



NEAR EAST UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
INNOVATION AND KNOWLEDGE MANAGEMENT PROGRAM

**THE USAGE OF KNOWLEDGE MANAGEMENT
CAPABILITY AND INNOVATION IN DEVELOPING TEAM
PERFORMANCE: A CASE STUDY OF ASIACELL
COMPANY IN SULAYMANIAH**

PSHDAR ABDALLA HAMZA

MASTER'S THESIS

NICOSIA

2018

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MASTER'S THESIS

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NICOSIA

2018

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ABSTRACT

THE USAGE OF KNOWLEDGE MANAGEMENT CAPABILITY AND INNOVATION IN DEVELOPING TEAM PERFORMANCE: A CASE STUDY OF ASIACELL COMPANY IN SULAYMANIAH.

Much empirical research exists in the different areas of knowledge management capability, innovation adoption, team performance and competitive advantage to induce a new dimension of business operation. The concept of knowledge management capability was adopted by Asiacell Company in the development of business operation systems for achieving competitive advantage. The aspects of knowledge management and innovation adoption create a unique differentiation of business operations through initiating and sharing constructive ideas in the business cycle. This research incorporates all essential resources in knowledge management, including human resources and finance to facilitate a change through innovation and enhance team performance.

Furthermore, the primary objective of this study is the presentation of a framework model that illustrates the process for effective knowledge management implementation. This study is a quantitative research method, a survey research was carried out with a questionnaire to collect information. Random sampling method was used to distribute (229) questionnaires. SPSS software was also used to enter and analyse data. Knowledge management capability is positively correlated to team performance and innovation adoption is also correlated to team performance. Moreover, team performance is correlated to competitive advantage. A conclusion is made that knowledge management and innovation adoption should be incorporated in business models to enhance good team performance and achieve competitive advantage.

Keywords: Knowledge management capability, Innovation adoption, team performance, competitive advantage.

ÖZ

TAKIM PERFORMANSININ GELİŞTİRİLMESİNDE BİLGİ YÖNETİMİ KAPASİTESİNİN VE İNOVASYONUN UNKULLANIMI: SÜLEYMANİYE'DE ASIACELL ŞİRKETİNE YÖNELİK BİR ORNEK OLAY ÇALIŞMASI.

İş yönetiminin yeni bir boyutunu teşvik etmek için bilgi yönetimi kabiliyetinin farklı alanlarında, yeniliklerin benimsenmesinde, takım performansında ve rekabet avantajında çok fazla deneysel araştırma bulunmaktadır. Bilgi yönetimi yeteneği kavramı, rekabet avantajı elde etmek için iş operasyon sistemlerinin geliştirilmesinde yaygın olarak kullanılmaktadır. Bilgi yönetiminin ve inovasyonun benimsenmesinin özelliği, iş döngüsündeki yapıcı fikirleri başlatarak ve paylaşarak iş operasyonlarının benzersiz bir şekilde farklılaşmasını sağlar. Bu araştırma, inovasyon yoluyla değişimi kolaylaştırmak ve takım performansını geliştirmek için insan kaynakları ve finans dahil olmak üzere bilgi yönetimindeki tüm temel kaynakları içermektedir.

Ayrıca, bu çalışmanın temel amacı, etkili bilgi yönetimi uygulaması için süreci gösteren bir çerçeve modelinin sunulmasıdır. Bu çalışma, nicel bir araştırma metodu olup, bilgi toplamak için bir anket ile anket araştırması yapılmıştır. (229) anketin dağıtımı için rasgele örnekleme yöntemi kullanılmıştır. SPSS yazılımı ayrıca veri girmek ve analiz etmek için de kullanıldı. Bilgi yönetimi yeteneği, takım performansı ile pozitif olarak ilişkilidir ve inovasyonun benimsenmesi de takım performansı ile ilişkilidir. Ayrıca, takım performansı rekabet avantajı ile ilişkilidir. İyi ekip performansını geliştirmek ve rekabet avantajı sağlamak için bilgi yönetiminin ve inovasyonun benimsenmesinin iş modellerine dahil edilmesi gerektiği sonucuna varılmıştır.

Anahtar Kelimeler: Bilgi yönetimi yeteneği, Yenilik benimseme, takım performansı, rekabet avantajı.

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LIST OF ABBREVIATIONS

CA: Competitive Advantage

KM: Knowledge Management

H: Hypothesis

OL: Organisational Learning

SCA: Sustainable Competitive Advantage

INTRODUCTION

Background of AsiaCell Company: This chapter outlines the background of AsiaCell Company, statement of the problem, research objectives, research questions, conceptual framework model, and structure of the thesis. This chapter highlights the introduction and the purpose of the study and the significant of the study to all stakeholders of the company.

AsiaCell Company is a telecommunication company which provide services to over 10 million people in Iraq. AsiaCell Company is well known as the first telecommunication company in Sulaymaniah in Iraq Asiaceel Company is found in many cities including Bagdad. It is also one of the companies which have a large market share through product differentiation strategy. The company provides services to all of the 18 provinces in Iraq. AsiaCell managed to provide telecommunication services to more than 97% of the total population of Iraq. AsiaCell Company specializes in the prepaid mobile services but in the recent years it started offering post-paid services as well. In the beginning of 2015 the company began offering 3G services as well.

Statement of the Problem: Managing knowledge is major challenge that impacts how individuals can cooperate to make sure the organization achieves its objectives. Within any organization there may be a learning curve where knowledge management and innovation adoption can make a difference in the success or failure of the organization. Much of the corporate knowledge sharing is determined by the capacity of employee adaptation to new systems through communication. Lack of continuity and management of knowledge capability affects the ability of an organization to attain or maintain positive firm performance. Innovation adoption system is another aspect of knowledge flow that may affect firm performance. There are a limited research that gives an insight about the personal knowledge management capability and the level of innovation adoption of employees for achieving competitive advantage.

Empirical research indicated that knowledge management has a positive impact to both team performance and achieving competitive advantage.

Research Objectives: The main aim of the study is to analyse the effect of knowledge management capability and innovation adoption for team performance of Asia Cell Company: Objectives are as follows:

- To identify the impact of knowledge management capacity and innovation adoption for competitive advantage.
- To identify the benefits of knowledge management and innovation adoption for competitive advantage.
- To analyse the effectiveness of knowledge management capability and innovation adoption in AsiaCell Company.

Significance of the Study: This study makes a substantial contribution to knowledge management and innovation research by demonstrate how knowledge management capacity applied in telecommunication companies for competitive advantage. The research also provides the theoretical information and concept of adopting innovation for enhancing team performance for achieving competitive advantage.

Delimitation of the Study: This study focuses on AsiaCell Company in Sulaymaniah. The field of study is knowledge management and innovation, focusing on knowledge management capability and innovation adoption.

Research Hypothesis: The study seeks to test the validity of the following proposed null hypotheses;

- **H₁:** Knowledge management capabilities directly affect team performance.
- **H₂:** Innovation adoption directly affect to team performance.
- **H₃:** Team performance has a direct effect to organizational competitive advantage.

Structure of the Thesis: Introduction is an introductory chapter of the study. It presents the background of the research, significance of the study, the scope of the research and background of the study. (Cardenas et al, 2015). This is followed by the hypotheses supporting the study.

Chapter one consists of an analysis of the literature related to knowledge management capacity.

Chapter two focuses on innovation adoption, team performance and competitive advantage. Knowledge management literature is obtained to deduce a study conceptual model. The literature is also based on the research objectives.

Chapter three presents the research design used in the study to test the research hypotheses. This chapter outlined the research design, research instrument, sample population, sampling techniques and data collection strategies. The last section includes outlines data collection method, presentation and analysis. The response rate analysis and the demographic characteristics of the respondents are presented and described. The issue on data reliability and validity was also indicated in this chapter.

Chapter four focuses on discussion of the results from the related studies in literature. This chapter includes data analysis and presentation of the results of the research. The results from regression analysis and descriptive statistics for the three variables are reported. An analysis of reliability and validity of the measurement scales are presented.

Chapter five consist of conclusions and implication of the study grounded on the research objectives. The chapter indicates areas which need further research. Limitations of the study are also indicated in this chapter.

1. CHAPTER: LITERATURE REVIEW OF KNOWLEDGE MANAGEMENT

1.1 The Concept of Knowledge

The concept of personal knowledge and the related aspects in knowledge management are introduced in this section. Businesses are surviving in this era through knowledge management and innovation because companies are competing in a knowledge economy. (Drucker, 2001) and knowledge is perceived as the most essential and important element in the sphere of business cycle for achieving sustainable competitive advantage. It is also known as a strategic resource for achieving organisational goals (Choi et al., 2008; Nonaka et al., 2000).

Rasoulinezhad (2011) defines a knowledge organization as: "An organization that takes into consideration the role of stakeholders in the knowledge management application and techniques for attaining targeted goals. Other aspect like culture has a greater influence in knowledge management and each organisation that wishes to embrace knowledge management should analyse the cultural aspect of the company before implementation of some changes". To add a feather on a cap, knowledge plays a pivotal role in development and sustainability of businesses especially product development and provision of services. Organisation should first understand the essence of knowledge in business development for gaining market share (Yang, 2009).

Yang (2009) alluded that knowledge can be acquired or gained through experience as it is different from beliefs and commitment. Knowledge is defined can be measured though action and obtaining results. Knowledge is a key aspect in dissemination information from one person to another as well as executing duties according to the required standard. (Nonaka et al, 2000) state that knowledge is acquired through a process starting from the contextual information that learner obtained and then interpreted based on personal belief and commitment.

In support of the above assertion (Davenport and Prusak, 1998) state that transformation of information to knowledge is very essential and some useful ways are as follows: such as:

- **Comparison:** a conclusion could be drawn through comparison of information. Comparison enables organizations to take the best option to enhance team performance.
- **Consequences:** by recognising the effect of information on decisions. Consequences in business encourage managers to use their critical thinking to achieve their goals through acquiring more knowledge.
- **Connections:** by illumination of the linkage of knowledge from different sources. Connections of valid information boost the confidence of every employee during execution of work.
- **Conversation:** by deliberate on the perspectives of the knowledge of other people on this information. Sharing information through different platforms like social media helps organization to discover new trends in the business sector (Davenport and Prusak,1998)

Furthermore, knowledge activities involve the participation of groups, or people or through the use of books, documents, social media, television, and internet. Sometimes it requires person to person conversation that leads to practical application of knowledge. (Davenport & Prusak, 1998). In addition to this, due to this era of technological advancement knowledge can also be acquired on internet websites. Moreover, knowledge requires the aspect of involving action after learning and understanding from the previous experience. (Alavi & Leidner, 2001).

1.2 Knowledge Integration in Organizational Culture

Knowledge in practice and knowledge-intensive firms are just two examples of knowledge integration in organizational culture. A practice-based organization is an organization where the workforce uses hands on activities to work with the knowledge that is unique, personal, and difficult to access (Nilsen et al, 2013). Corporate culture that nurtures knowledge development and innovation in business creates a competitive edge.

A framework was established indicate that knowledge-in-practice suggest learn ability scales and knowledge management activities that positively affect the organizational performance. Knowledge intensive firms rely on employee commitment to the organization for the prevention of knowledge loss (Casimir et al., 2012).

The incorporation of computer information system in business facilitates dissemination of information and system of innovation for team performance. (Bhatti et al, 2001) and (Rehman et al, 2011) emphasized that knowledge management incorporates capacity of Information and technology to enable processing of information and data for the aptitude of innovation adoption.

This gives an appropriate opportunity for employing techniques that enable to unlock the intellectual asset that is based on knowledge to practical aspect (Walecka-Jankowska, 2015). Management of human capital in business enhances proper implementation of knowledge management to achieve competitive advantage through team performance.

1.3 Hierarchy of Knowledge

Shankar et al, (2003) knowledge hierarchy indicated on figure (1.1) is utilised to understand the stages of developing knowledge:

1.3.1 Data

Data is also known as facts which explain a certain attribute of a certain aspects which cannot be regrouped or joined with other facts (Loshin, 2001; Robbins et al., 2000; Zikmund, 2000). Data is more similar to aims of goals (James, 2005; Tiwana, 2002). Data are raw facts and transaction records.

1.3.2 Information

Information is available for analyses of data and used for validating objectives in a way appropriate for taking the best decision, or in a contextual perspective the combination of two or more data that form a relationship (Loshin, 2001). Information and data are objectives (James, 2005). Information is data organized with relevance, purpose context.

1.3.3 Knowledge

Knowledge, is another stage whereby information that obtained from analysed data incorporates rules, experience and values (Bollinger & Smith, 2001; Davenport & Prusak, 1998; Pemberton & Stonehouse, 2000; Robbins et al, 2000). Knowledge is subjective because it incorporates many elements like insight, skills and principles (James, 2005). Knowledge is information enriched with experiences, values, insight. In business context information and knowledge applied at work (Davenport & Prusak, 1998) and „the capacity to put into action the knowledge“ (McElroy 2003, p.188). According to Sagsan and Zorlu (2015) alluded Knowledge could be used for organisational products, services and decision making.

1.3.4 Wisdom

Wisdom incorporates the aspect application of the acquired knowledge into action for solving problems, for effective implementation of strategies and effective use of resources (Vance, 1997). Wisdom follows reflections after personal or physical experience or action (Bahra, 2001; Nonaka & Takeuchi, 1995). Wisdom is knowledge that gives the ability to solve business issues.

