

Review different knowledge strategy models and designing a new model

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Abstract. Knowledge strategy is new concept in knowledge management studies. This research has been conducted in an attempt to survey and define the related essentials, functions and the models to these two. Moreover, to present exist differences between these components. The research method of this research is based on descriptive–surveying method needed information gathered by library and internet-oriented study (books, essays, and dissertations). In the present research we have review different knowledge strategy models. the results demonstrate that knowledge strategy (KS) determines that organization should obtain what kinds of knowledge, with what depth, form which resource and towards which way to corroborate strategic planning. On the base of study consequences, there are four components to recognize and characterize KS, which are: 1- Method of Knowledge Preparation, 2- Knowledge Preparation Resources, 3- Knowledge depth, 4- Knowledge life cycle (KLC).

Keywords: Knowledge, Knowledge Management, Knowledge Strategy, Strategic approach.

1. Introduction

Enterprises in the knowledge-oriented economy can't merely accentuate on the tangible advantages like money, equipment and machinery; while on the contrary, business environment based on knowledge require a system on which enclose intangible assets such as knowledge, employees capabilities, innovation, customer relationship, organizational culture, systems and processes, organizational structure and so on. Utilizing these intangible resources in the enterprises preserves and procures competitive advantages. In the atmosphere Knowledge Management Systems (KMS) develop in an attempt to affecting on recognition, creation, storage, retrieval, sharing and practicing of knowledge. Meanwhile University of Texas defines KM as the systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee's comprehension in a specific area of interest. Knowledge management makes an organization gain insight and understanding from its own experience. Specific knowledge management activities help the organization focus on acquiring, storing and utilizing knowledge for problem solving, dynamic learning, strategic planning and decision making. It also protects intellectual assets from decay, adds to firm intelligence and provides increased flexibility. On that ground, KM as an inter-functional activity should be considered as the components of the enterprise top management.

2. Knowledge strategy models

Knowledge strategy is a special method to optimize knowledge creation and transform it to competitive advantage in the enterprise (McDermott Consulting Firm, 2005). Knowledge strategy is formulating for filling the existing knowledge gap and the needed knowledge gap. The goal of knowledge strategy is to answer to the strategic questions, which emphasizes on the competitive intelligence and internal retrieving systems of knowledge (Zack, 1999). As soon as knowledge avails, strategists can coordinate among strengths,

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weaknesses, opportunities and threats (Kruger et al., 2007). In a general manner, all of the effort toward KM should be a part of strategy formulation process of the organization, which ought to be along a course leading to organization future planning and targeting. Correspondingly, there are different theories and definitions about knowledge strategy that present by management intellectuals until now, which come next:

2.1. Bierly & Charkrabarti studies (1996)

Bierly and Charkrabarti have conducted the first empirical study about knowledge strategy. They have determined knowledge strategy as "the combination of organizational questions to the strategic learning requirements." Bierly and Charkrabarti believe that the managers make strategic decisions about knowledge strategy on the base of some factors like learning speed, knowledge depth and the type of organizational learning (internal, external, gradual or fundamental). They conduct the research with use of gathered data process from 21 American pharmaceutical companies from 1991 to 1996 by the use of cluster analysis. As a result, they have uncovered four generic knowledge strategic groups-i.e. 'innovators', 'explorers', 'exploiters' and 'loners'.

2.2. Professor Zack model (1999)

Professor Zack has found considerable results about knowledge strategy by researching on 25 firms. He believes that knowledge strategy in each organization according to the its capability and ability to support organizational competitive position can divide into three, innovative knowledge, advanced knowledge and core knowledge. On that category, Zack proposes a framework to demonstrate present situation of the organization to comparison with competitors, which has been shown by following figure.

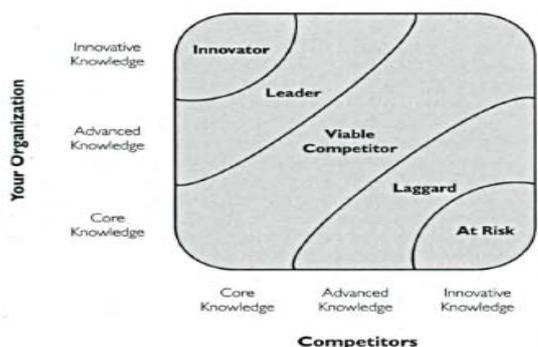


Fig. 1: Evaluation Framework of the present situation of knowledge in the organization.

