

Knowledge Management as an Instrument for National Performance: A Review

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Abstract

It is a given that Knowledge resides exclusively in people's minds. A society endowed with knowledgeable people could generate the greatest wealth for its people because in knowledge economies human capital and intellect are the drivers of performance. In recognition of this vital role knowledge plays in national development, the Indian Government appointed a National Knowledge Commission (NKC) to prepare a blueprint to manage knowledge in institutions and infrastructure. At the organizational level, institutions are now grappling with knowledge management as a key component in the organization, to ensure it drives performance to enable them achieve their objectives, outcompete rivals, innovate and stay ahead in their respective fields. This paper therefore seeks to explore how knowledge management is being used in organizations to boost performance and initiate innovations. Understanding how knowledge is created, stored, shared, and applied is critical for development. The study used desk review and document analysis to guide its findings.

Key words: Knowledge Acquisition, Knowledge Management, Knowledge Sharing, Organizational Performance

Résumé

Il est admis que la connaissance réside exclusivement dans l'esprit des individus. Une société dotée de personnes instruites pourrait générer la plus grande richesse pour ses membres, car dans les économies du savoir, le capital humain et l'intellect sont les moteurs de la performance. Reconnaisant ce rôle vital que joue la connaissance dans le développement national, le gouvernement indien a nommé une Commission Nationale de la Connaissance (NKC) pour préparer un plan de gestion des connaissances dans les institutions et les infrastructures. Au niveau organisationnel, les institutions s'efforcent désormais de gérer les connaissances comme un composant clé de l'organisation, afin de garantir qu'elles stimulent la performance pour atteindre leurs objectifs, surpasser leurs rivaux, innover et rester en avance dans leurs domaines respectifs. Cet article cherche donc à explorer comment la gestion des connaissances est utilisée dans les organisations pour améliorer la performance et initier des innovations. Comprendre comment la connaissance est créée, stockée, partagée et appliquée est crucial pour le développement. L'étude a utilisé une revue de la littérature et une analyse de documents pour orienter ses conclusions.

Mots-clés: Acquisition de connaissances, Gestion des connaissances, Partage des connaissances, Performance organisationnelle

Introduction

In evolutionary social development Information Society and Knowledge Society appear like cousins or step brothers born one after another. This is because Information Society comes before Knowledge Society. Inevitably in our quest to review Knowledge Management, exploration of the two societies is a compelling precursor. Therefore, it is logical and prudent to begin this discourse by exploring Information Society.

To understand Information Society, it is paramount to scale factors that determine the arrival of an Information Society. Although scholars use the phrase “Information Society,” to mean society as a -whole, the problem is how to distinguish an information society and when it has come into being. At this point, it might be useful to refer to and listen to commentators and leaders on what they have said about the phrase. In an abridged form, to them Information Society is a direct consequence of: i) the data explosion; ii) the growing information consciousness and information dependence on society at large; and iii) accelerating developments in computing and communication technologies. But Cawkell (1987) explains that “the pre-requisite for an Information Society is a telecommunication-based information service infrastructure, which gradually builds up until a critical mass of terminal users will be connected to a more or less universal network”.

For Bell (1973), the term refers mainly to the social structure of the post-industrial society. That it describes the characteristics and the structure of the society of which the driving force is the production of information values and not material values. But in order to consider when Information Society status will be realized, it is necessary to look at the four stages of technological development which must be fulfilled before it is achieved: i) science-based computerization, where the computer is used extensively in national scale projects; ii) management-based computerization in both government and business; iii) society-based computerization in which computers will be used for the benefit of the society as a whole; and iv) individual-based computerization where each individual will have access to the terminal and computer information to solve problems, enable creativity to flourish in mass knowledge creation society.

In other words, the most advanced stage of Information Society appears to be high mass knowledge creation society. From the above discussion, it may be inferred that a high degree of computerization, large volumes of electronic data processing and employment of information technology with telecommunication-based information service structure, are the main criteria, that signify whether a society or nation has become an information society or not.

Emergence of Information Society. The Information Society dispensation evolved during the 1970s and 1980s, and quickly gained wide popularity. Its proponents ranged from scholars and academic authors to popular writers. One of the most prominent writers was Masuda (1981), a Japanese who, perceived Information Society as a transition of society to the point at which the production of information values becomes the driving force for the development of the society. Other commentators perceived it as the dawning of a new age for Western Society specifically drawing explicit parallels and contrasts between industrial and information societies.

