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# THE EFFECT OF KNOWLEDGE MANAGEMENT FACTORS ON IMPLEMENTATION OF BUSINESS STRATEGY AMONG COMMERCIAL BANKS: A CASE OF BANKING INSTITUTIONS IN CHUKA TOWN, KENYA

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## ABSTRACT

*The objectives of the study were to determine the effect of Organization Culture and Information Technology on implementation of business strategy. Exploratory research design was used in the study. The target population of the study was seventy-nine staff, of the six commercial banks in Chuka town. A sample of seventy-four staff was selected from the population. There were two main sampling designs used in the study: Purposive sampling was used to select the middle level and management staff categories. A census survey of ten management staff was conducted. Stratified sampling was done between banks and within each bank stratification was done in the two levels: middle level and management. A proportionate sample size of sixty-four middle level staff was selected. Primary data was collected from employees of the banks through the use of questionnaires and interview schedules. Data was then analyzed using descriptive statistics such as percentages and frequencies through Statistical Package for Social Sciences. Information Technology was found to have the greatest effect on implementation of business strategy with 76% of the respondents indicating some level of importance. Organization culture affected implementation of business strategy by 67% rate. These research findings would be useful to commercial banks in helping them to carefully align their Organization Culture and Information Technology towards effective implementation of business strategy.*

*Key Words: Business Process Re-engineering; Business Strategy; Knowledge Management; Organizational Change; Organization Culture Profile Scale*

## 1.0 INTRODUCTION

### 1.1 Background of the Study

For many years, mankind has been concerned about creating, acquiring, and communicating knowledge and improving the re-use of knowledge. However, it is only in the last decade and half that a discrete field called "Knowledge Management" (KM) has surfaced.

Knowledge Management is based on the assertion that, just as human beings are unable to draw on the full prospect of their brains, organizations are usually not able to fully exploit the knowledge that they possess. Through KM, organizations seek to acquire or create potentially valuable knowledge and to make it available to those who can use it at a time and place that is appropriate for them to achieve maximum effective usage in order to positively influence organizational performance. It is generally believed that if an organization can increase its knowledge utilization by only a small proportion, great benefits will be obtained.

Knowledge is often defined as a "justified personal belief." There are many classifications that specify various kinds of knowledge. The most fundamental distinction is between "tacit" and "explicit" knowledge. Tacit knowledge inhabits the minds of people and is (depending on one's interpretation of Polanyi's (1966) definition) either impossible, or difficult, to articulate. Most knowledge is initially tacit in nature; it is laboriously developed over a long period of time through trial and error, and it is underutilized because "the organization does not know what it knows" (O'Dell & Grayson, 1998). Some knowledge is embedded in business processes, activities, and relationships that have been created over time through the implementation of a continuing series of improvements.

Knowledge is defined as a type of high value information that is either explicit or tacit and is combined with experience, context, interpretation, and reflection that is to be applied to decisions and actions (Davenport & De Long, 1998). Generally, organizational knowledge has been classified into two categories, tacit or explicit. "Tacit knowledge, from the Latin, *tacitare*, refers to knowledge that is very difficult to articulate, to put into words or images; typically highly embedded knowledge such as knowing how to do something or recognizing analogous situations" (Dalkir, 2005). Tacit knowledge also refers to personal, context-specific knowledge that is difficult to formalize, record, or articulate; it is stored in the recesses of the mind. Tacit knowledge consists of various components that include intuition, experience, judgment, values, assumptions, beliefs, and intelligence" (Tiwana, 2002). The second classification of knowledge is referred to as explicit knowledge. "Explicit knowledge is that which has been rendered visible (usually through transcription into a document or an audio/visual recording); typically captured or codified knowledge" (Dalkir, 2005). Alternatively, "Explicit knowledge is that constituent of knowledge that can be codified and transmitted into logical and prescribed language" (Tiwana, 2002).

While all firms may have pools of knowledge resources scattered throughout their respective organization, they may be oblivious of the existence of these resources as well as how to effectively control them for competitive advantage. Therefore, firms must engage in activities that seek to build, protract, and leverage these intellectual resources. These types of activities, generally typified as knowledge management, can be defined as the cognizant practice of identification, capture, and leveraging knowledge resources to assist firms to compete more effectively (Hansen, Nohria, & Tierney, 1999; O'Dell & Grayson, 1998).

Knowledge is thus information that has significance: It is relevant, current, and applicable as well as dynamic in meeting performance goals. However, according to Drucker (1969), the key to tap the value of information and knowledge is "action," that is, it must be dynamic. The active and dynamic implementation and management of knowledge prove to be decisive in enabling organizational performance enhancements, decision-making, and teaching (Liebowitz, 1999). KM is then the systematic, explicit, and purposeful building, renewal, and utilization of knowledge to optimize an enterprise's effectiveness and returns from its knowledge assets (Wiig, 1997). KM uses methodical approaches to extract, comprehend, and use knowledge to cause value (O'Dell, 1996). The processes and terminology associated with KM often sound abstract, however, it is tangible, practical, and genuinely imperative (Leonard, 1995). The understanding of KM is particularly vital to technical enterprises, both new and established. Knowledge and KM are rapidly developing as the preliminary point for action in all businesses, and over the past 10 years, this understanding has emerged as a major focus for its role in the enterprise value process. To renew and sustain a competitive edge in today's business environment, an enterprise must harness and use all the knowledge and skills of its employees. This implies the classical sources of competitive advantage such as physical resources and assets have ceased to offer long term competitive advantage. In Africa too, knowledge and information are now the most important resources that a firm can muster. Today's managers depend on a wide array of knowledge to take action, solve problems, enhance performance, and simply "get things done" in technical enterprises. The new information-based service economy places a premium on knowledge due to the explosive and quickening pace of new information and subsequent knowledge. This knowledge emergence requires fine consideration to developing the knowledge reserves of managers, professionals, and workers so that they can cope and compete effectively (Eccles & Nohria, 1992).

Implementation of business strategy is difficult when resources are not made available. Successful implementation relies heavily on availability of competence and resources. It is important to identify the resources and actions needed to implement new applications and development tools. Resource mobilization for implementation is an effective implementation mechanism to secure quality of implementation. The resources often required are financial, technological and human.