Even though knowledge is dynamic, but this framework can exert a perpetual image about present situation of knowledge in the organization in comparison with the knowledge that the organization utilizes for implementing grand strategy, specially versus competitor's knowledge. Moreover, Zack propones a framework to uphold executives to evaluate and explain organizational knowledge strategy. This framework is a two dimensions matrix. He believes with considering to the dimensions an organization can evaluate and analyze its knowledge strategy. Zack proposal framework for formulating knowledge strategy. On this matrix, knowledge strategy formulates general approach of the organization (aggressive, conservative) to align resources and present organizational knowledge with knowledge requirements for implementing organizational grand strategy. The organizations that move toward exploiting internal knowledge exhibit the most conservative knowledge strategy, whereas, creative and innovative ones procure knowledge by exploiting internal and unbounded resource with exhibiting aggressive knowledge strategy (Zack, 1999).

2.3. Kesten Studies (2007)

Kesten believes that knowledge strategy is combination of road maps, which formulate organizational decisions toward diagnosing, acquiring, developing, preserving, retrieving and in general managing the knowledge. In this field, Kesten investigates that how knowledge strategy can effect on the organization in this way Kesten gathered information from 5 firms in different field, two of them in the field of Hospital, one of that in the field of financial services, another one in the field of accounting and the last one in the banking

field. Following figure demonstrates different kind of knowledge strategy in each cell, which is consisting of following knowledge strategies:

- 1- Knowledge scope (broad to narrow), 2- Organization (reactive to proactive), 3-Preservation province (people to technology)

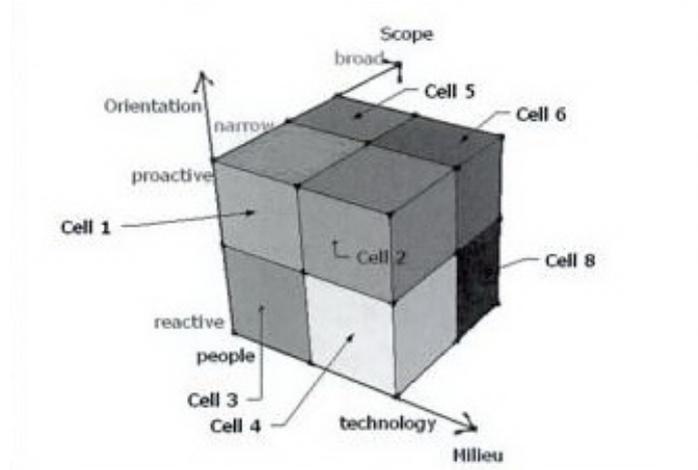


Fig. 2: model of knowledge typology(Kasten, 2007).

2.4. Abdullahi's framework of knowledge strategy formulation (2009)

Abdullahi with regarding to considering to the different knowledge strategy formulation and a field study in the consulting companies and supervising informatics concepts presents a domesticated knowledge strategy formulation for these companies. He defines knowledge strategy as the combination of strategic choices that an enterprise executes around resources, bases, preparation and preservation of the knowledge in order to directing and conducting knowledge resources toward organizational goals and objectives. Abdullah's framework of knowledge strategy formulation will come next in the figure.

3. Conceptual Model of the Research

Consequently, conceptual model of the research designed as below in the figure(3):

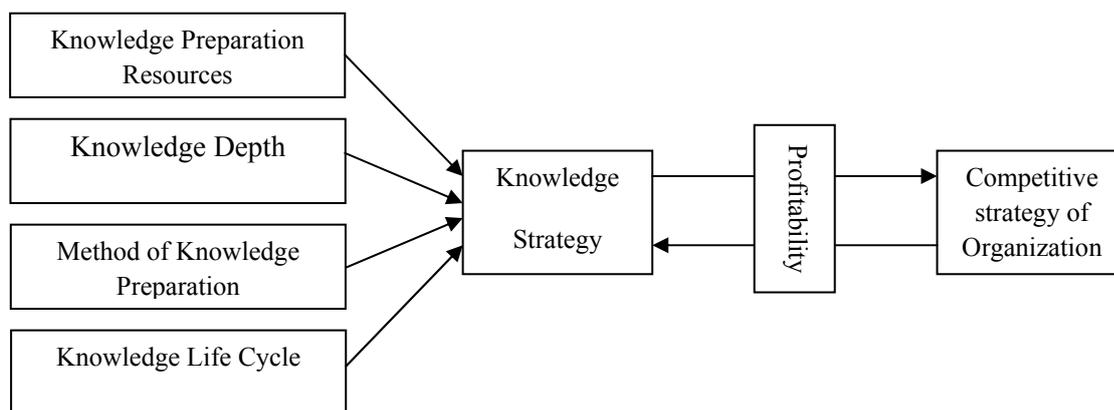


Fig. 3: Conceptual Model of the Research

On this conceptual model, knowledge strategy formulates in the form of four dimensions, Knowledge Preparation Resources, Knowledge Depth, Method of Knowledge Preparation and KLC. Which all of these dimensions are dependent variables and competitive strategy of the organization on the base of Miles nad Snow typology (defined four general strategic types of organizations, Defender, Prospector, Analyser and Aeactor) is independent variable while, it affects all of the knowledge strategy dimensions.

