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Knowledge Mapping and Auditing: A Proposed Knowledge Management Audit Framework for Corporate Organizations in Nigeria

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Abstract

This paper aims to illuminate the understanding of Knowledge Auditing (KA) and knowledge mapping as well as propose a knowledge management audit framework as essential tools for Corporate Organizations in Nigeria. The methodology adopted was a documentary/literature search to unravel the role of KA in corporate organizations in Nigeria. The paper further discusses the elements of KA, the benefits of KA, and the challenges that corporate organizations are likely to face in the course of conducting knowledge auditing. Also, a critical review of some of the KA methodologies proposed by researchers in the literature was delved into. This paper revealed that there are no universal approaches to conducting KA in organizations. However, due to the dearth of studies on KA in the Nigerian environment, a Knowledge Management Audit (KM-A) framework was proposed for corporate organizations in Nigeria. This paper concluded that KA should be given priority by the management of organizations in Nigeria for their continual existence from time to time, and most importantly to determine their knowledge health. It was recommended among others, that the Corporate Affairs Commission (CAC) in Nigeria should design and enforce the implementation of KA

policies for corporate organizations so that their knowledge resources both within and outside Nigeria can be optimally managed and utilized.

Keywords: Knowledge auditing, Knowledge mapping, Knowledge management Methodologies, Framework, Corporate organizations

Introduction

In this era of knowledge economy, knowledge assets play a pivotal and strategic role in the efficient running of organizations. For instance, corporate organizations in Nigeria, can easily attain a competitive edge through the optimal use and management of their knowledge resources within and outside their operating environment. The idea of Knowledge Management (KM) came into existence in the Nineties during the “internet boom”, and has since culminated in the use and application of KM principles by organizations, mostly in developed economies (Ndagire, 2018). KM principles encompass guidelines, policies, rules, procedures, infrastructures, culture, and strategies among others that are required for the successful implementation of KM (Kruger & Johnson, 2010).

In a nutshell, KM can be defined as an integrated approach to identifying, capturing, evaluating, and sharing an organization's knowledge assets to achieve maximum payoff (Koenig, 2018). However, in a developing economy like Nigeria, the application and use of KM principles by organizations is still at a low ebb, perhaps due to little understanding of this concept and its relevance to meeting organizational goals and objectives (Elongue, 2021).

Although organizations have evolved diverse practices in managing their knowledge assets, this may be due to unprecedented growth in the use of technologies. Therefore, through the right application and use of KM principles, organizational knowledge can be effectively managed to achieve maximum returns (Kruger & Johnson, 2010). Employees in any organization constitute the core knowledge assets, being the main carriers of knowledge, and on this account, there is the need for proper

management and continual improvement of knowledge to contribute optimally to an organization's bottom line.

Apart from this, employees also acquire and utilize diverse forms of knowledge such as tacit and explicit knowledge throughout their lifetime in an organization. Tacit knowledge is the type of knowledge that is personal, experiential, and most times embedded in the subconscious level of an individual (Mohajan, 2016). It can be transferred through the process of socialization or face-to-face interaction in an official environment or unconsciously without the realization of the individual who possesses such knowledge unless it is expressed (Mohajan, 2016). On the other hand, explicit knowledge is disparate sources of documented knowledge that exist within and outside an organization such as books, journals, magazines, correspondences, and databases among others (Dhamdhare, 2015). These categories of knowledge need to be identified, captured, audited, and applied in line with the principles of KM to attain specific organizational goals and objectives.