Knowledge Value Chain

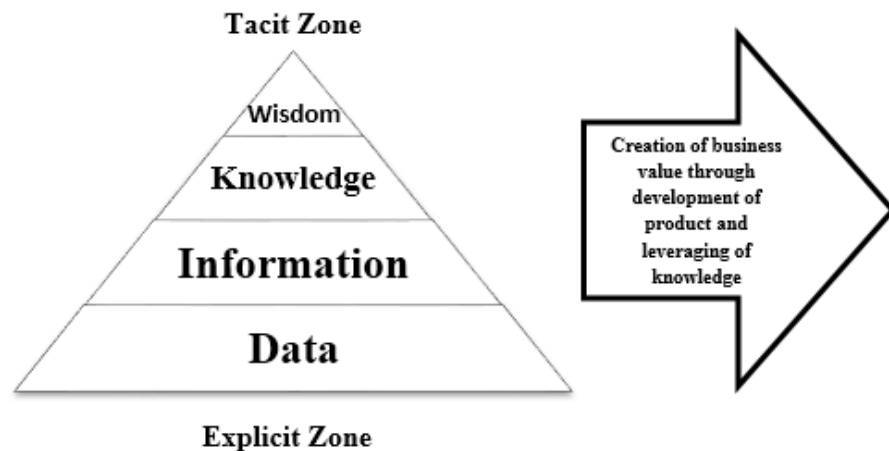


Figure 1.1: Knowledge Value Chain

Source: (Shankar et al, 2003) (usir.salford.ac.uk)

1.4 Types of Knowledge

It is essential to understand the types of knowledge in developing knowledge management. Knowledge is also known as a philosophical aspect that no one has the definite definition of knowledge because people have different opinions about knowledge (Nonaka, 2000). There is no concrete answer on the issue of the types of knowledge because of the disagreement of authors. The following is a list of the types of knowledge that people came out with and no one agreed on theories of knowledge:

- 1) **A Priori:** This is the knowledge that someone developed from before without having experience anything. This requires the art of reasoning upon something. An experience gives a different dimension of facts that shapes knowledge (Gemma, 2004).
- 2) **A Posterior:** This includes reasoning that is inductive meaning it developed from past experience. In philosophy, this area requires a lot of understanding by using five senses in creating a logic and reflective notion over the matter (Nonaka, 2000).

- 3) **Propositional Knowledge or Descriptive Knowledge:** the key is to acknowledge the truth and this type of knowledge involves propositions whereby knowledge declarative sentences used.
- 4) **Procedural Knowledge:** This type of knowledge is very common is solving problems in a procedural way. This system of knowledge can be used in a court of law as it as it includes the sequence of procedures to be followed. Knowledge is based on what was agreed upon from the previous experience. This study is going to deliberate more on two aspects: explicit knowledge and tacit knowledge.
- 5) **Explicit knowledge:** (Yim et al, 2004) state that explicit knowledge is well known type of knowledge in the business cycle that includes logical reasoning and manipulation. Explicit knowledge is knowledge which is available in libraries and other documentaries hat is recorded and communicated through mediums like libraries and databases and one of the characteristics is that it is also tangible. Moreover, explicit knowledge involves the evidence of numbers and codified numbers.
This information can be used by many people because it is accessed by anyone and available for many generations. Furthermore, it creates a platform where posting and spreading become easy (Alavi&Leinder, 2001; Becerra-Fernandez et al, 2004).
- 6) **Tacit knowledge:** Tacit knowledge is some personal abilities of that developed through acquiring skills which are not easy to share or communicate with others (Nonaka, 1991). In addition, tacit knowledge is complex in nature and it is not easy to locate because of its unstructured nature (Yim et al, 2004). Moreover, tacit knowledge can only be achieved through experience (Levy et al, 2010) and it is easy to communicate with people who share the same experience or background (Levy et al, 2010). The challenge of tacit knowledge is that it requires people to know the right time to share and communicate and it involves consistent commitment.

Tacit knowledge is a tool that can be used by individuals to achieve personal objectives through commitment. Furthermore, (Mayfield, 2010) state the tacit knowledge cannot be documented or recorded as it operates in the mind of individual. However, (Yang, 2009) highlighted that there two types of tacit knowledge namely: technical dimension and cognitive dimension. Technical dimension consists of the skills of executing task by applying the knowledge acquired. Cognitive dimension consists of the system of using beliefs and ideas acquired to complete the given task.

1.4.1 Modes of Adaptation (explicit and tacit knowledge)

It is vital to consider the model of tacit knowledge and explicit knowledge for further appreciative of the concept of knowledge development. (Nonaka and Takeuchi, 1995) argue that the notions of the modes of convention are evolved around the two concept of knowledge which is tacit and explicit knowledge. The diagram below shows four modes of knowledge adaptation.

1.4.2 Knowledge Processes

Knowledge processes consists of six elements which are transfer, creation, storage, capturing, acquisition and sharing.

1.5 The knowledge Management Processes Cycle

The knowledge management consists of acquisition and creation of knowledge. Knowledge creation consists of incorporating new ideas of knowledge in order to replace old knowledge (Nonaka, 1994). Knowledge creation involves implementation of new modes of business operation to the existing business systems in order to achieve the goals. (Nonaka's, 1994) highlighted d four type of knowledge creation which are: socialization, combination, externalisation and internalization.

Socialization the transformation of tacit knowledge to new tacit knowledge by using experience and social communication.

Combination this involves the developing of new explicit knowledge from existing explicit knowledge.

Externalization transforming tacit knowledge to new explicit knowledge.

Internalization is the development of new tacit knowledge from explicit knowledge (link.springer.com).

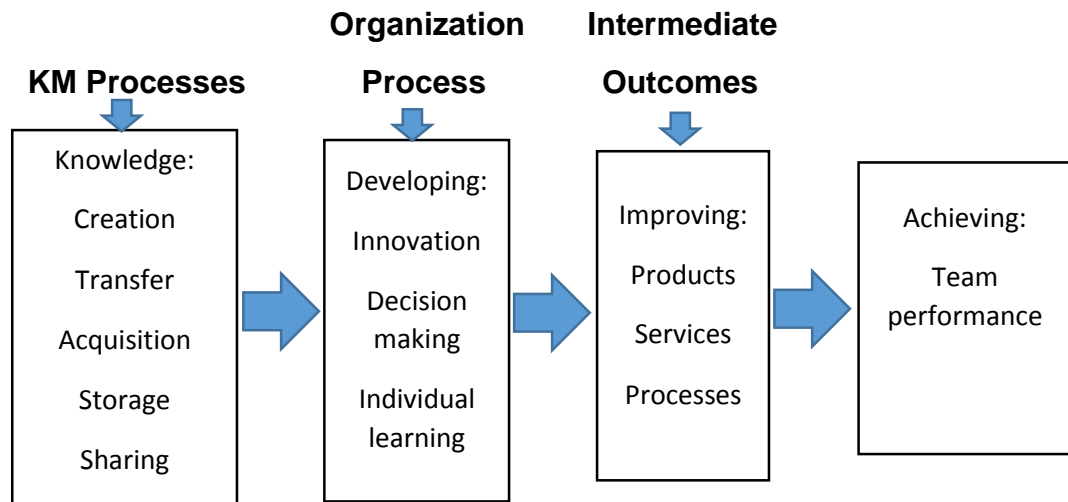


Figure 1.2: The knowledge Management Processes Cycle.

Source: (Nonaka, 1994).

1.5.1 Knowledge Capture

Knowledge capture is a procedure of understanding a certain concept through learning. Two categories of knowledge differ in that tacit knowledge is personal and problematic to capture while explicit knowledge is easier to capture and manage (Bloodgood & Chilton, 2012; Nonaka, 1994). It is important to minimize knowledge losses at the knowledge capture stage to prevent loss of knowledge at later stages (Shankar et al, 2013). (Dzekashu and McCollum, 2014) proposed a tacit knowledge capture process moving from identification to acquisition to refinement to storage of the knowledge. In addition to this knowledge capture enables knowledge creation as an extension of the capture process, which increases organizational knowledge.

1.5.2 Knowledge Creation

Knowledge is created through different stages continuously. Nonaka et al, (2000) states that “The SECI (socialization, externalization, combination and internalization) process is the process of knowledge creation and spiral in nature. As the conversion flows from socialization (tacit knowledge to tacit knowledge) to externalization (tacit knowledge to explicit knowledge), externalization to combination (explicit knowledge to explicit knowledge), combination to internalization (explicit knowledge to tacit knowledge) and internalization to socialization, it continues cycling without stopping. This knowledge creation process can flow inside or outside organizations while supporting both internal and external stakeholders of an organization potentially increasing firm performance (Nonaka et al, 2000).

Wegner et al (2014) concluded that investments of organizational knowledge assets ultimately increasing organizational competitive advantage. Many organizations give employees opportunities to learn through organizing refresher courses, conferences and team building meetings. On the other hand, (Liora and Moreno-Luzon, 2014) used the concept of organizational learning to relate to knowledge creation through dimensions of learning, knowledge and information as they relate to each other.

Jankowska (2013) conducted a study to examine the relationship between knowledge transfer, knowledge creation, organizational trust and innovativeness determining that knowledge creation provides partial mediation regarding the trust- innovativeness association. (Mahr and lievens, 2012) examined innovation-related knowledge creation in virtual communities finding the creation of knowledge differed between the different virtual communities based on the individual focus areas. Knowledge created requires transference to others in order to achieve organizational goals.

1.5.3 Knowledge Acquisition

Knowledge acquisition is a system of acquiring new knowledge through learning, reading and knowledge sharing through group discussion and person to person conversation (Inkpen, 1996) knowledge can be acquired from different sources like books, people and internet.

1.5.4 Knowledge Transfer

Knowledge transferring is another knowledge process that impart knowledge to others people. Knowledge transfer provides a method of providing forgetfulness rectification in projects across industries. Knowledge transferring consists of delegation and training of employees through using experts who possess the required knowledge. (Donate and de Pablo's, 2015) research regarding knowledge application practices supported knowledge transfer as a means of organizational learning. Transformation of tacit knowledge to explicit knowledge occurs through training or through experience (Okoroafor, 2014). Features of knowledge transfer within organization include innovation and bonding of workforce through common activities (Martelo-Landroguez & Cegarra-Navarro, 2014; Jankowska, 2013). Measurement of knowledge transfer provides organizations feedback regarding the best methods to meet their overall performance objectives.

1.5.5 Knowledge Sharing

Knowledge sharing occurs when employees are open to sharing their knowledge, both explicit and tacit, which can increase an organization's competitive advantage. (Jain and Amoreno, 2015) concur that an accumulation of knowledge occurs when shared within the organization, which is important to consider when building knowledge to support improving team performance. However, found that while tacit knowledge sharing had negative associations with the speed of innovation and firm financial performance, they did find tacit knowledge had positive associations with innovation quality and firm operational performance.

1.5.6 Knowledge Management Application

Knowledge application is a process of using wisdom to execute duties. Knowledge application process within an organization it requires action through applying the acquired knowledge in decision making and planning. According to Nonaka et al (2000) knowledge application involves implementation of knowledge to achieve organizational goals and also found that the opposite with explicit knowledge sharing since knowledge sharing was positively associated with innovation speed and firm financial performance.

1.6 Knowledge Management

Management of knowledge is a conceptual tool for managers to ensure knowledge capture, creation, transference and sharing occurs in support of positive firm performance (Massingham & Massingham, 2014). It can be defined as the process of managing the acquired information or wisdom for achieving organisational goals through using intellectual assets. Furthermore, all these elements can be used to evaluate value as it applies to future investment of intellectual capital to enhance organizational knowledge. Organizations have different ways of developing knowledge management such as physical tools or software and others rely on sharing lessons learned and training.

Basu (2014) defined knowledge management to include several areas such as education and sharing of best practices as well as employee training and development and communication media. It consists the following process storage, acquisition, utilisation, creation and sharing. Performing can be enhanced for cost effective through applying knowledge creation, acquisition and sharing. (Masa'deh, Obeidat, Al-Dmour and Tarhini, 2015) stated one opportunity of managing knowledge is through the capture of tacit knowledge for use by an organizational practice. It also takes into consideration the system of communication, controlling, coordination, organisation, and planning and motivation people in an organisation to achieve organisational objectives or to enhance competitive advantage.

This study will consider knowledge management in business for development and team performance. The goals of knowledge management are to improve decision making planning human resources and develop effective knowledge practices the gives a company a competitive advantage. Manpower or employees can be considered as resources when managers allow them to explore their horizon in business process through applying acquired knowledge from different sources in the business society. Moreover, it is essential to account for the differences in managing tacit and explicit knowledge since these forms of knowledge capture, creation, transferral, and sharing occur via different methods (Bloodgood & Chilton, 2012; Nonaka, 1994; Suppiah & Sandhu, 2011).

Knowledge capture, creation, transfer, and sharing are all important aspects of organizational knowledge for ensuring knowledge remains an organizational asset. When corporations adopt knowledge management practices, utilization and sharing of the knowledge and competitive advantage increased. Knowledge management is a system that involves the management and the employees in coming out with the best way of achieving organisational goals and maintaining a competitive edge.

Knowledge management processes are quite people-intensive, and less technology-intensive than most people might believe, although a modern knowledge-enabled enterprise must support knowledge management with appropriate information and communications technology (King, 2008).

Social processes involve the diffusion of knowledge through sharing ideas and information from the expertise with experience to those without experience in order to achieving goals. Such social processes are essential because knowledge exist in the minds of those who acquired it and the best way of impacting knowledge to others platforms like social groups, internet plays a crucial role in knowledge management, (pelagiaresearchlibrary.com).

1.6.1 Knowledge Management Systems

Knowledge management systems (KMS) consist of the application of technology for knowledge management sharing and processes. Computer and information system helps to create employee's database and learning from the computer business software. Information technology is used for communication in knowledge sharing and creation. Computer information systems combine all the knowledge in one package through software design which facilitates sharing of information from one department to the other. Technology helps to create dissemination of information from the expertise to the recipients for achieving the goals. Employees can share information or knowledge through group discussion systems.

Organisations are embracing the system of using video conferencing as a way of sharing knowledge without considering the distance between the business partners. Business meetings are held through video conferences worldwide. Management information system is another system which is used by companies to acquire knowledge about the welfare of employees and management of resources in an effective way. Organisations in telecommunication industry are using property management system which gives transparency to the accounting and transaction system. Tax and auditing systems are also developed in the telecommunication industry for billing and making payment to the authorities.

Some accounting systems have some formulas for accounting and calculating of generated revenue per day. Knowledge sharing consists of information, data and can be in numerical form for accounting management process. Decision support system is used to select the best possible decision to take and it takes into consideration the opportunity cost. The possible results can be shown on a decision support system. Organisational learning systems involve the operation of computers for sharing and acquiring knowledge through learning online. Organisations use learning system for continuous improvement of the business operations (Nonaka 2000).

