project implementation. This helps the receiver up to date system changes and how to accept the change in the system. Agile methodology helps to transfer knowledge to end customers according to their need. In this way, receiver of knowledge transfer knows what the change area and related information..."

(Respondent 2, Finance Department Executive)

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According to respondent 2, he developed a strategy to share knowledge of the current changes to everyone. By this way, everyone knows what's happening now and learn to master it while waiting for project progress.

"...He has been practising formal and informal learning. Where he makes effort to learn new things on his own by buying books, online sources and etc. At the same time, he makes friends with IT department staff so discuss with them whenever he has opportunity informally offline…"

(Respondent 9, Finance Department Executive)

According to respondent 9, he practices social skill to get to know people workingin IT department which help him to discuss about SAP system and what is happening which helps him to have informal education. At the same time, he purchases books and visit online resources as suggested by IT department friends. He said learning is personal effort.

By increasing on job training, there given staff to employee acquiring new knowledge and improve the existing knowledge. Continuous training also can facilitate internal processes, aiding ERP users to become familiar with the systems (Ma'arif et al., 2018). Besides internal training, employees are also not encouraged to attend external training to gain new knowledge related to the ERP system to have a minimal cost in knowledge acquisition and creation process.

"...usually IT department will conduct training on the system and staff is encouraged to be there. It's only compulsory for the finance staff to join in if there is a big change in the current system..."

(Respondent 3, Finance Department Executive)

"...IT department will provide training to new staff to learn on the SAP system and training will be providing to the existing staff if there are any changes in finance module..."

(Respondent 5, Finance Department Executive)

5. Knowledge application

The application of knowledge becomes a determinant of whether an organization can apply the knowledge they have in order to be more competitive (Alavi & Leidner, 2001). In other words, it is the level of knowledge received in the form of tacit and explicit that will be used in the same situation by other individuals. The main challenge faced is the lack of motivation to apply the new knowledge (Aman & Risman, 2012). Ouchi (1979) suggested that motivation can be given in financial form such as bonuses or in non - financial form such as attractive career

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paths.

5.1 Challenges in knowledge application

The findings of the study indicate that the difficulty in applying knowledge is because it depends on the individual's ability to integrate existing knowledge with the work environment and challenges. For example, in the Finance Department, the Executive interviewed described the challenges he faced:

"...We are conducting investigations from various aspects. We will look at the issue in detail, if it relates to the Finance we will refer to relevant Finance Department key person. We keep working to resolve it and repeat theinvestigation until it is completed. Any problem will be solved but it will take time and depend on the level of knowledge and experience of an officer involved..."

(Respondent 3, Finance Department Executive)

According to Respondent 3, all task is also said to be very challenging because every communication with the customer is only done through phone calls and not face to face. Officers must have high communication skills to ensure that dealings with customers run smoothly. In addition, they should also be smart in communicating with customers who use different languages and find it difficult to understand other languages. In addition, the division is also experiencing a shortage of employees.

According to the department manager, he's trying to educate his team members on the business process and function and system. Same time also sending the membersfor training on soft skill so they can improve their interpersonal skill while in discussion with customers. About the number calls, he's trying to reduce the call by educating the end customers on the simple process to resolve standard issues with documentation.

"...We also have shortage of staff and trying to hire but unfortunately there's no budget for this year..."

(Respondent 12, Finance Department Manager)

Despite experiencing a shortage of employees in this division, however, as head, he will make sure each party knows what other colleagues are doing. Among the steps taken to overcome this challenge is to hold meetings and always communicate with other divisions. In addition to being able to avoid misunderstandings in the future, hold meetings and communicate with each relevant division can encourage knowledge sharingand task execution more efficiently.

5.2 Innovation in knowledge application

The study found that each department head and manager has their own method ofworking on applying the learned knowledge in daily activities. One of the ways is to reward when team members identify gap or improvement idea. This method is as implemented by Respondent 2:

"...every innovative idea for improvement is rewarded once the department and company approve it when the idea saves cost or resources. I try to apply my lean methodology in my work. SAP work process can be simplified and can save time when executing work. In this way, knowledge is applied at the same time also rewarded..."

(*Respondent 2, Finance Department Executive*)

According to respondent 2, he has applied his lean methodology in SAP process to speed up his work and others which directly save process time.

"...I applied agile methodology in implementing SAP project instead of working on waterfall project methodology. It helps the project team to work with IT team easily. Lucky company sends me to agile project manager training. It is rewarding when the project was role out successfully without any hiccup. Personally i feel satisfied and achieved token of appreciation..."

(*Respondent 12, Finance Department Manager*)

According to respondent 12, he applied Agile project management methodology to run SAP project for his department. Project progress and success was rewarding for his career. He's happy his manager approves his training and allowed him to apply the learned knowledge in his new project.

6. Conclusion and implications

In this analysis of the use of an SAP system in a research, we have premised our argument on the understanding of the discipline of knowledge management as a process of four core activities of knowledge creation, knowledge storage and retrieval, knowledge transfer, and knowledge application. We have discussed the research findings framed by these four core activities of knowledge management in the context of existing literature to clearly demonstrate how knowledge management supports SAP System usage process by finance department in telecommunication company.

Overall, this paper attempts to answer the research questions 1) What are the challenges faced by telecommunication companies in managing their knowledge handling SAP system, and 2) How do telecommunication companies address those challenges in Finance Department? Preliminary findings of the study indicate that new knowledge is created when there is a problem that needs to be solved. This knowledge is stored in the form of documents and transferred through formal or informal training. In turn, this knowledge will be applied by colleagues or stakeholders in the future. This cycle of knowledge management processes will continue as long as new knowledge is

created. At the same time, it trains employees to document and apply new knowledge. Indirectly, knowledge management also develops the talents or abilities of employees through the process of creation, storage, transfer and application of such knowledge.

Theoretical implications can be seen from the use of conceptual frameworks constructed based on Alavi & Leidner (2001) and talent enhancement through documentation practices and informal training (Zach, Munkvold & Olsen, 2012). The practical implications are in terms of the knowledge management mechanism used. Employees not only need to be experts and knowledgeable in the field of SAP system, but they also need to be trained to perform work more efficiently and effectively through knowledge management (Aman & Nicholson 2012).

Overall, this paper highlights the challenges of knowledge management in small telecommunication company in Malaysia. However, the findings of this study are still in its infancy and there are still many questions that can be elaborated in future studies, especially about the challenges of training employees with different backgrounds, knowledge and experience and ensuring they implement good knowledge management inthe interest of the company. Such studies are important to ensure that the accounting outsourcing industry continues to grow and contribute to the bulk of the country's economic development.

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