

# KNOWLEDGE MANAGEMENT STRATEGY BUILDING: LITERATURE REVIEW

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## **Abstract**

The purpose of this paper is to discuss the main aspects of Knowledge Management Strategy building in the organizations. The paper discusses the meaning of KM strategy, the methods used to build the strategy, how researchers see the approaches to pursuing an effective KM Strategy in organizations, and what are the new trends in strategy building. Earlier and recent scholars (e.g. Mintzberg, 1979; Barney and Hesterly, 2010; Acur et al., 2012) emphasized that strategy building could be seen as a way to achieve organizational goals and objectives, and therefore achieving the organizational vision in order to sustain competitive advantage. Most studies do not explicitly describe how Knowledge Management (KM) Strategy is formulated and aligned with business strategies (Lee and Chin, 2012). It is generally acknowledged by experts in the area that KM strategies must be aligned with the business vision; they must reflect why knowledge is important; knowledge managers must practise what they preach, and it must provide channels for discussion and allow for the flow of ideas. The consequences of

not perceiving are dire and will certainly make impossible to realize the business value of knowledge management for the organization.

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**Keywords:** Knowledge Management, Strategy, KM Strategy, KM Strategy Building, KM Systems, Information Technology, Knowledge Management Infrastructures, Knowledge Economy, Information and Communications Technology.

## 1. Introduction:

In the changing global economy companies are fiercely competitive. Thus, they need to differentiate themselves on the basis of knowledge in the global economy. Haggie and Kingston (2003) explain the knowledge economy and how it has introduced the importance of the process involving acquisition, sharing, using, employing, inventing, and producing knowledge to attain strategic changes in the economic environment and enhance the value of all facets of life by utilizing rich information services, advanced technological applications, and utilizing the human mind as a rich knowledge capital.

The fundamental, integrated, and coherent elements set of the knowledge economy include supportive societal infrastructure, readiness of knowledge workers and knowledge makers, broadband electronic connectivity, easy access to the internet, and disseminating the culture of a learning society in all societal institutions (Battams, 2002). Knowledge Economy has key characteristics and functions including: high quality aiming at distinction, dense with knowledge, readiness of workforce, pursues continual learning and training, flexible and responds quickly to changing needs, open to the world and competitive, employs an effective system of marketing, shifts economic activity from commodity production to knowledge service production, invests renewed energy, increases the income of competence knowledge makers, assists in building and employing ICT systems effectively, stimulates research and development, and within Knowledge Economy the work contracts are more flexible, temporary, and task related (The Ministry of Education, 2004).

Bontis et al. (2003) explained that knowledge management is predicated on the concept that an organization's most useful resource is the knowledge of its individuals. Thus, the extent to which an organization performs well can rely, among other things, on how effectively its individuals will produce new knowledge, share knowledge around

the organization, and use that knowledge to best impact the performance of the business. Basically, knowledge management is about applying the collective knowledge of the entire workforce to achieve specific organizational goals. The aim of knowledge management is not necessary to manage all knowledge but just the knowledge that is most important to the organization. It is about ensuring that people have the knowledge they need, where they need it, and when they need it (i.e. The right knowledge, in the right place, at the right time).

Knowledge management is unfortunately a misleading term as knowledge resides in people's heads and managing it is not really possible or desirable. Knowledge management is essentially about facilitating the processes by which knowledge is created, shared and used in organizations (Zack, 1999). It is not about setting up a new department or getting into a new computer system. It is about making small changes to the way everyone in the organization works. There are many ways of looking at knowledge management and different organizations will take different approaches. Generally speaking, creating a knowledge environment usually requires changing organizational values and culture, changing people's behaviors and work patterns, and providing people with easy access to each other and to relevant information resources.

In terms of how that is done, the processes of knowledge management are many and varied. Grover and Davenport (2001) tried to introduce the term knowledge management as a relatively new concept as they explained that organizations are still finding their way and so there is no single agreed way forward or a best practice. This is a time of much trial and error. Similarly, to simply copy the practices of another organization would probably not work because each organization faces a different set of knowledge management problems and challenges. Knowledge management is essentially about people - how they create, share and use knowledge, and therefore no knowledge management tool will work if it is not applied in a manner that is sensitive to the ways people think and behave.

That being said, there are in fact an entire raft of choices in terms of tools and techniques, several of which don't seem to be new. A number of the processes that are presently taken to constitute knowledge management have been around for a long time, however as a part of functions such as coaching, communications, information technology, librarianship, records management, sales and marketing. Furthermore, a number of those processes are often very straight forward, like providing induction packs filled with 'know

how' to new employees; conducting exit interviews upon leave so their knowledge in mind is not lost as far as the organization is concerned; making databases of all publications created by an organization so that staff will access them from their desk; providing in progress learning so people will constantly update their knowledge; encouraging people with a common interest to network with every other; creating electronic filing systems that may be searched in a range of ways, creating and facilitating the access to knowledge in a much easier way for concerned employees to find, seek out or search out; redesigning offices to as open spaces so that employees and managers are visible to each other and can ask one another directly; putting directories (tacit knowledge maps) on-line so people will simply find out who does what and wherever those knowledge holders are; making intranets so employees will access all kinds of organizational information and knowledge that might otherwise take a good deal of time and energy to find (Choi and Lee, 2003).