User involvement in implementation is an effective implementation mechanism to guarantee quality of business strategy implementation. It is usually better to use a high involvement process that utilizes the knowledge and creativity of the people who actually do the work. Implementation represents a state of transition in which users may experience a risk to their sense of control over their work, if not direct loss of control.

### 1.2 Statement of the Problem

The scope of problems that knowledge management has to deal with has become broader. It is only in the last one and half decade that firms have begun realizing the value of knowledge management as a strategic resource. In the Banking sector, banks have traditionally relied on asset bases and size for competitive advantage but this is becoming more difficult to sustain owing to competition. Despite the benefits gained by knowledge management in other industries, there is need to establish whether knowledge management would be of strategic importance in the banking sector. This study therefore sought to establish the effect of Knowledge Management factors on implementation of business strategy at banking institutions in Chuka Town. The study was guided by the following specific objectives

i. To determine the effect of Organization Culture on implementation of business strategy.
ii. To determine the effect of Information Technology on implementation of business strategy.

## 2.0 LITERATURE REVIEW

### 2.1 The Concept of Knowledge Management

Knowledge management (KM) refers to a set of organized and disciplined actions that an organization can take to acquire the optimum value from the information accessible to it. 'Knowledge' in this perspective takes into account both experience and understanding of the people in the organization and the information artifacts. (Marwick, 2001)

KM frameworks aid in establishing a focus for KM efforts (Earl, 2001). These frameworks help organizations to advance towards KM systematically and consciously. They can help to recognize a specific approach to KM, to define goals and strategies and intended outcomes, to realize the various knowledge management initiatives, and then select the optimal ones for specific circumstances (Earl, 2001; Maier & Remus, 2001). There have been several proposed frameworks to direct KM efforts in organizations. However, according to Calabrese (2000), these frameworks do not view KM across the full spectrum of organizational needs but rather address certain KM elements. However, there is still a need for a comprehensive research on knowledge management factors that considers the full range of organizational dimensions such as organization culture, leadership, information technology and learning.

Three previous researches (Holsapple & Joshi, 1999; Lai& Chu, 2000; Rubenstein-Montano, Liebowitz, Buchwalter, McCaw, Newman, & Rebeck, 2001) have elaborated on the components and assumptions of knowledge management frameworks proposed. There seems to be an agreement on the need for a more generalized framework. Thereafter, these researchers summarize suggestions concerning such a framework. The three studies agree that the crucial components should be knowledge resources, KM processes, and influences. Singh (2008) acknowledges that every organization has a firm commitment to grow and that by strategically putting up stiff competition to its competitors. Strategic goals of this nature can be realized if it maximizes upon creating and managing knowledge. The actual determinants of knowledge management and its influence on business strategy remain un-addressed.
According to Calabrese and Stankosky, (1999) Knowledge Management rests on four pillars, which lead to effective enterprise learning a critical component of business strategy.

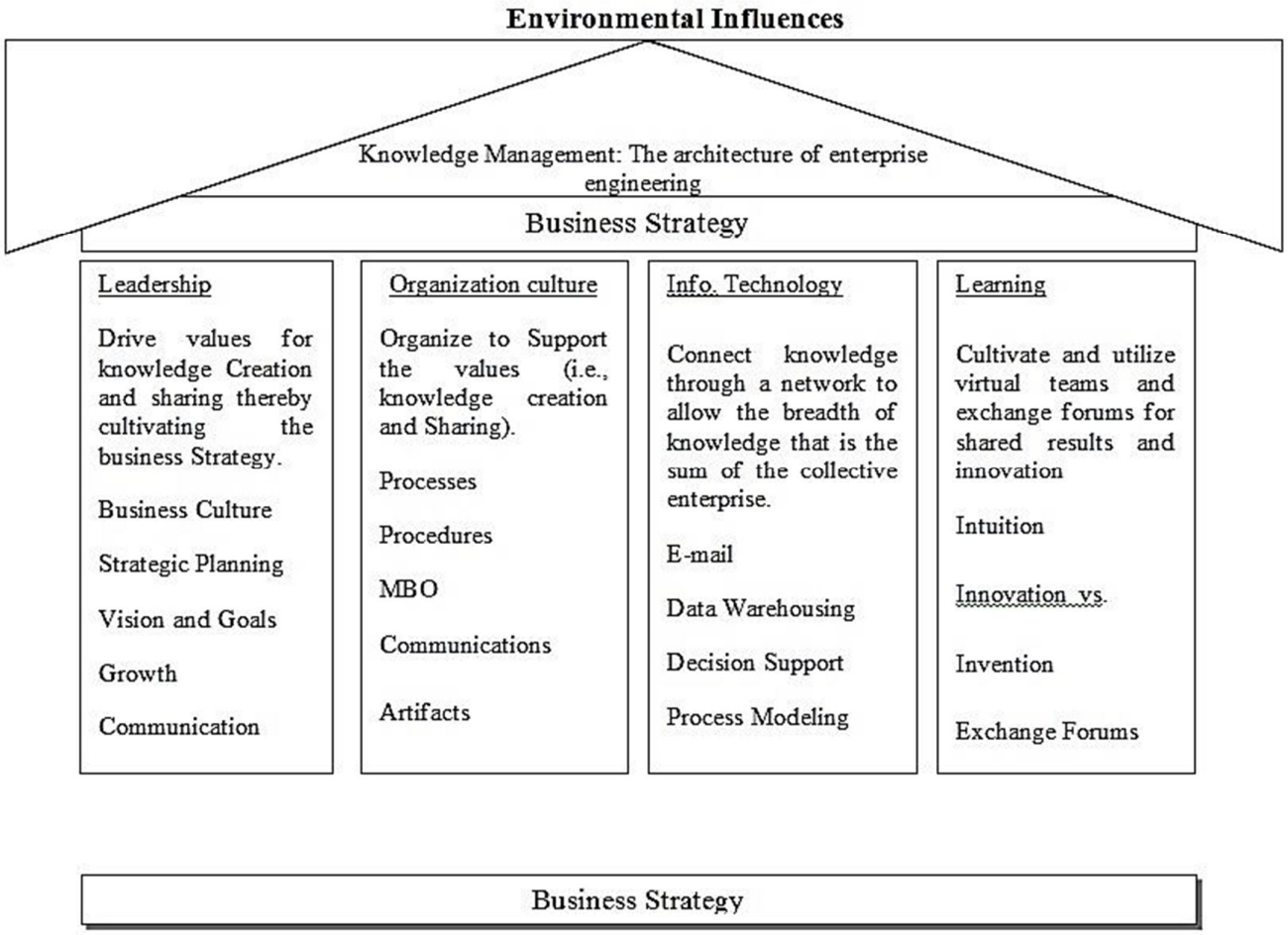


**Figure 1:** Knowledge Management Pillars
Source: Stankosky & Calabrese, 1999.

Their framework has been widely accepted as basic in the discipline of knowledge management. The framework relies on the premise that if an organization is able to critically examine the four factors well, understanding of the composition of KM infrastructure and process capabilities that are expected to provide coherent and systematic knowledge support to strategy is imminent. This study though critical in knowledge management research its authors recommended more explicit research findings were needed to be able to acceptably conclude that the four pillar framework can be generalized to several industries.