One of the principles of KM that are rarely practiced by corporate organizations in a developing country like Nigeria is the regular auditing and mapping of their knowledge assets. Auditing in layman's language can mean a thorough investigation of a process or activity to ensure it conforms to the norm or standard. Knowledge Auditing (KA) can be defined simply as a “systematic analysis of an organization's information and knowledge entities and their key attributes, such as ownership, usage, and flow, mapped against users and knowledge needs” (Skyrme, n.d.). On the other hand, knowledge mapping is a process of visualizing or having a pictorial representation of an organization's knowledge resources. It acts as a visual guide for users to know exactly where knowledge resources reside in an organization (Kumar, 2013). It can also be referred to as an inventory of knowledge, which is more like a repository that points out to users the diverse sources of organizational knowledge and their locations (Siyanbonga, 2020). In short, a knowledge map can either be manual or electronic, although, an electronic or digital map has an advantage over its manual counterparts based on its flexibility, and it enables quicker access to an

organization's resources. Knowledge auditing and knowledge mapping can be seen as two sides of a coin, therefore, the idea of focusing on one aspect and leaving out the other is not possible in this instance; rather, the two activities are interdependent. They need to be carried out simultaneously and painstakingly to grasp the vastness and the extent of utilization of an organization's knowledge resources.

In the context of KM implementation in an organization, KA is the first and most important step to establishing a successful KM initiative (Pa, Taheri & Abdullah, 2012; Levy, Hadar, Greenspan & Hadar, 2010). It is a consistent and continuous exercise that needs to be undertaken

before the development of the KM strategy. It is also a process that needs to be done from time to time due to the changing work environment and knowledge needs of an organization (Molala & Nkate, 2018).

Several researchers have defined KA from diverse and similar perspectives. For instance, Elongue (2021) defined knowledge auditing as a dynamic process that entails the identification of needs, sources, structure, and use of knowledge resources within an organization. Kaila (2020) also defined KA as a process that enables one to find out the state of an organization's knowledge economy, that is, in terms of the type of knowledge that exists, the required knowledge, and the extent of use of an organization's knowledge. KA gives one an idea of whether an organization's knowledge is maximally utilized or under-utilized.

KA requires comprehensive planning to ensure successful outcomes by adherence to the following principles as pinpointed by Pa et al., (2012). These include (a) The need for proper orientation on KA amongst the workforce and what it is all about; (b) Knowledge auditors need to be trained to carry out this activity; (c) The need for employees to give appropriate and straightforward answers to questions posed during the auditing. This is necessary to reflect the true picture of the knowledge needs/gaps that have not been captured or identified; (d) The need to present a KA report to management after the exercise as feedback in line with the scope and objective of the audit.

KA serves varying purposes for organizations as pinpointed by some researchers in the literature (Ayinde et al., 2021; Siyanbonga, 2020; Kaila, 2020). Some of these purposes among others are highlighted as follows:

- (i) Knowledge auditing enables an organization to determine the health of knowledge resources;
- (ii) It helps to determine the knowledge needs of an organization in line with the goals and objectives;
- (iii) It helps to identify and determine the value of the knowledge developed in an organization;
- (iv) It helps an organization to identify and locate the experts with strategic and valuable knowledge;
- (v) It helps an organization to create an inventory of knowledge assets being housed;
- (vi) It helps to locate critical knowledge that needs to be managed effectively for organizational performance;
- (vii) It helps to identify knowledge gaps within an organization.

It is also noteworthy, that KA can either be broad or narrow depending on the type of methodology adopted (Siyanbonga, 2020). Most importantly, it is the ability to identify the knowledge needs of an organization as well as bridge the knowledge gap as detected in the course of the KA investigation that makes the audit worthwhile.

In line with the above, the role of KA in an organization cannot be undermined because it brings to the limelight the strengths and weaknesses of an organization as it relates to the management of its knowledge resources. However, in the context of corporate organizations in Nigeria, the whole idea of knowledge auditing and mapping seems to be alien to most of these organizations, perhaps, due to low awareness of the application of KM principles in the management of an organization's knowledge assets. Also, there is a dearth of studies on KA using Nigerian organizations as case studies.

In view of the above, this paper aims to bring to the limelight the understanding of the concept of knowledge mapping and auditing and its relevance to corporate organizations in Nigeria. This paper further discussed the elements of KA, the benefits of KA, and the challenges

corporate organizations may likely face in the course of conducting knowledge auditing and mapping. Also, a critical review of some of the KA methodologies proposed by researchers in the literature were delved into. And lastly, recommendations and conclusions were equally made.

Aim and Objectives

The main aim of this paper is to shed light on the understanding of knowledge auditing and mapping and its relevance to corporate organizations in Nigeria. The following objectives are given prominence in this paper.

