

Knowledge Audit (A Brief Review on Concepts and Methodologies)

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Abstract. In the late 21st century, knowledge became the most meaningful resource of globalized economy. It is the knowledge that determines the health of all business in high tech manufacturing, services or information sectors. Knowledge management is the solution to the issue. As Peter Drucker declared: We cannot manage what we do not know how to measure! So the knowledge audit, the first step of knowledge management implementation in organizations, as a key success factor is the best answer to understand how and what we could measure! This literature defines different aspects of knowledge audit as the solution for organizations' knowledge needs.

Key words: knowledge management, knowledge audit, knowledge audit models, knowledge audit methodologies, knowledge audit constituents, knowledge strategy.

Introduction

Knowledge increasingly occupies a strategic role in most organizations. High levels of uncertainty characterize the 'new world of business' and enterprises need to reinvent themselves to adapt to this changing environment (Paramasivan 2003: cited in Toit, 2014: 6). Knowledge is generally distinguished as the most vital, strategic asset that an organization possess (Henczel, 2001). In this 21st century, Henczel's statement is a fact as knowledge grows constantly to meet the challenging needs of various areas of expertise, interests and subjects (Ansari, 2018). As such, organizations are challenged today to develop appropriate knowledge management strategies to better manage its corporate knowledge to gain competitive advantage. Zack in his article managing organizational ignorance suggested that knowledge management guidelines are needed by organizations to help them identify and respond to the various knowledge problems that is linked to what they do not know or do not understand (Zack, 1999).

Knowledge Concept

Knowledge is neither data nor information, though it is related to both, and the differences between these terms are often a matter of degree. Most people have an intuitive sense that knowledge is broader, deeper, and richer than data or information. People speak of a "knowledgeable individual," and mean someone with a thorough, informed, and reliable grasp of a subject, someone both educated and intelligent. They are unlikely to talk about a "knowledgeable" or even a "knowledge-full" memo, handbook, or database, even though these might be produced by knowledgeable individuals or groups. By definition knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also

in organizational routines, processes, practices, and norms. What this definition immediately makes clear is that knowledge is not neat or simple. It is a mixture of various elements; it is fluid as well as formally structured; it is intuitive and therefore hard to capture in words or understand completely in logical terms. Knowledge exists within people, part and parcel of human complexity and unpredictability (Davenport and Prusak, 2000).

Knowledge Management

Knowledge as conceptualized is as value-added and actionable information, which allows forecasting and decision making. To name some specifications, it is somewhat: unstructured, intuitive, difficult to communicate with and express in words, it lies in conversations, connections and experiences and it highly depends on the owner. Knowledge is becoming an important asset of organizations by emergence of knowledge economy. Therefore, each organization needs to manage its owning knowledge effectively. This results in an accurate image of tacit and explicit knowledge, better understanding of knowledge creation process and also knowledge sharing (Pa et al., 2012). Gottschalk, cited by Ansari, defines knowledge management as the process of gathering, generating and synthesizing and sharing information, reflections, insights, thoughts and experience to achieve corporate goals (Ansari, 2018). Also American Productivity and Quality Center (APQC) defines KM as The application of a structured process to help information and knowledge flow to the right people at the right time so they can act more efficiently and effectively to find, understand, share, and use knowledge to create value (APQC, 2018). All benefits of knowledge management (KM) lead organizations to gain competitive advantages. A KM process consists of planning, technique, resources, process of knowledge transformation and environmental factors (Pa et al., 2012). Chong stated five preliminary success factors for effective KM implementation: business strategy, organizational structure, Knowledge Management Team, Knowledge Map and Knowledge Audit (Chong and Lee, 2005). Knowledge Audit as the first phase which initiates a knowledge management activity / project is focused in current research. Also bear in mind that effective knowledge management KM implementation improves organizational knowledge by ensuring that “the neediest would gain right knowledge at the right time” through sharing and exploitation of knowledge in various ways. Many organizations embark KM primarily for business performance improvement and to attain competitive advantage. In ensuring the successful implementation of KM, it must be closely integrated with business strategies and core competencies of an organization (Drus et al., 2014).

