Analysis of Creativity and Product Innovation

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Abstract: This study hopes to understand the source of creativity of fashion designers, the designer's creativity is to create new products. Therefore, this study describes what is product innovation, and factors that influence the creativity, then further discuss what is creativity.

Keywords: Product, Innovation, The Textile Industry

1. INTRODUCTION

About innovation, many scholars have different ways of definition, and their views are different. Freeman noted that innovation is the introduction of new technologies to promote new and improved products or processes, while technological innovation is the innovation that is based on advanced knowledge. Tushman & Nadler think that innovation for enterprises, means to create a new product, service or process, the most successful innovation is based on cumulative limited product and process changes, or combing the existing technology, ideas and methods with the creative ability. Drucker believes that innovation is an economic or social terms, rather than the technicality. Innovation is referring to "change the resources of output", and it can be defined as "value and satisfaction to consumers of changing resources"; in other words, he considers the so-called innovation is a new ability, given the resources to create wealth effect, to maximize the resources. Innovation is not only scientific, technical, procedural or product but also includes social innovations. Afuah mentioned in the book “Innovation Management” that Innovation is to adopt new technology or market knowledge to provide customers with new products or services. He expresses innovation with the following diagram, that innovation is the result of integration with an organization's original abilities or talents through the acquisition of new technical or market knowledge.

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In addition, the definition of product innovation can be categorized into three, most often based on consumer base, market base, and manufacturer base. Robertson divides product innovation into three categories: 1. Continuity Innovations: Products are improvements but not creating new products.

Dynamic Continuous Innovation, involves the creation of new products and product improvements to change the way that consumers use them. 3. Non-continuous Innovation: the introduction of new products and change the type of charge.

Lai Shibao's definition is that the market is the main body, he believes that as long as the market can meet the unmet needs, it can constitute a product innovation. For example, the first time of new products to enter the market, update products of the existing product line, low-cost full-featured products and so on.

Setting up a standard according to reflection of the market, the new product is divided into six categories:

1. New Products: create a new product.
2. New product line: new products which is the first time to enter the existing market.
3. The existing product improvements: new products which improve functions, increase value and replace the existing products.
4. Existing product line extension: new products which reinforce the existing product line.
5. Repositioning: Putting existing products into new markets or divisions.
6. Reduce costs: provide products with the same function at a lower cost.

Innovation will affect consumer's choice rate, so definite product innovation from the point of view of customer needs. Product which provides different satisfaction ability for the consumer spending system is the new product.

Xu Shijun thinks that we should definite the product innovation from the point of view of customer needs. Product which provides different satisfaction ability for the consumer spending system is the new product.

Blythe points out that the term innovation means implying "never seen before" or "fresh things from the factory" for the individual.

2. RELATED FACTORS THAT AFFECT INNOVATION

The introduction or implementation of innovation, just like the implementation of a new activity, it will always encounter some problems. What are the factors that affect innovation? Many scholars below
put forward different views on this issue.

Lai Shibao summarizes the benefit factors of product innovation as the following: 1. In the development of product innovation strategy, Enterprises must consider the over-all environment and the changes of industrial environment. 2. Technology and operating policies should be decided with the product innovation strategy, and must cooperate with the product innovation strategy. 3. The situation of the relevant departments in the enterprise will affect the innovation performance, and will have a positive effect on the innovation performance. Especially the R & D, marketing and manufacturing departments. 4. We should create an organizational climate that is absolutely conducive to product innovation inside the organization. 5. In the aspect of performance appraisal, we should consider the achievement of the performance of technology, business and strategy together with the quantifiable and objective financial indicators as much as possible so that the product innovation activities can be combined with other activities to produce the results of the synergy.