The four pillars reveal that knowledge management is specific is certainly reliant, since it must be designed to each firm's structures and processes (Tsoukas, 1996). These studies also highlight the diversity of ways, in which knowledge can be managed, capitalized, transferred, and collectivized (Nonaka & Takeuchi, 1995). The gap is to ascertain how the various resources and capabilities required in gathering and diffusion of knowledge can be linked together. It is in this context that organization culture, learning, information technology and leadership require careful consideration. Tsoukas (1996) reveals that "the knowledge firms need to draw upon is also innately indeterminate." The result of this should be sustainable competitive advantage

Davenport, DeLong and Beers (1998) suggest that "knowledge is information pooled with experience, context, interpretation and deliberation." This cautions organizations not to disregard the contextual nature of knowledge. "Knowledge is synthesized and works through a progression of productive collaboration among individuals as well as through exchanges between those individuals and the thought devices within which they operate" (Poitou, 1997). Thought or cognitive devices are defined as "organized and consolidated sets of intellectual objects, associated to each other and set spatially for the intention of producing goods or knowledge" (Poitou, 1997).This aspect is important in allowing comprehension of how learning can be used to lead to successful implementation of business strategy.

Simoni (2005) provides a lucid classification and analysis of three KM approaches: Approaches of the objectification type emphasize the codification of knowledge. Knowledge assumed to be an object that can be precisely defined, captured, and moved from one place to another, capturing and formalizing knowledge at the end. A variety of methods are put forward for large-scale projects or for retaining strategic expertise within a firm. These methods have a certain degree of relevance to the conservation of knowledge, but since they take no account of socio-organizational context, they do not encourage the transfer of knowledge. This aspect leaves a research gap in the socio-organizational facet. Disproportionate use of knowledge objectification techniques and computing systems has been criticized. Research by Von Krogh, Ichijo, and Nonaka (2000), for example, are concerned with relations within organizations and seek to make out the attitudes likely to facilitate knowledge creation at the diverse stages of its development within organizations. This research underscores the need for research into relations as they are heavily influenced by organization culture and leadership particularly in the banking sector as this is a knowledge intensive sector.

Approaches of the socialization type are based on analysis of the functioning of communities of practice (Brown & Duguid, 1991, 1998, 2000). In this approach, learning is considered part of a social process, and defined as "social interaction among individuals engaged in a shared practice." Communities of practice are the focus for the conception and diffusion of knowledge. This knowledge is, therefore attached to the background of the organization and often heavily embedded in practice. The diffusion of knowledge needs social media, such as translators capable of working out one community's interests from the point of view of another community, intermediaries or brokers working within several communities to propagate the flow of knowledge, and controls that provide opportunities to compare practices of several communities. It would thus be interesting to observe how organization culture, learning, leadership and information technology contribute to business strategy against such a backdrop.

In relation to organizational approaches, approaches of this kind bring to attention to the variety of the modes of knowledge generation (Davenport & Prusak, 1998): internal being process and product research employee sharing of experiences and external being acquisition, rental, dedicated resources, merger, adaptation, and networks. They focus on the factors that might control knowledge management (Szulanski, 1996). These factors are inherent in the very structure of knowledge and individuals' capacities for learning, hence the interest in examining means of facilitating knowledge creation. This approach relies heavily on also existence of supportive organization culture and leadership. Information technology is firmly attached to this process as it aids in knowledge generation especially after capture.

The findings from leading KM practitioners, researchers, and recent studies provide major sources that can be used to identify the critical success factors for KM as well as research gaps. However, there is a diverse standpoint within the knowledge management field regarding the identification of these factors (Jennez and

Olman, 2004; Alazmi and Zairi, 2003; Chait, 2000; Choi, 2000; Kemp et al., 2001). Factors highlighted in the studies are focused at providing an environment that provides the enterprise with a sustainable competitive advantage through which it can leverage its knowledge resources. Moreover, they provide the opportunity and set the tone where KM functions and systems can flourish. The gap that emerges from these studies is their lack of applicability in industries beyond those studies. This is likely since business strategy is highly specific to a given environment. Further research into other industries has been recommended by the authors.

After conducting an empirical study of factors affecting successful implementation of KM, using responses from different sectors, Choi concluded that top management leadership, fewer organizational constraints, and information systems infrastructure were the top three critical success factors for KM to succeed (Choi 2000). Moreover, Stankosky and Baldanza put forward four key elements or vital success factors for KM implementation–leadership, organization, information technology, and learning (Baldanza & Stankosky, 1999; Stankosky & Baldanza, 2001). Each of these factors is present in unified harmony providing the elemental frameworks for the long-term success of knowledge management. These factors were validated by Calabrese (2000), and later by Bixler (2000), and determined to be essential for the foundation of knowledge management architecture.

**2.2 Organization Culture and Knowledge Management**

Organization is the systematic arrangement of elements into a whole of interdependent parts. Schein (1985) defines organizational culture as implicit assumptions held by members of a group that determine how the group conducts itself and responds to its environment. At its quintessential level, culture is composed of core values and beliefs that are rooted tacit inclinations about what the organization should strive to attain and how it should do it (DeLong & Fahey, 2000).

These tacit values and beliefs resolve the more visible organizational norms and practices that consist of rules, expectations, rituals and routines and myths, symbols, power structures, organizational structures, and control systems (Bloor & Dawson, 1994; Johnson, 1992). In turn, these norms and practices drive behaviors by providing the social context through which people communicate and act (DeLong & Fahey, 2000). Putting this into the context of knowledge management, organizational culture influences the social context consisting of norms and practices. This gives organization culture prominence that cannot be ignored while considering knowledge management factors leading to successful business strategy implementation.