- i . To identify the elements of knowledge auditing as applicable to corporate organizations in Nigeria
- ii. To identify the benefits of knowledge auditing to corporate organizations in Nigeria
- iii. To identify likely challenges in conducting knowledge auditing by corporate organizations in Nigeria.
- iv. To propose a KM-Audit framework for corporate organizations in Nigeria.
- v. To suggest policy options to ensure the consistent practice of knowledge auditing and mapping by corporate organizations in Nigeria.

Elements of Knowledge Auditing

There are diverse elements of knowledge auditing that cut across organizations, regardless of their type or size, as identified by authors in the literature as discussed below: (Kaila, 2020; Serrat, 2017; Kumar, 2013; Pa et al., 2012). These universal elements are various activities undertaken by knowledge auditors to ensure successful KA.

- i. Scope Definition and Objective of the Audit: Scope definition and objective are the first elements of a knowledge audit. By this, everyone in the organization is expected to be carried along, and to know the purpose of the audit (Pa et al., 2012). Aside, likely areas to cover and expected outcomes need to be clearly stated in a memorandum to the management of the organization. In the

memorandum, stakeholders, resources, and timelines are equally stated before the commencement of the audit.

ii. Knowledge Need Analysis: Another element is knowledge need analysis which is mostly carried out to identify the collective tacit and explicit knowledge that an organization possesses. Apart from this, the individual knowledge of employees is equally examined to determine their usefulness and relevance to meeting organizational goals and objectives. In the course of carrying out this analysis, the knowledge gap within an organization is detected, and diverse ways of bridging the gap are identified (Serrat, 2017).

iii. Knowledge Inventory Analysis: Knowledge inventory analysis can be described as a process of identifying, locating, and documenting an organization's explicit and tacit knowledge assets (Kaila, 2020). It involves indexing and classifying these knowledge resources based on their usefulness to the organization. In the case of tacit knowledge, it can be classified using criteria such as professional qualification, skills, and core competency areas. Knowledge inventory analysis allows an organization to find out the types of knowledge, locations, owners, users, and formats of the knowledge resources housed within an organization (Kaila, 2020).

iv. Analyze Knowledge Flows: Analyzing an organization's knowledge flows is also another element of KA. This can be done by mapping or visualizing the knowledge flows from one source to another. It is possible to detect how knowledge flows within a particular department, to other departments in an organization. It could be done to detect how knowledge flows from management down to the organizational members (Serrat, 2017).

v. Creation of Knowledge Maps: This fifth element has to do with creating knowledge maps of the existing knowledge resources in an organization. Knowledge maps help to visualize the existing knowledge, their sources, flows, and stopping points within an

organization. Electronic knowledge maps could be used due to the advantages it has over manual knowledge maps, such as quick access to the organization's knowledge resources via links on the map (Kumar, 2013).

vi. Review and Improve: The last element is review and improvement, which is often done after a comprehensive audit has been carried out by the audit team. The findings of the audit team are reviewed and documented in the form of a management report. The onus is therefore on management to act on the report to improve the organization's knowledge base and decide on the most appropriate KM strategy for that organization (Siyanbonga, 2020).

Methodology

The methodology adopted for this study was a documentary literature search. Due to the dearth of articles on this subject matter by Nigerian authors, articles by non-Nigerian authors were mostly used and scrutinized for relevance. 35 articles were sorted based on their topics and year of publication. The author reviewed the sorted articles ranging from Year 2007 to 2021. The contributions of past researchers on knowledge auditing were analyzed, critiqued, and discussed in the context of the Nigerian environment. Topical analysis was done by segregating the articles into different areas as it appear in this paper such as elements of auditing, benefits of KA, tools required for auditing and mapping, and critical evaluation of some selected methodologies proposed by past researchers among others.