A strategy map is a pretty well established way of mapping out the strategy of an organization in a visual way. The standard Kaplan map starts with the organization’s vision at the top of the page, and works down, via elements of the strategy, to the financial, customer, process and learning activities or objectives that support it. KM should be aligned with this strategy map. As we know, KM should be driven by the organization’s vision and strategy, and should support the key activities that are needed to deliver that strategy. When Kaplan and Norton developed the ideas around strategy maps KM was in its infancy and the learning activities or objectives they included were fairly generic. What KM can do is make these learning activities less generic, linking them to specific KM interventions and activities thus showing how the elements of KM directly support the business strategy (Barnes and Milton, 2015).

Business Strategy

Raise the issue of business strategy with anyone exposed to a formal business education and the first thing that typically comes to mind is “SWOT.” SWOT stand for strengths, weaknesses, opportunities, and threats. It is a framework for strategic planning made popular by Ken Andrews of the Harvard Business School in the mid-1960s, and has since influenced both practice and research in the field of strategic management. Performing a SWOT analysis involves describing and analyzing a firm’s internal capabilities-its strengths and weaknesses-relative to the external opportunities and threats of the competitive marketplace. Organizations are advised to take strategic actions to preserve or sustain strengths, offset weaknesses, avert or mitigate threats, and capitalize on opportunities. Strategy can be seen as the balancing act performed by the firm as it straddles the high wire strung between the external environment (opportunities and threats) and the internal capabilities of the firm (strengths and weaknesses) (Zack, 1999).

Knowledge Audit

Developing a knowledge-sharing culture is a change process on the way to better organizational performance. To achieve that change, an organization needs a vision of where it wants to be and an accurate picture of where it is now that is its current reality (Oliver. Serrat, 2017). The concept of auditing is deemed important for managers in assessing the organization's well-being as “auditing as a source of information has become very useful in modern business, especially with businesses’ increasing complexities and pressures for continuous adaptation and improvement”(Karapetrovic and Willborn, 2000 cited in Drus et al. (2014). A knowledge audit is one way of taking that picture. An inspection of the organization’s knowledge assets and evaluation of its Knowledge Management (KM) strategy is the concept. Knowledge Audits (KA) typically involve identifying knowledge needs and gaps, assessing knowledge flow, and performing knowledge mapping. Knowledge audits may have a broad scope, or they may focus on specific topic domains/expertise areas (APQC, 2018). Ten years earlier Serrat defined KA as an investigation of the strengths and weaknesses of an organization’s knowledge, and of the opportunities and threats that face it (Olivier Serrat, 2008). The audit determines what knowledge exists as well as what knowledge needs to be created and provides an estimate of an enterprise’s knowledge ‘health’ (Perez-Soltero et al., 2007: 17).

Knowledge audit is one of the critical activities in knowledge management (KM) that all organizations should conduct so as to realize their strategic goals (Dewah, 2016). In this regard Hylton is of the view that a knowledge audit is an essential early step in measuring the value of corporate or organizational knowledge (Hylton, 2002). Hylton (2012) and Davenport and Prusak (1998) aver that the fundamental cause of most of the failures in KM is the serious oversight of excluding a knowledge audit in the organization's overall knowledge management plans and initiatives. Yet an audit can uncover important insights about the state of knowledge in an organization and how it flows. This helps an organization to shape and determine an effective KM strategy (Debowski, 2006; Donnelly, 2008 Cited in Makambe, 2015: 18). As Perez-Soltero confirms, Liebowitz defines a knowledge audit as a tool that assesses the potential stores of knowledge. It is the first part of any KM strategy. By discovering that knowledge is possessed, then it is possible to find the most effective method of storage and dissemination. It can then be used as the basis for evaluating the extent to which change needs to be introduced in an enterprise. A part of the knowledge audit process is capturing “tacit” knowledge (Liebowitz et al., 2000: 3-10). Knowledge audit would support the leaders of organization by

providing accurate information, avoiding risks in order to help them to make correct decision; and could guarantee the organization knowledge management activities running on the right track and under the modern management mode (Nur Syufiza et al., 2013).

In any knowledge management program, the first step one need to do is to identify where knowledge is being created, where it already exists and where it is needed to support decisions and actions. The whole process of identifying, locating and marking the knowledge consistent with what the knowledge audit is doing (Henczel, 2001). As Sukiam et al, in the case study conducted for Special Communities stated: the knowledge audit processes helped to identify the available, required and missing knowledge and the subsequent recommendation of KM strategy that can be used for better managing the knowledge (Sukiam et al., 2009).