A number of researches have tried to define culture at the organizational level. Wallach (1983) asserts that organizational culture is a composite of three distinctive cultural types: bureaucratic, innovative, and supportive. In bureaucratic cultures, there are clear lines of authority, and work is highly regulated and systematized. Innovative cultures are characterized as being creative, risk taking environments where burnout, stress, and pressure are often observed. However, Lundberg (1990) deems this view as contradictory as most highly innovative firms give greater leeway as a way of reduction of stress and burnout and encourage creative thought process. In contrast, supportive cultures are those that offer a friendly, warm environment where people tend to be fair, open, and honest. From this perspective, all firms will have all three types of culture, each to varying levels and may be situational. It implies cultural dimensions were conceived based upon a synthesis of other major organizational culture guides. This study of cultural elements was applied by Kanungo, Sadavarti, & Srinivas (2001) to study the relationship between IT strategy and organizational culture. Part of the attractiveness of Wallach's (1983) dimensions, in

comparison with other commonly used cultural indices such as the Organizational Culture Profile scale (O'Reilly, Chatman, & Caldwell, 1991); the Competing Values Framework (Quinn & Rohrbaugh, 1983); and the Organizational Value Congruence Scale (Enz, 1986), is that it is highly intuitive and is sensitive to the process of thought. Managers can thus readily identify with the descriptions of the three general culture types.

The literature on organizational culture verifies that most successful companies (those with sustained profitability and above-normal financial returns) have organization culture as their most important competitive advantage (Cameron & Quinn, 1999).Hence the need to study organization culture more deeply.

Kotter and Heskett, after conducting four cultural studies, conclude that the culture of the company has a prevailing effect on the performance and long-term effectiveness of the organization. Their study reveals the power of culture as, being encountered all the time and often goes unnoticed- until the organization tries to implement a new strategy or program which is unsuited with their norms and values. Then one begins to recognize, first hand, the power of culture (Kotter & Heskett, 1992).

Goffee and Jones (1998) assert that the culture of an organization is perhaps the most powerful force for the solidity in the modern organization. The concept of culture, in a holistic sense, symbolizes a set of traits of any human group that are transmitted from one generation to the next (Kotter & Heskett, 1992). For a culture to develop, however, the group of people must have shared a considerable number of experiences that have allowed them to have a common view of the world around them. It is essential to be aware that organizational culture is a lasting set of values, beliefs, and assumptions that typify organizations and their members, and thus should not be mistaken for organizational climate, which denotes temporary attitudes, feelings, and perceptions of individuals that are always in flux (Cameron & Quinn, 1999).

In addition, a cultural analysis is necessary to grasp how knowledge management efforts influence the business strategy of the enterprise. The implementation of a knowledge management system at the enterprise-wide level crosses many different cultures, and the interaction of these different culture types impinge on the KMS implementation, acceptance, and its overall success. If the KMS implementation encounters significant organizational resistance, undermined by the different cultures interactions, it will not be successful. McDermott, Carlin, and Womack (1999) discovered that no matter how strong is the dedication and approach to knowledge management, the organizational culture is always more influential. To reduce this difficulty, they propose the creation of a knowledge management strategy that fits the culture and is linked to core culture values (McDermott & O'Dell, 2000).With proper study of knowledge management factors it would be easier to determine whether organization culture determines implementation of business strategy. Nonetheless, Lundberg (1990) agrees that creating awareness of organizational culture is a process that is potentially attractive, because culture awareness takes form of another source of information upon which everyday decisions, actions, and activities are based thereby aiding knowledge management use in business strategy decisions.

Business Process Re-engineering entails radical rethinking and redesigning work in terms of organizational processes to improve key performance measures such as cost, service, and speed. The idea is to apply a total system approach to managing the flow of information, materials, and services from raw material suppliers to the end customer. Recent trends, such as outsourcing and mass customization, are forcing companies to find flexible ways to meet customer demand. The focus is on optimizing those core activities in order to maximize the speed of response to changes in customer expectations. The BPR approach seeks to make

revolutionary, as opposed to evolutionary, changes. It does this by taking a fresh look at what the organization is trying to do, and then eliminating non-value-added steps and computerizing the remaining ones to achieve the desired outcome. It is then crucial for the change to be woven into the organization culture as employees' mindset-the way they think about work processes-needs to be shifted. Banks have undertaken this approach to increase efficiency, introducing change with it. The situation presents a good basis for research on how organization culture as a knowledge factor influences implementation of business strategy.

### 2.3 Information Technology and Knowledge Management

There are diverse ways to group, sort, and organize knowledge management technologies depending upon the situation. However, all of these technologies currently fit into eight major classes: Internet, Intranet, Extranet, data warehousing, document management/ content management, decision-support systems, knowledge agents, and groupware/e-mail. In 2000, KPMG developed this KM technology classification system that codified an approach taken by (Nonaka, 1990).

Information Technology used in distributive processing displays a sequential flow of explicit knowledge into and out of the repository, whereas technologies used in collaborative processing are focused on sustaining interaction among people holding implicit knowledge. Distributive technologies preserve a repository of explicitly encoded knowledge synthesized and managed for sequential distribution to knowledge consumers within or outside the organization. These technologies show a sequential flow of information into and out of a central repository, planned to provide flexible access and views of the knowledge. Collaborative technologies may be used by a simple list of individuals within or associated with a community of knowledge. It may also take a more interactive form of a knowledge brokerage.

The large investment in information technology (IT) that organizations must make to develop and maintain various systems, as well as in the organizational mechanisms required to manage them, dictates the need to assess whether the systems are actually doing the jobs for which they were designed. Firms regard the results of IT effectiveness evaluation to be useful in justifying further investment in IT. This necessity prompts the need to undertake research with a view of establishing its role in implementation of business strategy. Its usefulness in propagation of knowledge in the banking industry is well appreciated.

Most of the approaches on information technology suggested in (Ruggles, 1997; Liebowitz & Wilcox, 1997; Marquardt & Kearsley, 1999), involve the following stages: Generation or acquisition which is summarized as recognition of knowledge. This stage involves locating the source of knowledge. Validation of knowledge follows with a view of establishing whether the knowledge obtained is suitable. The next stage involves codification which interprets the knowledge obtained into written text. Storage of knowledge then follows and the process is concluded with retrieval and sharing of the knowledge. This final step is also considered as the disseminative stage of knowledge management.