Drucker believes companies should develop an atmosphere internally to make everyone regard innovation as an opportunity, not a threat. Litwin & Stringer propose the concept of "whole" and "subjective" to study the behavioral motivation of the members of the organization and their behavior, thus forming the so-called organizational climate theory. The simple definition of organizational climate is the perception of an environment directly or indirectly by an individual in a particular environment. Aiming at organizational innovation, Amabile adopts a different view from the past for measuring the facets of organizational climate and considers the three major analytic facets that associated with organizational innovation are ways to stimulate innovation, resources in the work area, and innovative management skill. In terms of ways of stimulating innovation, he points out the high-level personnel set basic orientation in the face of innovation, while middle-level personnel are responsible for disseminating and explaining basic orientations. Ways of stimulating innovation include the organization encourage colleagues to innovate, executives encourage ministerial to innovate, supporting colleagues to engaged in meaningful risk-taking and supporting colleagues to explore new ideas, colleagues have a warm working mentality and so on. In the resources section of the work area, he refers to the organization can provide sufficient resources to assist its colleagues in getting the work done. These resources include the people have knowledge of implement innovation, colleagues familiar with the relevant markets, employees have the relevant experience, capital, material resources, production systems, research markets, related information, manpower training in the work area. And these resources are scattered in the enterprise’s financial, production, human resources, research and development and other departments. Innovative management skills refer to management skills that help organization to innovate at the organizational and departmental level. These managerial skills include appropriate balance of freedom and restraint, setting goals, participation and cooperation management, fair rewards and recognition of creative endeavors and outcomes, division of policy, informal management structures, appointment of specialized managers, affirmative systems, creatively solving problems, avoiding internal competition and threat assessment, removing excessive time pressure, and encouraging group or departmental cooperation.

3. PRODUCT INNOVATION OF THE TEXTILE INDUSTRY

When it comes to innovation in the textile industry, "pop" plays a decisive role. Therefore, the textile industry is also called the "popular manufacturing industry" and the popularity of textile innovation has contributed to it. Wang Yiran in the development of textiles, mentions the use of textile innovation in product technology has several different stages: 1. Fiber Innovation: natural fiber, new raw materials development of man-made fibers. 2. Spinning technology innovation: Xin spinning, dyeing or settling of new technology development. 3. Fabric specifications innovation: the development of new fabric specifications. 4. Pattern design: provide patterns, totem, design, color of the popular design.

Wu Wenyin illustrates the high-tech textile research and development, not to define by the manufacturing process, but to emphasize consumer considerations, he believes that high value-added science and technology products can meet the more consumer demand, which is divided into three facets, emotional, function and health. As shown below. The business community observes the physiological and psychological needs of consumers for the development source of product innovation. He believes that the "function" of high value-added textiles is the product innovation axis. Such as odor, antibacterial, protective, regenerative, soft, dry, adaptability of visual conversion. Under the active promotion of enterprises, consumers pay more and more attention to product innovation besides visual effects.

4. THE SIGNIFICANCE OF THE DEVELOPMENT OF CREATIVITY

For creative research, Amabile distinguishes the performance of creativity at individual or group level ideas or products, and so-called organizational innovations successfully implement these ideas or products within the organization. The performance of creativity can be divided into individual, group or organizational levels, but in fact it is difficult to
clearly distinguish the factors that impact creativity.

On the elements of creativity, Guilford believes that creativity is manifested through diffusive thinking. The performances of such ability are fluid, adaptable and ingenious. Mednick uses the theory of association to explain creativity, thinking that creativity is thinking in terms of bringing together the elements of associations into new combinations to suit specific needs or useful purposes. Torrance believes creation is a process, that problems, imperfections, gaps, lacking, knowledge and all other incongruous objects are sensitive and able to prove the difficulties, find the answers, make assumptions, verify the assumptions, and can make assumptions to amend, re-verify, to be raise results later.

Designers further develop and extend their products to make them more responsive to consumers’ needs and to change or innovate consumer habits. Add the fun to life, and to achieve the psychological needs of life expectancy. Stronger the creation is, the closer the customers follow. Reaching the realm that designer guides customer's life, which also forms a corporate brand guidance. Designers’ creativity is the lifeblood of enterprise development, but also the cornerstone of product innovation continues evergreen.

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