Knowledge Audit Purpose

A complete or detailed knowledge audit offers a wide comprehensive examination, review, assessment and evaluation of a company's knowledge abilities, its existing knowledge assets and resources, and of its knowledge management activities. The K-audit is a fact finding, analysis, interpretation, and reporting activity which includes a study of the company's information and knowledge policies, its knowledge structure and knowledge flow. The audit brings high visibility to the organizations knowledge assets. The main purpose of the K-Audit is to help the audited unit to determine what it knows, who knows what, what it does not know, what it needs to know, and how it should go about improving the management of its existing knowledge. The audit therefore serves to help the audited unit to determine if it 'knows what it knows' and 'knows what it doesn't know' about its existing knowledge state. The K-Audit also assesses the efficiency and effectiveness of corporate, departmental and process-driven knowledge lifecycles. The enlightenment that comes as a result of the knowledge audit sets the agenda for the knowledge management initiative, program, and implementation, so that the company can better leverage knowledge for business and competitive advantage (Hylton, 2002).

A knowledge audit as Serrat declared can have multiple purposes, but the most common is to provide tangible evidence of what knowledge an organization needs, where that knowledge is, how it is being used, what problems and difficulties exist, and what improvements can be made. Although there can be no blueprint, a typical knowledge audit will, not necessarily at the same time or level of detail¹, query the following (Oliver. Serrat, 2017):

- What are an organization's knowledge needs?
- What tacit and explicit knowledge assets does it have and where are they?
- How does knowledge flow within the organization, formally and informally, and to and from clients and relevant organizations?
- How is that knowledge identified, created, stored, shared, and used?
- What obstacles are there to knowledge flows, e.g., to what extent do its people, business processes, and technology currently support or hamper the effective movement of knowledge?
- What gaps and duplications exist in the organization's knowledge?

Knowledge Audit Constituents

There are variety of models and technique for KA. Which are based on different constituents, according to investigations on KA from 2005 until 2019 including models, methods, processes, tools, techniques, advantages, challenges and limitations it is clear

that all those are common in basic steps which are summarized below as Sharma et al. declared (Sharma and Chowdhury, 2007).

Knowledge Needs Analysis

Identify precisely what knowledge the agency has and what knowledge they would require in the future in order to meet objectives and goals

Knowledge Inventory Analysis

Locate knowledge assets and resources in the agency. This process involves counting, indexing, and categorizing of tacit and explicit knowledge to identify gaps and as well as areas of unnecessary duplication

Knowledge Flow Analysis

Looks at knowledge resources in the agency, from where it is to where it is needed. It is to determine how people in an agency find the knowledge they need, and how do they share the knowledge they have. It will allow an agency to further identify gaps in their agency's knowledge and areas of duplication. It also highlights examples of good practice that can be built on, as well as blockages to knowledge flows and effective use

Knowledge Mapping

A knowledge map is a visual representation of an organization's knowledge which is the outcome of synthesis of explicit/tactic knowledge.

Knowledge Audit Methodologies

In order to define effective KM strategies and tools, an organization must start with an analysis of its knowledge needs and priorities to set up a plan for further actions as we know there are curriculums for anything we would start (Shoa Hasani, 2004). In the curriculum, a knowledge audit (KA) is recommended as a first phase for this analysis (Gourova et al. 2009, Perez-Soltero et al. 2007: 17), as it provides a better understanding of knowledge resources availability and gaps (cited in Roy et al., 2013)). Despite the adoption of knowledge audits in organizations, there is limited literature on the methodologies for conducting a KA (Toit, 2014: 6). Also, there seems to be no consistency in terms of how different organizations conduct their KAs. This inconsistency and lack of sufficient guidance can result in reinvention of the wheel and inefficient use of resources in organizations. Despite the KA methodologies recommended in the KM literature, the decision regarding which KA methodology to use lies solely with the organization (Molala and Nkate, 2018). In other words, there is no universally accepted model for conducting a knowledge audit. The knowledge audit process it is a complex and multidimensional fact-finding and analytical process, which aims to record all the quantitative and qualitative variables related to knowledge and to the ability to use it effectively in order to create business value.