More than a decade ago, Bradley (1993) and Clemons (1993) accentuated the need to identify significant actions that support information technology investments for global organizations. The following summarizes the main four themes that have been stressed over the years by many researchers: Knowledge management technologies are to be lucidly linked to strategy. Knowledge management approaches should be supported by leaders/ champions within the organization. Organizations should have personnel who are responsible for coaching and mentoring employees on the use of these technologies. Organizations need to provide incentives (recognition, awards, monetary rewards, etc.) to use these technologies. These themes suggest a deeper understanding of how information technology influences implementation of business strategy by aiding flow of information in the knowledge management process

## 3.0 RESEARCH METHODOLOGY

### 3.1 Research Design

The literature review presented indicated that there has been limited research into what constitutes knowledge management environment factors and their effect on business strategy implementation. This is particularly true in the banking context where there has been little research into knowledge management itself (Dilnutt 2000; Jones, 2001). Hence, the nature of the research was initially exploratory and 'theory building' (Hussey & Hussey, 1997; Perry, Riege & Brown, 1999; Perry 2001; Ticehurst & Veal 1999). This has been selected for two key reasons: the lack of quantitatively testable hypotheses due to the early pre-paradigmatic stage of the development of knowledge management as a discipline (Perry, 1998); and the potential richness of the data to be collected. Exploratory Research design was utilized in the form of self-administered questionnaires and one on one interview (researcher-administered questionnaires) to obtain relevant data to the study. It is the researcher's view that to a great degree the research was to be exploratory since the focus was on gathering new information and ideas in the area of Knowledge Management. The researcher used primary data which will be obtained through the use of questionnaires and data from relevant reports.

### 3.2 Sampling Procedure and Sample Size

The sampling frame outlined the list of elements from which the sample was drawn. It comprised of the entire population derived from each bank's staff. There were two main sampling designs: Purposive sampling was used to select middle level and management staff. A census survey of ten management staff was carried out as the number was considered too small for sampling. Stratified sampling was done between banks and within each bank. The basis for stratification was to achieve the meaningful responses from each bank and the two levels of staff owing to the uniqueness of each stratum. Stratification was done in the two levels: middle level and management. A proportionate sample size was selected randomly from the middle level staff of each bank totaling to 64 staff. Gay (1981) suggests that for a sample to be sufficiently representative, the sample size should be at least 30 percent of the target population to achieve normal distribution. On the other hand, Kathuri and Pals (1993), observe that for a population of 68, a sample size of 59 would be sufficiently representative. However this study therefore interviewed 64 respondents from the mid-level staff to cater for possible attrition and errors. The final sample size arrived at consisted of 74 respondents that comprised of management and mid –level staff.

**Table 1: Sampling Matrix**

| Name of Bank | No. of Middle level staff | Sample size of middle level staff | Management |
|---|---|---|---|
| Kenya Commercial Bank | 13 | 12 | 2 |
| Barclays Bank | 6 | 6 | 2 |
| Co-operative Bank, | 14 | 13 | 2 |
| Equity Bank | 28 | 26 | 2 |
| Postbank | 4 | 4 | 1 |
| K-Rep Bank | 4 | 3 | 1 |
| **Total** | **69** | **64** | **10** |

### 3.3 Data Collection

Data was collected through questionnaires that were administered to both middle level and top level staff. Questionnaires were administered to the respondents by the researcher. The researcher and respondents scheduled appointments at each of the banks. Questionnaires were filled by the respondents and interviews conducted by the researcher. The researcher allowed the respondents four days to complete the questionnaire and a day for the interview. Data for this study was collected over a period of 3 months.

### 3.4 Data Analysis

Completed questionnaires were scrutinized and responses grouped and prepared for analysis using SPSS computer package. This involved data cleaning, editing, coding and arrangement for analysis. Data was then analyzed using the Statistical Package for Social Science (SPSS version 18.0) software. Descriptive statistics in the form of percentages, frequencies and ratios were used. SPSS was found appropriate for exploratory research owing to its versatility in aggregation, selection, sorting and weighting of cases (Levesque, 2005), transformation and restructuring of data (Slater and Atuahene-Gima, 2004). Data was entered into the Data Editor and variables defined. In this case in the variable view tab the first column had the name of the variable and the rows under this column showing each of the questions as a variable. The Data View was then used to enter the data with the data entered in Variable View being the headings for the columns in Data View. Data from the interview schedule was analyzed by categorizing responses by a particular respondent and comparing this to the same individual's responses on the questionnaire.

## 4.0 EMPIRICAL RESULTS AND DISCUSSION

### 4.1 Composition of Sample Respondents

Twenty four out of a sample size of seventy-four declined to take part in the study thus leaving a total of forty-three respondents. These were staff from Barclays Bank and Co-operative bank who were denied the authority to take participate in the study. Three pointers to the nature of the composition of the respondents were considered to be relevant. These were the respondents' banks, the position held in the bank and the age of the respondents. Table 2 presents the proportion of respondents from each bank.

**Table 2: The Proportion of Respondents from each Bank**

| Name of the bank | Respondents | Percent |
|---|---|---|
| Kenya Commercial Bank | 12 | 27.9 |
| K-Rep bank | 7 | 16.3 |
| Post bank | 5 | 11.6 |
| Equity Bank | 19 | 44.2 |
| **Total** | **43** | **100.0** |

From Table 2, the highest percentage of respondents were from Equity Bank at 44.2% followed by Kenya Commercial Bank at 27.9% and Post Bank had the lowest number of respondents at 11.6%. This outcome can be explained from the fact that Equity Bank has the highest number of staff with Post bank having the least.

Also demographic factors such as staff distribution by job title, gender and age were regarded as imperative in establishing trends in the responses. Table 3 gives the proportion of staff in different job titles within the sample.

**Table 3: Staff Distribution by Job Title**

| Job title | Respondents | Percent |
|---|---|---|
| Managers | 7 | 16.3 |
| Mid level staff | 36 | 83.7 |
| **Total** | **43** | **100.0** |

Majority of the respondents were mid-level staff with a number of 36 and a percentage of 83.7%. This was to be expected as the banking industry uses a model that is almost the same with two or three managers representing the top level staff and section heads and clerks representing the mid-level staff. Owing to the relatively small number of managers all were taken as respondents.