Different components of conceptual model and all of criteria for measuring knowledge strategy concept come ine the following table:

Table. 1: the criteria of measuring knowledge strategy dimensions.

KS dimensions		Definition	Criteria
Method of Knowledge Preparation	Utilizing from exist knowledge	Implementing, revising and improving exist knowledge	<ul style="list-style-type: none"> • Accentuating on exist frameworks, trends and regulations for solving problems and or developing new products • Emphasizing on development of exist skills and proficiencies • Well – Considering to the ideas, technical skills and solving problem solving methods
	new knowledge creation	Discovering, initiating and experiencing new knowledge	<ul style="list-style-type: none"> • Emphasize on innovative and entrepreneurial behavior toward developing new products • Admiring innovation and thinking more than job description and regulations • Evaluating and testing new ideas
Knowledge Preparation Resources	Knowledge Preparation form Internal resources	Resource of Knowledge Preparation from inter-organizational borders	<ul style="list-style-type: none"> • Developing idea, technical skills and problem solving methods in the organization • Accentuating on the developed frameworks, procedures and regulations in the organization for solving the problems and or developing new products • Continuous utilizing of internal knowledge toward knowledge development
	Knowledge Preparation from external resources	Resource of Knowledge Preparation from outer-organizational borders	<ul style="list-style-type: none"> • Considering to the customer knowledge • Intensifying on investigation about competitor knowledge analysis • Attaining knowledge from consulting institutes out of organization
Knowledge Life Cycle	First Stage: Knowledge Creation	Initiating new knowledge	<ul style="list-style-type: none"> • Personal interest to develop knowledge • Individual connecting among employees with the same raw material (thoughts) • Employing professionals • Connecting to the knowledge producers
	Second Stage: Knowledge Preparation	Purification of developed knowledge and mining its value	<ul style="list-style-type: none"> • IT emphasizes on the informal channel of transferring knowledge • Informal group support to transfer knowledge in the organization • Considering to the pragmatic and liberal human resource • External relationship with main customers and other partners
	Third Stage: Knowledge Dissemination	Creating value by Knowledge Dissemination	<ul style="list-style-type: none"> • Informal systems based on personal and group network utilizes accompany with training to the employees • MIS 's use as comprehensive knowledge base • Employing the person who respect to the near customer relationship and use knowledge to solve customer problems • Company should survey the competitors to use the knowledge from their side
	Fourth Stage: Knowledge Commercialization	Value creation from knowledge which change to product	<ul style="list-style-type: none"> • Formal system to create value added from knowledge • Utilizing MIS's for data mining systems • Employing people who know customers • Concentrate on potential customers
Knowledge Depth	Specialized Knowledge	Products and specialized/ expert knowledge	<ul style="list-style-type: none"> • Multi- function employee in the organization • Admiring specialization in the business • Existing specialized knowledge in different cases
	Multiple and Extensive Knowledge	Products and general knowledge	<ul style="list-style-type: none"> • Multi- function employee in the organization • Retaining professional groups • Existing specialized knowledge in different general cases

4. Conclusion

KS formulation in the organization helps distinguish KM process strategically, due to which the organization what kinds of knowledge, with what depth, form which resource and towards which way must obtain strategic planning. If KM wants to keep in the organizations, it must create value for the organization to achieve sustainable competitive advantages. Therefore, organization to implement KMS productively, should consider explicit and tacit knowledge to define enterprise main direction for investing in the field of KM. on that ground, enterprises toward KM, first ought to characterize the nature of the work, existing knowledge, and well utilization from explicit and tacit knowledge capital in the long range for KMS formulation.

In the next stage, to approach to sustainable competitiveness, organization needs to pay more attention to business strategy alignment accompany with knowledge development and mental capabilities. Organizations must strategically appraise their knowledge capabilities broadly. In this way, the organization distinguishes the gap between the knowledge, what have and what should have. Consequently, organizations' knowledge strategy should use by the process of creating, sharing and implementing knowledge to fill that gap and to maintain organizational competitive strategy. organizational knowledge strategy should align with competitive strategy of the organization. As a result, to characterize KS, at first the business strategy should be defined, then the knowledge should be prepared toward aligning and supporting the organizational strategy. Presented model in this research can be a guideline for formulating organizational strategy in the other enterprises.

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