As stated, Literature on KM emphasizes the importance of KAs, but there is no unanimously endorsed methodology or framework for conducting KAs. However, the common elements in most of the methodologies presented in literature, by Pa et al, 2012 and Perez-Soltero et al. (2006: 17), are the analysis of the organization's knowledge inventory, knowledge needs and knowledge flows. The final step is the knowledge mapping, which identifies the sources of explicit and tacit knowledge in the organization, the knowledge roles and expertise within the organization, bottlenecks in the flow of information and opportunities to exploit existing knowledge for the achievement of the

organizational goals. The outcome of the KA process is a detailed KA report, which would serve as a guiding document for the development of the organization's KM strategy (Molala and Nkate, 2018).

Most of these approaches have common goals, i.e. they aim to identify knowledge uses, gaps, flows, carriers, sources, and link the analysis to business strategies and processes. They are most often comprehensive and all inclusive, i.e. study everything regardless of its significance and often lack to propose ways to set priorities. The methods also require an extensive amount of effort to collect and analyze data, and are therefore better suited for smaller organizations or business units.

A typical knowledge audit includes the following steps (Gourovaet al., 2009):

- In-house knowledge overview and general information audit, including knowledge resources, people, key organizational knowledge assets – patents, trademarks, experts; then business processes (innovations, learning, sharing) and knowledge flows, IT systems, social aspects and culture.

- Analysis of the tacit dimensions of the company knowledge or assessment of the individual and group knowledge with questionnaires and surveys among staff.

- Analysis of the company environment to identify the industry knowledge

- Identification of knowledge strengths and weaknesses and knowledge opportunities and threats.

- Identification of the organization's readiness to adopt a KM initiative – pointing out the KM enabling factors and persons, what are potential barriers, suitable KM instruments and initiatives to start with, and finally implementation roadmap.

Knowledge Audit Models

There is no universally accepted model for conducting a knowledge audit. The knowledge audit process it is a complex and multidimensional fact-finding and analytical process, which aims to record all the quantitative and qualitative variables related to knowledge and to the ability to use it effectively in order to create business value. A number of models encompassing a broad range of issues, methods and theories that differ in scope and focus have been developed but the overall processes and phases could be summarized in Fig. 1.

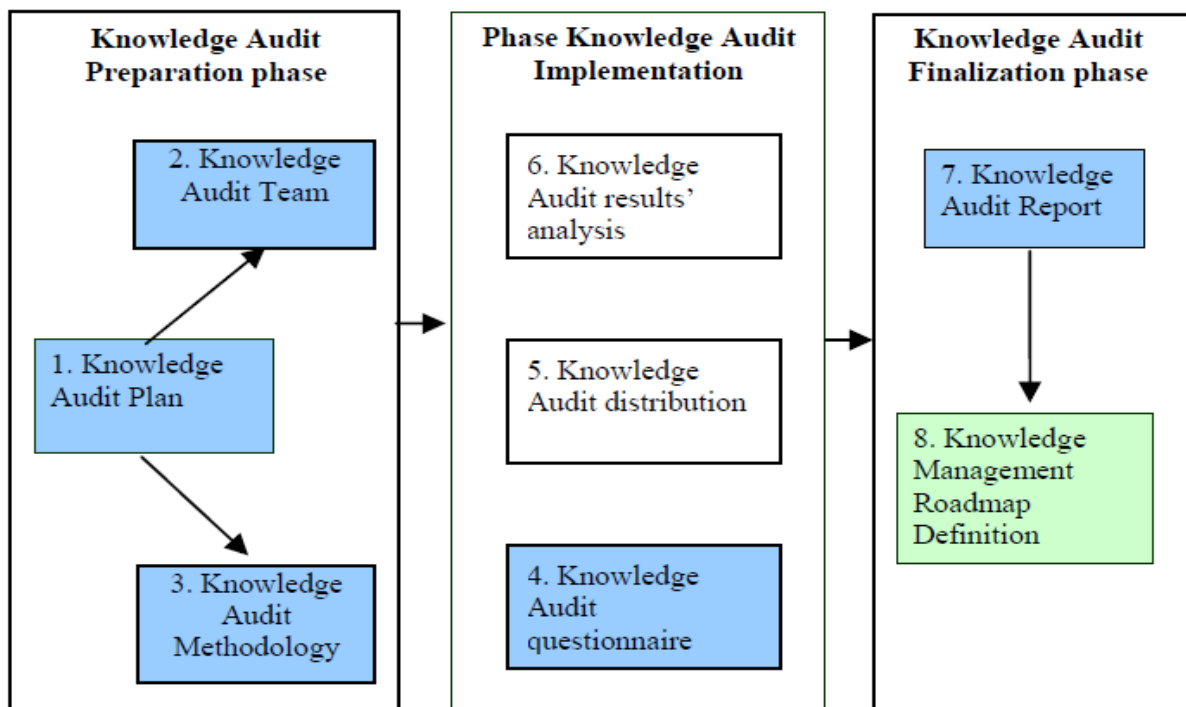


Fig. 1. Knowledge Audit Processes and Phases (Source: Adopted from Gourova et al., 2017)