Although not very comfortable with the term information society, Daniel Bell did much to sustain it through his work on post-industrial society as the classical exponent of post-industrialism, and theorised the Information Society (Bell, 1979). In his book, *The Coming of Post-industrial Society* (1972) Bell argued that the increased part played by science in the productive process, the rise to prominence of professional, scientific, and technical groups and the introduction of computer technology, are all the evidence of a new axial principle at the core of the socio-economic system, namely, the centrality of theoretical knowledge.

A growing number of workers get employed in the information sphere, an important factor enabling the discourse to shift from post - industrialism to Information Society and leading to the massive growth in the economic significance of information technology (IT). Technological utopianism is especially powerful in the USA. Toffler (1996) did much to popularize the concept of information society. Other scholars contended that the United States made the transition from an industrial to an information society as early as 1960s and 1970s, and that in this process the computer played a significant role.

On the other hand, Toffler (1996) talked of an information bomb exploding in our midst and a power shift in society, which made it depend on knowledge. The newness and attraction of these ideas and the vigour, with which they were expressed, fired the public imagination, and helped to sustain the interest in the concept of the information society and its literature.

Information and knowledge are deemed to be social wealth that can co-exist side by side, or one after the other, and the benefits of this social wealth should be available to members of society in a variety of forms: books, periodicals, microfilms, and computerized data bases. Ordinary citizens require various information types and knowledge to fulfill their daily duties. The impact of knowledge and information may be noticed in several human activities like education, research, development (R&D), government programs and mass communication activities.

Information Society Dispensation. Information Society has been characterised by various dimensions. Several authors have tried to define and interpret this term according to their own perceptions. What strikes one in reading the voluminous literature on the information society is that “so many writers operate with underdeveloped definitions on the subject. They write copiously about features of the information society, but are vague about their operational criteria. Eager to make sense of change in information, they rush to interpret these in terms of different forms of economic production, new form of social interaction, and innovative processes of production. As they do so, they very often fail to set out clearly in what ways and why information is becoming more central today, so critical indeed that it is ushering a new type of society, Webster (1996).

One may be at a loss wondering what is about information that makes so many scholars to think that it is at the core of modern age. Let us try to examine some of the significant definitions provided for the term information society in the literature and analyse their main attributes. According to Branscomb (1986) “it is a society where the majority of people are engaged in creating, gathering, storage, processing or distribution of information”.

Kochen (1987) writes that the simple notion of a society in which information rather than material flows constitute most of its “communication and control” exchanges is extended to stress that: i) Most members generate knowledge by knowledge-based procedures that are knowledge-intensive; ii) Information consistently reflects basic social variants; iii) Reason and human values rather than strength and expediency manage conflicts between pressures to conserve invariants and pressure to adoptive change.

Having stated all this, Kochen (1987) emphasizes that “an information society is a stage in the evolution of community brains, towards a world brain. This is probably most likely to be the essence of the great transition that futurists seem to agree on. When enough people begin to believe it as likely to happen, if it is a stage in natural cultural evolution, then this belief may contribute to its self fulfilment.”

Ronfeldt (1992) is of the opinion that “information society is one which sees the steady blurring of the boundaries, which presently separate computer hardware, communication systems and satellites, global networks and more”. While none of the above quoted definitions is wrong, they serve to emphasize the fluidity of present situation, one which suggests that what is likely to emerge – and certainly in short term – is a series of parallel information societies, between which users switch according to their need.

Another expert Martin (1978) maintains that the term (information society) has come to represent societies at an advanced post-industrial stage, characterized by high degree of computerization, large volume of electronic data transmission and an economic profile heavily influenced by the market and employment possibilities of information technology. The emerging social framework of Information Society builds upon this base, because Information increasingly becomes a source of added value and wealth with a growing proportion of workers employed in the Information Sphere.

Difference between Information Society and Knowledge Society. Inevitably, change is the essence of a growing society with Information and Communication Technologies (ICTs) acting as facilitators of that change. In this interconnected world, the current revolution around the importance of information and knowledge is profound. In fact, a new class structure is being created around the wealth of information and knowledge. Knowledge has come to be constitutive of the way that we live, and historically speaking, it is correct to say, to a greater or lesser extent, knowledge has always followed the development of man and mankind. It has been seen as a kind of measurement to the success and achievements of society or mankind.