Benefits of Knowledge Auditing to Corporate Organizations in Nigeria Knowledge auditing is mostly beneficial to organizations that are interested in managing and using their knowledge assets maximally and optimally. A comprehensive knowledge auditing will enable an organization to achieve the following benefits as pinpointed by (Shahmoradi, et al., 2016; Kaila, 2020).

i. Identifying an Organization's Knowledge Resources: KA

allows an organization to identify their knowledge resources (Tacit and Explicit), and develop strategies to manage them (Shahmoradi et al., 2016). Organizations use disparate sources of knowledge on a day-to-day basis, however, in the process of carrying out a thorough and detailed KA, an organization may need to identify and categorize these knowledge resources based on their usefulness and relevance to an organization (Kaila, 2020).

ii. Improvement in an Organization's Intelligence Quotient (OIQ): OIQ in the context of any organization, can be defined as a quantitative measure of the level of effectiveness in information distribution, decision making and action based on the use of relevant information (Shahmoradi et al., 2016). OIQ can measure specifically the level of awareness of external information, dissemination of internal knowledge, continuous innovation, and decision-making architecture put in place in an organization (Shahmoradi et al., 2016).

iii. Identify Present and Future Knowledge Gaps: KA enables an organization to determine its present and future gaps, that is, the missing knowledge in an organization (Serrat, 2017). The missing knowledge can be prioritized if acquiring it could be costly for an organization. One of the ways of acquiring the missing knowledge is by training and re-training the workforce on the required knowledge to carry out their work functions and routines.

iv. Helps to Identify Present and Future Skills and Competencies in an Organization: KA helps to identify the entire know-how in an organization. Know-how has to do with skills and technical knowledge imbibed by employees to carry out their assigned duties with ease. KA will help to identify those skill sets along with the employees who are versatile in the use of these identified skills. Aside, skill gaps are equally identified, and diverse ways to bridge the skill gap are proposed by the audit team in their report to management.

v. Develop Knowledge Maps- Knowledge maps are visual

representations of the various types of knowledge resources in an organization. It helps to direct employees to several sources of knowledge in an organization. Currently, there are quite a number of software that can be used in developing knowledge maps such as MindManager, and Edrawmind among others.

vi. **Assessment of your Organization's Knowledge Value:** The value of your organization's knowledge resources is very essential for the present and future generations in an organization. If the value is known to be superior, it should be guarded jealously so that it does not get to the hands of third parties. On the other hand, if through KA, the value is found to be low, management may be advised to improve the value of an organization's knowledge assets.

vii. **Evaluating Knowledge Attitude, Culture, Risk, and Environment:** Another benefit is using qualitative analysis in evaluating the knowledge attitudes of employees, knowledge culture, and the organization's environment. Aside, the level of knowledge risk can also be ascertained among the workforce and management to determine the amount of risk taken to effectively utilize both internal and external knowledge.

Tools Required for Knowledge Auditing and Mapping by Corporate Organizations in Nigeria

Effective and successful knowledge auditing requires the efforts of everyone in an organization, although, a team of experienced knowledge auditors is required to achieve success. However, there are no universally acceptable tools for KA, but the type of tools to be used depends on the objective of the audit. The auditing involves assessing documents, organizational processes, routines, knowledge cultures, knowledge attitudes, and behaviors among others. Some of the essential tools of knowledge auditing are face-to-face interaction, document inspection, observation method, telephone interviews, structured/unstructured questionnaires, group discussion, and online surveys among others (Levy et al., 2010; Sharma & Chowdhury,

2007). These tools are discussed briefly by the author as highlighted below:

i. Face-to-Face Interaction: A comprehensive auditing requires face-to-face interaction, especially between the audit team members and the employees of an organization. The team members need to meet the employees on a one-on-one basis to discuss their knowledge sources on their respective jobs. Employees are expected to discuss freely without any form of prejudice or bias to get to the crux of the matter. There is a need for openness, honesty, and frankness by employees to carry out a successful KA.

ii. Document Inspection: Document inspection is another tool that can be used for knowledge auditing in organizations. Another name for this method is called document analysis. It is the process of examining several documents in an organization to draw out relevant knowledge that is mostly used by an organization. Specific and important knowledge sources are identified and labeled as a basis for adding value to an organization's knowledge.