Codification or personalised approach is very important for knowledge management strategies. (Earl, 2001) identified sub-strategies of codification namely:

1. Systems are developed by the participation of the management and employees in knowledge sharing and motivate people to execute their tasks with confidence.
2. Processes initiating systems of sharing knowledge within an organisation through modifying the previous communication systems
3. Commercial many organisations are known for their trademarks. Registration for the management of intellectual property such as patents is very important.
4. Strategies many organisations use ways of gaining market share and growth for competitive advantage.
5. Cartographic these are maps which shows directions and ways of linking people
6. Organisational it consists of creating communities through technology like social media
7. Social creation of social gathering and groups for knowledge sharing and creation.

Oliveira et al (2012) eluded that, "the application of knowledge management projects remains to be a task for many organizations". Proper execution of processes and procedures in implementation affect the outcome results which is the organizational performance. It is vital to consider the merits of implementing knowledge management in order to achieve organizational goal through building assessing team performance.

1.6.2 Knowledge Management in Organisation

Knowledge management is very vital for the success of the organisation. KM requires team work in order to facilitate platforms for sharing ideas which are related to the organisational performance. It also incorporates management functions namely; organising, communication, coordination and planning. Management of ways of sharing or transferring information in the organisation follows a proper system which involves all employees.

1.7 Benefits of Knowledge Management (KM)

Knowledge management supports organizations in maximising profits, increasing sales through customer satisfaction, reducing the gap between customer expectations and service delivery. KM plays a crucial role in investment or entrepreneurship as it helps to identify the return on investment (Civi 2000).

Knowledge management facilitate the capability of the organisation to convert ideas into practice through implementation. When ideas are formulated there is a need for the concept knowledge management in analysing the possibilities of the positive outcomes. Product development in telecommunication industry requires knowledge management to embrace the latest technological advancement in producing the best products for the market. Market share and market growth can be achieved through knowledge management application in business. KM involves the element of planning and organising the human resources and equipment (Nonaka, 1991).

Davenport and Prusak (1998) highlighted that knowledge management helps to develop business models which gives a competitive advantage over the competitors. Knowledge management facilitates selection of the best decision in expansion of the business either nationally or regionally. Knowledge management involves a certain degree of innovation as a way of developing new business dimension in designing the structure of the organisation. Innovation requires a proper organisational structure in order to monitor the progress and evaluation of the outcomes.

Organisational commitment can be enhanced when employees are equipped with knowledge for executing the tasks. On the job training is another way which boosts the employees' morale at work. Employees will be able to utilise resources at their disposal for making decision and effectively implement mechanisms that produce best results. Employees should have the knowledge and information about market size and the position of the company in the market. This will help employees to develop innovative ideas of competing with other companies.

1.8 The Future of Knowledge Management

There is a noticeable implementation and use of knowledge management since 1990. A total of 80% of the biggest global establishments have applied KM projects. Moreover, knowledge management plays a significant role in shaping and defining the viability of business as every business experience external and internal forces that requires knowledge to solve them. (Becerra-Fernandez et al, 2004) state that knowledge management incorporates the element of human judgement and decision in solving problem.

The integration of technology and human will enhance fully utilization of imparted knowledge across diverse domains and as a result improve team performance. Organisations are guided by visions and mission for the determination of the viability of the business. Knowledge management cannot be separated from the information system as the world is moving towards an era of using technology in everything either marketing or accounting as well as teaching.

The future of the knowledge management is going to be influenced by the technological changes. For organization to achieve this there should be a determination of leakages of the business models (Turner & Minonne, 2010). Knowledge management should have policies and guidelines which are very clear to all stakeholders involved.

1.9 Knowledge Management Capability

1.9.1 Capabilities

"Capability management" is an element of considering the ability of the organisations resources in achieving goals. The employees should have the required knowledge that helps them to be creative by implementing strategies of achieving the objectives. Personal skills are crucial in capacity management development (Gold et al, 2001)

Capability of applying the acquired knowledge in product differentiation, provision of services and manufacturing requires proper knowledge in executing the task. Knowledge should be acquired first before implementation as the capability measured by produced results. (Gold et al, 2001; Gray, 2001). Companies are required to provide organisational structure that encourages every employee to participate. It is very essential to consider the previous knowledge and the new knowledge.

1.9.2 Types of Business Capability

The viability and expansion of every business is determined by its capability to adapt to internal and external forces which requires flexibility for innovation. (Leonard, 1995) identified that there are three types of business capability that are related to the business performance:

- 1) Core Capabilities is the ability of a business to create core skills and experience which cannot be imitated by competitors and it gives a competitive advantage to the organisation. Employees acquired important skills over time which are very useful for developing products and services.
- 2) Supplemental Capabilities can give support to the core values for capability improvement of employees. Supplemental capabilities add value to the main capabilities of any organisation. For instance, if the core capability is of developing new software by tapping into technological application systems, supplemental capabilities can be the system of developing software for producing different outcomes.

3) Enabling Capabilities are that capability which does not gives a business the ability to distinguish itself from competitors. They are skills of producing a product or providing a service by using common principles which are more similar from the competitors. There is nothing unique in enabling capabilities, for instance any telecommunication company can master some skills of producing mobile phones. What makes a company different is the ability to manufacture mobile phone which gives peculiar applications like Samsung and Apple.

A business capability consists of processes, control measures that are necessary to carry out business strategies. Capability Management it involves the level of business flexibility to adapt to environmental, technological and economic changes which affect the normal business operation.

Capability management is a very effective management approach which takes into account the customers perspectives of the value proposition for the organisational objectives. Capability management have a notion to utilising available resources for the improvement of the business operations without affecting the investment system in other business discipline.

1.9.3 Organizational Learning (OL)

Business learning is a very essential process to enhance team performance. Learning is a process of acquiring knowledge and knowledge is the content of information that one has. For the success of a business learning and knowledge must be the essential elements in knowledge management. Knowledge management is a mechanism of managing the acquired knowledge or content for customer satisfaction.

The mandate of every business is to achieve goals by utilising human resources, employees encouraged to learn more about the related business operations (King et al, 2008).

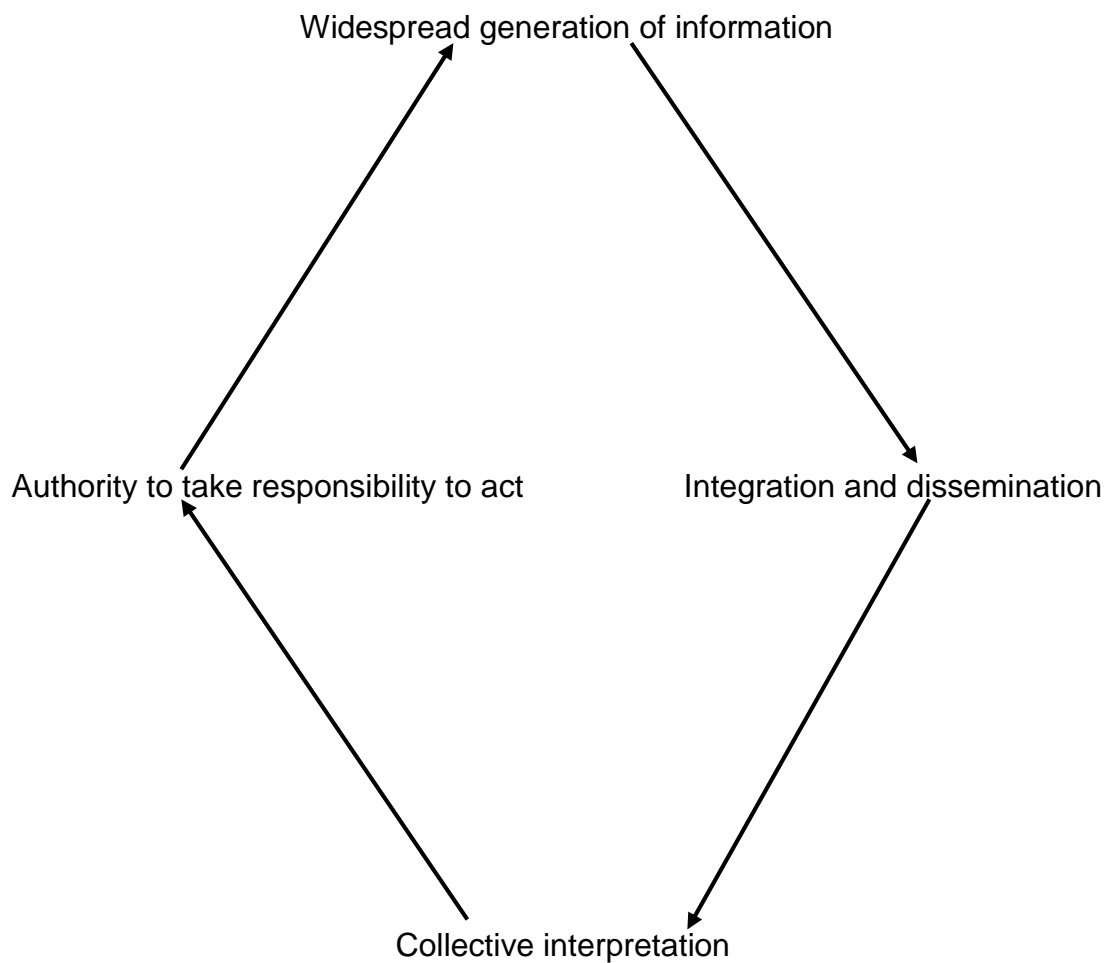


Figure 1.3: The Organisational Learning Cycle

Source: (Senge, 1999).

The cycle shows a continual develop their collective knowledge throughout the organisation rather than passively receiving and implementing someone else's information (Senge, 1999). In business a system of hiring experts and accumulating skills and capabilities will not bring positive results naturally. Senge, (1999) highlighted that organisations suffers from conflicts of interest of employees and also duplication of effort because of lack of cohesion of knowledge in the cycle. There is a need of creating large scale cycle for sharing and developing knowledge.

1. Wide-spread generation of information

Wide-spread generation of information is a stage whereby organisation specialising in gathering and creating information through research and analysing findings for decision are making. It also the mandate of every member in the organisation to acquire and generating information for the improvement of their performance as a team (Senge, 1999). Infrastructure for moving forward- Information system plays an important role for collecting information to integrate and disseminating it as knowledge for business operation. Electronic communication facilitates the spreading of information to the right people at the right time and it acts as a tool for communication.

2. Integration and dissemination: Reframing information in context

Information of individuals cannot be performed in isolation but it needs the participation of everyone in the system. Each employee should understand the nature of the work and other duties which are related. Sharing information requires people who understand and be able to integrate.

3. Collective interpretation: Meetings of many minds

Experience is very essential and makes sense of life among the employees who acquired knowledge through experiments, sharing information with customers, interacting with suppliers and learning form individual mistakes and success. People have different perspectives in the business cycles and conflicts are inevitable but it takes an individual approach of learning every difference in order to reach consensus over any business issue. Comparison of the differences in the subject under discussion gives a different perspectives and new information that enhances sense making process for business (Senge, 1999).

4. Authority to take responsible action: designing experiments.

Leaning boost employee's confidence at work as they will be aware of them and take responsibility. Organisations cannot learn from individuals and groups act only on their conclusion. Every member was expected to act responsibly and be flexible to accept other tasks.

1.9.4 Capability Value Contribution.

It is necessary to assess figure out the contributed value of every business capability by analysing the financial reports and customers' feedback. (Jack, 2009).

Figure 1.4 below shows the relationship of different aspects in business operations that affect achievement of goals. Some capabilities have the impact of affecting the financial position of the company. Capability has a direct effect to the market aspect, business models, operation management and financial management.

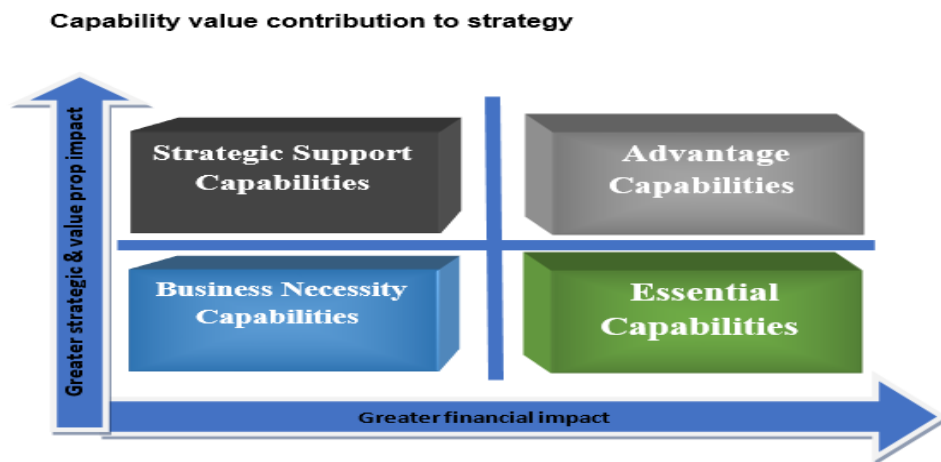


Figure 1.4: The Cost Take Out Challenge.

Source: (Jack, 2009)

The diagram above shows for sections which can be used to measure the impact of capability by analysing the financial impact against greater strategic and value proposition impact.

Strategic Support Capabilities, businesses put in place some strategies which support business operations. These supports have an effect to the financial position and the value added to the results obtained. Support capabilities include a system of drafting a contingency plan in case of uncertain circumstances which hinders business operation.

Business necessity capabilities, management should come up with strategies which enhance value addition without affecting generating of income of businesses. The word “necessity” in this sense applies to the application of essential strategies for market growth and rejuvenation of decline business

Advantage capabilities, organisation analysis the things which promises to hinder development. Management uses strategies of solving the issue before it appears. It gives a business an advantage over competitors. When there is an advantage capability, the finances increase.

Essential capabilities, these are very important capabilities which determines the viability of the business. These are more similar to the core capabilities. The income increases by embracing long term strategies of using “essential capabilities” from the available workforce. (Jack, 2009).