No society until the present one has ever been called or referred to as “knowledge society.” This term developed relatively shortly after the term information society was introduced in the last decades of the 20th century (Stipanov, 2005). The reason for this might be the technology-related developments which have fundamentally transformed the degree to which knowledge is being integrated into economic activity to the extent that we are witnessing a shift in the very basis of competitive advantage. The expression knowledge society, recognizable more as social project than as sign of times, is not without substance.

In the 1960s the debate on industrial society raised the question whether there can be considered a paradigm shift

towards a knowledge-based society. Some prominent authors already foresaw knowledge as the main indicator to displace labour and capital as the main driving forces of capitalistic development. The notion Knowledge Society emerged towards the end of the 1990s and is particularly used as an alternative by some in academic circles to the Information Society.

UNESCO has adopted the term knowledge society, or its variant, knowledge societies within its institutional policies. Consequently, there has been a great deal of reflection on the issue, which strives to incorporate a more integral conception that is not only related to the economic dimension. For instance, Dr. A.W. Khan, Former Assistant Director General of Communication and Information, UNESCO writes that: “Information Society is the building block for Knowledge Societies, whereas I see the concept of Information Society as linked to the idea of technological innovation, the concept of Knowledge Societies includes a dimension of social, cultural, economical, political and institutional transformation, and a more pluralistic and developmental perspective....”

The concept of knowledge societies is preferable to that of Information Society because it better captures the complexity and dynamism of the changes taking place.... The knowledge in question is important not only for economic growth but also for empowering and developing all sectors of society” Sally, (2005). “Today on the political level and in many scientific disciplines, the assumption that we are already living in a knowledge-based society ... the vision of a knowledge-based society determines at least the perception of the Western Societies (Krings, 2006).

Understanding Knowledge Society. The transformation of existing societal structures by knowledge as a core resource for economic growth, employment and as a factor of production constitutes the criteria for designating advanced modern society as a Knowledge Society. Such a society, in which knowledge plays a crucial and decisive role, with its entire mechanisms and organization gives an impetus for new knowledge, ensuring the conditions of its inception and use, which further increases new knowledge, and so on.

Society is therefore, structured and anchored on knowledge, which is deeply penetrated so that complete functioning of society, including the entire development and progress, rests on Knowledge (Stipanov, 2005). In a knowledge society the traditional measures of competitiveness such as labour, capital and land costs and infrastructure are replaced by new indicators such as patents, research and development (R&D), availability of (or capability to afford) knowledge workers. The emphasis is not on the knowledge anybody has but the knowledge one produces.

As is well known that knowledge resides exclusively in people. It is therefore clear that the greatest wealth of any nation, any society is its people. This is a vastly underused resource, which offers the opportunity for any country to make breakthrough, and catch up with countries presently more developed. It is necessary to differentiate here between the definitions that aim to characterize an existing or emerging reality from those that express a vision – a longing or desire for a potential society. Both are relevant: the former for their contribution to analysis, and the latter because they guide policies.

Castells (2005), an authority on the subject Information Society points out that Knowledge Society, “is to do with a society in which conditions for generating knowledge and processing information have been substantially changed by a technological revolution focused on information processing, knowledge generation, and information technologies”. Castells (2005) opines that Information society places the emphasis on the content of work (the process of collecting, processing, and communicating the necessary information). But knowledge society emphasises economic agents, who should be superiorly qualified to exercise their work.

Characteristics of Knowledge Society. There are many components of Knowledge Society because there is a huge quantity of newly created knowledge in all fields continuously expanding and exponentially growing. Statistics are known about the exponential growth of knowledge surpassing the entire past historical period, including all kinds of publications, as one of the proofs of the whole process. To this we need to add new possibilities of informing, communicating and team work which were incomparable and unthinkable earlier.

Modern ICT has connected the world on all levels so closely, that the entire globe has become a net from which we can connect practically from any one point to another. The possibilities and the speed of communicating, the transfer of information and knowledge, the acquisition of new ideas and views, not to mention the experience of it are so incredible that Castells *et al.* (2005) rightly call today’s society a network society. All this creates conditions for the development of new knowledge and awareness, uninterrupted progress, and development. This process is advancing with such speed and dimension, that all those who are not directly or indirectly involved will ultimately stay on the fringes.