The Knowledge Management Assessment Tool (KMAT) is developed by Arthur Andersen Consulting in co-operation with the American Productivity and Quality Center (APQC), quoted in Mertins et al., 2003 cited in Gourova et al., 2009). It is based on the Organizational KM model, and the KMAT strives to achieve two aims: to ascertain the position of one company with regard to KM in comparison to other companies, and secondly to evaluate the efficiency of the realization of the knowledge management process (Gourova et al., 2009).

Bukowitz et al. developed Knowledge management diagnostic (KMD), based on the model of the "KM Process Framework" which consists of 7 activities (get, use, learn, contribute, assess, build/sustain, divest). The KMD is designed as a tool for self-evaluation, and collects subjective qualitative data, and enables users to determine how well the different KM processes have been realized in the company through a number of questionnaires (Gourova et al., 2009).

The KM maturity model (KMMM) is developed in the Competence Center of KM in Siemens AG (Mertins et al., 2003). It is based on a model for analyses of 8 fields of design of KM (strategy and aims, environment and partnerships, employees and competencies, collaboration and culture, leadership and support, forms of knowledge and knowledge structures, technology and infrastructure, processes, roles and organizations). In the model are described the demands of the organization in each field, and depending on how the company meets the demands maturity levels are assigned. The maturity levels are ranged from one to five (initial, repeated, defined, managed, optimized), evaluating the KM activities and deriving a suitable step for development and improvement of the KM (Gourova et al., 2009).

Jurinjak et al. cited in (Gourova et al., 2009) focus on KA adapted to the needs of IT companies. The method is aimed to overcome some limitations identified in other methods, such as: insufficient project orientation, targeting the KA to part of the

organization, inclusion of people who are not staff members. A proposed focus of method are project members, and collecting their knowledge profiles, identifying knowledge assets, creating a knowledge map with relations and knowledge flows between individuals, and creating knowledge value chain representing processes basic for knowledge.

Choy et al. as Gourova et al. investigated, integrate various KA-related techniques into pre-audit preparation (focused on culture assessment and KM awareness raising), in-audit process (including structured interviews to capture process-critical knowledge) and post-audit analysis (including knowledge inventory, knowledge maps and knowledge flow analysis). Knowledge mapping and social network analysis are used to show the knowledge exchange in the organization and make the key knowledge suppliers and customers visible. On this base is made a knowledge flow analysis, pointing out the strength and weakness of the knowledge flow (Choy et al., 2004).

Fai et al. propose an 8-steps KA approach. It starts with orientation and background study in order to get insight into the organization and prepare the KA plan. The second step is focused on KM readiness assessment, and in particular, organizational culture, knowledge sharing, learning abilities and communication tools. On this base are conducted a survey and interviews with experts to collect more qualitative data. Building knowledge inventory is an important step focused on available tacit and explicit knowledge assets in the organization which is used for visual representation on the next step by knowledge mapping. The audit result analysis, knowledge audit reporting and continuous-based knowledge re-auditing are the final steps of KA (Gourova et al., 2009).

Perez-Soltero et al. consider the diversity of KA concepts and methodologies, and stress the need for better focus of KA, namely on core processes essential for meeting organizational goals and customer expectations. With their approach they focus KA and save time for not studying the organization (Perez-Soltero et al., 2007: 17).