## **2. KM Strategy Definition:**

The literature review indicates that there are many definitions for KM strategy. Some examples as reported in the literature are summarized as follows (some of the definitions included below were cited in (ABC of Knowledge Management, 2005):

- A description of the approach an organization wishes to follow in the management of these assets i.e. a description of approaches, methodologies and tools.
- A document describing the role of knowledge in the organization. i.e. a description of key knowledge and its role, which is used to help projects, services and individuals, identify the actions they should be taking.
- A project or service level description of the working level actions that will be undertaken to develop, import or export knowledge.
- A document that “articulates the role of knowledge in the business with sufficient clarity that it enables decisions to be made”; as such it must identify key knowledge, knowledge gaps, commercially sensitive know-how, and so on.
- KM strategy is based on three elements - knowledge architecture, technical infrastructure and a knowledge sharing and learning culture.
- “Clinical knowledge management means enhancing the identification, dissemination,

awareness and application of the results of research relevant to clinical practice in health and social care.”. Jeremy Wyatt (Director of the new Institute for Digital Health Care, professor of eHealth Innovation in Warwick University and visiting professor in Medical Informatics in Amsterdam and Porto).

- “The creation and subsequent management of an environment, which encourages knowledge to be created, shared, learnt, enhanced, organised and utilized for the benefit of the organisation and its customers.”. (Abell and Oxbrow, 2006)
- “Knowledge management is a process that emphasises generating, capturing and sharing information know how and integrating these into business practices and decision making for greater organisational benefit.”. (Maggie Haines: NHS Acting Director of KM, Canada).
- “The capabilities by which communities within an organisation capture the knowledge that is critical to them, constantly improve it, and make it available in the most effective manner to those people who need it, so that they can exploit it creatively to add value as a normal part of their work.”. (BSI: PAS 2001 Knowledge management: A guide to good practice).
- “Knowledge is power, which is why people who had it in the past often tried to make a secret of it. In post-capitalism, power comes from transmitting information to make it productive, not from hiding it!”. (Drucker, 1999).
- “Knowledge management involves efficiently connecting those who know with those who need to know and converting personal knowledge into organisational knowledge.”. Yankee Group (1997).
- “Knowledge management is not about data, but about getting the right information to the right people at the right time for them to impact the bottom line.”. IBM (2006).
- “The capability of an organization to create new knowledge, disseminate it throughout the organization and embody it in products, services and systems.”. Nonaka and Takeuchi (1995).
- “Knowledge management is a relatively young corporate discipline and a new approach to the identification, harnessing and exploitation of collective organisational information, talents, expertise and know-how.”. (Office of the e-Envoy, 2002)
- “Knowledge management is the explicit and systematic management of vital knowledge and its associated processes of creating, gathering, organizing, diffusion,

use and exploitation. It requires turning personal knowledge into corporate knowledge that can be widely shared throughout an organization and appropriately applied.”. (Skyrme et al., 1997).

## **2.1 What is corporate knowledge Management?**

Corporate Knowledge Management is a framework that considers business processes as value-adding knowledge processes. It synergizes the processes of organizational knowledge production, sharing and application through appropriate changes in systems, processes and culture by using an appropriate KM tools and techniques; by creating an enabling environment; and by leveraging the organizational knowledge for improving quality and effectiveness, and for strategic advantages.

Mcintosh (2005) listed a number of challenges to deploying manage knowledge assets in the organization for creating a competitive advantage which are:

- 1- The increase in the competitiveness in the marketplace and the rising rate of innovation. Therefore, knowledge must evolve and be assimilated at an ever faster rate.
- 2- A prime concern for corporations has become the creation of customer value. The functions of workers are being reduced as are management structures. This meant that there is a need to replace the informal knowledge management of the staff function with formal methods in customer aligned business processes.
- 3- The size of the workforce holding the knowledge is being reduced due competitive pressures.
- 4- Employees have less time for experiencing and acquiring knowledge.
- 5- The increasing trends for employees to retire earlier or to increase their mobility which leads to some of organizational knowledge.
- 6- The need to manage increasing complexity as small operating companies due to trans-national sourcing operations.
- 7- A change in a strategic direction for the organization may result in the loss of knowledge in a specific area. Any subsequent reversal in policy may then lead to a renewed requirement for this lost knowledge, but the employees with that knowledge in demand may no longer be there.

According to McIntosh (2005), knowledge management is difficult because having an enterprise-wide vocabulary to ensure that the knowledge is correctly understood is not straight forward; being able to identify, model and explicitly represent the organizational knowledge is not easy; and sharing and re-using organizational knowledge among differing applications for various types of users, which implies being able to share existing knowledge sources and also future ones, is difficult.