Knowledge is no more connected with an individual; it is today the characteristic of the society as a whole, an interconnected society. In a perfect knowledge society, all people have:

- Open and timely access to information and knowledge;
- The capacity to absorb and interpret information; and
- Avenues and opportunities to use knowledge and decision making and for transformation to higher quality lives.

Establishment of Knowledge-based Society. A careful analysis of the literature available on knowledge society reveals that establishing a knowledge-based society is clearly desirable and, looking from the perspective of the imminent future, it may well be the only possible society. “The establishment of such a society is a political process – it requires political decision making and political actions. The process of establishing a knowledge-based society would be facilitated if one would define bench marks, indicators providing quantifiable measurements indicating whether we are going in the right direction and how far we have progressed. In fact, the essence of progress is to assure order among changes and preserve changes amid order (Slaus, 2007). It may be stated that the emergence of knowledge society means an ever-increasing demand for a well-educated and skilled workforce across the whole economy.

In this connection, it is worth noting that the appointment of the National Knowledge Commission (NKC) by the Government of India has been a step in the right direction. The NKC had been entrusted with the preparation of a blueprint for reform of our knowledge related institutions and infrastructure. It has submitted its report that will take us a long way in the knowledge society.

In the sections above, we have explored conditions, trajectories, characteristics, and environments in which knowledge exists. The next part examines Knowledge Management – the concept, role and what it means for organizations, professionals, academicians, and individuals.

Knowledge Management: Emerging Paradigm. The management of our stock of knowledge resources or intellectual assets has become a topic that is universally popular to both academicians and practitioners (Koohang *et al.*, 2017). Little wonder, most contemporary organizations have realized the importance of utilizing knowledge resources, to enhance their competitiveness and innovativeness, and have therefore shifted their emphasis to knowledge-based systems (Mills *et al.*, 2011). In fact, our dynamic environment, as a prerequisite, requires a paradigm shift in corporate capabilities to create sustainable competitiveness in organizational processes and performance (Rehman *et al.*, 2015).

Omotayo (2015) has indicated that knowledge management (KM) remains a key to the door of competitive advantage among firms in the same industry because it broadens acquired knowledge by increasing the ability of organizations to be creative, thereby putting them at an advantageous position in relation to their competitors. Therefore, the only firms that will remain competitive in their dynamic environments are those ones that are outstanding in terms of innovativeness and creativity (Desouza *et al.*, 2011). That is why some authors argue that a lot of studies is now carried out with a view to identifying why knowledge acquisition, sharing, and application in organizational settings has rapidly increased from the 1990's, and has remained so (Serenko *et al.*, 2010).

It is no longer strange for individuals and organizations alike to appreciate that only organizations that are innovative will survive in very turbulent economic landscape. It is also a fact that innovations can only be achieved when an organization continuously learns and becomes a learning organ. A learning organization is characterized by the stock of both tacit and explicit knowledge which it has acquired over time and how the stock of knowledge is utilized. The stock of knowledge becomes useful only when it is shared and utilized for the overall improvement in all organizational processes and human capital enhancement. Although it is relatively a recent phenomenon, its historical development and popularity has helped to throw weight on the importance of intellectual activities over traditional form of resources like land and capital (Spender, 2008). It is no longer strange that knowledge management has now been known to be a source of an organizational competitive advantage, just like the concept of organizational learning. Knowledge management is an extension of organizational learning because an organization that does not learn can never have any knowledge to store, to share and to use.

Knowledge has come to be regarded as an organizational resource that must be managed effectively if an organization is desirous of standing the pace of competition and environmental dynamism. According to Dalkir (2005) knowledge is now regarded as a commodity or an intellectual asset, but possesses significantly distinct features different from normal commodities, for instance, when individual shares knowledge with another person, his stock of knowledge does not deplete, rather, his knowledge base expands. A very good understanding and appreciation of the fact that information in particular, and knowledge in general has become recognized as veritable organization assets, has made it imperative for organizations to put a lot of energy in its management.

This therefore involves the application of different strategies, policies and tools in the effective management of knowledge as an organization asset. This paper will first of all, establish the meaning of data, information, knowledge and wisdom. Thereafter, we will discuss the relationship between organizational learning and knowledge management. We will also identify some of the reasons why knowledge sharing is not well accepted by some organizational members.