Table 4 presents staff distribution by gender giving the proportion of how many members of staff were of each gender.

**Table 4: Staff Distribution by Gender**

| Gender | Frequency | Percent |
|---|---|---|
| Male | 25 | 58.1 |
| Female | 18 | 41.9 |
| **Total** | **43** | **100.0** |

In terms of gender the research revealed that 58.1% of respondents were male and 41.9% were female as shown in Table 4.

Table 5 presents staff distribution by age and the findings discussed as follows.

**Table 5: Staff Distribution by Age**

| Age of Respondents | Frequency | Percentage |
|---|---|---|
| 20-25 | 9 | 21.43 |
| 26-30 | 24 | 57.14 |
| 31-35 | 5 | 11.90 |
| 36-40 | 1 | 2.38 |
| 41-45 | 2 | 4.76 |
| 46-50 | 1 | 2.38 |
| **Total** | **42** | **100** |

The age of the respondents ranged between 22 years and 47 years, with the highest frequency of respondents being between 26 to 30 years. Twenty four respondents fell into this category giving a percentage of 57.14%. Seventy eight percent of the respondents are of the age of thirty years and below. This trend could be explained by the fact that banks are of late employing fresh graduates who fall into this category.

### 4.2 Effect of Organization Culture on Implementation of Business Strategy

From the data obtained, there were a number of interesting observations. This section consists of four sub-sections that describe the results in depth.

#### 4.2.1 Effect of Organization Culture on Employee Engagement

One of the objectives of this study was to determine the effect of organization culture on employee engagement. In this study, organization culture was characterized by certain elements. The following elements were investigated: change management, trust, organization values, and organization beliefs on sharing of knowledge and formal and informal knowledge gathering. Being qualitative research, any patterns found in the data, which are about the research issues, were presented and reasons for those patterns given. The outcome of analysis of the responses was presented in form of a table. Table 6 gives the outcome of the effect of organization culture on employee engagement.

**Table 6: The Effect of Organization Culture on Employee Engagement**

| Elements of organization culture | Employee engagement | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Change management on employee engagement | 3(7%) | 3(7%) | 13(30.2%) | 14(32.6%) | 9(20.9%) |
| Trust on employee engagement | 0(0%) | 2(4.7%) | 7(16.3%) | 17(39.5%) | 16(37.2%) |
| Organization values on employee engagement | 0(0%) | 5(11.6%) | 17(39.5%) | 13(30.2%) | 7(16.3%) |
| Organization beliefs on sharing of knowledge | 0(0%) | 1(2.3%) | 17 (39.5%) | 18(41.9%) | 7(16.3%) |
| Organization culture on formal and informal knowledge gathering | 0(0%) | 8(18.6%) | 16(37.2%) | 14(32.6%) | 5(11.6%) |

From the interview data, the respondents describe their organization culture as a blend of hierarchical and innovative. The hierarchical aspects are evident in that little innovation is undertaken until senior management have officially supported the innovation, but once senior management has supported it, then everyone goes along. As shown in Table 10, 32.6% of the respondents felt that the effect of change management on employee engagement was very important. Knowledge sharing takes place on a deeper and more customizable basis, where the focus is on people and how they undertake change rather than on

information and how it is handled. Trust was considered crucial by the respondents in maintaining cordial working relationships and was preferred as it facilitated a creative and open atmosphere. Respondents considered an organization culture that created trust through employee engagement to be very important with 30.2% indicating this. Equally, the respondents felt information and knowledge are strategically important resources that can only be effectively utilized if there is trust because many types of organizational capabilities achieved through employee engagement that are a direct result of sharing, integrating and applying them.

The importance of having organization beliefs on sharing knowledge with an aim of encouraging employee engagement had the following responses: 41.9% of the respondents considered it very important for the organization to have beliefs that facilitate sharing of knowledge. Seventeen responses representing 39.5% of respondents felt it was important to have organization beliefs that encourage sharing of knowledge. No respondent indicated that it was not important to have organization beliefs that encourage sharing of knowledge. Clearly respondents consider this to be a strong factor in eliciting employee engagement in implementation of business strategy. The effect of having an organization culture that encourages formal and informal knowledge gathering with the purpose of implementation of business strategy elicited interesting responses. The analysis of responses to this question is presented in Table 10. The respondents were very clear with 37.2% indicating it was important to have an organization culture that encourages formal and informal knowledge gathering. Closely following this, 32.6% of the respondents felt it was very important to have organization to have a culture that encourages formal and informal knowledge gathering. Approximately 18.6% felt it was fairly important to have such a culture.

### 4.2.2 The Effect of Organization Culture on Support for Strategic Goals

The following elements of organization cultures were investigated: employee engagement and trust and their effect on support for strategic goals. The analysis revealed the following results presented in Table 7.

**Table 7: The Effect of Organization Culture on Support for Strategic Goals**

| Elements of organization culture | Support for strategic goals | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Organization culture on employee involvement | 0(0%) | 2(4.7%) | 8(18.6%) | 16(37.2%) | 17(39.5%) |
| Organization culture on trust | 0(0%) | 0(0%) | 14(32.6%) | 18(41.9%) | 11(25.6%) |

From the responses obtained, the respondents described the effect of employee involvement as means of securing support for strategic goals. About 39.5% of the respondents felt that it was extremely important to have employee involvement as a means of securing support for strategic goals during implementation of business strategy. Some 37.2% of the respondents felt it was very important to have the same. Thus a strong majority of 95.3% of respondents felt that employee involvement was invaluable in securing employee

support for strategic goals. In relation to organization culture on trust, 41.9% of the respondents felt it was very important with 32.6% regarding it as important. This element of organization culture revealed its importance among respondents as none of the respondents regarded it as not important or fairly important. The reason for this perceived importance was that employees felt that their managers trusted their decision-making capabilities and provided an environment where employees are able to take responsibility for their actions. From a majority of responses at from the interviews, this view came out strongly.