### 3. KM strategy Approach:

The literature presents three different meanings associated with the term KM strategy (Boisot,1998; Davenport et al., 1999; Haggie and Kingston, 2003). The most common of the meanings interprets KM strategy as an **approach to KM**. This in itself reflects the diversity of perspectives presented in the field and the lack of consensus models for KM strategy. A second meaning relates KM to strategic management, and defines KM strategy as **knowledge strategy**, which is a critical element of knowledge-based competitive strategy. A third meaning would be the one that is usually employed in practical contexts, conveys; as **KM implementation strategy**. All three meanings shed light on the relation between KM technologies and strategy.

#### 3.1 KM strategy as an approach to KM:

Numerous authors mean a particular approach to KM when they use the term KM strategy (Van der Heijden and Eden,1998). Different approaches to KM reflect distinct perspectives, conceptualizations, and methodologies that emerge from particular disciplinary backgrounds, specific interpretations of what knowledge is and how it can be managed, and the varied backgrounds and agendas of those involved in KM. Since the field is relatively new, existing approaches are varied and diverse. It is possible, however, to group them in some relevant types.

The most ordinary type of approaches to KM seem to be **technology-oriented** ones, which emphasize the explicit nature of knowledge, and tend to interpret it as an object that can be stored in bases and transferred using information and communication technologies.

**People-oriented** approaches, on the other hand, highlight the tacit nature of knowledge, and tend to understand it as a social, context-dependent process of understanding that requires human communication and cognition in order to emerge. These approaches accept the

relational perspective on KM, the development or flow perspectives on knowledge, personalization or human strategies for KM and behavioral schools of KM (Boisot, 1998; Haggie and Kingston, 2003; Lopez, 2000). These two prominent types of approach reflect a major division in the KM literature and practice between technology and people orientation. Some authors favor one over the other, either technology-oriented approaches or people-oriented ones. Others argue that both can be effective, but there is a trade-off between them (i.e. if an organization emphasizes one, it should avoid the other). We believe that a balance is preferred, and an organization can benefit from using both types of approaches in different circumstances, for different purposes. Other relevant types of approaches include **asset-oriented** ones, which focus on measuring the economic value of knowledge, thus referred to as intellectual capital or intangible asset, and process-oriented ones, which focus on increasing business processes effectiveness by providing employees with context-specific knowledge at the task level (Shaw et al., 2003).

### **3.2 KM strategy as a knowledge strategy:**

The knowledge strategy concept builds on the knowledge-based view of the firm to bridge knowledge management and strategic management. The knowledge-based view argues that a firm's unique knowledge is the key source of competitive advantage, allowing it to combine conventional resources in distinctive ways and provide superior value to customers. A knowledge strategy identifies this unique knowledge, either existing in the firm or required for a projected situation, and draft ways to develop and/or capitalize on it (Mintzberg, 1979; Barney and Hesterly, 2010; Acur et al., 2012).

The key elements of a knowledge strategy are knowledge domains and knowledge intents. Knowledge domains or areas of interest and expertise that comprise strategic knowledge resources. Domains can focus on external or internal issues, and be more general or more specific. Examples of domains are industries, markets, and customers, which focus on external opportunities and threats; organizational functions and processes, which focus on internal capabilities; and products, services, and technologies, which try to connect internal capabilities to identify opportunities (Lee and Chin, 2012).

Knowledge intentions are the substance of a knowledge strategy, and are derived from the comparison between existing and required knowledge resources. Knowledge resources can



exist internally or be available externally; thus, generic knowledge intents are to: leverage existing internal knowledge, acquire existing external knowledge and Create new knowledge. The literature on knowledge-based strategy refers to a dichotomy between exploitation, the

application of existing knowledge, and exploration, the creation of new knowledge. Both are necessary, in fact, and companies should seek a balance, using exploitation to provide the revenue required for exploration, the basis of long-term revenues. These two concepts are referred to as knowledge creation (exploration) and transfer (exploitation) (Parent et al., 2000).

### **3.3 KM strategy as a KM implementation strategy:**

Authors concerned with the practice of KM sometimes use the term KM strategy to refer to strategies for implementing KM. KM strategy, in this sense, is a general plan that provides guidelines for making decisions and attaining results of KM initiatives. This concept of KM strategy applies mainly to executives and managers responsible for the KM function or KM programs in an organization (Haggie and Kingston, 2000).

Barney and Hesterly (2010) mentioned the existing KM implementation frameworks help employees to drawing particular implementation strategies include a numerous of recommendations. It can be summarized in the following topics:

1. Securing a set of required conditions.
2. Choosing and prioritizing a set of initiatives.
3. Establishing evaluation criteria.

Some elements are often cited as requirements for (or indicators of) successful KM programs. Among them, we can include senior management support, alignment with strategy and business requirements, consideration of organizational dynamics and culture, and involvement of key personnel and stakeholders (Bontis et al., 2003). The actual implementation happens through a series of KM initiatives designed to support knowledge processes, usually balancing human- and technology-oriented approaches. A frequent recommendation is to prioritize initiatives according to a trade-off between opportunity and

strategy and to implement them in stages, starting with pilot projects that provide lessons for further expansion.

