Knowledge as a Resource and Intellectual Capital in Development

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Abstract The importance of knowledge in the 21st century cannot be over emphasized in relation to the fact that it is a major criterion that places countries of the South as mostly underdeveloped, poor and impoverished as against countries of the North as rich and well-off. Through relevant literature this paper discusses the various concept of knowledge, perspectives in knowledge management and highlights the importance of innovation in knowledge organization. The paper concludes that the concept of knowledge as an industry should be well understood in any developmental process and in the sustenance of productivity through information technology and innovation.

Keywords Developmental Process, Innovation, Productivity, Knowledge

1. Introduction

Ever since the term Knowledge Management (KM) emerged as an initiative, various proposed definitions for what knowledge is and how it can be managed have often been a debate.[1],[2]. Unfortunately, the term knowledge management is not easy to define because it contains multiple representations and concepts. Many authors agree that KM requires a total organisational transformation, including organisational culture, structure, and management style[3],[4],[5]. Therefore many researchers have defined KM from different perspectives, because most debates are centred on the difference in meaning between information and knowledge. This research mentions some of the definitions, for example[6], defines KM as “the identification, optimization, and active management of intellectual assets, either in the form of explicit knowledge held in artefact or as tacit knowledge possessed by individuals or communities[7],[8], suggests that there are currently three major schools of thought on what KM is. One of them recommends that KM is mainly an IT issue, with networks of computers and groupware being the keys. If you construct widespread computer networks and add communication tools that allow group collaboration, people will be more disposed to share information and knowledge.[9], defines KM as “an audit of ‘intellectual assets’ that highlights unique sources, critical functions and potential bottlenecks which hinder knowledge flows to the point of use. It protects intellectual assets from decay, seeks opportunities to enhance decisions, services and products through adding intelligence, increasing value and providing flexibility”[10], defines KM as the management of the organisation towards the continuous renewal of the organisational knowledge base - this means, creation of supportive organisational structures, facilitation of organisational members, putting IT-instruments with emphasis on teamwork and diffusion of knowledge such as groupware into place.[11], sees KM as the discipline that assists the spread of knowledge of individuals or groups across companies in ways that directly affect performance. KM envisions getting the right information within the right context to the right person at the right time for the right business purpose. Therefore, for[12], knowledge management involves the recognition and analysis of obtainable and required knowledge assets, and knowledge asset related processes; and the ensuing planning and control of actions to develop both the assets and the processes so as to fulfil organisational objectives.[13], opined that KM is information or data management with the extra practice of capturing the tacit experience of the individual to be shared, used and built upon by the organisation, leading to increased productivity.[14] gives a short definition of KM as the process of creating value from an organisation’s intangible assets. The definitions of[13] and[14] though similar underscore the processes of creating, capturing, and allocation of knowledge, which are vital in building value and empowering the organisational workforce to increase productivity. From all of these definitions, knowledge is something more than information. Knowledge is seen as a tool, capacity and capability, as something that cannot be said, as information plus. They have successfully demonstrated how knowledge is derived for problem solving and how it is used for forecasting or predicting customer
behaviour. It becomes reasonable to bear in mind that any form of knowledge created for solving problems will be reused whenever an organisation faces the same problems. Therefore can is a continuous seamless series.

2. Entrepreneurial Knowledge Management

Entrepreneurial Knowledge is concerned with all thoughts relating to the process of starting and operating business as well as getting results in modern enterprises by innovators through and their subordinates. Two major types of knowledge are evolutionary and comparative (contemporary) knowledge. Evolutionary knowledge like thought details the general way of thinking characteristics of a particular period or class to date. For example, entrepreneurship development evolved from the universal thought through linear stages, systems and quantitative thought to the present day contingency thoughts[15]. Evolutionary Knowledge comes about as a result of man’s persistent search for solution to problems of any particular period. This type of thought is historical, longitudinal, cumulative and absolute rather than relative in nature. Comparative knowledge in its plurality is absolute rather than relative in nature. Similarly, it compares various ways of thinking zoned to various periods, classes or nations. For example, a comparative knowledge of traditional versus modern entrepreneurship thoughts of Japanese and American styles of management, sales era versus marketing era, capitalism versus socialism, African versus American thought of management cannot be analysed in isolation without the contest of history, politics, culture, time among others[15]. Often than not, comparative knowledge are analytical, distinct and relative.