### 4.2.3 The Effect of Organization Culture on Resource Utilization

The effect of encouragement of innovation on utilization of organization resources elicited very interesting responses: Table 10 shows that 30.2% of the respondents felt that it was extremely important for the organization to encourage innovation with a view of optimizing resource use while implementing business strategy. It is also important to note that 93.0% of the respondents attached some level of importance to this aspect of organization culture. However, seven respondents did not respond to this question.

**Table 8: The Effect of Organization Culture on Resource Utilization**

| Elements of organization culture | Resource utilization | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Encouragement of innovation | 0(0%) | 4(9.3%) | 11(25.6%) | 12(27.9%) | 13(30.2%) |
| Encouragement of peer to peer problem solving | 1(2.3%) | 2(4.7%) | 9(20.9%) | 15(34.9%) | 12(27.9%) |

In regard to the effect of peer to peer problem solving on utilization of organization resources, 34.9% of the respondents felt that it was very important for the organization to encourage peer to peer problem solving with a view of maximizing organization resources use while implementing business strategy. It is also important to note that 90.7% of the respondents attached some level of importance to this aspect of organization culture with only 2.3% of the respondents considering this aspect as being unimportant.

### 4.2.4 The Effect of Organization Culture on Knowledge Adoption

Table 11 presents the results on the effect of organization culture on knowledge adoption. A strong majority of respondents, 48.8% felt that it was important for staff to share knowledge as a means of encouraging knowledge adoption with a view of implementing business strategy. From the responses, it can be deduced that 95.3% of the respondents attached some level of importance on sharing of knowledge. Sharing of best practices came out from the interviews as the most common mode of sharing of knowledge with 87% of respondents affirming this.

**Table 9: The Effect of Organization Culture on Knowledge Adoption**

| Elements of organization culture | On adoption of knowledge | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Sharing of knowledge | 0(0%) | 5(11.6%) | 8(18.6%) | 21(48.8%) | 7(16.3%) |
| Motivation towards knowledge adoption. | 0(0%) | 4(9.3%) | 11(25.6%) | 12(27.9%) | 14(32.6%) |

The question on motivation sought to elicit views on how respondents attached importance to motivation towards adoption of knowledge. About thirty three percent of the respondents viewed motivation as extremely important in encouraging staff to adopt knowledge, while 27.9% viewed the same as very important. In regard to the same, 25.6% felt that motivation was important. A relatively small percentage of 4.7% did not respond to this question.

### 4.3 Effect of Information Technology on Implementation of Business Strategy

#### 4.3.1 Effect of Information Technology on Knowledge Adoption

The advent and adoption of information technology has not always resulted in freer flowing and freely available information or knowledge. Information and knowledge are organizational essentials, and bureaucratic cultures and structures can inhibit the flows of information. Additionally, an unstable and changing environment can result in employees' concerns with job security resulting in inhibitions in information sharing (Davenport, Eccles & Prusak 1992). The following are responses on effect of IT on knowledge adoption presented in Table 10.

**Table 10: The Effect of Information Technology on Knowledge Adoption**

| Elements of Information Technology | Knowledge adoption | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Accessibility to modern technology | 2(4.7%) | 0(0%) | 12(27.9%) | 21(48.8%) | 6(14.0%) |
| User friendliness of information technology tools in place | 1(2.3%) | 7(16.3%) | 7(16.3%) | 18(41.9%) | 9(20.9%) |
| Effect of adoption of new information technology | 2(4.7%) | 2(4.7%) | 3(7.0%) | 22(51.2%) | 14(32.6%) |
| Documentation of new routines | 1(2.3%) | 1(2.3%) | 18(41.9%) | 9(20.9%) | 14(32.6%) |
| Training of staff | 0(0%) | 3(7.0%) | 10(23.3%) | 16(37.2%) | 12(27.9%) |
| Monitoring of implementation progress | 0(0%) | 3(7%) | 13(30.2%) | 20(47.6%) | 7(16.3%) |

The responses relating to Information Technology, obtained views on the effect of accessibility of modern technology on knowledge adoption. Twenty one respondents representing 48.8% of the respondents felt it was very important to have accessibility to modern technology as a means of encouraging adoption. In comparison, 27.9% of the respondents felt that it was important to have accessibility to modern technology. A relatively small percentage of 4.7 were of the opinion that it was not important to have accessibility to modern technology. From the interview 85% respondents, felt that accessibility to modern technology was of most importance during planning.

In response to the importance of user friendliness on IT tools to adoption of knowledge, 41.9% was from respondents that felt it was very important that IT tools should facilitate knowledge adoption. The second highest score of 20.9 % support was of respondents that felt it was extremely important that IT tools should facilitate knowledge adoption. In comparison, 16.3% of the respondents felt it was both important and fairly important that IT tools should facilitate knowledge adoption. Almost all the respondents felt that IT tools should facilitate knowledge adoption with 97.7% of the respondents indicating this. The relatively high response of extremely important responses at 20.9% serves to illustrate how important user friendliness of IT systems is to facilitation of knowledge adoption. Respondents felt the adoption of new information technology was crucial to knowledge adoption: Some 51.2% of respondents felt it was very important to possess new information technology that supports adoption of knowledge. A relatively large percentage of 32.6% felt it was extremely important with only 7.0% declaring it was important to possess new information technology that supports adoption of knowledge. From the interview, 85% of the respondents viewed IT as an invaluable tool in aiding knowledge adoption.

The question on the effect of IT on documentation of new routines with a view of supporting knowledge adoption elicited the following results: 41.9% of the respondents representing 18 respondents were of the opinion that it was important to document new routines as a means of encouraging knowledge adoption. About 32.6% of the respondents felt it was extremely important to document new routines as a means of encouraging knowledge adoption with 20.9% responding that it was very important to document new routines for the same end. About, 2.3% of the respondents felt that it was fairly important and a similar percentage agreeing that it was not important to document new routines as a means of encouraging knowledge adoption.

The effect of IT on training of staff towards knowledge adoption attempted to gauge respondents' views regarding IT and the attached importance to training as a means of encouraging knowledge adoption. About 37.2% of respondents regarded the effect of training of staff as very important towards adoption of knowledge with 27.9% regarding it as extremely important. In comparison 23.3% and 7.0% were the percentages of respondents who regarded it to be important and fairly important to have staff trained on IT to support knowledge adoption respectively. The effect of IT on monitoring business strategy progress on adoption of knowledge had the following responses: 46.5% of the respondents regarded it as very important to have IT as a tool in monitoring progress of implementation of business strategy thereby encouraging adoption of knowledge. From interview responses most respondents felt IT was important in communicating progress through reports and collecting feedback. Some 30.2% of the respondents considered it important while 16.3% as extremely important to have IT as a tool in monitoring progress of implementation of business strategy. From the results, 34.9% of respondents thought Information technology was very important in communication of goals as a means of securing support for strategic goals. In relation to use of Information technology in communication of key policies, 41.9 % felt it was very important.

