EXAMINING THE ROLE OF KNOWLEDGE MANAGEMENT IN THE PERFORMANCE OF BRAND PRODUCTS DEVELOPMENT PROCESS IN THE WORLD AND IRAN

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ABSTRACT

The ultimate goal of each economy is to increase the community welfare through promotion and stable development. Today, brand plays a crucial role in creating and maintaining a business's financial performance. According to market high level competition, a powerful brand help the company differentiate itself from the market and explains the reason of satisfying the customers 'needs uniquely by its products or services. Accordingly, although the country has advantages and potential of such a high level of energy security, mine resources and abundant educated labor force, economic growth performance and Iran per capita income as an objective component of development in the region and the world are not satisfactory. This problem raises the attention necessity to brand issue in Iran and world trade area. This study is kind of scientific- promoted which is collected via internet resources. It is assumed that brand is a determining factor in creating and maintaining a successful business and differentiation factor in a competitive markets and the position creation factor in customers' minds. If managers can identify the key stimulus and control them, organization will be successful. To achieve this goal, it is important to hold training courses of brand strategic management for selected units

Keywords: Brand, Product Development, Knowledge Management, Key Success Factors, Business Community, Knowledge-Based Economy

INTRODUCTION

The ultimate goal of each economy is to increase the community welfare through promotion and stable development which is impossible regardless of industry and industrialization in the current climate of the world.

Many believe that by improving the industrial performance as the engine of economic growth higher welfare can be achieved. Now widely accepted that brand play a crucial role in creating and maintaining a business's financial performance. According to market high level competition, a powerful brand help the company differentiate itself from the market and explains the reason of satisfying the customers 'needs uniquely by its products or services. The main sources of success in competitive advantage for companies in the future are successful and continuous development of new and improved products. In the past thirty years, many researchers have been done on the effectiveness of the product development processes and various models have been proposed to systematize these processes (Mani *et al.*, 2011). Knowledge is to take full advantage of data and information combined with skills, competencies, attitudes, perceptions, commitment and human internal incentives. Knowledge is presented in the form of opinions, judgments, relationships, perspectives and concepts and is the foundation and director of the post-industrial economy. In the product development process, a large amount of organizational knowledge creation, storage, retrieval will be used. In today's competitive environment, organizations needs to knowledge assets have highly increased than the past. The inimitable, rarity, being valuable and irreplaceable are the characteristics of these knowledge assets, with the emergence of approaches and concepts such as

Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231–6345 (Online) An Open Access, Online International Journal Available at www.cibtech.org/sp.ed/jls/2015/01/jls.htm 2015 Vol.5 (S1), pp. 642-648/Jalali et al.

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knowledge management, intellectual capital and intangible assets, are all indicative of the growing importance of knowledge in organizations. In this article, it is tried to pay attention to the necessity of the brand issue, assumptions about the role of knowledge management and performance of their product development process, researches done in this case, the role of governments in supporting the development of the brand and the results of this study and necessary suggestions for brand products development.

Necessity of Expression

Although the country has advantages and potential of such a high level of energy security, mine resources and abundant educated labor force, economic growth performance and Iran per capita income as an objective component of development in the region and the world are not satisfactory. This problem raises the attention necessity to brand issue in Iran and world trade area. Assumptions about the role of knowledge management in the development process of brand products in the world, including Iran are as follows:

- 1. Brand as a logo and visible components associated with it.
- 2. Brand as a determining factor in creating and maintaining a successful business.
- 3. Brand as a cause of differentiation in competitive markets.
- 4. Brand as the position creation factor in customers' minds.
- 5. Brand as a trademark and intellectual property associated with it.
- 6. Brand as a symbol of tangible and intangible assets.

Theoretical Basis of Study

Knowledge of strategic planning, knowledge of tactics and designing procedures are basically implicit. Clark and *et al.*, found that new product development strategy depends heavily on the integration of knowledge.