Entrepreneurship knowledge focuses on the independent and dependent variables of organisation. It also analyses the external and internal variables or statics of any organisation. Its philosophy is the reflective realistic knowledge and consummate wisdom of how to create, operate and sustain innovated ventures. The wisdom may converge around entrepreneurship concepts, functions and practices such as Management by Objective (MBO), Total Quality Management (TQM), Just-In-Time (JIT), de-marketing, management buying-outs, loan syndication, privatization, commercialization, development assistance, entrepreneurship schemes, among others. In the same vein, entrepreneurship scopes through business development, elements of organic business functions and the elements of productivity. This suggests that the concept of knowledge may be total (as in MBO and TQM) or partial, that is relating to an aspect of business such as purchasing reciprocity, elementary analysis of inventory, transfer pricing, recentralisation of authority, counter trade, and development support.

In a knowledge-based economy, recognizing the value of nourishing corporate knowledge represents the foundation of organizations and their business strategies. The often repeated assertion that knowledge has become the key economic resource and the dominant; and perhaps even, the only source of competitive advantage has been acknowledged by business experts, academics, practitioners and consultants as an important element to understanding the value of knowledge and its management[16]. Recognizing the value of any knowledge is key to innovative thinking and corporate investment, and is the cornerstone to organizational performance. As a result, organizations are beginning to examine knowledge as a resource—intellectual capital[17], and are trying to understand its role with respect to knowledge strategies (e.g., effective methods and techniques used within organizations as leverage). Business experts, traders and industrialists among many others in the 21st century are taking on strategic initiatives to enhance their knowledge power—to ensure their survival in a globalising and competitive economy. For many organizations, the core competency for survival in the new global knowledge environment is knowledge management. Knowledge management is seen as a significant component of a business strategy that will equip an organization with opportunities and flexibilities to manage new market challenges and future prospects. Organizations are recognizing the value of employing knowledge management strategies—focusing on the importance of employee skills, talents, abilities and experiences in leveraging corporate knowledge. As a result, connecting people to enable and encourage thought processes is the premise for understanding how knowledge can be leveraged across organizations for improving its products and services, responding to client needs and development in general.

3. Perspectives in Knowledge Management, Innovation and Creativity

In understanding the application of knowledge management initiatives within organizations,[18] noted that knowledge-based companies as well as individuals must be creative as well as innovative in employing knowledge management strategies through different perspectives commonly employed by diverse organisations. These standpoints include the people themselves—the knowledge workers or an employee; organizational knowledge; technology and innovation; and the knowledge-based economy.

These perspectives try to demonstrate the divergent knowledge strategies being employed by organizations. A discussion on the application of knowledge management strategies in relation to communities of practice is put forward. Benefits and barriers to knowledge management are examined in reference to the development and implementation of knowledge management strategies and organizational frameworks.
4. The Importance of Human Knowledge: Level Analysis

4.1. Level I: The Individual Analysis

There is no doubt that it is the individual who is endowed and holds the capacity for knowledge and exercises that knowledge within any corporate environment. It is within this context that[16], stated that:

"Every knowledge worker must first be a teacher, creating a wider understanding of his or her knowledge. It is their job to describe to the organization the power and limitations of their area of expertise. The knowledge worker must be clear about what people should know about their area, especially what they can and cannot produce. Ultimately, becoming a learning organization requires first becoming a teaching organization... It is imperative that the knowledge worker educates his associates as to what his job and knowledge are...The knowledge worker must define his or her information needs’ (53-54).

[19], asserts that people are at the height of companies; and the people, the (knowledge workers); contribute to the success of organization portfolios. In his opinion, business reengineering represented one of the most detrimental management processes. It excluded the knowledge worker from successfully contributing to the overall corporate mission. Therefore, the human factor (the people) needs to come first. For instance, in any organisational setup, the organisation is the people, the knowledge of operation resides in them and it is for this reason that the people exercise their rights and authority. This further justifies the idea that knowledge is power, which is only true when it manifests itself in human actions[19].