Types of Knowledge

Knowledge is structured into the following types:

Know-what: refers to the Knowledge and facts such as: what is the population of Kampala City? How much does lunch cost at Serena hotel/Owino market?

Know-why: refers to scientific knowledge of the principles and laws of nature. This kind of knowledge underlies technological development, product, and process advances in most industries. This kind of knowledge is often organized and produced in specialized organizations such as research laboratories, universities etc.

Know-how: refers to skills or capability to do something. For example, businessmen judging/assessing market prospects for a new product; or an HR manager selecting and training staff, or conducting interviews. Know-how is typically knowledge developed and kept ready within the organization at the ready.

Know-who: involves information about who knows what and who knows how to do what. It involves the formation of special social relationships which makes it possible to get access to experts and to use their knowledge efficiently. This kind of knowledge is internal to the owner and organization. It is very important for every modern manager or organization to acquire this kind of knowledge.

Explicit Knowledge: Explicit knowledge is the most basic form of knowledge, and it is very easy to pass along because it is written down and accessible. Explicit knowledge is formalized and systematic. It is codified, collected, stored and easily transmitted from person to person. It is not personally bound, and it possesses the qualities of data (Omotayo, 2015). Explicit knowledge is mostly easily handled in knowledge management software which is effective in handling and facilitating storage, retrieval and modification of documents and texts (Mills and Smith, 2011).

Implicit Knowledge: Implicit knowledge comes from the practical application of explicit knowledge, for instance conducting interviews in an organization using established formal regulations.

Tacit Knowledge: This is knowledge we possess, garnered from personal experience and content. It is information if asked for would be very difficult to write down, articulate or present in tangible form. According to Baloh *et al.* (2011) tacit knowledge is rooted firmly in action, procedures and processes, commitments and values and can only be indirectly accessed. Tacit knowledge has to do with intuition and reside in the knower and it is largely experienced based (Nonaka, 1994). According to him, tacit knowledge is action based,

very hard to disseminate, and it is highly contextual and personalized. It is also considered the most valuable form of knowledge which most of the time, leads to innovations and breakthroughs (Wellman, 2001). It is embodied in the hearts of the individuals and comprises mental models, values and norms of behaviour.

Intellectual Capital: In organizations, intellectual is the value of an employee knowledge, training and skills. Combined with proprietary information, it can provide companies with strong competitive advantage. Considered as an asset, intellectual capital can be broadly defined as a central repository of all of an organization's resources used to gain new customers, create new products and services, drive profits and improve the business. From a financial or value standpoint, intellectual capital is seen as the combination of human, technological and structured capital.

How Knowledge is Gained

Knowledge is therefore activated and gained when information is utilized for a new understanding or an insight into the application of new information. Knowledge Management is therefore the process of acquiring, sharing, using and managing the knowledge and information of an organization (Girard, 2015). In other words, it has to do with making the optimum application of our intellectual resources in the achievement of group objectives using a multidisciplinary approach.

We can therefore define knowledge management as a conscious effort of sourcing for the right knowledge and making it readily available to the right people and helping to distribute and making information actionable in ways that improve organization capabilities. When we deliberately study the concept of organizational learning and innovative capability, we discover that it inevitably enhances an organization's competitive advantage and its innovative strength. It tells us to focus on improving our learning capabilities both at individual, groups and organizational level, in order to achieve desired level of organizational outcomes, which can be performance enhancement or increase in profitability (Garcia-Morales *et al.*, 2006).

Organizations should endeavour to encourage timely and accurate documentation of our learning and experience and make it accessible for others so that everyone within the organization will stand to benefit from such experiences. It is only by so doing that the benefit of organizational learning will remain continuous and fruitful (Chawla and Joshi, 2010). According to Watanabe and Senoo (2010) organizational characteristics and national culture have considerable influence on the practice of knowledge management.

Organizational features, such as organization structure employees' management relationship and such other characteristics of the organization influences on the knowledge capabilities of an organization, which is one of the components of knowledge management. Information Technology and Knowledge Management Information technology is an essential aid and should never be discarded when we are discussing knowledge management. That is why Ahmad and Schroeder (2011) suggest that the establishment of strategies relating to information technology that are on knowledge-based which will provides employee's friendly environment that will encourage the refinement of information and transfer of both tacit and explicit knowledge for the benefit of the whole organization.

