

The Role of Knowledge Management in Building E-Business Strategy

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Abstract - e-business strategy is a roadmap to guide the organizations to a correct selection of both tools and solutions to achieve the organizations' goals and context of applications on internet. This research paper will clarify the role of Knowledge Management (KM) in e-business strategy, and the dependency of new e-business strategy on other exist strategies and its relationship with the overall corporate strategy. The purposes of the paper are to identify all possible benefits from KM and the contribution of its tools to create e-business strategy. The paper concludes that the KM has important effects and benefits could lead the organizations to build new strategy or develop the efficiency of the business processes and support the decision making processes.

Keywords: e-Business Strategy, Organizational Knowledge Base, Intangible Resource, Knowledge Management Tools.

1. Introduction

Building (Creating) e-business strategy is Information Technology (IT) project. The vital goal of building e-business strategy is to address the way of how Internet technologies can support the organization and give competitive advantages through the configuration of its available resources to meet the needs of the market and customers, as well as support the Customer Relationship Management (CRM) and Supply Chain Management (SCM) [1].

Organizational Knowledge Base is one of the essential components for building successful e-business strategy project in any firm, because it contains data, information and a set of knowledge assets about the firm. Thus, the firm must depend on and use this source as an elementary step to perform some of the strategy tasks easily and efficiently [4]. Creating e-business strategy based on four stages: 1) Initiate, 2) Diagnose, 3) Breakout, and 4) Transition [2].

1.1 Knowledge Resource in e-Business Strategy

Organizational knowledge base means Explicit Knowledge available in the firm and tacit knowledge (e.g. Managerial Expertises, experiences which reside in the minds of its owners) should used in those stages in order to help the project stakeholders to participate and perform all e-business strategy tasks efficiently [3], [4].

Formulating new e-business strategy for any organization is a duty of high-level management (Executive Managers) [7], to allocate the required resources to carry out the project successfully. Resources are as follows:

- 1- Tangible Resources. E.g. Mainframe.
- 2- Intangible Resources. E.g. Knowledge Assets.
- 3- Human Resources (HR). E.g. Web Designer.

The most valuable required intangible resource for strategies is knowledge [7].

In e-business, knowledge also is the most strategically important resource [21], such as products' specifications, trademarks, production and operations management expertises, customer and supplier relationships records, organization culture, policy, and reputation [6].

1.2 An Overview of Knowledge Management in e-Business

E-business is wide term means the use of all IT capabilities in business, it does not mean only buying and selling (e-commerce) it also includes other business processes such as serving customers/suppliers and managing their relationships electronically (e-CRM), managing all supply activities till delivering products/services to customers (e-SCM), internal communication between employees and external collaboration with other business partners [2], [8].

Obviously, all those activities are intangible assets, which mean that e-business solutions concentrate on the management of knowledge (intangible assets) [6]. E-Business strategy based on group work of different levels of management and organization departments, the shared factor which integrate them together is knowledge [9].

For example: customer's satisfactions feedbacks will linkage the marketing department with the production department. It thus connects the tasks between individuals, departments, and organizational levels.

2. Why Knowledge Management?

Because the flood of huge quantity of information through the organization about its business processes, rules, relationships [17]. Many organisations are suffering from the information overload, and looking for suitable

representation of information (knowledge) to benefit typically. In e-business strategies, there are a lot of possible opportunities as well as risks that should be critically identified before creating the strategy. Leveraging knowledge is one of the success factors for e-business strategy as a new economy [19]. E-business strategy has multi challenges to efficient and effective sources of KM:

- In the context of CRM, it gives perceptive meaning that enables the organization knows more about its customers, suppliers, and partners, and their relationships, and linkages with the organization [9], [20].
- In the context of SCM, enables the organization knows what materials available, what is required, how the organization operates these materials, how it delivers the products/ services (distribution channels), how it market's and serve's the customers [21].
- KM links all project stakeholders and management levels together, and support the team work by sharing the experiences and expertises.
- KM processes organize, distribute, filter, and store a huge amount of organization's data, information, and knowledge in distributed knowledge base which resides in different locations. This knowledge supports the decision making process and improve the project performance [20], [21].