iii. Telephone Interviews: The audit team carrying out the inspection may decide to conduct telephone interviews, especially for big organizations, due to the inability to go around all the departments in the organization; and equally to have an in-depth knowledge of their operations and activities. For instance, specific people in an organization who hold important positions can be interviewed to find out the vastness of the knowledge they possess.

iv. Observation Method: The observation method is also an important tool for knowledge auditing. The audit team may need to observe a whole lot of things going on in an organization such as work processes, knowledge use and reuse, knowledge sharing, and knowledge hoarding among others. The activities of the knowledge audit team would need to be carried out quietly without any form of confrontation or questioning on their part, rather, all observations are well documented and given as feedback to management.

v. **Structured/Unstructured Questionnaire:** Another tool which is the questionnaire can be used to capture relevant data from the employees or members of management. The questionnaire can be structured or unstructured depending on the preference of the auditors. This tool is often used to determine employees' depth of knowledge on KM issues and also relate to the use of organizational knowledge collectively and individually.

vi. **Group Discussion:** The audit team may decide to opt for group discussion as a tool for finding out the perceptions and opinions of employees on the organization's KM activities. Group discussion can be in the form of small focus groups in an organization such as employees in specific departments whose roles cannot be undermined. Several tea break sessions are organized by the knowledge audit team members to deliberate on issues among the employees.

vii. **Online Surveys:** Online surveys are another tool that can be used by the audit team. Electronic surveys could be conducted to save time and fast-track the auditing process. Several software packages can be used in this regard such as Google questionnaires, and survey monkeys among others. The e-questionnaire can be sent to the organization's portal for all the employees to respond to, or sent to designated people in an organization. The result of this online survey is later communicated to management via the audit report.

It is worthy of note that the use of the KA tools highlighted above may vary from one organization to the other in the Nigerian environment, and also, depending on the preference of the audit team; or based on the type and size of the organization in question.

Critical Analysis of Some Selected Methodologies in Conducting Knowledge Auditing and its Relevance to Corporate Organizations in Nigeria

The literature is replete with diverse methodologies that past

researchers have proposed for conducting successful KA in organizations. These methodologies can also be referred to as frameworks, tools, methods, and procedures that can be adapted in conducting KA in any organization (Pa, et al., 2012). However, a critical look at these methodologies, reveals a lack of uniformity in the proposed methodologies by researchers. Pa et al. (2012) pointed out that most of the studies on KA emphasize its importance, but there is no consensus yet on the methodology and processes involved in their implementation. These methodologies vary in their approaches and the number of stages in conducting KA (Siyanbonga, 2020). For instance, Perez-Soltero and Barcelo-Varenuela (2007) proposed a knowledge audit methodology using the organization's core processes approach. The proposed KA methodology comprises ten stages which are: acquiring organizational strategic information and identifying organizational processes; identifying the organization's core processes and establishing measurement criteria; prioritizing and selecting the organization's core processes; identifying key people; meeting with key people; obtaining knowledge inventory; analyzing knowledge flow; knowledge mapping; Knowledge audit reporting; and continuous knowledge re-auditing. This proposed methodology can help in determining the value and health of an organization's knowledge resources, knowledge flows, and the level of preparedness to implement KM initiatives in an organization. However, this proposed methodology has ten stages, which makes it quite cumbersome. However, some other KA methodologies in the literature have been collapsed into smaller steps.

On the contrary, Ganasan (2011) proposed a 6-stage knowledge audit methodology for organizations to determine the risks and opportunities associated with their use of knowledge resources and also address the identified knowledge gaps. The six stages are: assessing the organizational strategic information and culture, identifying organizational core processes, measuring the current knowledge health, knowledge audit reporting, recommendations of appropriate knowledge management strategies, and continuous knowledge re-auditing. This proposed KA methodology is tailored towards

identifying how well knowledge is used to achieve an organization's goals and objectives; and the need for continuous knowledge re-auditing in response to an organization's changing knowledge needs as suggested by Perez-Soltero and Barcelo-Varenuela (2007).