Learning and Knowledge Management. According to Singh and Sharma (2011), knowledge management and organizational learning have a positive relationship and by extension, with employee's performance. To improve the employee's performance, knowledge management systems must be enhanced and organizations must have to adopt different policies to enhance its learning capabilities.

KM has grown to be an important concept that is why the concept has gained considerable attention from scholars, practitioners, and policy-makers (Nissan, 1998, Spender, 2008; Pirro et al., 2010). It is on that basis that organizations are now paying special attention to their stock of both tacit and explicit knowledge because Knowledge should no longer be regarded as a freelance source of organizational competence.

Factors That Influence Knowledge Management

The three most important factors that influence the management of knowledge are: knowledge distribution, organizational change and organizational learning (Danish and Munir, 2012). Knowledge sharing is an integral part or stage in the knowledge management process. When intellectual assets are stored in archives via documents, procedural manuals, work processes and so on, without sharing, it is of no value. It is only when we share valuable information to those that need them, that we can be said to have engaged in meaningful knowledge management process. It does not end there, because knowledge that is shared without the practical application or utilization by the receiver is of no benefit to anyone.

Organizations do not change for nothing or from nowhere. There are indeed a lot of reasons why organizations change. It could be a planned or anticipated change, arising from executive or managerial game plan to re-strategize to capture a new market opportunity or it could be caused by a reaction by a competitor's action. In other words, an organization may be acting in such a way as to counter a competitive maneuver. Whichever one it is, it is very important for organizations to be current in terms of knowledge creation, storing, sharing and utilization in order to cope with any of such challenges (Danish and Munir, 2012).

The major components in organizational learning are knowledge acquisition, knowledge haring and knowledge utilization. Interestingly, this corresponds also to most definitions of knowledge management given by acclaimed scholars and practitioners. When an organization learns and keeps stock of what it has learned through individual, groups and organizational level interactions, it is said to be a learning organization (Watanabe and Senoo, 2011). Learning organizations keep stock of knowledge and use old knowledge as a basis of acquiring new insight in knowledge creation. They discard outdated knowledge and ensure that knowledge is given to every member of the organization that requires it.

In other words, learning organizations are those organizations that are visibly able to manage the knowledge that they have acquired over time. Knowledge management focuses on gathering, organizing, and analyzing the knowledge base of individuals and groups across the organization in a way that an organization can benefit through enhanced organizational performance (Wellman, 2009). Many organizations devote a lot of attention to the system of transferring best practices, experiences and knowledge as well as increasing the knowledge base of their organizations.

Knowledge management is the product of tacit knowledge or what may be called undocumented ideas or experience and explicit knowledge that are captured in documents as information. It is from the knowledge management information base that knowledge that is stored, is shared between individuals, teams as well as the whole organization. Knowledge management is not limited to information creation and storage, because information that is stored needs to undergo certain processes before they can be shared or utilized.

According to Ries and Trout (1986), the processes include *assimilation*: This is the process of converting stored data into scientific knowledge through validation and analysis. *Data compaction*: This is the process of refinement whereby information that appears irrelevant is discarded. *Data substitution*: This allows information users to systematically access large arrays of information through the logical representation of developed formats that stands for the original documents. *Repackaging*: This is the actual development of the material required for public utilization. These processes are all embedded in knowledge management perspectives as postulated by Ries and Trout (1986).

According to Marcus (2001), there are three roles in the reuse of knowledge. Firstly, the originator of the knowledge, secondly, knowledge intermediate, that is the person that packages the information for storage, sharing and into its usable form. It has to do with indexing, publishing, mapping and standardization, and finally, the consumer of the knowledge, that is the person or persons that will use the knowledge in question. But Demin and Fruchter (2006) identified two types of knowledge re-use, namely internal and external. Internal has to do with a producer or originator of the message using his own knowledge at some future time. External has to do with when the knowledge consumer uses someone else's knowledge.

Barriers to Knowledge Management

Technological barrier. There is often unavailability of software and hardware, coupled with inadequate IT manpower to handle the software, even when it is available. Furthermore, a firm can be caught up in a technological trap caught up by the difference between the time a technology is acquired and the time it is utilized (Heman, 2011). In Africa, for instance many people are comfortable working with mobile phones compared to laptop computers. According to Kelly (2011) most Africans regard mobile phones as their personal computers.