1.9.5 Knowledge Management Capability

KM capability is very important in the knowledge management application as it concentrate on sharing, transferring, managing, facilitating, and acquire knowledge for the better performance of organisation. Organisation must have the capacity of utilising the acquired knowledge through proper management of the information. The ability of the organisation to apply knowledge management functions element makes a difference from the competitors.

The element of including the knowledge management-based resources incorporates the involvement of all business resources capacity to meet organisational objectives. Capability is also any important concept that organisations gain from knowledge management processes (Gray, 2001).It is very important to identify the knowledge management capabilities dimensions which are known as the knowledge management enablers and knowledge management processes. The implementation of knowledge management capability is facilitated by the availability of the business enablers. All the processes of knowledge management are determined by the availability of certain conditions like resources, (Corsoa et al, 2006).

1.9.6 KM Infrastructure and KM Process Capabilities

Knowledge management infrastructure can be defined by the involvement of both external and internal factors. The global business environment has an effect to the implementation of knowledge management locally and internationally. Internal factors which affect the knowledge management capability implementation are as follows, organisational structure, organisational culture, availability of latest equipment and availability of human resources. External factors which hinder the application of knowledge management capabilities are as follows: economic situation, environmental issues, technological advancement and political instability.

Knowledge management processes capabilities can be defined by considering the internal activities of businesses like acquisition of both data and equipment, application of the acquired data to the business, protection of knowledge systems and business trademarks. There should be a combination of both knowledge management infrastructure and knowledge management processes. Some authors highlighted the relation of inter integration of these two elements in order to come up with some theories of knowledge integration. The perspective of the aspect of knowledge integration and combination contributed to the concept of the knowledge integration (Hicking botham, 2004).

An analysis of knowledge management capability and knowledge transfer was done by Smith, 2006 in order to evaluate the effectiveness of incorporating capability to the transfer process. The results show that a business with an effective knowledge management capability has the potential to transfer information within the organisation.

Moreover, Liu and Khalifa (2003), focused on the dimension of Knowledge management infrastructure capabilities by including other variables. On knowledge management capability the issue of leadership has to be considered in order to achieve the organisational objectives. Knowledge management strategies have an effect to the knowledge management capabilities. The organisation should have some strategies which motivate employees to show their ability to execute their duties effectively.

Liu and Khalifa (2003) included the issue of technology on knowledge management capability. Employees must have knowledge about the changes in technology to enhance knowledge management capability. Everything is now evolved in technology especially products and services. In conclusion the author highlighted that there is a link between these dimensions of knowledge management capability and a business cannot achieve its goal is attention is not given. Information technology plays a pivotal role in knowledge management effectiveness and achieving competitive advantage.

Lee and Choi (2003) drafted significant models which simplify the knowledge management enablers by explaining the organisational structure, information technology, organisational culture and human resources (people). The aspect of knowledge creation and process as well as the organisational creativity are incorporated in the model for team performance. Knowledge management capability involves the technical know-how of using personal creativity as an enabler for achieving organisation goal. The social perspective in business knowledge management enablers indicates how employees use interpersonal skills in sharing and creation and transferring ideas as a knowledge management process.

Organizational culture in knowledge management capability is very important as it affects team work and performance through resistance to change. It takes time for the leadership or management to trust employees especially when something new is introduced in the business model. Collaboration and learning of employees has also a direct effect to the knowledge management capability.

Some researches are being carried out on knowledge management capability by incorporating other elements of business operation like knowledge utilisation and knowledge generation. They also highlighted the issues of contextual environment of the concept of knowledge management capability in order to achieve organisational effectiveness.

2. CHAPTER: INNOVATION MANAGEMENT

2.1 Innovation

Models and researches have been done by authors and have different perspective about innovation implementation and obtained outcome. Innovation is defined as a concept which include initiative, creativity and creation of new ideas, new systems of operation for the purpose of differentiating outcomes or results (Rasoulinezhad, 2011).

There is a need for equipping the employees in knowledge innovation in order to achieve success in a competitive environment. It is not a guarantee of success when a company adopted innovation system but the positive results can be achieved in the long run. The difference in the approach to the concept of innovation depends on the field of study such as in organization theory, technology, economics and sociology.

Innovation can be defined in terms of the macroeconomic view and microeconomic view. Macroeconomic view objectivity looks at establishing of new work systems and Microeconomic view which is subjectivity, when a new business operation system is adopted and applied to the business regardless of its existence in other business models, (Walecka-jankowska, 2011).

The notion of implementation of innovation as a practical concept rather than theoretical information. Kaya and Sagsan (2016) agreed that there is a direct relationship between the speed of adoption of innovation and seniority of employees. Innovation is creating value through more effective processes, products, or pricing to create a competitive advantage for an organization (Hinter huber & Liozu, 2014). (Alegre and Chiva, 2013) defined innovation performance as in three different dimensions involving product and process effectiveness and innovation efficiency. Moreover, (Crespi and Zuniga, 2012) found through a study of the relationship between innovation and productivity that knowledge was important in innovation with strong associations between innovation and productivity.

Innovation is creating value through more effective processes, products, or pricing to create a competitive advantage for an organization (Hinterhuber & Liozu, 2014). (Lopez- Nicolas and Merono-cerdan, 2011) studied the codification and personalization of how an organizational knowledge management strategy enhances innovation. (Alegre and Chiva, 2013) defined innovation performance as in three different dimensions involving product and process effectiveness and innovation efficiency.

Moreover, (Crespi and Zuniga, 2012) found through a study of the connection between innovation and productivity that knowledge was important in innovation with strong associations between innovation and productivity. Moreover, for organization to attain or maintain successful performance, the use of dynamic capabilities ties to knowledge creation and the practices within the organization (Alegre et al, 2013). Innovation culture- barriers to knowledge management can be individual or organizational.

Hong et al (2011) Barriers to innovation consists of internal and external factors namely distance in their study of knowledge sharing barriers, trust, encourage, language, conflict avoidance, bureaucracy and gap in attentiveness and knowledge within the organization practice. Corporate culture and trust have a direct impact to the implementation and development of innovation strategies to achieve team performance.

Furthermore, organizational learning is very vital for equipping employees through human resources practice of developing human capital, as positively promoting organizational innovation. Every organization which possess a strong innovation processes have a potential to increase a sustainable competitive advantage. An innovative organizational culture supports critical thinking throughout an organization (Musa & Ismail, 2011).

Damanpour and Aravind (2012) explored managerial innovations noting business and practitioner-based innovation was gaining popularity over research and development while facilitating organizational culture changes and reinforcing the need for performance sustainment through continuous innovation.

It was determined managerial and technological innovation definitely affects firm performance (Walker et al, 2015). With the positive relationship between innovation and organisational performance, an organizational culture with strong leadership can support continued success. Knowledge management and innovative culture are critical to support business strategy. (Donate and Guada millas, 2011) hypothesized that the greater of a knowledge-centred culture, cause increase of the influence of knowledge to the fully utilisation of the innovation practices. In addition, leadership should empower employee to share knowledge and innovative practices as part of the organizational culture.

2.1.1 Determinants of Innovation

Knowledge management can be measured according the level of the adoption of innovation practices. Knowledge management is the major determinant of innovation adoption in business models. An organisation which pays attention to the development of knowledge management systems and applications has the highest level of being innovative. There are some other factors which affect innovation adoption but they can be controlled by the acquired knowledge. In this study knowledge management, innovation adoption and team performance are the variable which helps to achieve goals and objectives of an organization. Organizational structure, organizational culture and capability strategies determine the level of adaption to innovation of an organization.

2.1.2 Innovation Adoption

Adoption is processes which have a starting point and the final stage. Adoption starts when needs is identified and employ ways of solving the problem or need, classify the possible outcomes and decide to implement the process (Damanpour& Schneider, 2006).

(Greenhalgh et al, 2004) categorised the adoption process:

1. Pre-adoption this is the first stage of identifying the need and being attentive to the innovation process.

2. Peri-adoption before implementation it is very important to find out information about the innovation process.
3. Established adoption this is the action stage of making a decision of adopt the best procedure of solving the issues.

Frambach and Schillewaert (2002) discussed two stages associated with adoption:

1. Organization' and staff decision to continue with the idea of adoption. Adoption system in organisation requires the participation of everyone in order achieve the best results of innovation.
2. Individual acceptance of innovation it is very significant to find out that everyone who is involved in implementation is ready.

Yeloglu and Sagsan (2009) depicts that, if the innovation has a positive meaning to the adopters, the adopters adopt that innovation until the innovation keeps it valid. Besides, the rate of the diffusion of an innovation is highly correlated with adoption processes. Generally, the characteristics of the individuals, organizations and states can have effects on adoption patterns. Diffusion is well-defined as the adoption process of an innovation that is transferred over the communication channels within a social system (Rogers, 1995). If the results of the adoption of the innovation are positive, the other adopters will keep the duration of the adoption shorter. If the complexity level of the innovation is high, the degree of difficulty of using and perception of that innovation will be higher.

This can extend the duration of the adoption and the rate of the diffusion will be slower. Another variable can be defined as the communication channels because they are major variable for diffusion (Yeloglu and Sagsan,2009) Among various diffusion models, the Bass model is recognized as the most widely used as it incorporates both innovative and imitative effects, which means there are some innovators and imitators.

What differentiates imitator and innovators is the rate at which innovation takes place. Finally, the following elements determine the degree of innovation which can be measured by time taken to complete the implementation and the rate of implementation.

Potential adopters are facing problems of judging and evaluation the possible outcome of the implementation because of other organisational factors like organisational culture, values and norms.

Greenhalgh et al (2004), Oldenburg and Glanz (2008) Perceived attributes of an innovation include:

- **Absolute advantage:** when implementation of the innovation process is better than the notion it surpasses. When the advantage to implementing the innovation is high, there are some chances to adopt the innovation process.
- **Compatibility:** The when the innovation process is almost similar to the existing values and needs, there is some chances to be adopted but when the innovation is not in relation to the past experience or values, there innovation is not like to be implemented or adopted.
- **Complexity:** The innovation should be very simple and not complicated to implement, complex innovations are not easy to adopt and the chances of implementing complex innovation are next to zero.
- **Observability:** When the results of innovation are easily noticed the innovation is likely to be adopted. If the innovation is not that easily observed or noticeable the chances of adoption are next to none.
- **Trial-ability:** when there is an opportunity to try to implement the innovation or to see others implementing the innovation and observe the results. If the results are favourable the innovation process will be adopted.

There is a need to identify the factors that appear during implementation process or what may hinder the success of the innovation implementation in order to draft a contingency plan of solving the issues as they surface.

There are some theories which explain better the problems and effect that disturbs the application of the innovation process to a certain situation over a certain period of time. There is some complexity in the implementation of the innovation and they came up with a map which shows the complex interventions of innovation these are:

- a) The concept of interacting construct that helps to achieve the adoption process by taking into account the control measure during experiments.
- b) Simplicity of the adoption process to the who are receiving and delivering the process will tackle the issue of complexity in intervention
- c) The targeted group or organisation level of intervention acceptance in the adoption level,
- d) The results of the implementation process should be validity and reliability to produce unchangeable outcome,
- e) The intervention flexibility of innovation to be used in different scenarios and produce good,
- f) The level of contextual intervention that enhances innovation implementation.

2.1.3 Rogers Five Innovation Adoption Stages

Rogers identified that there are many stages of innovation adoption by looking at the personality traits of how people accept new innovation system. The acceptance of a change in innovation adoption applies to both employees and customers. Employees accepted new innovation systems for product development and customers have the capacity to accept or reject the products as soon as it enters the market (Rogers, 1962)

1. Innovators employees have different adoption skills for production improvement. Some employees have good skills of accepting same changes because they are risk takers. Employees who are innovators are willing to take risks. The company should also consider the end users of the product which are the customers. Technological advancement plays an important role in innovation adoption.

2. Early adopters this is the second group of people who have the highest degree of accepting some changes in the business operation (Rogers, 1962). Young employees who graduated from universities have the highest adoption level because of the learning curve that transpired in the education cycle.
3. Early Majority these are innovators who take time to consider the innovation adoption concept in the production. They start by making some analysis of the consequences of taking the risk because of the uncertainty of the outcomes. According to Rogers 1962, early majority are individuals who tend to take their time in adoption process and rarely hold positions of opinion leadership.
4. Late Majority- These are employees who adopt innovation after most of other employees accepted the innovation. This is a group of people with a very high scepticism and after the majority of the employees has adopted the innovation. These are also known as the employees with very little opinion leadership according to Rogers (1962).
5. Laggards is the last stage of innovation adoption according to Rogers (1965), these are the people who are known by resisting to change. Innovation adoption has the aspect of incorporating some changes in the business cycle. Rogers 1962 reiterates that laggards are individuals who show little to no opinion leadership. Most of the older employees are laggards because they have an aversion to change -agents. Laggards they get involved in the production after they see how the product works and the viability of it in the market.

2.1.4 Innovation Fit with Users' Norms and Values

The issue of implementation of innovation affect the organisational goals and values. There is a need to analyse the issues evolved in adopting the innovation process at the pre-adoption level. During the adoption level an evaluation should be done of the effects of the adoption in order to continue or stop the innovation process if it is necessary to do so (Graham & Logan, 2004).

The following factors should be considered in adopting a certain innovation system, the value of the organisation, the people or employees who are supposed to implement the innovation, the customers who are likely to be affected by the implementation, the culture of the organisation as well as the knowledge and ability to implement.

Managerial structure and the leadership style used to manage the organisation has a significant impact the adoption of innovation. There is a need to analyse the effects of the managerial style at the pre-adoption stage. Management have the power to influence employee through boosting their morale at work, accepting new tasks and motivating them achieve organisational goals and well as putting on mechanisms of rewarding employee performance.

2.1.5 Synthesis of Staff or Individual Characteristics

Attitude of both the management and employees have a direct impact to any change or acceptance of new things in an organisation. An attitude which embraces the elements of accepting changes is flexible to achieve an innovation system. Innovation involves an element of accepting some changes during the implementation process. Adoption can be pursued by those who accept changes and takes changes as a strategy for personal growth.

A consistent monitoring of the adoption process and giving feedback about the progress of the innovation helps organisation to prepare for the uncertain risks which might appear during the implementation stage. There should be a social network connection of those who are involved in adoption of the innovation for the purpose of sharing ideas during implementation.

