

# Analysis of Modern Product Design Based on Efficient Service

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**Abstract:** Objective Service Design is a New Trend of Design and Development Driven by Economy. from the Point of View of Service Design, This Paper Summarizes the Characteristics of Service Design, Discusses the Relationship between Service Design and Product Design, Analyzes the Problems in Product Innovation, and Analyzes the Principles and Methods of Product Innovation under the Service Concept. the Methods of Literature Study, Case Analysis and Graphic Guidance Are Used in the Analysis. the Conclusion is That If You Want to Innovate Your Product, You Must Have Innovative Design Thinking Mode. the Use of Service Design Concept is a New Trend of Product Design Innovation, Which is the Main Way to Transform Products from Productization to Service. the Discussion of Service Design on Product Innovation Link Follows the General Trend of Human Oriented Design and Development.

## 1. Introduction

Driven by the Rapid Economic Development, the Service-Oriented Economic Thinking Mode Has Gradually Penetrated into All Aspects of Life under the Guidance of the Internet Era and Service Industry. the Deepening of Economic Reform is Changing the Mode of Economic Development, But Also Changing the Design. the Market Competition with Core Products is Becoming More and More Incompetent, and the Service-Oriented Product Model Has Become a New Selling Point of the Company. in the Stage of Design Industry, Nouns Appear Formally, and the Result is the Transition from “Visible Economy” to “Invisible Economy”[1]. At the 18 Member National Conference Held in Beijing in 2012, Director General Xi Proposed the Transformation of China from Made in China to Created in China, the Important Discussion of China's Speed on China's Quality and Chinese Brand on the Future of Chinese Products. the Meeting Again Emphasized the Important Position of Innovation, Which Has Become a Hot Topic Since Then, “People-Oriented” Development Strategy is Realized through Reform. It Can Be Seen That in the Future, the Direction of Enterprise Innovation is to Change from Commodity Production and Processing to Customer Care. the Service-Oriented Design Concept of Creating and Sharing Value for Human Society Will Become the Mainstream of Product Design. Product Design is Gradually Deepened and Realized in All Aspects of Products. the Era of Experience Economy and Service Economy Has Come.

## 2. Service Design

### 2.1 Overview of Service Design

Service design is not a new category in the field of design, but a complementary concept of overall law design[2]. With the development of science and technology, design is more and more inclined to emotion, surprise and touch, as well as natural emotion. Design is not only the status and function of products, but also the pursuit of service and experience creation. It is no longer limited to the improvement of the material world, but the formation of the invisible world. The layman's condition is to observe and reflect the user's use[3]. This is the initial motivation of service design. According to the publication of service design, service design has continuity, which is a process and

activity. It is the product use experience in use and after consumption. Infinite experience is an intangible spiritual feeling attached to products, and also a spiritual judgment. There is no specific mode of service quality. It has no material preservation; systematically speaking, service design is not only related to users, but also to design factors, as well as to various organizational structures in the global design [3].

## 2.2 Formation and Development of Service Design

Service design is a new design concept in China, which has been developed in Europe and the United States for decades. In 1984, Shostack g. Rin first started the development of service design. in 1991, service design officially emerged as a rule. However, the development and application of service design mainly depend on the inheritance of public design institutions of inte and the International Design Institute of Cologne[4]. More and more attention has been paid to service design. In addition to the research and popularization contributions of design, enterprises and research institutions, it also has its unique historical necessity. In the past industrial technology era, due to the backwardness of science and technology and the lack of resources, most people's demand for products is to maintain useful and usable appearance, to ensure the basic functions and appearance of designers and enterprises. What's more, the experience of this product is inevitable.

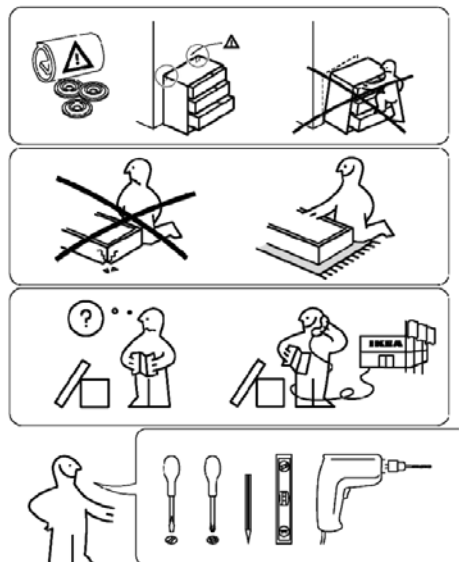


Fig.1 Ikea Product Installation Instructions

## 2.3 Relationship between Service Design and Product Design

The initial service design and product design are complementary. To some extent, the concept of service design is also the product of industrial technology development. Service design in the form of communication and dialogue between designers and users, if service design is for communication and dialogue Technology(i.e[5]. user comfort, designer's conceptual model, and then, naturally communicate). In addition, the product itself shows the communication process of designers' thinking in Figure 1. In addition, due to the intangibility and deprivation of service design, tangible products must be regarded as support, and service design is the intangibility of tangible products.