All frameworks mention the need for assessing results and providing for accountability. This includes the need for identifying expected business benefits and developing a business case, collecting anecdotal evidence, and adopting performance indicators and metrics, both KM-specific and business- driven. Descriptions of implementation approaches include both top-down and bottom-up ones. The necessary considerations tend to be the same; only the order in which they are carried seems to be different. Top-down approaches usually start by securing the required conditions and establishing evaluation criteria, while bottom-up ones start with local initiatives that expand later by focusing on the other elements (Grover and Davenport, 2001).

### **3.4 Linking KM technologies to KM strategy:**

It is possible to understand the relation between KM technologies and business strategy by analyzing the three meanings associated with KM strategy. A given KM program is strategic if:

1. There is a knowledge strategy in place, which defines knowledge intents that support a particular knowledge-based competitive strategy.
2. The program includes a set of KM initiatives that directly or indirectly support those knowledge intents.
3. Since KM technologies are always used in the context of KM initiatives, if those initiatives do support a knowledge strategy, then the technologies have strategic value.

It is also possible to identify four ways by which KM initiatives can be used strategically. KM initiatives naturally follow a particular approach to KM, the prominent ones being personalization and codification. If those initiatives support knowledge intent, then we have also a balance between creating and transferring knowledge. By combining knowledge intents with approaches to KM, we have the following possibilities:

1. Creating knowledge according to a personalization approach.
2. Creating knowledge according to a codification approach.
3. Transferring knowledge according to a personalization approach.

4. Transferring knowledge according a codification approach. KM technologies can support all four types of initiatives.

#### **4. Methods Used To Build KM Strategy:**

A majority of knowledge management projects and program initiatives have been started by various organizations where the heart of these initiatives aimed at building new systems of information technology that provide appropriate support for data collection, storage, retrieval, and dissemination of an organization's explicitly recognized knowledge. However, a smaller number of organizations consider that the most significant knowledge is the tacit knowledge presented within peoples' minds, improved or disseminated through interpersonal communication and social interactions. Organizations are employing the "social capital" that results from people socializing frequently over time to develop their intellectual capital (Zack, 1999). To enhance social relationships, new organizational cultures, forms and reward systems are being tested by a lot of organizations (Nahapiet and Ghoshal, 1998).

The organization's strategy has been found by researchers as the most crucial context for steering knowledge management. The identification of knowledge management initiatives (i.e., support the organization's purpose or mission, strengthen its competitive position, create shareholder value) can be helped by the organization's strategic context. Consequently, the firm that is familiar with more about its customers, products, technologies, markets and their linkages should achieve better results. While often discussed, the relationship between knowledge management and business strategy has been generally unnoticed in practice (Zack, 1999).

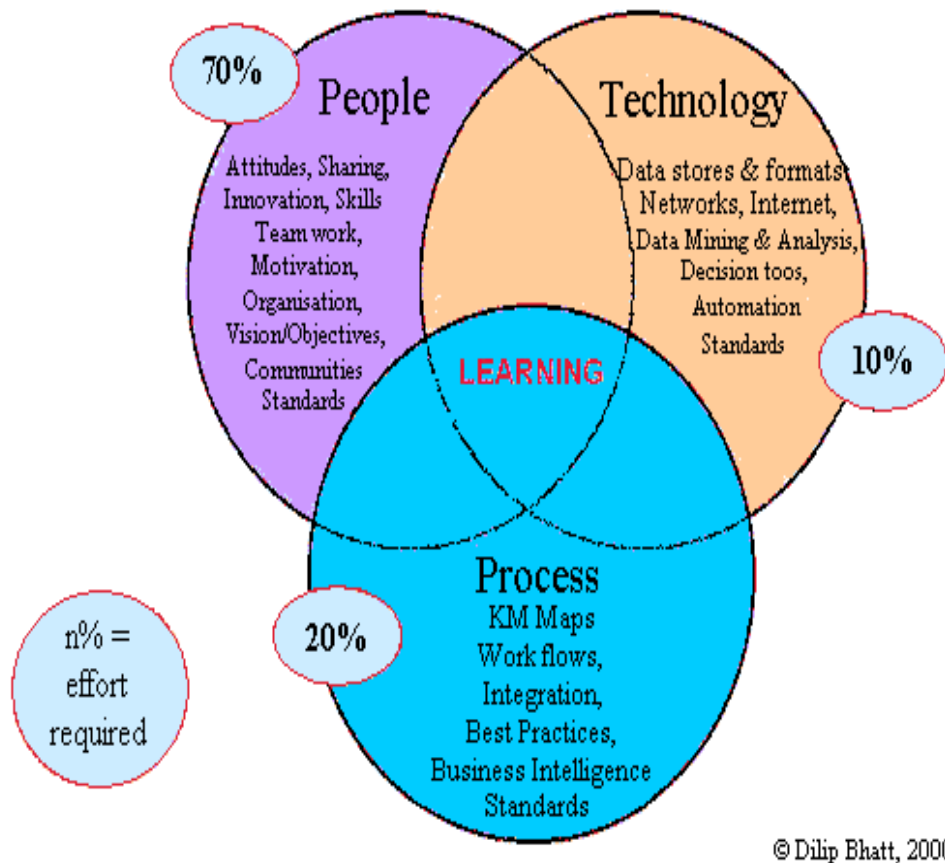
##### **4.1 The Knowledge - Strategy Link:**