2.1.6 Client Characteristics, Readiness for Change and Capacity to Adopt

Many organisations use adoptions as a way of improving the products on offer or providing a variety of products to the potential clients. The organisation and the customers can influence the adoption system at the pre-adoption stage.

Taking in account their views or involvement and contribution towards the innovation process give them that sense of belonging and they feel part of the change rather than waiting for a change to happen and try to fit in or accept (Backer et al,1986). The organisation should do a research or a pilot study at the pre-adoption stage in order to gather information about the flexibility of the clients to the changes as well as collecting their view concerning the matter.

Customers must be satisfied with the changes in goods and services to avoid issues which are related to resistance to change. The customers should also give evidence that they are ready to accept in changes. The employees also should be equipped with proper benefits of adopting innovation as a strategy of achieving competitive advantage. Employees tend to resist change if it's not communicated to them at the pre-adoption stage.

Employees should also indicate or give a sign of willing to embrace adoption as a strategy for individual and organisational growth. Many employees need to be associated with organisation which gives them challenges and satisfied at the end after achieving positive results (Feldstein & Glasgow,2008); (Becerra-Fernandez et al,2004) argue that knowledge management can influence on overall team performance directly or indirectly.

The organisation should include the aspect of innovation adoption or knowledge management in its vision or mission statements. This helps the organisation to instil that sense of readiness to change as it is already known by all the employees. The innovation adoption process should be clear and easy to understand to all employees do the execution of work will not be a burden to employees. (Becerra-Fernandez et al, 2004).

Sawhney et al (2006) indicates that factor like offering, platform, solution, customer, experience, brand and presence significantly influence overall company performance. Innovation is also known as an element that motivate introduction of new products, new technical system, new planning of adoption, experiments, embracing new technology and restructuring the organisation to suit the purpose of implementation.

2.2 Team Performance

Team performance is very significance in the process of understanding the position of the company as far as competitive advantage is concerned. Organisational team performance can be measured through analysing the level at which the business is operating in terms of revenue generating, market growth and market share. Customer satisfaction level is very essential element in measuring the team performance of the organisation. Knowledge management programs should be more related to the ways of improving the team performance of the organisation through provision of learning programs that are useful to any changes like innovation adoption (Holsapple & Jones, 2005).

Corporate performance indicates a clear picture of the position of the business operations by evaluating different performance indicators like market growth, market share, financial position, quality of products and services (Choi et al., 2008). Firm performance is an organization's ability to increase market share, operate efficiently, and improve services, products, or sales, innovative practices, and overall profit shares (Damanpour & Aravind, 2012).

The above elements show the viability of business and the results can be measurable for an organization to indicate the true picture of the firm performance from the available human capital. Tacit knowledge held by employees is the firm's human capital of knowledge management (Cohen & Olsen, 2015). Findings indicated organizational trust and knowledge management initiatives supported superior firm performance.

2.2.1 Team Performance Management Systems

This aspect is so essential in an organisational and its ability to yield effective results depends on the following aspects;

- 1) Team performance management system takes advantage of the technological advancement in developing and improving products and services to their customers and reduces production cost and wastages.
- 2) Business process are very significant to the organisational performance a skill of prioritise the important issues like customers satisfaction and improve the provision of products and services should be considered first.
- 3) A comparison of the organisation performance can be drawn through analysing the performance of another organisation by using the same tool which is “team performance” as a benchmark.
- 4) A team performance management system enhances the consideration of both long term and short term strategic plans for achieving the organisational goals. Organisations have strategic systems which should be always gives direction to the employees for planning the best way of using the strategies for achieving organisational goals.

2.2.2 Knowledge and Performance

Knowledge and Performance loop shows the relationship between knowledge and performance as far as business is concerned. The loop is showing a continuous movement of information by using two processes namely: application and learning.

Figure 2.1 shows that when employees are equipped with knowledge they apply the knowledge in the day to day business and at the end their performance can be measured. When knowledge is increasing there is likely to have a positive impact to the team performance.

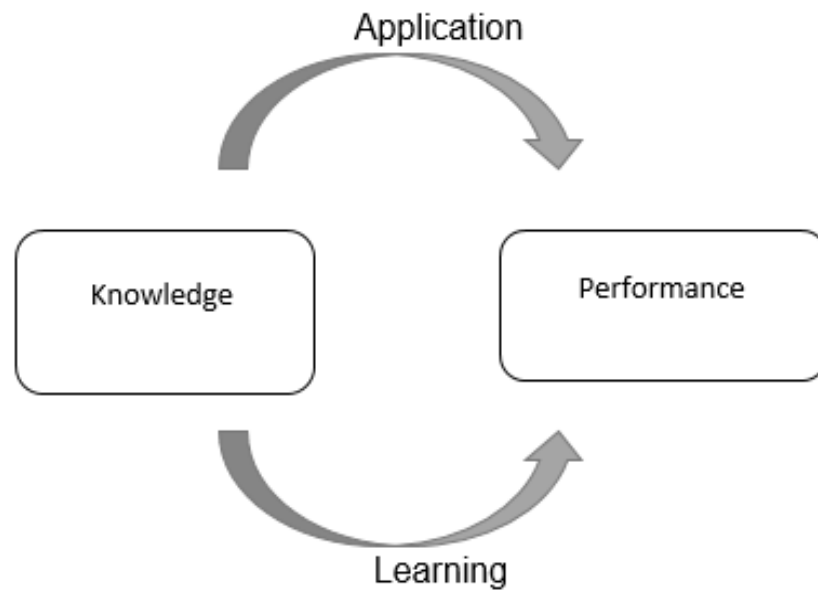


Figure 2.1: The Knowledge Performance Cycle.

Source: (Knoco, 2008).

The knowledge/performance loop; is indicating the effect of knowledge to the performance through learning. Learning is a continuous process as the employees learn best way of solving issues that will affect the team performance in a positive way. When the employees are not learning anything, it will affect their performance in a negative way. Anything which affect knowledge has an impact to the performance either negative or positive (Knoco, 2008).

2.2.3 Performance management

Figure 2.2 below shows the relationship between four variables namely; targets, knowledge management and learning, metrics and benchmarks and performance management. All these variables have a significant impact to the performance of the organisation.

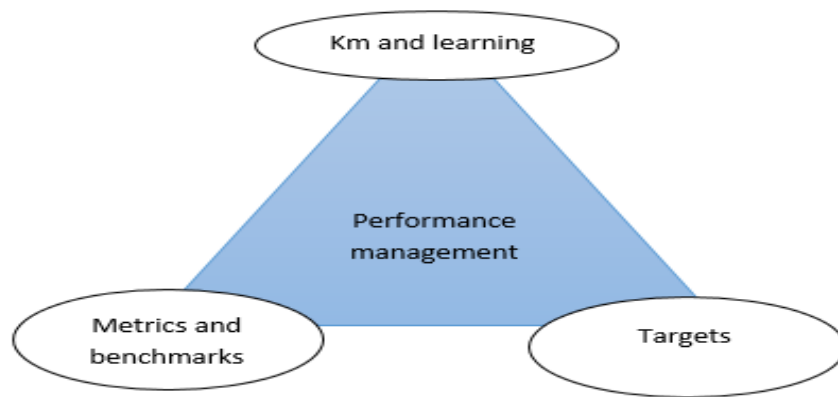


Figure 2.2: Performance Management

Source: (Knoco, 2008, p.26).

Measurement and benchmarking are ways of showing the performance of the organisation through contributions of individuals. In organisation there are people who are good performers and some and weak performers. Sometimes it's very difficult to strike a balance between these two kinds of people. The weaker performers might have a strong impact to the strong performer then as a result the performance will be affected adversely. When the strong performer motivates the weaker performer, there will be a positive or increase in productivity. These two kinds of people might have been drawing their inspiration from the same source but their results differ (Knoco, 2008).

Target setting is the key element for business development. Every organization set target in order to measure performance and to ensure viability of business. Target setting is the best measure of team performance, when the employees achieve their target for instance sales or revenues within a certain period. Setting targets helps managers to achieve a competitive advantage by working towards the goal through acquiring the right resources. Targets should be realistic and achievable so that employees will feel motivated by achieving the set goals. Ways of achieving the target should be clear to those who are involved in implementation of the process. (Knoco, 2008; Nonaka, 2000).

Knowledge management and learning these are also important components of team performance of an organisation. Employees apply what they learnt from school, from peers, from the communities and also from their mentors or internet. Anything which is related to the organisation can be applied in order to achieve the organisational goals. Knowledge management is very essential in team performance employees are encouraged to share, create and transfer information to their peers during work. Management of impacted knowledge is very vital to avoid selfishness and ignorance at work.

2.2.4 Performance Management in Operations

Performance of employees are measured by three elements the target, benchmark and knowledge management and learning. Organisation is able to embrace these three variables to achieve team performance. Team performance will also lead to competitive advantage if the organisation is performing well as compared to competitors. Production level in industry is the best indicator of team performance, for instance if an organisation has a target of 30000 units per month. Managers will continuously check the progress by recording the units per days. The rate at which the employees are working is low, management use knowledge management and learning to find out the problem of low production. Performance management involved the engagement of everyone in the organisation especially the managers and the human resources. The layout of the equipment should enable the flow of operation to avoid bottlenecks in the process of achieving the goals.

2.2.5 Management Framework for Continuous Improvement

A management framework is an area which needs critical analysis because it is the core centre of business improvement. Employees should be aware of what is expected from them as a group or individual performance. Some organisation uses the rewarding system which is in relation to employee performance according to individual targets. Some employees are motivated by earning commission especially the sales representatives in the marketing department. Target setting instils the sense of responsibility and accountability to employees for the mandate of achieving the goals.

Some organisation reward and recognise employees who are good at sharing information to other employees. When the employee meets their target as a group those who have spearhead success will receive their rewards. All these are mechanisms of encouraging employees to work together and achieve the organisational (Knoco, 2008).

Government plays a pivotal role in success of many companies especially when the policies and rules are in favour of business operation for the improvement of the quality of life of the local people. Those organisations which embark in cooperate social responsibility acquired the basic principle of ploughing back to the community. A healthy community will produce quality educated employees. It also gives a competitive advantage to the organisation as some companies are using the strategy as a marketing tool in order to create awareness and brand image (Nonaka, 2000). Many governments in the world put strict measure on the usage of internet and it hinders development of business social groups. Knowledge transfer and sharing uses the same platform for achieving the goals of the organisations (Knoco, 2008).

2.2.6 Factors Affecting Team Performance

- a) The workforce should be engaged in decision making and strategizing the best way to achieving organisational goals. Lack of continuous updating employees about the progress of the business affect the employee's morale. Putting in place good performance management system which instil a sense of competition in employees helps organisation to meet targets (Knoco, 2008).
- b) Organizational change is another factor which is not handled by management properly. Due to the changes in the business models many organisations have some techniques of employing the best strategies to change their business structure and culture without affecting productivity (Nonaka, 2000).

- c) Risk avoidance mechanisms must be put in place to avoid poor production and performance. Team performance system should draft ways of tackling risks as they appear in the business.

Knowledge management focuses on the knowledge process which are knowledge creation to come out with new ideas of solving business issues, acquisition of the relevant knowledge for business operation, storage is the mechanism of keeping information, transfer and sharing of information within the organisation and utilization of resources for achieving competitive advantage. These processes are very important in business operation processes which involve innovation, individual learning, and collective learning. Above processes will provide a positive outcome only if the corporate culture accommodates knowledge management.

The outcome of knowledge management and innovation is improved product, services, decisions, organizational behaviour and also relationships that enhance team performance. Measuring of knowledge management is very important to enhance organizational performance. Constant monitoring and evaluation of knowledge management to ensure success and allow adjustments were necessary helps organization to realize retain on investment. Knowledge management requires a lot of investments through learning, sharing, transferring, and creation. The level of productivity helps to analyse the implementation of knowledge management.

2.2.7 Measure and Improve Teamwork.

Measurement of teamwork consist of the level of sharing and transferring information form one employee to the other or other or diffusion of ideas among groups of employees. Employees should work as a team through a collective effort of each member in order to achieve goal as well as to improve performance. A measure is also a way of checking progress in business operation. A measure of teamwork can be shown by indicators for example the level of adapting to new systems and the ways of solving problems as a group.

2.2.8 A Measure for Team Performance

Team performance can be measure by the achievement of the employees in meeting targets either long term or short-term targets:

- Long Term Goals these are goals which cannot be attained over a short period of time. Motivation employees to day to day targets is enough to instil that sense of thing that it's possible to achieve long term goals.
- Short Term Goals these are goals which can be measured on a daily basis or weekly even monthly. Employees' team performance can be measured in analysing the organisational sales and revenue statistics or the number of complaints received from customers.

2.2.9 Level of Performance

There are many levels of performance. The three anchors for levels of performance are:

- a) Beginner- Are motivated by achieving goals by applying knowledge to solve the factors of production
- b) Proficient- These are performers who are motivated by achieving long term goals by showing high level of performance.
- c) Master- There are performers who analyse the scenario and provide high performance by applying tactics which they acquired in the long run.

2.2.10 Contextual Information of Performance

This can be established using the following guidelines;

- **Purpose:** developing a sense of purpose in the employees have an important impact to the team performance. Discovering the purpose of joining a company and enjoying work helps employees to improve their performance.
- **People:** some employees work as a team and others specialise on their work. The team performance can be measured on individual basis or on team basis depending on the organisational policy.
- **Scope:** The measuring processes should be an on-going process and a structure should state the period of assessing employees' performance. The assessment process should not take more than 15 minutes and should not less than 10 minutes. Promotion of employees should be done where it is necessary to do so in order to motivate employees.

2.2.11 Methodology (a step-by-step plan for measuring team performance)

It is very essential to know the steps or procedures used to measure performance as a way of identifying achievement and failures. The steps of measuring performance vary from organization to organization depending of the target and period of achievement. The management team should inform the employees the purpose to assessing them and review the last assessment form to check if there is any progress of improvement of the employees. Understand the issues rose in the team performance exercise. It is important to present opportunities if an employee is ready to improve his/ her performance and also rewards associated with improvement. Time for the team performance should be agreed upon before assessment starts. The assessor should also get information about the future plans of the employees if another opportunity is presented to him. The assessor should also know the interpersonal relationship of the employees with other employees. As the external and internal forces prevail knowledge management is an ongoing process of learning and application of current strategies of solving the factors (Saunders 2009).