2.1 Benefits of KM Tools into e-Business Information Management

KM tools are all technologies and resources that enable the knowledge transfer, generation, and codification [4]. It does not mean that all KM tools are computer-based applications; knowledge can be transferred via phone calls [14]. The following are possible benefits of KM tools for e-business information management:

1. Organize and Evaluate Customers' and Suppliers' Requirements and Relationships (Customers-Suppliers Oriented Trends)

Questionnaires as a tool for gathering data and information are one of the common methods to get information. But getting information is nothing new to organizations [17]. The classification and evaluation processes are based on all gathered information from customers, suppliers, and partners such as satisfaction, suggestions, recommendations, and requirements. Knowledge Base System (KBS) is KM tool to organize a collection of

information and evaluate them in such way to be 'knowledge'.

The importance of this process is to enable the organization to respond and make correct decisions toward the customers' or suppliers' demands. This is the first step for organization changes 'new strategy'. [12], [13].

For example: after classifying the knowledge related to customers' feedbacks, the organization found out that, customers do not receive up-to-date information about new products, prices, and offers. That would make the organization think about "new marketing" tool to improve the promotion, such as e-Brochures or e-Mail marketing.

2. Support the Decision Making Process (Forecast)

KBS for existing customers and suppliers helps the organization to keep update their needs (Declarative Knowledge), as well as benefit from the internet technologies as KM tool such as search engines, also capable the organization to capture more information about the market competition, new customers' demands, customer's demographics, competitors, etc. (Behavioural Knowledge).

Declarative and behavioural knowledge will support the decision makers (executive management) in the following benefits [10] in order to structure the organization on internet:

1. Select appropriate e-business model. (Initiate step for e-business strategy)
2. Suitable e-marketing plan.
3. Predict the size of competition after implementing e-business system as global tool for business.

3. Filter and Store All Organization's Knowledge in Knowledge Repository- (Organizational Trends)

Knowledge repository stores the processed information that are captured, organized, filtered, and evaluated and save them as knowledge, as well as store all knowledge that are related with other organization's strategies such as marketing strategy and Information System (IS) strategy [11], [13]. Knowledge repository makes the process simple for employees to save, retrieve, access, and organize all knowledge.

These three benefits prepare the basic infrastructure to formulate e-business strategy, and identify where we can practically benefit from knowledge in the building process. They show KM value chain components begin from creation to storage and distribution of knowledge.

3. The Contribution of KM in e-Business Strategy Stages

According to [10] there are numbers of well-known international organization integrate KM in e-Business activities such as Sun Microsystems. As mentioned before, building e-business strategy is based on four stages as follows:

1. Initiate Stage

According to [2] the objectives of this stage are:

1. Outline project scope.
2. Identify project stakeholders.
3. Determine project schedule.

Project scope and schedule tasks deal with data and information nothing tangible “no deliverables”, they are about prediction and general study [10].

KM has extremely significant contribution for these two tasks because both depend on gathered data/information ‘Declarative Knowledge’ about customers and suppliers, as well as ‘Behavioural Knowledge’ about organization documents, market competition, and prediction for deliverables . All these tasks can be performed effectively by the following KM tools:

- Organizational knowledge base.
- Knowledge mining.
- Knowledge determination.

For identifying project stakeholders’ task, there is also significant role of KM. According to [3] KM is one of three key enablers as shown in Fig.1 to manage the relationship between stakeholders. Knowledge transfer sticks the stakeholders together and assists the creation of the value proposition. Knowledge repository has all required knowledge which enables the firm to identify the affected customers, employees, suppliers, departments, public and private sectors in the new system.