In addition, Ganesan and Dhanapal (2012) equally developed a hybrid methodology that combines the core process approach of Perez-Soltero and Barcelo-Varenuela (2007) with culture also being identified as the main core process. The six-stage methodology comprised information and culture assessment, core process prioritization, knowledge health measurement, knowledge audit reporting, KM strategies recommendation, and continuous knowledge re-auditing. This proposed methodology sees culture as an important element in an organization if KA is ever going to be successful. Culture in this regard refers to the people, processes, and procedures that are entrenched in an organization to facilitate KM initiatives.

Kumar (2013) also proposed a four-stage KA methodology slightly different from the propositions of other researchers mentioned earlier. The proposed methodology comprised four components namely: knowledge needs analysis, knowledge inventory analysis, knowledge flow analysis, and lastly, knowledge mapping. At the knowledge need analysis stage, an organization identifies the current and future knowledge needs that will enable it to achieve its performance targets. The knowledge inventory analysis entails identifying the knowledge assets and resources that exist within an organization at the time of the audit and where they are located. The knowledge flow analysis looks at an organization's processes, people, and systems to determine how knowledge flows within an organization. During this phase, the knowledge gaps and constraints are identified to meet future knowledge needs. Knowledge mapping, which is the last phase of the KA process, entails a diagrammatic or visual representation of the knowledge resources as well as the knowledge flow within the organization.

Similarly, Jafari and Payani (2013) also proposed a systematic approach to KA comprising six steps which are: identifying the organization's knowledge objectives, identifying the organization's

experts, identifying the organization's knowledge documents, determining the organization's enjoyment of knowledge, determining the knowledge importance and auditing organization's knowledge situations. This proposed methodology is more specific and detailed in conducting a standard and comprehensive KA. It also emphasizes on examining the extent of the use of tacit and explicit knowledge resources in achieving the organization's goals and objectives. However, methodologies with fewer stages have been proposed by other researchers in the literature.

Burnett and Williams (2013) proposed a reconsideration for a standard knowledge audit process, which centers on identifying and measuring knowledge base processes at the individual and organizational levels. It would become much easier to implement KA with the adoption of this methodology since the knowledge management team is expected to have an idea of where critical knowledge is possibly located. Also, knowledge inventory, mapping, and knowledge needs analysis were regarded as appropriate KM strategies to be adopted in an organization. However, in this proposed framework, infrastructure is considered as one of the components of KA, but it failed to consider the infrastructure enablers in the context of an organization.

Shahmoradi *et al.* (2015) also proposed a comprehensive KA methodology by considering the infrastructural aspect of KM such as information technology and organizational culture in the knowledge audit. This proposed framework examined critically the integration of infrastructure and its enablers such as structure, processes, and systems among others to determine the successful implementation of KA. This methodology is an improvement on Burnett & Williams's (2013) proposed KA methodology. In support of this proposed methodology, Molala and Nkate (2018) equally affirmed that the enabling conditions of KM cannot be undermined in the proper implementation of a comprehensive and standard KA audit.

In another vein, Molala and Nkate (2018) proposed a five-stage KA methodology that was adopted for the National School Government (NSG), a training school for public servants in South Africa. KA was conducted to assess the state of knowledge in NSG and to identify the

knowledge needs of the institution. The five staged KA methodologies are: Knowledge needs analysis; Knowledge inventory analysis; knowledge flow analysis; knowledge mapping and knowledge audit reporting. This methodology is similar to Kumar (2013), however, the distinct difference between these two KA methodologies is the absence of knowledge audit reporting. KA audit reporting is essential as a component of auditing, however, it is not to have been included in

Kumar (2013), which brings out the limitation of his proposed methodology.

Furthermore, Molala and Nkate (2018) in their study compared the NSG proposed model to Jafari and Payani's (2013) systematic approach to KA. It was discovered that both methodologies are similar and also distinct in some areas. For instance, Molala and Nkate (2018) and Jafari and Payani (2013) proposed a systematic approach to KA, therefore, making them similar in their approaches to KA, however, the distinct differences between the two proposed methodologies is that: Jafari and Payani (2013) did not incorporate knowledge mapping and KA reporting in their model, while Molala and Nkate (2018) did not consider the extent of an organization's enjoyment and prioritizing of knowledge, and it's impact within the organization as proposed in Jafari and Payani (2013).