4.2. Level II: Organizational Analysis

At the organizational level, the application of knowledge management strategies is dependent on the needs of an organization. There are organizations that take a general approach to knowledge management, and incorporate the essential aspects to help identify their knowledge needs; while for others, a more focused approach is essential. As a result, the significance of knowledge management at the organizational level is based on taking a knowledge-based approach to understanding everyday business practices. The application of knowledge management ideas is very real. Quite a number of companies are now focusing on implementing knowledge management strategies to get the knowledge-edge. Specific strategic areas such as knowledge creation and knowledge innovation are dominating the business world, with organizations honing in on their knowledge niche to remain competitive in their day-to-day business strategies. It is in this regard that the concept of competitive intelligence has crept into organisational management and development, which emphasises the ability of employees and individuals to make forward-looking decisions. For example, Jack Welch, former CEO of General Electric clarifies organisational knowledge with the ability of any employee to be able to provide answers on one hand to key intelligence questions such as:

1. What is the detailed global position of your business and that of your competitors: market shares, strengths by product-line, and by region today?
2. What actions have your competitors taken in the past two years that have changed the competitive landscape?
3. What are you most afraid your competitors might do in the next two years to change the landscape?

Similarly[17], noted that if the defining goal of modern day business and any developmental process can be isolated to just one item it would be the search for competitive advantage. And, as everyone in business should know, it’s a lot harder than it used to be. On the one hand, competition is more intense than ever – technological innovation, consumer expectations, government deregulation, all combine to create more opportunities for new competitors to change the basic rules of the game. This has prompted quite a number of organisations to continually empower workers in terms of skill acquisitions as well as the search for best brains and huge remunerations for those with such brains, of which knowledge is enhanced through innovation and technology.

4.2.1. Knowledge Innovation and Technology

Knowledge innovation is becoming more critical for organizations. According to[20], knowledge innovation refers to the creation, evolution, exchange and application of new ideas into marketable goods and services for the success of an enterprise, for the vitality of a nation’s economy and for the advancement of society. For this reason in any developmental discourse, innovation is cited as the single most important benefit of knowledge management. Knowledge innovation exemplifies the notion that innovation is the ‘one competence’ needed for the future. Xerox PARC has put forward its theory of knowledge ecologies, explaining how knowledge is turned into innovation[21]. It involves the interconnection of how we organize our work, how we invest and use technology as well as the organizational practices and processes implemented by the workers. According to[21], the competence, the skill base, and the capabilities of the organization are where we have to start in knowledge ecology, in a knowledge managed world. The focus is on harnessing the collective learning acquiring of knowledge and skills within the organization. The models many organizations and nations have used in the past no longer seem adequate for effectiveness and success in the 21st-century developmental and organisational environment, hence rapid changes, adaptation and the quest for new models. The situation in many nations, organisations as well as entrepreneurial skills has changed from when the environment and processes were stable or slow[17]. In many sectors today, work processes are changing at a much faster pace as nations; organizations, and businesses face the challenges of rapidly changing technology, globalization, uncertainty, unpredictability, and turbulence[22]. In the past, because of monopoly to technology, market, or brand, they could expect to be successful for a long time despite the
inability or refusal to innovate. However, due to the volatile and ever changing environment, many nations, entrepreneurs, researchers are failing and need creativity and constant innovation to remain competitive and successful. This means that they must recognize and harness the creativity and leadership that exist in the organization to manage its innovation processes. Strategic design, technology, culture, and organizational strategy may not be able to sustain them very long unless organizations also establish a structure that continuously develops creative leaders to run and sustain the process. This strategy will help the organizations establish environments that are conducive to renewal, build organizational culture that encourages innovations, and establish organizational diversity that in turn helps them to remain competitive and productive in the quest for effective development.