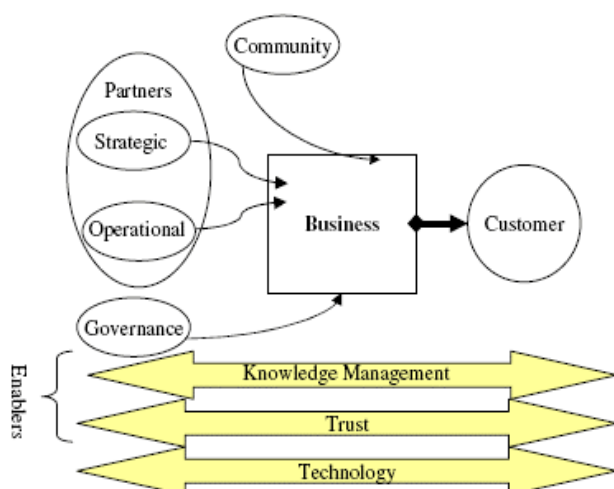


Fig.1. e-Business Stakeholder Model [3]

2. Diagnose Stage

The purpose of this stage is to find out strengths; weaknesses, opportunities, and threats (SWOT) of the current business strategy [16], which can be done by:

- 1) Analyzing the organization position among its competitors, and
- 2) Revises the current strategy in order to understand the current relationships between the organization and its suppliers and customers [2].

To analyze and assess the current organization position there are some analytical tools can be used that enable the firm to assess its position, Small-size firms can use industry analysis, medium/large-size can use supply chain analysis [1], [2], [16]. For customers’- suppliers’ relationships there is a tool called Customer/Supplier Life Cycle enable the firms to evaluate its relationships [16].

All tasks in this stage need organizational knowledge base and knowledge repository to be carried out, because they are about the current state of the organization which means no need for gathering data/information and no predictions as well for the future behaviour.

3. Breakout Stage

The objective of this stage is to derive a new strategy (e-breakout strategy) from the overall business strategy to match the organization goals. E-business strategy could be dependent or independent on other organization’s strategy. That is why it is recommended to understand the relationship between the proposed e-business strategy and other adopted strategies before creation [1], [3]. New e-business strategy should be ready to form based on (Diagnose Stage) the assessment of organization strategy (SWOT) and analysis of its position [2], these both are intellectual assets of the organization.

The derivation process of the new strategy is duties of project manager for allocating staff, distributing tasks, identifying IT requirements, adding/deleting new features to optimize the corporate overall business strategy, satisfy SWOT deficiencies [7]. Furthermore, the responsibilities of the project manager deal directly with the human dynamics of the corporation and concerned on the required technology. In conclusion, building e-business strategy is about converting the corporation’s intellectual assets (Knowledge) into a new roadmap of what the corporation needs to do, by re-arranging the corporate business strategy based on IT infrastructure.

According to [18] the main role of Chief Knowledge Officer (CKO) is to convert knowledge into valuable profit by managing and controlling the corporation’s intellectual assets. Therefore, CKO can be e-business strategy project manager.

4. Transition Stage

In this stage, the firm has to implement the proposed roadmap of the new strategy. Transition means that the firm will move from current state to the proposed state, this movement will be supported by new resources and capabilities [2].

In this case, it is recommended for firms to carry out gap analysis in order to avoid the changes, risks, and conflicts between the current and new strategy to understand and identify the differences between them.

The key role of KM in this stage is vital and valuable. KM is necessary to measure the organization's ability for implementing the new strategy. Knowledge as intangible resource of the organization comprise of organization's culture, policy, business processes, and HR experiences, will capable the corporation to assess itself by assessment tools (e.g. risk or change readiness analysis) to know if the corporation has the ability to cope with the changes of the new strategy, and able to alter or not, and critically determine all areas of changes in order to manage these changes.

CKO can conduct the evaluation process of the corporation and diagnose risk and opportunities of the new strategy.

4. Conclusion

This research paper has only determined the contribution and key roles of knowledge management in e-business strategy, which could be main concerns for knowledge managers interested in creating effective KM systems.

The innovation of information technologies in business is forced the organization to adopt new strategies to capable the real time optimization of the value chain. Building e-business strategy and plans should be derived from the business objectives, culture, policy, and current strategies (knowledge resources).

From effective knowledge management, the organization can build suitable e-business strategy, as well as control the organization changes, evaluate and estimate the cost/benefit/risk of the project (e-business strategy); CKO can lead the e-business strategy project as a project manager.

Managing knowledge should be based on technology platforms to provide the sharing and exchange processes. Therefore knowledge management is a combination of human resources, technology resources, and information resources.

In conclusion, knowledge management does not exist in specific organizational position or management level, KM can be found in the overall corporate strategy, organization objectives, business operations, and people.

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