In addition, Drus (2020) proposed a KA methodology for two electricity supply industries in Malaysia. He identified four phases in his proposed KM methodology for electricity companies. These are evaluation and assessment, identification of knowledge, culture, and customer relations attributed to KA. This proposed KM methodology by Drus (2020) was designed for electricity companies, however, this methodology can equally be applied by other types of organizations.

On the whole, a critical assessment of these few methodologies of KA depicts that there are no universal methods for conducting KA for organizations as revealed in the literature (Ayinde et al., 2021). However, for the sake of this paper, a KM Audit (KM-A) framework was proposed for conducting KA in the Nigerian environment based on the insight and contributions from the works of past researchers on KA.

This KM Audit framework is essential to identifying the extent of KM implementation and the existence of KM enablers within an organization in the course of auditing. This proposed framework is very similar to Perez-Soltero and Barcelo-Varenuela (2007). However, the distinct difference lies with this proposed framework, in the sense that it focuses on determining the extent of KM implementation in an organization through KA.

Proposed KM Audit Framework for Conducting KA for Corporate Organizations in Nigeria

Fig 1: Knowledge Management Audit (KM-A) Framework

Source: Adapted from Perez-Soltero and Barcelo-Varenuela (2007)

The proposed KM Audit framework as shown in Fig 1 above comprises of 9 stages. It is a combination of the systematic processes of KA as

suggested by past researchers in the literature, coupled with core organizational processes along with the KM enablers and KA processes. In line with the proposed KM Audit framework above, conducting a comprehensive KA will require understudying the core organizational KM processes such as acquisition of knowledge, creation of knowledge, storage, retrieval and maintenance, application and exploitation, knowledge use and reuse to determine the extent of KM processes utilized by an organization. There is also the need to assess the level of KM implementation, and this can be done by assessing whether the KM enablers (culture, structure, information technology, people among others) are well entrenched in an organization for the proper functioning of KM. The auditing will also involve identifying key people in the organization for further insight into KM activities, taking stock of the knowledge inventory, analysing the knowledge flows, mapping the knowledge areas identified, auditing the knowledge resources to identify missing gaps and needs, and lastly, knowledge re- auditing in case there is the need to do a proper follow up based on the feedback from the audit. At the end of the auditing, a comprehensive knowledge auditing report would show clearly the strengths and weaknesses of the organization in terms of the extent of KM practices, types of knowledge assets, knowledge flows, and knowledge gaps/needs. It would equally reveal the level of acceptance of KM and the existence of the enabling factors that support KM in the organization.

Therefore, in the context of corporate organizations in Nigeria, the importance of this proposed KM -Audit framework cannot be overemphasized, due to its role in determining the level of preparedness for KM implementation, finding out the knowledge needs, determining the knowledge gap or missing knowledge, assessing knowledge culture, knowledge attitude, behavior, technology, structure, and KM strategy among others. However, in all these, the support of management cannot be undermined in the successful conduct of KA, however, the lack of adequate support may not bring about the expected outcome.

On the whole, this proposed KM-A framework has shown that a KM-

focused environment is a sine qua non for conducting a successful KA. However, if an organization is not KM-inclined, it may not achieve much success in the process of auditing its knowledge resources.

Challenges in Conducting Knowledge Auditing in Corporate Organizations

In a bid to conduct a comprehensive and successful knowledge auditing in any corporate organization, numerous challenges need to be tackled headlong to ensure the successful implementation of KA as identified in the literature (Pa, et al., 2012; Raham & Shukor, 2011; Gourova, 2009). Corporate organizations in the Nigerian environment have versed knowledge assets, however, auditing these assets without due consideration for a KM-enabled environment may affect the successful outcome of the audit.