4.2.2. The Knowledge-Based Economy

According to a global study from Korn/Ferry International, conducted in partnership with the University of Southern California’s Centre for Effective Organizations at the Marshall School of Business, a major downfall in managing a knowledge organization is to implement a “one-size fits-all” knowledge strategy[23]. The report entitled, Strategies for the Knowledge Economy: From Rhetoric to Reality, focuses on the knowledge management challenges facing organizations, and tries to ‘identify the successes of global businesses in generating, retaining and leveraging their knowledge.’ The report outlines the Do’s and Don’ts in implementing a knowledge management strategy. Regarding the Do’s, companies should put together a strong business case for why a shift towards a knowledge enterprise is essential. The vision and values for implementing a knowledge management strategy should be clearly established and communicated across the organization. The skills and knowledge requirements should also be clearly delineated, as well as the implementation of a set of metrics to measure long and short-term performance. Regarding the Don’ts, knowledge management (KM) should not be delegated to the IT division, or to an individual responsible for KM initiatives. Knowledge management should be embedded in the day-to-day work practices of “frontline workers and their business leaders.” Promoting learning, but rewarding performance only, is another misnomer, according to the report. In addition, shifting all of the responsibility to the workers for developing professionally is not advisable. Furthermore, business leaders should continue to communicate the future requirements of their organizations as well as how employees can master new skills that would enable them to contribute to the overall success of the organization.

In the knowledge economy,[17],[24] state that the value is created through knowledge and through intangible means rather than tangible ones. They propose a four-quarter economic life cycle, which includes: new scientific or technological developments; a vision of a new economic infrastructure; a take-off change in business; and a period of organizational innovation. Speed, connectivity and intangibles are the key major drivers in the new knowledge economy. In addition,[20] believed that organizations implementing best practices competencies may soon begin to realize that there may be revenue opportunities in bundling knowledge products and services. This would benefit nations, companies, individuals and clients in making available the knowledge of their products and services. Therefore, opportunities to learn and to build on each other’s ideas are made available through interactions with internal and external clients/customers. In general, knowledge management has come to mean organizing infrastructures (e.g., technology, space and culture), processes, intellectual capital (content), and internal structure (e.g., incentives, reporting/teaming configurations) to better create, capture, access and apply knowledge[18]. The goal for knowledge management is not based on controlling people’s thought processes but on ways to manage how that knowledge is used, and to develop systems and mechanisms to facilitate the expression and thereby sharing of ideas and knowhow[25]. Creating value through knowledge is the primary objective for most nations and establishments practicing knowledge strategies. Businesses alike are increasingly focusing on implementing knowledge strategies and are trying to understand what lies beneath the concept of knowledge management.

For example, one of time manager of General Motors -Vince Barabba- implemented a Decision Dialog Process as a team-based strategy for making better decisions, and in turn, contributing to individual and organizational knowledge[18]. For others, it was time to focus on intellectual capital. Even with the negative impacts of restructuring, reengineering and downsizing of companies (i.e., the ability to be creative and innovative), organizations are realizing the need to move forward in the new global economy. The above theoretical perspectives try to provide a context within which organizations try to substantiate their roles in their application of knowledge management strategies. As a result, knowledge based business approaches are becoming ever more popular.

5. Innovation and Organizational Development

Scholars have argued how organizational structure, strategy, technology, culture, and other management tools help bring effectiveness and competitive advantage to organizations[26]. They also show that in the 21st-century organizational environment, creativity and innovation are the primary sources of competitive advantage. However, many authors say less about the role of entrepreneurs in innovative process. Creative and effective organizations do not emerge by mere luck or chance. They require individuals, entrepreneurs or leaders to drive and control deliberate changes in structure, culture, and process in order to
transform them into creative, effective, and productive ones. Even though many nations and organizations look for competitive advantage in their structure, strategy, technology, and culture, entrepreneurship is the most important source of competitive advantage. Entrepreneurs like scientists usually decide what happens in the organization and give the direction, vision, and momentum that bring success and development to nations. Therefore, entrepreneurs like leaders are the catalyst that create and manage the environment, organizational culture, and strategies that encourage and sustain innovation, effectiveness, success and development in the organization. When an organization establishes its strategy and work processes, the leaders direct the implementation that brings it to accomplishment. Technology, right culture, and strategy are necessary and contribute to the success of any organization. However, for any of these vital aspects to bring real benefit, the leadership must support, sustain, encourage, and inspire followers (workers) to make it work. Therefore, for the innovation process to begin in any organization, that organization must first put the right leaders and leadership structure in place (the human factor).