Tiwana focuses on several steps for implementing KM, whereas inventories take an important place in strategy formulation, both analysis of available infrastructure, as well as making knowledge-based SWOT and thorough KA. He suggests a 6-step KA process including: defining the goals, electing the audit method, determining the ideal state, performing the knowledge audit, documenting existing knowledge assets, and determining the organization strategic position within the technology framework (Gourova et al., 2009). Before KA he considers, however, a need for assessment of knowledge system infrastructure, whereas he pays attention to the following components:

- Knowledge flow: components that facilitate knowledge flow within the KM system.
- Information mapping: links and maps the flow of information that might later be converted to knowledge across the enterprise.
- Information sources: feed raw data and information into the KM system.
- Information and knowledge exchange: tools and non-technological facilitators that enable exchange of information across tacit (such as people) and explicit (such as databases, transaction processing repositories, and data warehouses) sources, help create and share context (the process itself is called contextualization), and facilitate sense making.
- Intelligent agent and network mining: knowledge mining, linking, retrieval, and intelligence tools facilitate finding knowledge using intelligent agents and pattern mining tools.

Jafari and Payani proposed methodology for auditing organizations knowledge and its implementation procedure in 6 stage are as follows (Jafari and Payani, 2013: 9).

- Stage 1: Identifying organization's knowledge objectives,

- Stage 2: Identifying organization's experts,
- Stage 3: Identifying organization's knowledge documents,
- Stage 4: Determining organization's enjoyment of knowledge,
- Stage 5: Determining knowledge importance,
- Stage 6: auditing organization's knowledge situation.

All KA models mentioned above and so many other methods and models as Taheri et al mentioned in her research (Taheri et al., 2017: 24) have a common feature, their focus on the current status of the organization knowledge, locating it throughout the organization, and examining knowledge flows and processes. It is important, however, to focus also on the future development scenarios. The real KA should, therefore, go beyond the company internal status and deliver a broader picture of the global processes and stakeholders, and the knowledge position of the company against its competitors. It should include, in addition to the competition or industry branch analysis, an analysis of the level of technology development, current research state, available resources and macroeconomic perspectives, customer demands and requirements, industry growth trends, leading industry experts and human factors. This analysis will guarantee more successful level of KM implementation and better action plans, while designing KM tools, IT systems or HRM techniques. In fact, a wider understanding of company interests, global situation and processes could facilitate all employees to contribute better to the competitive position of the company and the management of its knowledge. This means not only better acquiring (learning) and generating (innovating and experimenting) knowledge, sharing it (communicating) and storing it (codifying), but also better anticipating the future, and finally, better preparing for it.

A number of techniques can be employed in order to conduct KA, including, interviews questionnaires, literature review and etc. Employed technique should result on the knowledge map as an output. Knowledge map should locate sources, directions and breaking points inside the organization. It will give an idea of how to improve key business and organizational processes (Miklyayev, 2013).

Knowledge Audit and its Link to Knowledge Management, Knowledge Strategy and Business Strategy

Toni et al. (2011) as mentioned by (Drus et al., 2014) in the work titled "Knowledge Audit and its link to Knowledge Strategy and Knowledge Management" state that the attainment of competitive advantage by an organization depends on how the organizational knowledge is being applied and exploited, and not by the amount of knowledge that an organization has. This notion is also corroborated by Donate and Canales (2012) that state establishing a coherent and integrated KS would help organization in outperforming its competitors. Figure 1 illustrates the link between KA, KS and KM in an organizational setting (Drus et al., 2014).

As Drus et al. depicted in Figure 1, business strategy is the focal point in this relationship. Business strategy is the blueprint that predicts the future development of the organization and drafts plans for emergencies to meet future and uncertain challenges. It is formulated by analyzing the competitive environment and organizational context and is influenced by the vision, mission and values of the organization. Therefore, translating business strategy into action plans that are workable and attainable is important as it predicts the business performance and innovation of the organization.

According to Leung et al (2010) cited in Drus and Shariff (2011), KS is supporting the realization of business strategy of an organization by describing the overall approach to effectively develop and use knowledge resources and capabilities in an organization

to align with the needs and fulfillment of business strategy. Different organizational settings would require different knowledge strategies to be formulated. The link between business strategy and knowledge strategy is important as it determines whether the defined KS is reflecting the requirements of business strategy or not; and it is illustrated by one–arrow connecting business strategy to KS in Fig. 2.