Without any gainsaying, corporate organizations would experience some of these challenges highlighted below in the course of conducting KA regardless of the size and type of organization. Some of these challenges are briefly explained below:

- i. Lack of Adequate Funds: A comprehensive KA requires adequate funds to ensure a successful outcome. However, most organizations do not plan for KA in their budget, thereby making it very difficult to fund such an exercise without a detailed and comprehensive plan.
- ii. Lack of KM culture: Most organizations in the Nigerian environment have not imbibed fully the KM culture as expected, which is quite understandable. KM culture encompasses trust, openness, honesty, collaboration, support by management, use of technology, and mentoring among others (Stylianou & Savva, 2016). However, it can be imbibed by the workforce through proper orientation and change of attitude. If the KM culture is not cultivated, it will impact negatively on KA exercise undertaken in the organization.
- iii. Lack of Proper Orientation: The workforce in an organization must be given proper orientation before embarking on the KA exercise. Employees need to know the importance of knowledge auditing to any organization, and its benefits to the survival of an organization. An

orientation will suffice before the commencement of the exercise. Employees need to be given orientation on the roles expected of them during the KA. If there is no proper orientation, employees may exhibit an uncooperative attitude.

iv. Lack of Management Support: At times, if the management of an organization is not supportive of KA, it may be difficult to implement the exercise or sustain it. Therefore, management must be ready to support KA fully if there is going to be any tangible success. Handzic et al. (2008) pinpointed that leadership support in an organization plays a key role in KA success.

v. Lack of Trained Knowledge Auditors: A comprehensive KA requires the combined efforts of trained auditors. Knowledge auditors must be well versed in conducting auditing, however, lack of adequate training may deter the successful outcome of the auditing exercise. In case there are no knowledgeable auditors in-house, an organization can contract them out to experienced and trained auditors.

vi. Inadequate Time and Support: KA requires time, trained personnel, tools, and other essential resources. An organization must ensure that the exercise is given full attention and enough time it deserves, if not, there will always be a call for an extension of the exercise to meet up with time.

vii. Lack of Cooperation between the Audit Team and Employees in the Organization: It may happen that if the audit team is constituted by the management of an organization, employees may exhibit an uncooperative attitude, non-nonchalant attitude, and unwillingness to open up to the auditors, especially during the questioning and answering session due to the familiarity that exists between the employees and auditors (Raham & Shukor, 2011).

Overall, the challenges mentioned above can be surmounted by organizations that are interested in implementing KM initiatives. KA is an “eyeopener” for any organization to assist in identifying her Strengths, Weaknesses, Opportunities, and Threats (SWOT) as it relates to handling her knowledge resources (Sharma et al., 2010).

Conclusion and Recommendations

Without an iota of doubt, this paper has brought to the limelight the

need for corporate organizations in Nigeria to embrace KA for the proper management and optimal use of their knowledge resources. KA should be reconsidered as one of the major activities to be supported and implemented by the management of any organization, as well as planned for in the annual budget to ensure a successful outcome. Apart from this, the management of organizations should be ready to take the bull by its horns for the KA exercise to be a continual and enduring one. However, KA comes with its attendant challenges such as lack of adequate resources, the uncooperative attitude of employees, lack of funds, and lack of management support among others. These challenges need to be addressed for a successful KA implementation in any organization. In view of this, the following recommendations are hereby made to ensure a successful and hitch-free KA for corporate organizations in Nigeria:

- (i). There should be a proper orientation program ahead of the KA exercise. This would ensure that all employees are carried along and involved in the exercise.
- (ii). To ensure that KA is conducted from time to time, it should be included in the KM strategic plan of corporate organizations.
- (iii). Management should involve auditors who are KA experts in conducting a hitch-free and successful exercise.
- (vi). Management should implement in detail the feedback from the KA report such as meeting the knowledge needs, bridging the knowledge gaps, and enforcing the knowledge culture and attitudes in an organization.
- (vii). Management should give appropriate feedback to employees after the exercise based on the results of the KA. This would allow them to understand the nitty-gritty of KA and its implications for the future of the organization.
- (viii). Lastly, the Corporate Affairs Commission (CAC) of Nigeria should design KA policies that would help in determining the knowledge health of corporate organizations from time to time; and also ensure the optimal utilization of their knowledge resources both within and outside Nigeria.

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