Moreover, the entrepreneurs must themselves be interested in innovation; otherwise, they can stifle creativity and innovation in the organization. The top leaders in the organization usually have the power and authority to develop strategies that lead to innovation, which means if they are unable to perceive opportunity for renewal, do not wish to exploit them, or are unable to respond to them, these leaders can impede innovation and in the long run development is hindered. Conversely, if the leaders’ objectives are dynamic, ambitious, and innovative, and if they demonstrate proactive attitudes as well as a capacity to respond to change, this can help bring innovation, renewal, and success to the organization. Some management theorists argue that effective strategy, culture, efficient work processes, and other management tools, not leadership itself as a factor determine organizational success and development[27],[26] &[27]. For example, they point to the Japanese auto industry and technology to show how their strong corporate culture helped in their success. Moreover, empirical research demonstrates the importance of culture in organizational performance[28],[29],[30].

However,[31] has also shown that leaders are the ones who map the culture of development. For example, when IBM had to change its culture in order to renew the organization, it brought in a new CEO, Lou Gerstner. Similarly, it took Jack Welch, a new CEO, to change the culture of General Electric to help it become highly innovative and successful.[27] assert that culture change will not occur without the involvement, commitment, and active support of individuals who repeatedly work to convince the members of the organization of the benefits and needs for an organizational culture change. Organizations with weak leadership tend to be less effective and are prone to constant restructuring and downsizing. Thus business minded persons or entity should run their organization effectively to prevent it from reaching the stage of having to undertake major restructuring. For writers and researchers who take an ‘anthropological’ stance, organisations are cultures[32],[33],[32]. Describing something that an organisation is,[33][34] find a similarity between a nation’s culture and its organisational framework and development, thus an organisation comprises of:

- A pattern of shared basic assumptions,
- Invented, discovered, or developed by a given group,
- As it learns to cope with its problems of external adaptation and internal integration,
- That has worked well enough to be considered valid, and, therefore,
- Is or to be taught to new members of the group as the
- Correct way to perceive, think, and feel in relation to problems[34] p.247).

In this paradigm, development alongside organisational culture is both defined and circumscribed by group parameters (e.g. language, concepts, boundaries, ideology) and by normative criteria that provides the basis for allocating status, power, authority, rewards, punishment, friendship and respect which is only possible with the presence of effective entrepreneurs in organisations. Information is a commodity; while knowledge represents a dynamic human process of justifying personal beliefs toward the truth for development.’

6. Conclusions

The roles and importance of individuals as leaders and motivators can help their nations or organizations achieve development through creativity by stimulating it. This can be done by challenging and freeing individuals to produce fresh solutions to problems. Leaders ask questions that cause their followers to think freely. The stimulating leader creates challenges that make-work in any nation imaginative. This type of leadership loosens others up and focuses their intelligence and creativity in addressing societal and organizational issues and goals in innovative ways. Lastly knowledge management in the 21st century is not all about technology or the network of hardware, the suite of software, the databases, the document management repository and the corporate portal that provides as often said or the right information to the right people in the right format at the right time. Knowledge management and Information technology should be used to support communities—to assist them in collecting, organizing and making sense of the relevant data/information in leveraging people’s knowledge. Community co-ordinators and scholars can organize, maintain and distribute information to interested members by using their knowledge of the discipline to determine what is important, ground breaking and useful in achieving success and development; through the triangulation of efforts in enrich minds by creating, recreating, summarizing, combining, contrasting and integrating information.
Therefore, knowledge as a resource and intellectual capital in development must go beyond information management to support knowledge creation through innovation.

REFERENCES