To develop a foundation for depicting a knowledge strategy, the usual SWOT framework should reflect on today's knowledge-intensive settings. And, to better comprehend firms' points of advantage and weakness, they have to conduct a knowledge-based SWOT analysis and plan their knowledge resources and capabilities alongside their strategic opportunities and threats. Firms can employ this plan to strategically steer their knowledge management attempts, increasing their knowledge advantages, and decreasing their knowledge weaknesses. Therefore, knowledge strategy can be considered as matching knowledge-based resources and capabilities to the knowledge necessary for offering products

or services in methods better to those of competitors. The critical parts of a knowledge strategy include determining which knowledge-based resources and capabilities are significant, and how those resources and capabilities enhance the firm's product and market positions (Zack, 1999).

A key element of a KM concept is a requirement to address People, Process and Technology issues in tandem and not focus on any one element. The Figure below by Bhatt (2000) provides details of the sub-elements.

## Knowledge Components

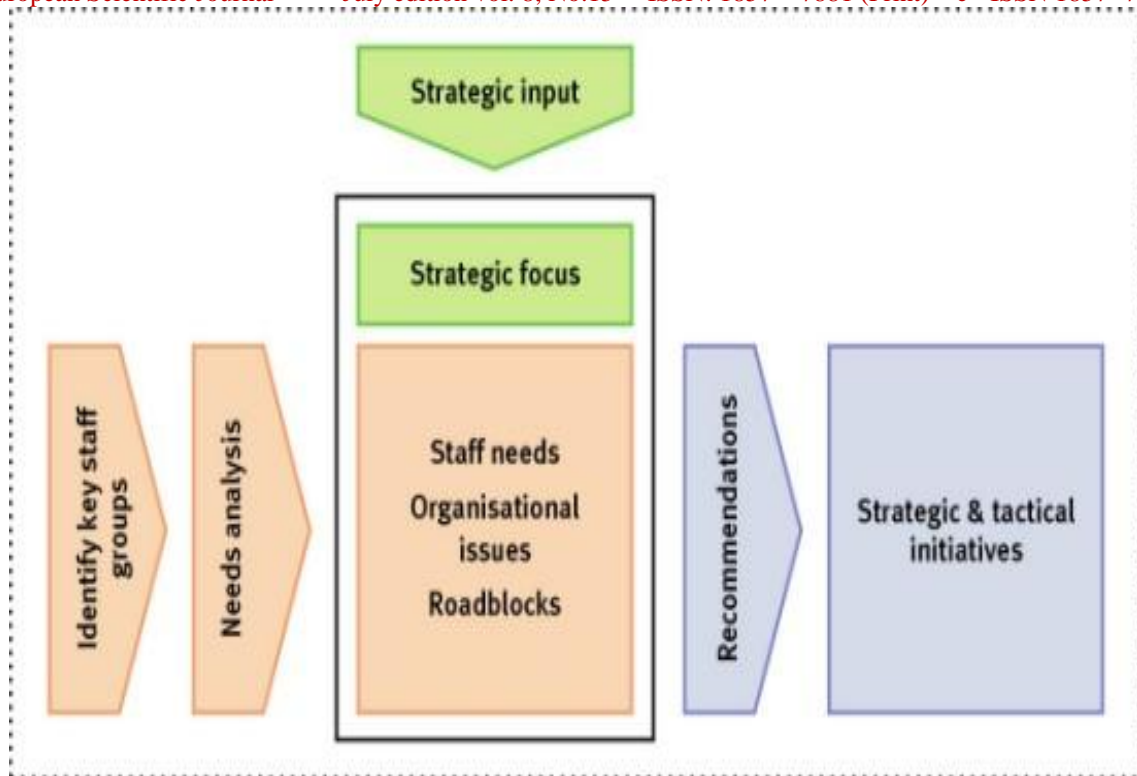


**Figure 1:** Knowledge Management Components and Sub-elements (Bahatt, 2000)

A holistic approach is needed in strategy setting. This is an area where several corporations fail, whereby KM is seen as a technical implementation. A typical example would be a strategic demand to share knowledge. A best result for KM if all the implications are self-addressed. That does not mean to technology is the least important of the elements. The purpose is that all elements should be considered important; Thus, the technology part could be the best and fastest to implement.

KM gurus often say that technology is 10% of the effort required; process is 20% and 70% being people/cultural issues. KM strategy should deal with specific implementation issues, such as an awareness campaign, understanding skills required to maximize knowledge, developing a rewards scheme and developing measuring requirements. In other words, a full change management program must be developed and implemented. A wider policy implication would be to set up an improvement and learning culture within the organization. In addition, a knowledge audit is required that aligns with the business strategy. Not only will the audit show gaps but also highlight areas where information which is currently being created in fact adds no value. By eliminating no value information chains, a great deal of work can be scrapped and help to address the working balance and reduce the burden (Zack, 1999).