Content barrier. A lot of innate skills and creativity is required to be able to transform tacit knowledge into explicit knowledge. Some ICT apparatus and processes are not easy to explain. This therefore acts as an impediment to knowledge sharing. An example could include unauthorized exchange of information through software within the organization (Heman, 2011).

Barriers in Routines and Procedures. Some processes and procedures are not practically applicable in all situations, for instance regular sectional review. Furthermore, most other procedures, like HR manuals are not rigidly followed because they are cumbersome and mostly prepared by external consultants. Some routines like every midday joint coffee breaks among staff may not be recognized or strictly followed by all employees, which makes them unreliable.

Barriers in Organization. An organization executive may create an organizational structure that is favourable to him alone and which coincidentally facilitate the sharing of knowledge without having the interest of the organization at heart. This may hinder knowledge management because other employees are not carried along in the design of such an organizational structure, but even at that, structures are multi-layered, polyvalent, and often contradictory and maybe invisible even to those who inhabit them (Ferguson, 2011).

Barriers in Personnel. Individual behaviour characteristics account for most of the challenges encountered while managing human access to resources as a major organizational asset. For example, for effective management of organizational intellectual resource, individuals in the organization must view knowledge as crucial capability of their organization; otherwise, it will be extremely difficult for organization to develop the intellectual competencies of the workers. Secondly, if the structure of the organization is not innovation friendly, knowledge management is bound to fail (Dalkir, 2005). Inadequate skills in the use technology can be corrected through effective training and the provision of useable technology.

Spiela and Kovac (2017) investigated the factors that promote organizational knowledge sharing and their findings show that personal inclinations, technology, and organizational variables are factors that help in predicting an organization's knowledge sharing orientations. It is very important to note that it is not the quantum of intellectual assets that an organization has that matters, but what is paramount is how the knowledge is shared to bring about optimum utilization of the knowledge (Argote and Ingram, 2000). The process of knowledge sharing is very important when one considers the fact that knowledge sharing among employees in the same department makes it possible for organizational members to meet their individual goals and objectives faster and makes it easy for them to come up with innovative solutions to their problems (Demartini and Paolloni, 2013).

In fact, a renowned author asserts that knowledge sharing is very important to organizations because of the following reasons: reduction in cost of operation, speed in meeting production targets, increase in efficiency and effectiveness, increase in innovation, and increase in organizational bottom-line (Hansen, 2002). However, even with all the supports and encomiums given to knowledge management as a discipline, Barson *et al.* (2000) argues that knowledge sharing has its own weakness, because according to them, some organizations do not have a culture that permits the distribution of knowledge.

Conclusion

Information and knowledge count significantly in people's everyday decisions and transactions. It is difficult to tell how interaction in life would be without information and knowledge. because decisions and choices are made based on their availability. But the quality and type of information and knowledge presented must be relevant, accurate, timely and reliable to fulfill the pressing needs at hand. Although information and knowledge sound similar and could be used interchangeably, they are not because they impact differently as can be seen in the actions and activities during the Information Society and later during the Knowledge Society periods examined in this review. Whereas information may evoke a reaction or response, knowledge goes beyond because it empowers and influences people's abilities and capabilities to undertake and perform tasks. That is, one can have all the information but lack the necessary knowledge competencies to perform tasks.

In this connection, the Indian Government must be applauded for recognizing how critical knowledge is in public and private affairs by constituting a National Knowledge Commission (NKC) to come out with a blueprint to guide in the generation, storage and sharing of knowledge for performance and development. This is a step in the right direction for India which other countries in sub-Saharan Africa, like Uganda, should emulate. But the real crux of the matter remains the quality and standard of knowledge, how it is managed and how it is shared with all the stakeholders. Knowledge Management has become a captivating discipline for academicians, researchers, scholars, universities, public and private organizations, and management executives. Because knowledge management determines organizations' performance and enables them to keep competition at bay while innovatively fulfilling expectations of their stakeholders. Knowledge management is therefore necessary and relevant not only for institutions, but for governments and individuals as well, because all human beings need knowledge to be able to act prudently. But this depends on the quality, quantity, relevance, timeliness, and ease of accessibility since knowledge is both a vital resource and intellectual power.

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