Research Background

In the past thirty years, many researchers have been done on the effectiveness of the product development processes and various models have been proposed to systematize these processes. Indicators that were introduced by researchers as key success factors of new product, some of them are common among these research results and some of them are different appropriate with business type and the studied product. The main challenge of organization understands knowledge management and how to implement it (Mani and Asgharzadeh, 2011). Today, the great wishes of organization are to define an appropriate knowledge management system and run it in a successful way. The most famous category of knowledge, divided it into two parts of tacit and explicit knowledge. Implicit knowledge is knowledge that is obtained by the internal individual processes and stored within oneself. Sometimes such knowledge defined with titles such as experience, reflection, individual talent or introversion. This knowledge is unstructured and does not base on objective and not subjective documents. Tacit knowledge is knowledge that is stored in a mechanical or technological means, such as documents or databases. According to Davenport and Prosac, knowledge management is a set of processes to understand and implement the strategic resource of the organization. Knowledge management is a structured approach that makes procedures to identify, evaluate, organize, store, and use of knowledge to meet the needs and goals of the organization.

MATERIALS AND METHODS

Research Method

This study is kind of scientific-promoted that is collected by adapting from the library method which includes written information from books, articles, specialized and related magazines.

Analysis of the Data

More than thirty years of research on the causes and factors influencing the effectiveness of new product development is ongoing. Today, the extensive list of these factors is available. Since the influential publication of Nonaka and Taguchi's book, regular and continuous management of knowledge is considered as an important factor in product development undoubtedly. Knowledge activity considered at the heart of new product development processes. Many managers and business owners tend to make decisions about how to enable the knowledge management or coordinate their company NPD activities

through knowledge management tools. The combination of knowledge management and new product development in businesses which have science and technology nature of work is more relevant. A company's customers tend to buy products that have more options than other similar products. That's the value created for the customers. In fact, the values presented in the heart of the business model of a company indicate what customers need and also its competitors have not offered that. For example, a new product offer in the shortest possible time, no limitation of time and space to provide products, better service after sale, is being complete, relationship with renowned companies, a well-known brand, low cost. Products and services establish the relationship between the company and its customers and indicate that what a company should offer (Sung and Perry, 1997). The following questions must be answered: What is the product or service that you provide? What are the differences between your product or service and other products or services? What will customers benefit from products and services? What are the benefits of your products and services to the customers? What are the expectation your customers from your product and service? Two groups of factors affecting on business model creation includes industry factors, which leads to higher profitability of firms belonging to the same industry compared to other industries. Company-specific factors lead to the success of a particular company among the competing companies in the same industry. Companies are affected by competitive forces exerted by suppliers, customers, competitors, products, complementary and alternative suppliers as well as stronger competitive that their bargaining power is high. Suppliers by imposing high costs of purchase will increase the costs of production and income. Suppliers may force the companies to buy lower quality raw materials, so the companies are not able to provide products with their own quality to customers. The higher production costs and lower product quality will result in lower profits for the companies. New product development is a process in which a new product or service is marketed. The success of this process can be measured by definition of an index that indicates the success or failure rate. The success of this process can be measured by definition of indices that indicates the success or failure. The expression of new product development is used both for the new product in the world and the product with minimum improvement or changes. Today, the life of market is declining and it is predicted that the rate of product development doubles in every five years.

As a result, new products that provide the needs and demands customers and go beyond those issues counted as a key factor in maintaining and improving the quality of competitive advantage. One of the most affection on approach method of Western companies in the field of product development originated from development concept by NASA in the 1960s which was large scale management to easily perform the complex defense projects. The first version is called divided project planning to explain the sequential approach consists of four phases.

1: The initial analysis (first phase), 2: definition (second Phase), 3: Design (third Phase), 4: Operation (fourth Phase). Besides, establishing checkpoints ensure that wrong transfer to the next phase never happen. An influential study is presented by Buzalen and Hamilton (1980) which is not only the new product development process but also considered it generally. When they were engaged in research on how to define the product development process, found the following steps:

Generate ideas



Figure 1: New product development process

Success Factors of NPD Projects

In order to succeed in NPD, Many companies take a systematic approach regularly and accurately to evaluate the products development process from the beginning of the development process to market offer

phase. Identification of success and failure of products is not easy because the product may be successful in one part and yet, be unsuccessful on another part. Various studies that has been done in the field of new product development have defined the main factors of project success. Some of these factors are: the structured process of new product development, goals, product definition, long-term view (of the future), strong and powerful leaders, understanding and knowing the market, senior management support and customers' involvement in the process and emphasizing to her/him. Development Team is important in the success of new product development. Teams must have a shared and clear vision. The formation and composition of the team is also very important. In addition, communications is an important factor. The team needs to have a good relationship with senior management. The team should be flexible to possible changes in the product and its characteristics. Team members must have sufficient skills and incentives. Another study conducted by Weiss consortium (2002) identified 10 factors in the product success. Ernest, also studied the research done on identifying success factors of NPD. The results are shown in Table 1.

Table 1: Applied Research in the field of new product development process

Year	Researcher	Number of Sample	of new product developm Success Factor	Findings / Results
1997	Rubinstein and <i>Et al</i> .	103	Technical Success, Economic Success, Technical and Economic Success	1. Structure and project process from: planning level of project, Transparency in performance needs 2. Technical information availability 3. Potential Markets Information availability
1987	Cooper and Klinschmit	125	Financial performance, Opportunity window, Market share	Transparency in determination of target market, correct definition of demands and customers' needs, Correct conceptual definition of product, correct definition of specifications and product requirement.
1989	Di Bertany	276	Reduction of 16 success variables to 4 variable: Market share and sell, Other amplifiers competitivene ss, Costs performance	Strong approach to market and customer, Existence of product development process
1994	Parry and Sung	258	Successful and unsuccessful projects selection by managers Development product	first analysis financial analysis
1995	AtuanGym a	275	Marketing performance Project performance	Market approach in relation with: collection and using market

1995	Cooper and Klinschmit	103		activities of product development Timely and rapid definition of product
1997	Clanton and Et al.	142	unsuccessful	Preliminary marketing activities development, Preliminary Technical activities development Marketing activities Technical activities
1997	Griffin	383	General success, Relative success, Success in market, Financial Success, Company classification to two category the best and the rest on 4 index	Differences between the bests and the rest Companies: Existence of official process in developing new product
1997	Souder and <i>Et al</i> .	150	Responders' agreement on Success and failure of project from business view	Marketing activity performance during the NPD process Technical activity performance during the NPD process Marketing skills
1999	Balbuntin and <i>Et al</i> .	208	Successful and unsuccessful projects selection expression by responder	Good skill in marketing and precise prediction design of market and customers' demands

Knowledge Management and New Product Development Relationship

Since the influential publication of Nonaka and Taguchi's book, regular and continuous management of knowledge is considered as an important factor in product development undoubtedly. Knowledge activity lies at the heart of new product development processes. A significant amount of organizational knowledge is distributed and not centralized, and some of it is implicit and skilled employees' minding various types of NPD models. Therefore, methods and the knowledge management experiences proceed on how to create, accumulate, and recombine the information available in the new product development process, both technically and in terms of procedures and deals. A significant amount of knowledge in NPD process, such as knowledge of strategic planning, tactics and methods of design, are basically implicit. Therefore, several researchers have introduced NPD as intensive knowledge activities (Sung and Perry,

1997). Kurt described three categories of knowledge which have been used by product designers in the development process: general knowledge, specialized knowledge and knowledge of the methods. Clark and Weil (1993) stated that new product development strategy is an information processing procedure, in other words, having knowledge in a good and regular manner. Clark and colleagues found that new product development strategy depends heavily on the integration of knowledge. Moran (1995) says business that has good capability in absorbing market information can reduce its instability in the market which is called external knowledge management and relatively enjoy higher success opportunity. Firms that are using correct methods for knowledge management, their efficiency and their new product development performance are more and better. Another study suggests that, due to supplying the needs of different customers, products are not compatible with the needs of customers. The successful new products are often those to be completed by scheduled plan and determined budget and achieve their objectives as well as other characteristics of a successful and reliable project.