Robertson (2003) stated that organizations are facing ever-increasing challenges, brought on by marketplace pressures or the nature of the workplace. He remarked that there could be many approaches for developing a knowledge management strategy. Each of these approaches is meant to be supported by a holistic model of KM processes. Robertson (2003) proposed an approach for developing KM strategy which is diagrammed in figure 2.



**Figure 2:** Developing a knowledge management strategy (Robertson, 2003)

Robertson went on further to suggest classify the approaches into two:

### **1. Top-down**

Using the overall strategic direction of the organization for identifying the focus of the knowledge management initiative. Ultimately, this broad goal would be met using a specially designed activities.

### **2. Bottom-up**

This requires that some research is conducted into the activities of staff involved in key business processes. The key staff needs and issues would follow from the outcome of the research. A range of knowledge management initiatives would be needed to tackle the needs and issues.

Riley (2002) who is the Director of Knowcom International in his presentation entitled “Methodology for the development of a Knowledge Management Strategy”,

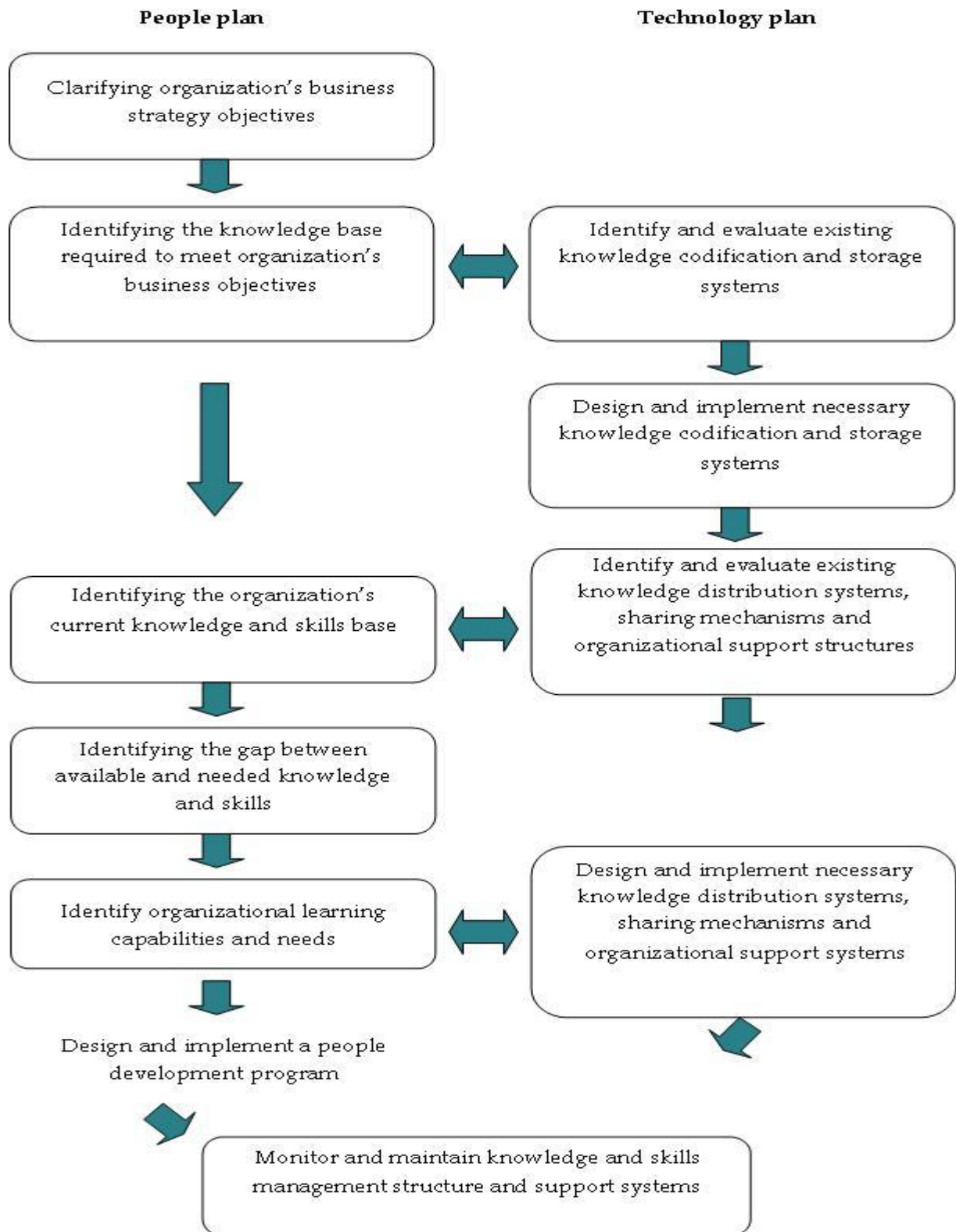
explained that Knowcom does not view knowledge management as a technology issue alone but collectively as the important constituting elements of a knowledge management strategy which are concerned with the following issues:

- Connecting people with people
- Connecting people with information
- Enabling conversion of information into knowledge, and
- Encouraging innovation through a culture of sharing and support.