2.3 Organization Competitive Advantage

Many organizations strive to dominate in the market through increasing market share. It is the mandate of every organisation to have a competitive advantage over competitor in the environment. Knowledge of the employees and the organisation products and services helps companies to achieve a competitive advantage. According to there are some resources which are used by companies to achieve competitive advantage namely: human resources, organisational structure and knowledge management. An author called (Michael Porter, 1985) discovered that many companies are competing in the market and introduced the concept of competitive advantage. Many companies in the world adopted the word competition in the business mission and vision as way of informing competitor that their aims are to have a competitive edge over them.

Davenport and Prusak (2000). It is the mandate of every business to strategies in a way which create a competitive edge over its rivals. Competitive advantage helps organization to increase earnings and profits through generating revenue. According to (Barney and Hesterley, 2006), an organisation can create a competitive edge over its rivalry as long it is able to enjoy economies of scale or generate profit. Profitability is one of the indicators which shows that the company has a competitive advantage. In other words, competitive advantage can be measures in terms of the market share, market growth, profitability and revenue generated, Porter idea of introducing the concept of competition was to inform organisation to be aware and be able to compete and meet their goal despite the competition pressure.

Competitive advantage can be a key indicator in business. There are some elements which can be used by organization to measure its competitive advantage through gathering statistics about market share and market growth. Organizational structure should be designed in a way that encourages knowledge sharing and transfer within departments to achieve competitive advantage. The organization can take advantage of the available resources for innovation to create distinct products to increase market share and competitive advantage.

Every organisation should consider the cost competences. Organisations prefer to buy or merge with suppliers in order to achieve competitive advantage. The cost of raw materials in production is very important because it affect the profitability of the business. If the firm decide to supplier the raw materials and process them as well as opening retail shops will have a competitive advantage through reducing the production cost.

Porter (1985) supported the issue of concentration on the cost competence strategies in order to solve the issue of production cost and enhance competitive edge. Acquiring knowledge about the cost competitive advantage created opportunities of discovering the loopholes of the financial system.

2.3.1 Competitive Advantage Is an Attribute of Team Performance

Assessing the level of the business competitive advantage as an indicator of the good team performance is very significant in the business environment where competition is very stiff. A good team is motivated by achieving a competitive edge over its rivalry. The organization should have a research and development department for continuous researching on ways of achieving goals through enhancing a competitive advantage over its rivals.

Research and development strategy is very important in improving the provision of services and products in the market. Marketing share statistics of the rivalry should be assessed to identify the position of the company as far as competition is concerned. Researching consists of gathering information about the strength, weaknesses, opportunities and threats of the competitors. This process helps the research and development department to discover their weaknesses and threats and concentrate to maintaining their strength and utilise the opportunities at their disposal. Technology advancement is facilitating the methods of research and development in order to produce products which can compete in the market. After an investment it is very important to assess the performance of the organisation by recording the return on investment. Every business will continue to invest through expansion of business and developing of new products.

George et al (2000) suggested three categories on return on investments are as follows:

- a) Retrospective evaluation- analysing the researches which were done in the past and the current situation reaches.
- b) Current evaluation- is mainly concentration on the current or resent status of the business mission and vision statement.
- c) Future evaluation- this consist of the sustainability aspect of the business some years to come and the benefits of continuous operation.

A combination of the three categories helps organisation to discover its future position in the competitive market. Looking and checking the previous research indicate current areas which needs attention. A comparison of the past experience and the current experience motivate employees if there is a positive change of the market share. Considering both the current situation and the future helps companies to revisit their strategies of growth and the sustainable competitive advantage.

2.3.2 Attributes of Performance Organizations

People

- Human resources are perceived as the assets of the business. It is the duty of the management to use the past trends and judgement in selecting and recruiting competitive candidates which achieve competitive advantage.
- Employees trust the management who delegate work to them and any challenge they believe that.

Leadership

- Leadership have the mandate to achieve the organisational goal
- Long term plans were drafted by the management for the employees to achieve.

Research management

- Research and development team is responsible for managing projects.
- Research and development is responsible for managing factors affecting production.

Organizational performance

- The business gained the market share and is well known
- The business operation meets the need of the customers

Management knows how to recruit employees who are competitive and efficiency. It is the role of the human resources manager to select and recruit the right candidates who perform duties exactly according to the standard. Employees should be free to contribute to the performance of the company. It is the right of the employees to:

- ☒ air their views to the management.
- ☒ Understand what is being expected from them.
- ☒ The can contribute in decision making process.
- ☒ To learn more about their duties.
- ☒ Seek help from management when their task is difficult to execute.
- ☒ Receive their rewards according to the promises.

2.3.3 Leveraging for Competitive Advantage

Leveraging external resources encompasses co-operating with other departments like marketing. The organisation employed the right people who understand the nature and the changes of the market and achieving the needs of the market is one their goals. Keeping potential customers customer retention systems is very important. Companies employ expertise who acquired knowledge about the product development and the market.

2.3.4 Organizational Knowledge for Customer's Satisfaction

Organizational knowledge is a concept of acquiring knowledge about the organisational structure, infrastructure, customers' needs and wants and the behaviour of the market. Customer satisfaction is achieved when the company service delivering process meets the customer expectations, or when the gap between service delivery and customers' expectation is reduced. The organisational structure allows sharing of ideas in the organisation and analysing feedback from customers.

2.3.5 Research Model

Based on the ideas given, we can thus formulate a conceptual framework as shown as follows;

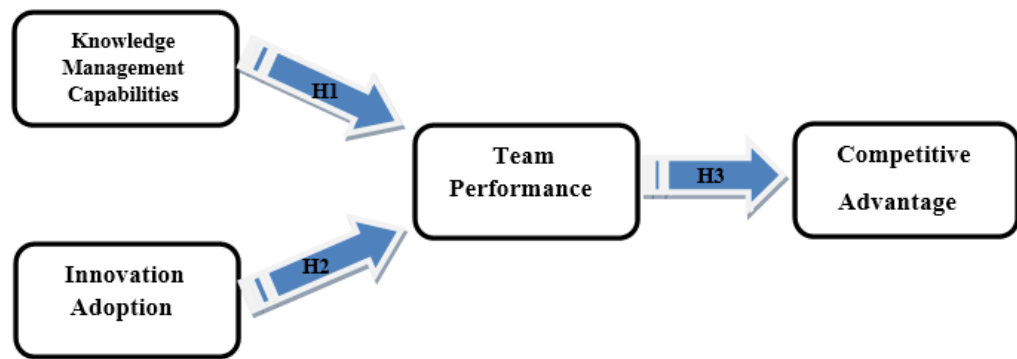


Figure 2.3: Research Model

In line with the above framework, we can thus formulate the following hypotheses;

- **H₁:** Knowledge management capabilities directly affect team performance.
- **H₂:** Innovation adoption directly affect to team performance.
- **H₃:** Team performance has a direct effect to organizational competitive advantage.

From the review of the literature above knowledge management capabilities has direct effect to the performance of the business and it gives a competitive edge in the market. Knowledge management capabilities encompasses capability to create new things for instance to be innovative. The level of adapting to changes can be determined by the capabilities of employees.

In short knowledge management capability enables the business to implement innovative ideas to achieve a competitive edge over its rivals. The employees play a pivotal role in knowledge management capability.

The company must consider the following questions first do we have the correct intellectual capital with capabilities to executive duties. Team performance can be measured by results like market growth, product development, market share and profitability. Knowledge management capabilities take into consideration the external and internal factors that can change the organizational structure like technology, changes in the market, demographic, political and economy. Knowledge management infrastructure determines the level of tolerance to external and internal forces.

Innovation adoption starts with the employees as the major assets of a business to adopt to new things like information technology operation systems which uses computers to track and store data. Innovation needs knowledge of managers, employees, customers for the implementation to be success. Team performance shows the level of adoption of all stakeholders to innovation. Organization competitive advantage will be realized if only the team is flexible enough to adapt to any changes according to literature review.

2.3.6 Conclusions

This chapter highlighted knowledge management and explained the different types of knowledge. Knowledge management helps a company to make sound decision, time management, improve quality of service and achieve competitive advantage. In addition to this, knowledge management can improve organizational processes, increase return on investment, improve operation speed, meet customers' needs and wants as well as enhance satisfaction, improve market share and penetrating in new markets, reduce cost and improve efficiency. Organizations encounter challenges of managing tacit knowledge through encouraging individuals to transfer and share ideas of the best way of executing tasks. What determines the accomplishment of tacit knowledge is the preparedness and capacity of individuals to use information they acquired and share with others. Another challenge that hinders implementation of knowledge management is organizational culture, which facilitates knowledge creation.

3. CHAPTER: RESEARCH METHODOLOGY

3.1 Introduction

This research used a systematic method of gathering data from the respondents. The research method managed to collect information from different individuals. This is quantitative research methods which include the statistical analysis and presentation of data. Quantitative research method employed to meet the research objectives and also to gain a deeper understanding and develop a clearer insight.

The aim of this study is to establish a set of quantitative procedures for assessing and the performance of the knowledge management program. The researcher will collect quantitative knowledge management performance data and uses this to characterize the effectiveness of the knowledge management practices within the organization (Arora, 2002)

Exploratory research provides greater understanding of the concept and provides quantitative data. Moreover, exploratory study due aims to discover and establish better appreciative of how knowledge management can improve the team performance, innovation adoption and the effectiveness of knowledge management capabilities.

Interview and questionnaires with the relevant and accessible respondents in this research is very essential and most fundamental of quantitative research methods... With the following support the research is an empirical research, as it pursues to answer questions, and is mostly grounded on analysing and quantifying of information collected to establish research findings and statistics.

3.2 Research Design

A research onion gives clear processes and procedure which are very useful in formulating various stages of the research process. (Saunders et al, 2009) alluded that a research onion, offers a contextual design for the research process. A research onion shows stages of conducting a research as the outer layer peels back another layer comes and the process continuous to the final stage of obtaining results.

3.3 Research Philosophy

This is epistemology research which concerned with the concept knowledge management and innovation adoptions. This is also a positivism research as it can be approved by natural scientist.

3.4 Research Approach

There are two widely used methods to research study namely inductive and deductive. Deductive is a method that involves the reviewing to literature to analyse hypothesis from the existing empirical researches, (Shepherd & Sutcliffe, 2011). Literature review will be used to test and develop hypothesis whereas induction is a method that involves developing hypothesis from the findings". It incorporates the facilitation of including the emerging data from the research for development of theories.

3.5 Time Horizons

This is a cross-sectional research which was carried out for a short period of time. The researcher was not able to carry out a longitudinal research because of the time frame.

3.6 Population, Sample and Data Collection

Research questions were distributed to the company stakeholders namely managers and employees. Sample size is a unit selected from a sample population. The sample size would be 267 respondents which consist of all employees selected randomly. Probability random sampling technique is suitable for this research. Random sampling will be used in order to give all the respondents equal chance of being selected.

3.6.1 Questionnaire Design

A questionnaire was designed in ways which facilitate measurement of the construct based on the findings and literature review. All four constructs of the research model are considered in the drafting of the questionnaire which is Knowledge management capability, innovation adoption, team performance and competitive advantage. Hair et al (2006) state that the proposed construct should be able to be measured by at least three indicators.

Table 3.1: Knowledge Management Capability

N	Questions: Knowledge Management Capability <i>My organization's members...</i>
1.	Can understand not only their own tasks but also others" tasks
2.	Can make suggestions about others" tasks
3.	Can communicate well not only with their department members but also with other department members
4.	Are specialists in their own field of expertise
5.	Can perform their own task effectively without regard to environmental changes

Source: Lee and Choi (2003).

Knowledge management capability is measured by the above indicators which concentrate on (human resources) employees and management experience and skills of managing a telecommunication (Lee and Choi 2003). The first question is going to discover if employees are multi-skills which determine by collecting information about not only their tasks but also tasks. Communication plays an important role in implementation of knowledge management capability. There should be a link between department in order to share ideas and solving problems. Some employees should specialise in certain areas for the purpose of maintain quality products and services. Every organisation considered an external force which controls the level of operation of telecommunication companies like regulation and rules of using mobile phones.

Table 3.2: Innovation Adoption.

N	Questions: Innovation adoption Organizational structure and culture <i>My organization's....</i>
1.	Structure facilitates the discovery of new knowledge and innovation adoption
2.	Structure facilitates innovation and creation of new knowledge
3.	Managers frequently examine knowledge for errors/ mistakes
4.	Structure facilitates the transfer of new knowledge across structural boundaries My organization
5.	Has a standardized reward system for sharing knowledge
6.	Bases our performance on knowledge creation Organizational Culture My organization
7.	Has a culture of innovation adoption as a system
8.	Employees understand the importance of innovation adoption to corporate success
9.	High levels of participation are expected in capturing and transferring knowledge
10.	On-the-job training and learning are valued
11.	Senior management strongly support the role of knowledge management to business success

Source: Smith (2006).

The questions above measure the level of innovation adoption and the influence of technological advancement in the telecommunication company. The responses should be able to identify the effect of organisational structure and culture which facilitate communication. Questions like discovery of new knowledge, creation of new knowledge, transfer of knowledge, rewarding system of sharing knowledge. These questions highlighted the impact of organisational structure to the implementation of knowledge.

Employees and the management have to consider the organisational culture for ensuring a conducive environment for innovation and knowledge management (Holsapple & Joshi 2001). This section contains questions which indicate that innovation adoption can be regarded as a system in the culture of an organisation.

The level of understanding and participation of employees in innovation and adopting of Asiacell Company should be known. Some aspect of innovation is incorporated during on the job training and learning. The participation of senior management in knowledge management is very essential for Telecommunication Company in order to control and analysis the outcome.