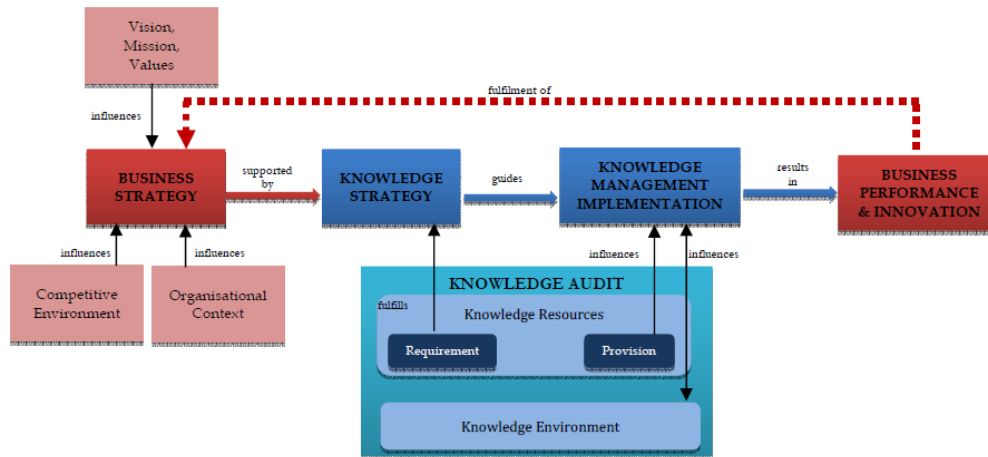


Fig. 2. Knowledge Audit and its Link to Knowledge Strategy and Knowledge Management Implementation of an Organization (Drus et al., 2014)

Leung et al (2010) also assert that by forming a link between KS and KM (as shown by one–way arrow from knowledge strategy to knowledge management implementation in Figure 1), organization is able to ensure that KM processes are truly aligned with the strategic needs of the organization and remain responsive to the needs of the organization and its environment. A mechanism must be established to assist organization in optimizing the transformation of knowledge into distinct competitive advantages and monitor the periodic alignment with other aspects of business strategy. However, many organizations are unsure on how to translate their strategic goals into course of actions (Drus et al., 2014).

KA can be utilized as the mechanism to assess the knowledge resources of an organization, in terms of identifying the knowledge requirements and the current knowledge provisions of the organization. This assessment would help organizations into devising plans that are aligned with their strategic goals. This relationship is depicted by the one–way arrow from knowledge resources requirements to knowledge strategy and knowledge resources provision to knowledge management implementation (Drus et al., 2014).

The knowledge environments and knowledge resources of an organization are also closely related (as illustrated by the two–way arrows connecting these two elements in Figure 1) as different knowledge environments (such as business functions, project scope, etc.) would require and provide different type of knowledge resources. Therefore, some knowledge resources may be distinct to a specific knowledge environment while some of them are general and applicable to different business functionalities or job functions (Drus et al., 2014).

Upon the execution of KA, the current knowledge environment of an organization will be ascertained. These outcomes may influence on new KM implementation (in terms of people, roles, leadership, culture and technology deployment of an organization). On the other hand, the current KM implementation of an organization may also influence the knowledge environment of the organization in terms of how people share and

communicate knowledge, use of technology, as well as in cultural and behavioral aspects (Drus et al., 2014).

KA is a critical step for KM in the organizations. It enables proper planning of a KM implementation and progress monitoring and represents a rich source of information about the true strengths and competitive advantages of the company.

Finally, KM implementation in an organization will then be evaluated based on two aspects, namely business performance and innovation. From the business performance perspective, it will be looked at the financial and productivity related results that are obtained by an organization due to the implementation of KM and its related initiatives. From the innovation aspect, it will be observed based on the new knowledge developed within an organization which could be directed either to satisfy customer needs (ie. products) or to improve organizational system activity (ie. processes) (Donate and Canales, 2012). The business performance and innovation may then be used to assess the fulfillment of business strategy, which is illustrated by the one-way dashed line arrow in Figure 1 (Drus et al., 2014).

Outputs of Knowledge Audits

Capshaw in Schwikkard and Du Toit (2004: 6) states that a knowledge audit should provide the following outputs (Gogela, 2005):

- An assessment of the current levels of knowledge usage and interchange;
- Knowledge management propensity within the enterprise;
- Identification and analysis of the knowledge management opportunities; isolation of potential problem areas; and
- An evaluation of the perceived value of knowledge within the enterprise.