Technology plays a vital role in assisting with these important elements. However, it is not the sole driver of a successful knowledge management strategy. For instance, the development of different approaches for capturing, sharing and effectively using knowledge does require an appreciation of how tacit and explicit knowledge are created, captured, shared and used in any organisation. It is believed that the Knowcom methodology allows for a streamlined approach to ensuring that the knowledge management strategy will meet the outcomes as required by the client. Therefore, the role of technology can be summarized in the following points:

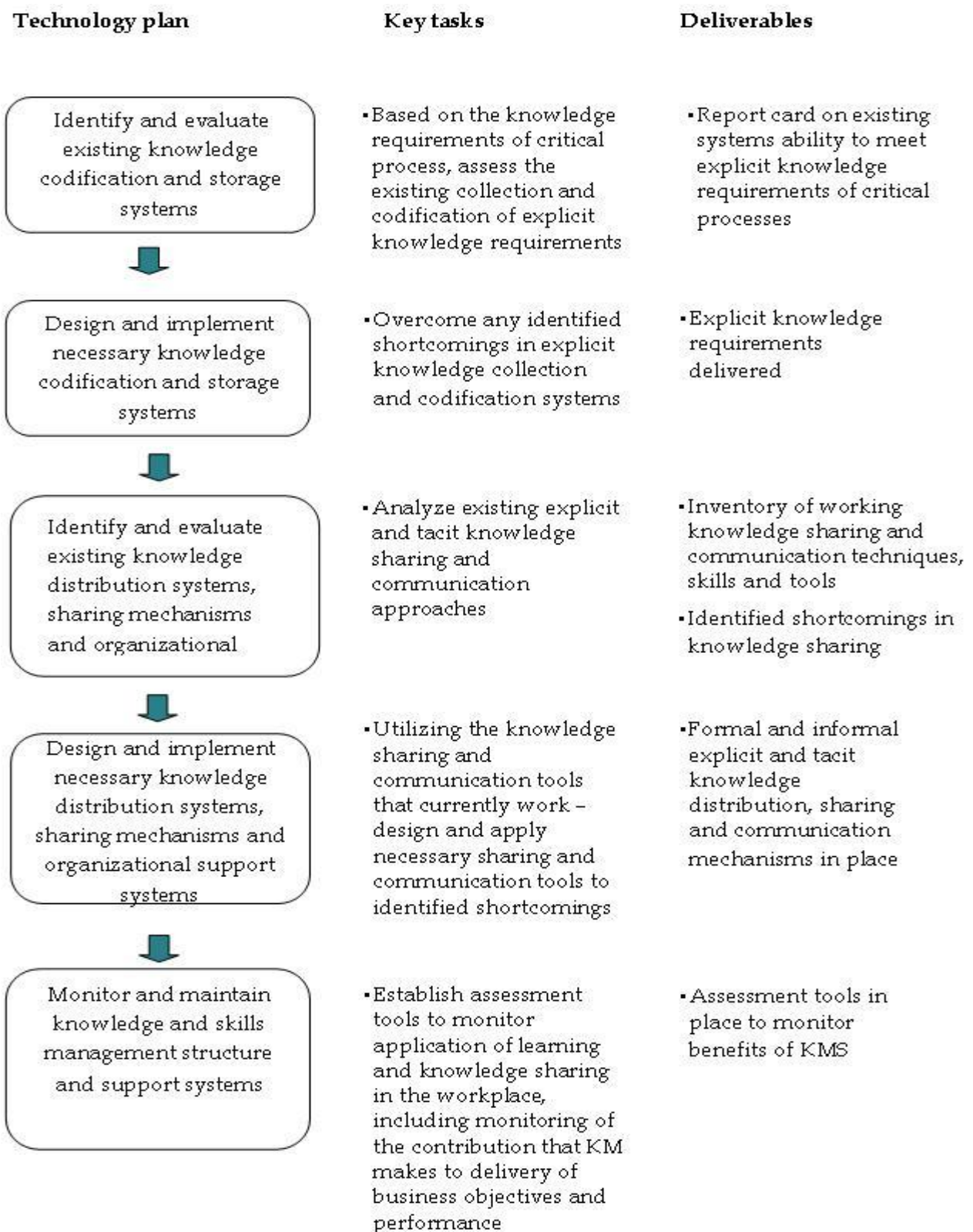
- provide the means by which the right knowledge is deployed at the right location, at the right time, and is effectively used to provide winning, value added services and solutions to the client, and
- Deliver client’s business strategy.

Diagrams setting out an overview of the Knowcom methodology by Riley (2002) is set out on the next page. The three figures 4, 5 and 6 provide a detailed view of the key tasks and deliverables in implementing the methodology.