Table 3.3: Team Performance (Acquisition and Application Processes)

N	Acquisition and application process <i>My organization....</i>
1.	Has processes for acquiring knowledge about our customers
2.	Has processes for generating new knowledge from existing knowledge
3.	Has processes for acquiring knowledge about our suppliers
4.	Has processes for distributing knowledge throughout the organization
5.	Has processes for acquiring knowledge about new products/services within our industry
6.	Has processes for transferring organizational knowledge to individuals
7.	Has processes for integrating different sources and types of knowledge
8.	Has processes for organizing (store/file) knowledge
9.	Has processes for using knowledge in development of new products/services
10.	Has processes for using knowledge to solve new problems
11.	Uses knowledge to adjust strategic direction
12.	Is able to locate and apply knowledge to changing competitive conditions
13.	Takes advantage of new knowledge

Sources: Smith (2006).

This section contains some question which shows the level of tem performance through acquisition and application of knowledge and innovation for achieving a competitive advantage. Gold et al (2001) state that knowledge processes can be perceived of as a structured coordination for managing knowledge effectively. Most of the questions are directly involves employee's participation through acquiring knowledge about, customers, suppliers and new product.

The process of generating new knowledge from existing knowledge gives a different perspective of innovation through considering the available resources. The efficiency and effectiveness of employees identified during the process of distributing knowledge within the organisation. Team work and team building through transferring of knowledge to individuals. Many organisations are utilising the information and technology department to organise storage of knowledge that will be useful in solving problems, developing new products, for adjusting strategic directions and changing competitive conditions.

Table 3.4: Competitive Advantage

N	Competitive Advantages (extensively meet customers' needs)
1.	My organization often uses knowledge-based innovation
2.	My organization's market position can create strong barriers to entry for other firms
3.	My organization uses knowledge management to widen the array (line/range) of products without increasing costs
4.	The knowledge management capability in my organization would be difficult and expensive for rivals to duplicate

Source: Chuang (2004).

Competition in organisation cannot be avoided as business system encourages companies to compete with each other for the purpose of gaining customers. A company which maintains a consistency system of using knowledge-based innovation and technology is likely to achieve a competitive edge over its rivalry (Smith 2006). It is important to create and maintain a unique market position which does not allow other companies to enter in the market. Knowledge management in accounting system is very essential for the profitability of a company. A company which offers a wide range of products and maintain the cost of production will enhance a sustainable competitive advantage. Knowledge management capability consists of processes that are not easy to duplicate or they are very expensive to produce some of the outcomes of implementation of knowledge in production.

3.7 Response Rate Analysis

Self-administered questionnaire was distributed to (267) employees of Asia Cell Company between the months of January 2018 to March 2018. Total of returned questionnaires were (229). The response rate was 86 %. Table (3.5) Table 3.5 shows the survey response rate analysis.

Table 3.5: Survey Response Rate

	Numbers	Percent
Self-administered	267	100%
Total returned	229	86%
Total coded samples	229	95%

Table 3.6: Reliability Statistics

N	Variable	Cronbach's Alpha	N of Items
1	Knowledge management capability	0.713	5
2	Innovation adaption	0.847	15
3	Team Performance	0.574	13
4	Competitive advantage	0.641	4
Overall		0.873	37

Reliability is very essential in quantitative research measurement scales. (Phelan and Wren, 2006) states that a measurement scale with a Cronbach's coefficient above (0.70) is accepted. This study shows that the overall Cronbach's Alpha is (0.873) from (37) items and (229) population size. Coefficient alpha is represented by α and the results are ($0.70 \leq \alpha, < 1.00$) (Bryan, 2015). Bryan, (2015) indicates that, if the measurement scale has a coefficient alpha below (0.70) there is need for examine for any source measurement errors such as management errors, sample character, unpredicted factors and hypothetical errors in developing a measurement scale.

4. CHAPTER: RESULTS AND DISCUSSION

4.1 Introduction

This chapter starts by providing the descriptive statistics of the four variables. Regression analysis was used to identify if the hypothesis is supported. In this study the independent variable is knowledge management capability and innovation adoption, mediator variable is team performance and the dependent variable is competitive advantage.

4.2 Data Analysis and Presentation

4.2.1 Descriptive Statistics Analysis

Descriptive statistics such as mean, standard deviation and distribution of data was used to compare and analyse data obtained from respondents. Cronbach's alpha coefficient was performed to examine the trustworthiness of the measurement scale. A presentation and interpretation of the hypothesis test was performed by using regression and Pearson correlation. Sharmila Devi (2018) Statistical Package for Social Science (SPSS) was employed to test statistical information from questionnaire and for checking normality.

Data collected from this research was presented in graphs, tables and pie charts for interpretation and analysis. A 5-point ordinal Likert scale was adopted in this study for rating questions and to measure the level of understanding of respondents towards knowledge management capability and innovation adoption.

4.2.2 Knowledge Management Capability of Employees

Table 4.1: Knowledge Management Capability of Employees

Questions	N	Minimum	Maximum	Mean	Std. Deviation
Understand other tasks	229	1.00	5.00	3.8603	.40571
Make suggestions	229	1.00	5.00	4.4934	.65975
Can communicate well	229	1.00	5.00	4.3100	.63172
They are specialist	229	1.00	5.00	4.4891	.63943
Can perform their own task	229	1.00	5.00	4.3450	.66803

Table (4.1) above shows the mean and the standard deviation of responses of employees towards knowledge management capability. The effect of environmental changes to the employee's performance has ($M=4.34$, $S= 0.67$) followed by most employees are specialist in their field of expertise ($M= 4.4$, $SD= 0.64$). Organizational members are multi-skilled people who tackles any job without hesitation ($M= 3.86$; $S= 0.41$).

4.2.3 AsiaCell Company innovation adoption and Information technology in telecommunication.

Table 4.2: Asiaceell Company Uses Innovation adoption and Information Technology

Questions	N	Minimum	Maximum	Mean	Std. Deviation
Employees collaboration	229	1.00	5.00	4.3013	.72004
Learn from a single source	229	1.00	5.00	4.2926	.63314
Learn from multiple source	229	1.00	5.00	4.4279	.62148
To map the location	229	1.00	5.00	4.4017	.63880
Structures facilities the discovery	229	1.00	5.00	4.4716	.61795
Structure facilitates innovation	229	1.00	5.00	4.4323	.63592
Exam in knowledge for errors	229	1.00	5.00	4.4629	.61749
Structure facilitates the transfer	229	1.00	5.00	4.3930	.61640
Standardized reward system	229	1.00	5.00	4.4934	.59692
Bases our performance on knowledge	229	1.00	5.00	4.4236	.63492
Has culture of innovation adoption	229	1.00	5.00	4.4541	.61690
The importance of innovation	229	1.00	5.00	4.4236	.62798
High level of participation	229	1.00	5.00	4.4803	.60394
On the job training	229	1.00	5.00	4.4017	.67225
Senior management support	229	1.00	5.00	4.4192	.62743

A table (4.2) indicates the effectiveness of information technology in telecommunication business through sharing ideas and upgrading the systems. Employees' interpersonal skill of sharing ideas with other employees from other organisations has the highest standard deviation. (M=4.30; S= 0.72). The information technology allows to map location has (M= 4.44; S= 0.62). Information technology allows multiple sources (M= 4.43; S= 0.62). The table above shows how innovation adoption can be supported by organizational structure and culture. On the job training has a highest score (M= 4.40; S= 0.67) followed by organisational structure facilitates new knowledge and innovation adoption (M= 4.43; S= 0.64) and based our performance on knowledge creation (M= 4.42; S= 0.63). The company has a reward system for knowledge sharing (M= 4.49; S= 0.60) and high levels of participation in knowledge management (M= 4.48; S= 0.60).

4.2.4 Team Performance (acquisition and application process) of AsiaCell Company

Table 4.3: Team Performance (acquisition and application process) of AsiaCell Company

Questions	N	Minimum	Maximum	Mean	Std. Deviation
Processes for acquiring knowledge	229	1.00	5.00	4.4410	.67034
Processes for generating new knowledge	229	1.00	5.00	4.4017	.65239
Acquiring knowledge about suppliers	229	1.00	5.00	4.4105	.66693
Processes for distributing knowledge	229	1.00	5.00	4.4017	.58878
Acquiring knowledge about products	229	1.00	5.00	4.4585	.62427
Transferring organizational knowledge	229	1.00	5.00	4.3886	.64349
Processes for integrating sources	229	1.00	5.00	4.4498	.63062
Processes for organizing knowledge	229	1.00	5.00	4.6550	.39746
Knowledge in development	229	1.00	5.00	4.5284	.61081
Knowledge to solve new problems	229	1.00	5.00	4.4454	.61618
Knowledge to adjust strategic direction	229	1.00	5.00	4.4323	.63592
Able to apply knowledge	229	1.00	5.00	4.4454	.54839
Takes advantages of new knowledge	229	1.00	5.00	4.4367	.60817

The organizations have procedures for acquiring knowledge from suppliers (M= 4.41; S= 0.67). Most of employees are able to apply knowledge (M= 4.44; S= 0.55). The company has the methods for acquiring knowledge (M=4.44; S= 0.67). The organization has knowledge to adjust strategic direction (M=4.43; 0.64) and the processes for integrating of sources and knowledge (M= 4.45; S= 0.63).

4.2.5 Competitive advantage

Table 4.4: Competitive Advantages

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge based innovation	229	1.00	5.00	4.4279	.60720
Organization market position	229	1.00	5.00	4.4148	.65424
Knowledge management to widen the array	229	1.00	5.00	4.4367	.60092
Knowledge management capability	229	1.00	5.00	4.4498	.60940

Table (4.4) above depicts the organizational competitive advantage. The organization has knowledge-based innovation (M= 4.42; S= 0.61). The employees agree that the knowledge management capability in the AsiaCell organization is difficult and expensive to duplicate (M= 4.44; S= 0.61). Respondents have confidence that the market position creates barriers to entry (M= 4.41; S= 0.65). Lastly, the employees acknowledged that the organization uses knowledge management for cost effectiveness and product differentiation (M=4.43; S= 0.60).

4.3 Correlation Analysis

Pearson correlation is a technique used for analysing the relationship between variables, in this case the connection of knowledge management capability, innovation adoption, team performance and competitive advantage. Table (4.5) below shows the connection amongst knowledge management capability and team performance has a significant correlation of (0.60). Innovation adoption and team performance has a substantial correlation of (0.65). Lastly, Team performance and competitive advantage have a significant correlation of (0.56).

Table 4.5: Correlation

Variables	Knowledge Management capability	Team Performance	Competitive advantages	Innovation adoption
Knowledge Management capability	1			
Team Performance	P = .598** Sig.= 0.000	1		
Competitive advantages	P = .580** Sig. = 0.000	P= .556** Sig. = 0.000	1	
Innovation adoption	P = .654** Sig. = 0.000	P= .648** Sig. = 0.000	P= .683** Sig. = 0.000	1

****.** Correlation is significant at the 0.00 level (2-tailed).

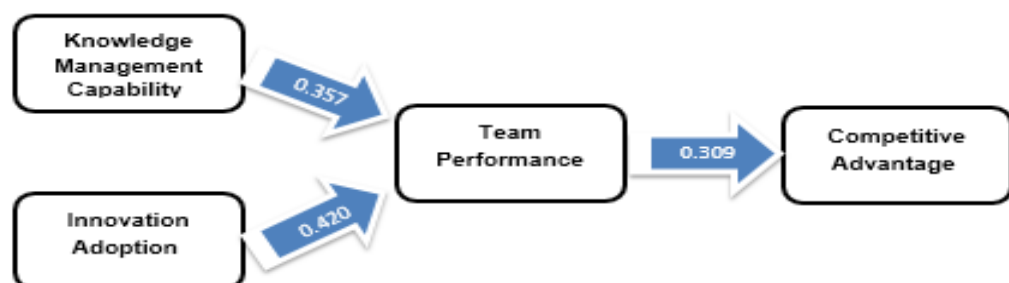


Figure 4.1: Conceptual Model.

4.4 Regression Model

4.4.1 Hypothesis 1: Knowledge management capabilities directly affect team performance.

Table 4.6: Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.598 ^a	.357	.354	.36321
a. Predictors: (Constant), KMC				

Table 4.7: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.630	1	16.630	126.061	.000 ^b
	Residual	29.946	227	.132		
	Total	46.577	228			
a. Dependent Variable: TM						
b. Predictors: (Constant), KMC						

Table 4.8: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.734	.243		7.125	.000
	KMC	.634	.056	.598	11.228	.000
a. Dependent Variable: TM						

The regression of knowledge management capabilities and team performance is indicated by (36%), this model is statistically significant. The significant change between knowledge management capabilities and team management is (0.00). Furthermore, knowledge management capabilities contribute (36%) of the prediction of team performance. Therefore, H1 is supported according to the results

4.4.2 Hypothesis 2: Innovation adoption directly affect to team performance.

Table 4.9: Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 ^a	.420	.417	.34512
a. Predictors: (Constant), Innovation				

Table 4.10: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.540	1	19.540	164.058	.000 ^b
	Residual	27.037	227	.119		
	Total	46.577	228			
a. Dependent Variable: TM						
b. Predictors: (Constant), Innovation						

Table 4.11: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.832	.284		2.932	.004
	Innovation	.820	.064	.648	12.809	.000
a. Dependent Variable: TM						

To test for H2 regression analysis regarding that effect that innovation adoption has on team performance (Chen, 2014). The results are shown in (Table 4.9) above; (42%) explanatory power, this model is statistically significant. It means innovation adoption contributes to (42%) of the prediction of team performance. The significant value is used to determine innovation adoption had an effect to team performance. The significant value is (0.00) which is less than (0.05). Therefore, H2 is supported according to the results.

4.4.3 Hypothesis3: Team performance has a direct effect to Organizational competitive advantage.

Table 4.12: Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.556 ^a	.309	.306	.35726
a. Predictors: (Constant), TM				

Table 4.13: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.979	1	12.979	101.688	.000 ^b
	Residual	28.972	227	.128		
	Total	41.951	228			
a. Dependent Variable: CA						
b. Predictors: (Constant), TM						

Table 4.14: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.081	.234		8.883	.000
	TM	.528	.052	.556	10.084	.000
a. Dependent Variable: CA						

To test for H3 regression analysis regarding the effect of team performance has on competitive advantage. The r square change is (31%), it shows that team performance contributes (31%) of the prediction of competitive advantage. There is a statistical significant value of (0.00) which is less than (0.05). Moreover, correlation between participation of tourism stakeholders and sustainable development was also directly related. In conclusion, H3 is supported.