Issues Requiring Iranian Firms' Attention in the Field of Brand and Branding

- 1. Environmental factors
- 2. Cultural needs: existence of long-term business activity culture
- 3. Scientific needs: development of specialized institutions of production, promotion and related knowledge.
- 4. Implementing needs: specialized institutions creation in the field of evaluation and brand support
- 5. Developing media tools such as specialized publications related to conferences and...

Institutional Factors

- Removal of constraint in providing resources
- Long-term perspective on business and economic
- Appropriate allocation of resources
- Rule of thinking, market-oriented thought rather than product-oriented thought
- Capital attitude to the brand issue than cost attitude

The Role of Governments in Supporting Brand Creation and Development

- supporting the productive and export organization for formulation and development of specialized brands to enter the international markets
- Brand promotion and development and Culturing for small and medium businesses
- Scientific support of organizations and businesses for scientific and practical acquaintance with brand specialized concepts
- Providing costs related to the development of brand strategy formulation, preparation of brand strategic management process.
- Supporting specialized brands appropriate for different markets
- Supporting the creation and development of specialized institutions in the area of marketing services.
- Study and needs assessment and related laws and regulations
- Stimulating demand function toward designing and preparing brand strategy in economic activities of business firms.
- Supporting the implementation of strategy and the progress of branding strategy with emphasis on overseas markets
- Supporting the creation and development of group bands in terms of export clusters and consortia.

Actions and Programs of Trade Development Organization of Iran in Brand Area

- 1. Product- based part (commercial Aids Assistance) includes empowerment and capacity building of organizations, branding
- 2. Market-based part (Marketing Assistance and Relationships conduction) includes:
- A) Predisposition including trade infrastructures, agreements, bilateral relationships and target markets.
- B) Synchronization including branches and organization offices, the international communities' relationship.
- C) Market making include: Research and studies, marketing costs reduction fairs Sending and acceptance of advertising staffs for brand support.

Indian Journal of Fundamental and Applied Life Sciences ISSN: 2231–6345 (Online) An Open Access, Online International Journal Available at www.cibtech.org/sp.ed/jls/2015/01/jls.htm 2015 Vol.5 (S1), pp. 642-648/Jalali et al.

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Attention and emphasis on the importance of branding and supporting it in various instructions

- Regulations supporting management companies
- Regulations supporting export clusters
- Advertising and marketing Regulations
- Separate regulations for Supporting the creation and development of brand.

CONCLUSION

If managers can identify the key stimulus and control them, organization will be successful. Otherwise, the organizations will have a weaker position in the competitive success. New product that provides Customers' needs and their demands are counted as Key factors to maintain and improve the Competitive advantage. To achieve these objectives, it is necessary to pay special attention to the following points. Firms that are using correct methods of knowledge management, their efficiency and their new and brand product development performance are more and better.

- Planning to hold training courses and specialized courses including training courses of brand strategic management for selected units.
- Supporting the publication of national brand strategy for selected organizations

Expectations and Suggestions

Rooms and organizations need to focus on brand development and branding support.

Continuity and development of professors and experts' efforts from the expansion of domestic and international interactions.

Developing strategic attitude in marketing plans of the firms

Basic knowledge of export strategies for Iranian firms

The State custodian's full support of brand issue including the Ministry of Industries and Mines, and the Ministry of Agriculture...

Facilitation and competition promotion in business environment by all custodians of this section.

Attention of the Islamic Republic of Iran broadcasting to brand culturing more than before.

REFERENCES

Booz Allen H (1980). New Product Management the.) 1980). New York: Booz-Allen. H

Clark K and Wheelwright SC (1993). Managing New Product and Process Development (Free Press) NY 457-480.

Mannyan A, Asghar Zadeh A and Dehghan M (Fall 2011). The role of knowledge management in new product development process performance.

Mohammadi, F. (1387). " Economic Research Series 1982

Moorman C (1995). Organizational market information processes: cultural antecedents and new product outcomes. *Journal of Marketing Research* 32(3) 318-335.

Song XM and Parry ME (1997). A cross-national comparative study of new product development processes: Japan and the United States. *Journal of Marketing* **61**(2) 1-18.

The WISE (Web-enabled Information Services for Engineering) Consortium. 2002 CYS/ 1-020326/ Version A4; 2002.