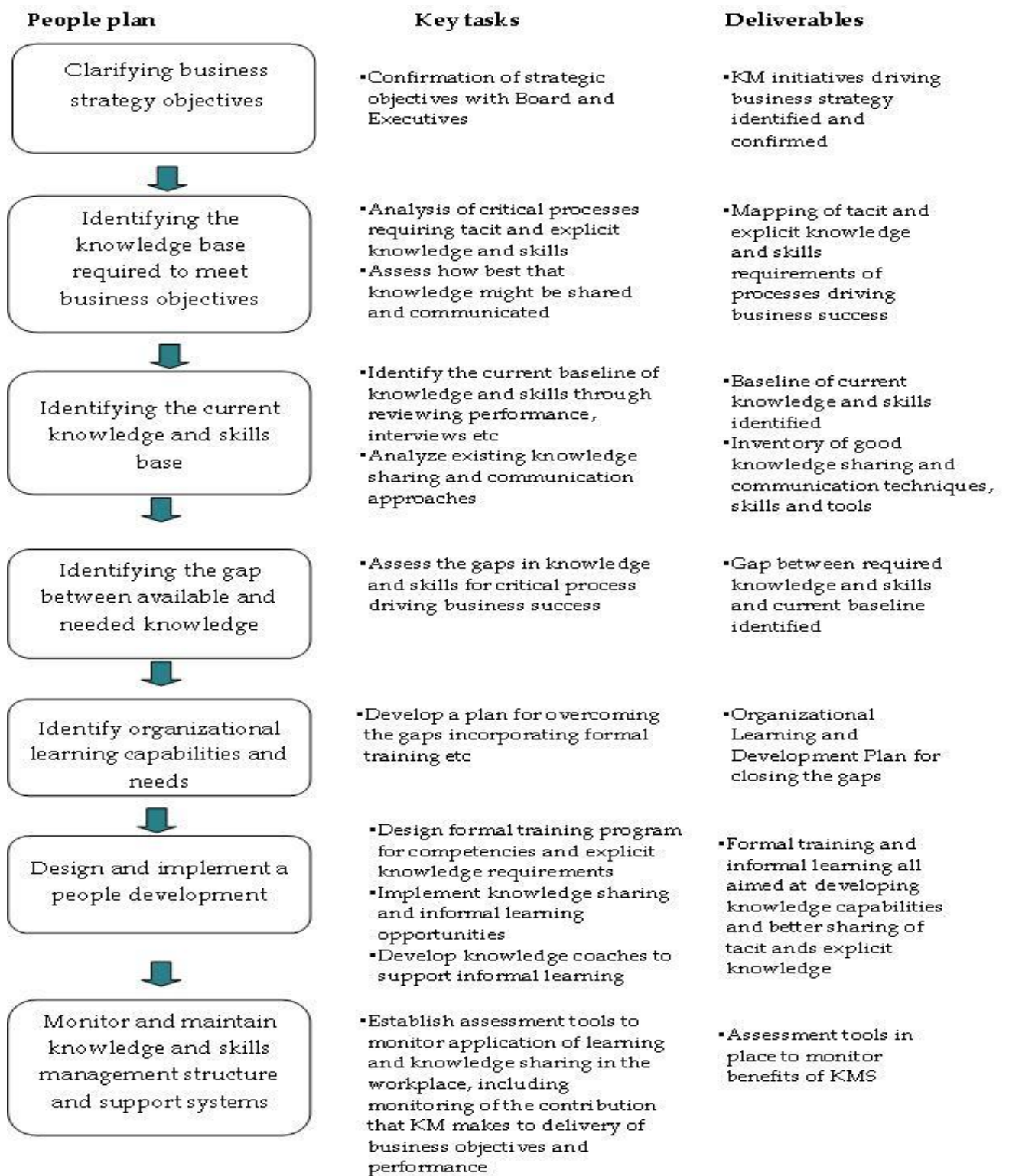


**Figure 4:** Developing the Knowledge Management Strategy (Riley, 2002)





**Figure 5:** Developing the Knowledge Management Strategy – Technology Plan (Riley, 2002)



**Figure 6:** Developing the Knowledge Management Strategy – People Plan (Riley, 2002)

## 5. Conclusion:

In summary, KM strategies must be aligned with the business vision and management and must ensure that staff is clearly on board. They must understand why knowledge is important; chiefs must practice what they preach. They must have channels for discussion and allow a flow of ideas. Feedback must be given and above all trust must be developed between the executive and the staff.

To be successful, a KM strategy must do more than just outline high-level goals such as 'become a knowledge-enabled organization'. Instead, the strategy must identify the key needs and issues within the organization, and provide a framework for addressing these.

Taking this approach ensures that any activities and initiatives are firmly grounded in the real needs and challenges confronting the organization. For knowledge management to occur has to be firmly connected to the creation of economic value and competitive gain. It can be attained by establishing knowledge management within the framework of business strategy. Firms are unparalleled in their business and hence ought to do extensive of soul checking and screening to obtain some answers to questions that need to be methodically tackled to transform today's knowledge management direction into one connected to the strategy and into a continuing method to perform business. Firms started to build technologically advanced knowledge management infrastructures that are competitive and they are capable to concentrate and give preferences to their investments in knowledge management and surpass competitors who have not established their attempts in strategy by developing the suitable strategic base. This is in line with Zack's contention.

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