Table 4.15: Summary of Hypothesis Analysis

Proposed Hypotheses	Descriptive of proposed Hypotheses	Results
H1	Knowledge management capability directly affect team performance	Supported
H2	Innovation adoption directly affect to team performance	Supported
H3	Team performance has a direct effect to competitive advantage	Supported

4.5 Discussion of Results

The results indicate that knowledge management capability is very essential for team performance and competitive advantage. AsiaCell employees are multi skilled they can execute any tasks which is in line with their profession. Most of the employees who provide services to the customers can handle any given task for instance, activating Asiacell line, fixing network problem and selling airtime.

Employees are able to give new ideas of improving services to enhance customer satisfaction. Those employees who work in the manufacturing department they rotate after every month for the purpose of enhancing efficiency and effectiveness of production. The department specialize in manufacturing handset, modem and tablet, it is the organization strategic plan for equipping its employees with necessary knowledge after considering their capability. There is a departmental interconnection between manufacturing and service department.

4.5.1 Innovation Adoption

AsiaCell company structure enables the discovery of new knowledge in developing smart phones and modem for internet connections. The structure of the company facilitates sharing of ideas and initiation of new knowledge. New system of producing and providing services to customers can be enhanced as the structure simplifies transfer of new knowledge.

Managers adopted a system of examine knowledge for avoiding errors and solving mistakes. The management drafted a structure of motivating employees through standardized reward system for sharing knowledge and boost morale of employees.

The performance of employees is based on performance on knowledge creation. The culture of AsiaCell Company encompasses innovation adoption as a system. Management offered refresher courses to employees to learn about innovation adoption for corporate success. Innovation adoption requires high level of participation in capturing and transferring knowledge.

Most of the senior management understand the concept of knowledge management for business attainment. The information technology system of AsiaCell Company provided a system that encourages employees to communicate with other employees through interpersonal skills. The organization adopted innovation in technology which facilitate communication.

In nutshell, innovation adoption is a system which considered the changes in the business model and the implementation of a change is facilitated by the organizational culture. Information technology plays an important part in telecommunication industry as it requires current changes in technology advancement.

4.5.2 Team Performance

Team performance is measured by way of acquisition and application of knowledge for achieving organizational goals. AsiaCell Company as a service provider they have skills of gathering information about their customers' needs. This process includes creating a database of customers and identifying active AsiaCellline. The method of knowing their customers helps the organization to satisfy its customers and enhance competitive advantage.

The organization discovered that it is very effective to generate new knowledge from existing knowledge as it affected by technological advancement for instance the company introduce 4G modem from 3Gmodem for internet connection. 4G modem is very fast and reliable the 3G modem.

The manufacturing departments of AsiaCell Company have a system of acquiring knowledge about suppliers in order to reduce cost of production through buying cheap quality raw materials. The new devices like computers and internet facilities AsiaCell facilitate video conferencing. As the new products and service systems are changing everyday through technological advancement the organization has a process of acquiring knowledge about the trends in the industry to enhance team performance. The performance of employees is measured by customer satisfaction and increase in revenue. For the improvement of the team performance, the organization use knowledge to adjust strategic direction or solving problems, developing new products, organizing knowledge for filing and storage.

4.5.3 Competitive Advantage

AsiaCell Company gained competitive advantage through using knowledge-based innovation. The company managed to gain market position which does not allow new competitors in the market. AsiaCell manages to use knowledge management to reduce the cost of production and provide variety of products. The organization has knowledge management capability which cannot be easily imitated or adopted by competitors. The organization is now enjoying economies of scale through broadening its services than competitors.

5. CHAPTER: CONCLUSIONS, RECOMMENDATIONS.

5.1 Recommendations and Conclusion

The previous chapter presented discussion of the results in relation to literature. This chapter focused on recommendations and conclusions to the study. This chapter outlines implications of the study for future research development.

5.2 Conclusion

This chapter has reviewed three disciplines innovation adoption and knowledge management capability along with the intermediate variable team performance. Three hypotheses were established to discourse three research objectives. An integration theoretical model was drafted to demonstration variation of interrelationship and correlation among construct of the study.

The results are indicating that there is a correlation of variable according to the questionnaire which was used. Although the results are favorable but there is a need for considering other external factors that hinders development in business. The theoretical contribution helps the telecommunication professional of Asiacell, on how to apply innovation adoption and knowledge management capability.

The main components identified as the knowledge management capability, innovation adoption, and team performance contributing to organizational competitive advantage. Knowledge management capability and innovation adoption was enhanced through three dimensions namely culture, people, technology and structure of an organization. Team performance is recognized by two measurements of knowledge namely acquisition and processes.

5.3 Implications of the Research Findings

5.3.1 Implications to Theory and Knowledge

This research attempts to extend literature in knowledge management and innovation by creating several important contributions. The research gives a critical review of the available literature on innovation adoption, knowledge management and competitive advantage. A hypothetical model of knowledge management capability, innovation adoption and competitive advantage was developed. Knowledge management capability consists of organizational structure, culture, people and technology advancement are the most critical dimension. The model stresses the importance of knowledge management capability in association with an organization's competitive advantage. The interrelationships between knowledge management capabilities were also explored for the organizational outcome.

5.3.2 Practical Implications

Professional in the telecommunication company

5.3.2.1 Marketing Department

It is a strategic objective of every business to achieve a competitive advantage through creating a unique market position. An organization takes advantages of acquired knowledge to remain competitive in the market despite environmental changes.

The marketing team is responsible for identifying potential customers and analyzing the position of the competitors. The research gives marketers a clear insight of the important element in the operation and the combination results in achieving competitive advantage. Asiacell Company professional learnt that application and acquiring knowledge gives a clear picture of the team performance. Application of knowledge in telecommunication provides touchable results like 3G for internet connection.

5.3.2.2 Business Administration

The management is concerned about ways of using such capabilities to achieve the organizational competitiveness. This research provides practical examples of telecommunication operation and addressed best ways of using knowledge management capability and innovation adoption to enhance better team performance. All the variables should be integrated and combined together to achieve competitive advantage.

5.3.2.3 Research and Development

The practical know how of information technology is essential for knowledge sharing facilities namely website, internet and electronic documents. Practical and implementation of knowledge management capability and innovation adoption can be affected by the structure.

Research and development department of the Asiacell Company, can embark on the development of the company by researching on new technology for innovation. More research is going to be carried for ensuring the knowledge capability of employees in developing new products for competitive advantage.

5.3.3 Limitations of the Study

This research is a cross sectional research which focused on the contributions of the employees' performance. The researcher collected information from employees only as the representative of the overall firm performance because time does not permit to record opinion of all stakeholders. This study lacks the view of the customers and the suppliers about the firm performance.

5.3.4 Recommendations for future research study

The researcher can adopt a longitudinal study which incorporates the views of the customers about the performance of the company. Longitudinal study needs more time in order to see the significance of innovation and knowledge management implementation. Longitudinal study incorporates all the stakeholders involved in the business and their opinions gives different results rather than cross sectional which focuses on a specific group of people in this case employees, the reason being the time period of the study is limited.

The future research could incorporate all the variable of knowledge management capability with knowledge management process that enables application of knowledge in business. Knowledge management capability has also a direct effect to the competitive advantage of the business, a case study of two companies gives a clear picture of the relationship between the two variables.

This study gives an opportunity for future research due to the introduction of innovation adoption which include technological advancement as the world is moving to computer system operation in every aspect of the business. A company that embraces technology is likely to achieve competitive advantage. This research enhances the development of business models which include innovation adoption with technology, knowledge management capability and competitive advantage.

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LIST OF APPENDICES

**Turkish Republic of Northern Cyprus
Near East University
Graduate school of social sciences
Innovation and knowledge management program**

Appendix 1: Research questionnaire

Dear Respondent

RE: ACADEMIC RESEARCH QUESTIONNAIRE

I am a master's student at the Near East University who is doing a thesis on how Asia Cell Company in Sulaymaniah implements knowledge management capability and innovation for team performance. I am interested to know more about what your department aims to achieve, how you organize the work, how you measure results and what challenges you face.

We are especially interested in how you solve problems that arise in the work, how you document solutions and how you find people with necessary knowledge the attached questionnaire is an important survey designed to assess your opinions about knowledge management. I would really appreciate if you answer all the questions carefully. All information you provide will be used for academic purposes and strictly confidential.

Thanks for your time and cooperation...

Pshdar Abdalla Hamza.

Section A: Demographic details:

1. Please indicate your gender; ☐ Male ☐ Female

2. Please indicate your age;

Under 18	18-24	25-34	35-44	45-54	55 or above

3. What type of ownership is your business?

State-owned	Limited	Joint Stock	Join Venture	100% foreign owned	Other, specify

4. How many years have you worked for this firm?

Less than 1 year	1-2 years	3-5 years	6-10 years	11-20 years	More than 20 years

5. Please indicate your level of Education:

High School	Diploma	Bachelor's degree	Master's degree	PhD

6. Please indicate your current position

Supervisor	Managing Director	Chief Executive	Operations Manager	General Manager	Other, specify

7. What is your firm's primary industry?

Manufacturing	Service	Other, specify

Source: Nguyen, T. N. Q. (2010).

Section B: Please indicate (by circling the appropriate box) the extent to which you agree or disagree with each of the statements. The following scale is applied for all statements:



Questions: Knowledge Management Capability, team performance and competitive advantage My organization's members						
		1	2	3	4	5
8	Can understand not only their own tasks but also others' tasks					
9	Can make suggestions about others' tasks					
10	Can communicate well not only with their department members but also with other department members					
11	Are specialists in their own field of expertise					
12	Can perform their own task effectively without regard to environmental changes					

My Organization uses Information Technology that allow						
		1	2	3	4	5
13	Employees to collaborate with other persons outside the organization					
14	People in multiple locations to learn as a group from a single source or at a single point in time					
15	People in multiple locations to learn as a group from a multiple source or at multiple points in time					
16	It to map the location (e.g. an individual, specific system, or database) of specific types of knowledge					



Disagree Strongly

Disagree

Neutral

Agree

Strongly Agree

Acquisition and application process My organization		1	2	3	4	5
17	Has processes for acquiring knowledge about our customers					
18	Has processes for generating new knowledge from existing knowledge					
19	Has processes for acquiring knowledge about our suppliers					
20	Has processes for distributing knowledge throughout the organization					
21	Has processes for acquiring knowledge about new products/services within our industry					
22	Has processes for transferring organizational knowledge to individuals					
23	Has processes for integrating different sources and types of knowledge					
24	Has processes for organizing (store/file) knowledge					
25	Has processes for using knowledge in development of new products/services					
26	Has processes for using knowledge to solve new problems					
27	Uses knowledge to adjust strategic direction					
28	Is able to locate and apply knowledge to changing competitive conditions					
29	Takes advantage of new knowledge					
Competitive Advantages (extensively meet customers' needs)		1	2	3	4	5
30	My organization often uses knowledge-based innovation					
31	My organization's market position can create strong barriers to entry for other firms					
32	My organization uses knowledge management to widen the array (line/range) of products without increasing costs					
33	The knowledge management capability in my organization would be difficult and expensive for rivals to duplicate					



Strongly Disagree



Disagree



Neutral



Agree



Strongly Agree

Questions: Innovation adoption Organizational structure and culture My organization' s		1	2	3	4	5
34	Structure facilitates the discovery of new knowledge and innovation adoption					
35	Structure facilitates innovation and creation of new knowledge					
36	Managers frequently examine knowledge for errors/ mistakes					
37	Structure facilitates the transfer of new knowledge across structural boundaries My organization					
38	Has a standardized reward system for sharing knowledge					
39	Bases our performance on knowledge creation Organizational Culture My organization					
40	Has a culture of innovation adoption as a system					
41	Employees understand the importance of innovation adoption to corporate success					
42	High levels of participation are expected in capturing and transferring knowledge					
43	On-the-job training and learning are valued					
44	Senior management strongly support the role of knowledge management to business success					

Comments:.....

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Note: filling this form optional.

Source: Nguyen, T. N. Q. (2010). Knowledge management capability and competitive advantage: an empirical study of Vietnamese enterprises.

PLAGIARISM REPORT

THE USAGE OF KNOWLEDGE MANAGEMENT CAPABILITY AND INNOVATION IN DEVELOPING TEAM PERFORMANCE A CASE STUDY OF ASIACELL COMPANY IN SULAYMANIAH

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ETHICS COMMITTEE APPROVAL

Sayın Prof. Dr. Mustafa Sağsan

Bilimsel Araştırmalar Etik Kurulu'na yapmış olduğunuz YDÜ/SB/2018/124 proje numaralı ve **“The Usage Knowledge Management Capability and Innovation in Developing Team Performance”** başlıklı proje önerisi kurulumuzca değerlendirilmiş olup, etik olarak uygun bulunmuştur. Bu yazı ile birlikte, başvuru formunuzda belirttiğiniz bilgilerin dışına çıkmamak suretiyle araştırmaya başlayabilirsiniz.

Doçent Doktor Direnç Kanol

Bilimsel Araştırmalar Etik Kurulu Raportörü



Not: Eğer bir kuruma resmi bir kabul yazısı sunmak istiyorsanız, Yakın Doğu Üniversitesi Bilimsel Araştırmalar Etik Kurulu'na bu yazı ile başvurup, kurulun başkanının imzasını taşıyan resmi bir yazı temin edebilirsiniz.

Dear Prof. Dr. Mustafa Sağsan

Your application titled **“The Usage Knowledge Management Capability and Innovation in Developing Team Performance”** with the application number YDÜ/SB/2018/124 has been evaluated by the Scientific Research Ethics Committee and granted approval. You can start your research on the condition that you will abide by the information provided in your application form.

Assoc. Prof. Dr. Direnç Kanol

Rapporteur of the Scientific Research Ethics Committee



Note: If you need to provide an official letter to an institution with the signature of the Head of NEU Scientific Research Ethics Committee, please apply to the secretariat of the ethics committee by showing this document.