4.3.2 The Effect of Information Technology on Employee Engagement

**Table 11: The Effect of Information Technology on Employee Engagement**

| Elements of Information Technology | on Employee Engagement | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Sharing of information on strategy | 2(4.7%) | 2(4.7%) | 12(27.9%) | 20(46.5%) | 6(14.0%) |
| Gathering of information on strategy | 0(0%) | 5(11.6%) | 8(18.6%) | 17(39.5%) | 11(25.6%) |

The effect of IT on sharing business strategy with a view of encouraging employee engagement elicited the following responses: About 46.5% of the respondents representing 20 respondents were of the opinion that it was very important for IT tools to be enabled in sharing business strategy so as to encourage employee engagement. In comparison, 14.0% felt it was extremely important for IT tools to be enabled in sharing business strategy so as to encourage employee engagement with 27.9% responding that it was important to have IT tools as a means of sharing business strategy. About 4.7% of the respondents felt that it was fairly important and a similar percentage agreeing that it was not important for IT tools to be enabled in sharing business strategy. Six responses representing 14.0% felt it was extremely important for IT tools to be enabled in sharing business strategy. From the results, respondents felt that IT was underutilized when it came to sharing of business strategy issues. In relation to effect of information technology on gathering of information on strategy, 39.5% of the respondents felt it was extremely important to obtain employee engagement by employing Information Technology in gathering of information on business strategy.

4.3.3 The Effect of Information Technology on Resource Utilization

**Table 12: The Effect of Information Technology on Resource Utilization**

| Elements of Information Technology | on Resource Utilization | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Resource optimization | 0(0%) | 8(18.6%) | 16(37.2%) | 14(32.6%) | 5(11.6%) |
| Resource monitoring | 0(0%) | 1(2.3%) | 10(23.3%) | 19(44.2%) | 13(30.2%) |

Sixteen respondents representing 37.2% of the respondents were of the opinion that it was very important for IT tools to be enabled to achieve resource optimization. About 11.6% felt it was extremely important for IT tools to be enabled to gain optimal resource use while 18.6 % responded that it was fairly important to have IT tools as a means of achieving resource optimization. In relation to the effect of IT on resource monitoring, 44.2 % felt it was very important to have IT as a means of resource monitoring.

**4.3.4 The Effect of Information Technology on Support for Strategic Goals**

The effect of certain elements of Information Technology on employee engagement realized the following descriptive statistic qualities displayed on Table 13.

**Table 13: The Effect of Information Technology on Support for Strategic Goals**

| Elements of Information Technology | Importance rating on support for strategic goals | | | | |
|---|---|---|---|---|---|
| | Not Important | Fairly important | Important | Very important | Extremely Important |
| Communication of goals | 0(0%) | 3(7.0%) | 11(25.6%) | 34.9(15%) | 27.9(12%) |
| Communication of key policies | 1(2.3%) | 7(16.3%) | 7(16.3%) | 18(41.9%) | 9(20.9%) |

The effect if information Technology on support for strategic goals revealed the following results. About 34.9% of the respondents thought Information Technology was very important in communication of goals as a means of securing support for strategic goals. In relation to use of Information Technology in communication of key policies, 41.9% felt it was very important.

Respondents felt that having a clear mission and vision for the organization was essential if the organization was to achieve successful implementation of its business strategy. About 46.5% of the respondents considered this as very important. A relatively large percentage of 27.9 % felt it was extremely important, 16.3% declaring it was important to have a clear mission and vision for the organization, while 9.3% of respondents felt it was fairly important.

The effect of resource optimization in the implementation of business strategy was a vital in establishing to what level respondents attach importance resource utilization. About 37.2% of respondents regarded IT as a tool of achieving resource optimization during utilization. 18.6% regarded it as extremely important while 32.6% and 9.3% of respondents who regarded it to be important and fairly important for IT to be an enabler of resource utilization. From the interview the respondents felt that IT tools were especially important in tasks such as apportioning resources with a view of implementing business strategy.

The effect of IT enabled resource monitoring on implementation of business strategy elicited interesting responses. The responses obtained were relatively close to each other in magnitude than on any other aspect of the four variables. About 37.2% regarded it as very important to have IT as a means of monitoring resource utilization. About 30.2% of the respondents regarded it as extremely important with a similar percentage regarding it as important. This aspect had no responses falling under fairly important and not important. This trend signifies how imperative IT is on resource monitoring.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusion

The study sought to find out the effect of organization culture and technology on implementation of business strategy. The following conclusions can be drawn from the study.

Organization culture, employee involvement in support for strategic goals had the highest effect with 86% of respondents acknowledging its importance. Change management as an aspect of organization culture recorded 69%.This value means that employees felt employee involvement an aspect of organization culture was best suited in the implementation of business strategy. From the interviews, respondents 76% revealed that organization culture is important for successful implementation of business strategy. Certain aspects of organization culture were fairly important to respondents. These included trust, peer to peer problem-solving and organization beliefs.

Information technology was viewed by respondents to be relatively important in realizing knowledge adoption with 76% of the respondents attaching some level of importance. Respondents felt that the use of IT for communication of organization had the greatest importance with 80% of respondents indicating this. However from the interviews 82% of respondents indicated IT is of greatest importance in sharing of organization knowledge. The effect of accessibility of IT tools on knowledge adoption was found to be least importance by the respondents with 72% indicating its importance.

### 5.3 Recommendations

It is on the basis of this study that the researcher recommends the following:

Organizations need to chose and provide tools that can support activities of knowledge management, as without tools the codification and exchange of knowledge will be not possible. The choice prior to provision may be made by business unit managers in consultation with members of the unit.

Careful consideration of the culture of the organization by management is required. While the required technology and information technology can be put in place in the organization, the success of KM will still depend on people, as people produce the knowledge and only by having a motivation or interest people will document and share knowledge and experiences.

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