Skyrme Associates (2004) cited in (Gogela, 2005) highlights that knowledge audits deliver the following benefits:

- Identification of the core knowledge assets and flows - what knowledge resources/assets an organization has, how that knowledge moves around the organization - from where it is to where it is needed, who uses it, etc.;
- Identification of gaps in information and knowledge needed to manage the business effectively;
- Areas of information policy and ownership that need improving;
- Opportunities to reduce information handling costs;
- Opportunities to improve the coordination and access to commonly needed information;
- A clear understanding of the contribution of knowledge to business results.

Steven asserts that the knowledge audit can (Steven, 2000):

- identify the intellectual assets of value to the organization, but it is valuable in pointing out the improvements to existing processes and identifying people who have been acting as barriers to knowledge proliferation whether inadvertently or on purpose
- generate useful measures;
- reveal how knowledge is shared across departments;
- uncover best practices that people have developed but have kept to themselves and a few colleagues within the organization.

By following the above approach, it is noble to conclude that the knowledge audits help organizations identify their knowledge needs, draw up a knowledge inventory, analyze knowledge flows and create knowledge maps and simultaneously identifying gaps, areas of duplication, best practices, blockages, as well as barriers.

Knowledge Audit Report

The KA report provides the scientific evidence from which the KM team and senior decision makers can make informed decisions concerning KM strategy, implementation of KM systems, tools and instruments, improvements in knowledge lifecycles and knowledge flows. It also facilitates the building of a knowledge map, provides recommendations for KM roadmap and steps for action plan, identifies key KM enablers and potential barriers, etc. The KA report is research and analysis tool, serving for KM evaluation, progress measurement and time comparison. It must examine, analyze, assess, verify, validate, review and report the findings about the current state and recommendations for future steps for developing new knowledge assets in the organization (Hylton, 2004).

The term KA is often used as a synonym for a company KM survey [6], and as presented above, significant number of KA approaches are based and limited to some form of questionnaires-surveys. In order to become complete, useful and focused on the company needs, the KA report should include multiple sources of information about the organization and its knowledge assets, analyzed in a proper and detailed manner. According to Hylton (2004), the KA report should comprise a questionnaire survey and/or interviews, followed by a basic analysis of the results, and a brief report. The questionnaire-survey and proceeding interviews are only the first, and indeed, the easiest stages of the KA. These surveys can only offer first level qualitative, subjective indicators for the true nature and management of knowledge assets.

Debenham and Clark, consider that the structure of the KA report should include executive summary, highlighting the major findings of the KA, discovering a clear statement of the reason for conducting the KA and description of the audit process; followed by a "block map", a diagram displaying the various knowledge blocks audited, their relationships to one another and the knowledge repositories in which they reside (Debenham and Clark, 1994: 201-211). According to Liebowitz et al., the KA report is composed of two parts, to draw up a knowledge inventory and prepare a knowledge flow analysis (Liebowitz et al., 2000: 3-10).

The knowledge inventory identifies and locates knowledge assets and resources, e.g. counting and categorizing explicit (documents, databases, systems, quality, access and usage) and tacit knowledge (people in organization, job levels, qualifications, trainings). Comparing the knowledge inventory with analyses of knowledge needs can determine the knowledge gaps and areas of unnecessary duplication in the organization.

The knowledge flow analysis describes how the knowledge moves around the organization. The knowledge flow analysis looks at explicit and tacit knowledge, addressing people (their attitude of sharing and using knowledge), processes (business processes, organization policies and practices, daily routines, best practices), and systems (IT systems, information access, content management, usability, actual use). An assessment of the knowledge flows completes the auditing process and allows better understanding of the knowledge gaps, barriers and good practices in the organizations. It focuses attention on the KM initiatives improving knowledge demand and supply within the organization.

Conclusion

In an economy where the only certainty is uncertainty, the one sure source of a lasting competitive advantage is knowledge. Knowledge is different from information in various ways. Creating new knowledge is not simply a matter of mechanistically processing objective information, but it depends on tapping the tacit knowledge. For

organizations, a comprehensive approach to managing knowledge includes coordination of people, technology and organizational processes to secure the greatest benefits from their investments. The quality synergy among these components and the capacity for leveraging the flow of knowledge, determine an organization's capacity to generate a sustainable value. Collectively, the knowledge business processes build a learning organization skilled at adapting its actions to reflect new insight and innovation. Knowledge audit is not a quick or simple process. Locating and identifying knowledge that is suitable for capture, storage and use to build an organization's corporate knowledge base "the content" is an ongoing activity. Management of knowledge processes creates a potential for a competitive advantage.

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