## 3. Problems in Product Design Innovation

### 3.1 Replicable Innovation Model

Innovation is the lifeline of product design, which is always valued by large and medium-sized enterprises. Since the reform and opening up, China's manufacturing industry has gradually changed from made in China to created in China. However, for a long time, China's innovative design only focuses on the innovation mode of the product itself, staying in the innovation of function and form. Some immature designers also sum up the so-called good design in order to

come up with new solutions. In this combination, the “innovative product” is designed. With the passage of time, the low-end production with low physical reconfigurability of product innovation mode will seriously hinder the enterprises to form the market core competitiveness. The limitation of function and form also makes the product market competition more and more intense.

### **3.2 Ignore the Real Needs of Users and Innovate**

Today, “first fashion” is becoming popular. In order to shorten the production and manufacturing cycle of enterprises, enterprises often make plans, leaders approve, modify and finalize, and produce in a production mode with high production efficiency. This design and manufacturing process shortens the product development cycle[6]. In order to obtain the first time of new products and seize the commodity market in advance, the most important link and the essence of product design of user centered co creation mode are ignored. The supplier centered service development method can't really realize the users' real functional needs, spiritual needs and psychological needs. On the other hand, some designers believe that to inject new functions into products is innovation[7]. In this short R & D cycle environment, designers cannot wait for users to add unique functions, whether or not they really need them. The increase of function makes the product more and more complex. And that doesn't contribute to improving product and brand satisfaction.

### **3.3 Designers Only Connect with Customers**

Product design companies provide services to customers according to market demand, so designers' ideas must be consistent with customers' ideas. The customer is not the user of the product itself, or the customer can represent the expectation of a very small number of users, but the designer must make the customer happy and listen to the customer's feedback. In this case, the designer's design ideas and user's design methods need to be maintained[8]. This kind of service mode hinders the small-scale design companies to grasp the product innovation and the designers' real needs, and cannot meet the essence of user centered participatory design.

## **4. Application of Service Design Concept in Product Innovation**

### **4.1 Application Principle**

The application of service design concept needs certain implementation criteria. Through research, service design concept should follow the following main application principles.

The application of user center service design concept is to better sell products to customers and design products according to the needs of customers or participants , so as to improve the potential added value of tangible products. Design ideas. User centered product innovation needs to meet the explicit (material) and implicit (spiritual) needs of customers. The clear requirement is to realize the standardization of product function and structure. Please do not sacrifice the conceptual model of previous users, and build a new one at cost[9]. Please do not innovate the user's usage and add unnecessary product functions without authorization. Hidden needs need designers to meet the personalized customization needs of customers and pay attention to the potential psychological needs of customers. Sequence, i.e. control of process and process. Service is a dynamic process. Carefully grasp the process progress and promote the further development of service design. Designers should have an approximate process model of product service process. Similarly, customers need to be able to control the use progress and process of products. Research shows that the controllability or predictability of service process can increase customer satisfaction of product . Sequence, i.e. control of process and process. Service is a dynamic process. Carefully grasp the process progress and promote the further development of service design. Designers should have an approximate process model of product service process. Similarly, customers need to be able to control the use progress and process of products. Research shows that the controllability or predictability of service process can increase customer satisfaction of product .

### **4.2 Application Method**

Through the application of induction principle, the service innovation methods of products can

be concluded as follows. Visual feedback mechanism product design should be visible. That is, the user can think of the product status and possible operation methods at a glance. So far, the designer, according to the user's correct conceptual model, conceptual model, it is necessary to establish match through correct operation. The user can judge the relationship between functional components and decide the operation mode and prediction results. During the user's operation, the feedback information shall be properly provided to the user through sound, color and other means to enable the user to "communicate" with the product. please use tangible carriers to carry invisible services. Service is intangible, so designers and customers provide design services, which can make up for the vulnerability, time of each time, and the use of multiple products. For example, better user dialogue of applications and music, etc. apple can provide a more convenient and comprehensive service experience of high-quality music foundation for users, which can be used as the experience of its application iPod.

As one of the factors that affect the production process of user products, user participation service mode can make users experience more independent creativity, self selectivity and fun in the process of using and purchasing products. Teachers can also get first-hand feedback from customers in order to improve better products .

### **4.3 Application Case Ikea**

IKEA's products and sales model reflect the practicality of the concept of service design. Due to the use of independent assembly mechanism, the packaging form of semi-finished product packaging parts is convenient for disassembly and assembly, and convenient for transportation and handling. All parts are well expressed and easy to understand. What's more attractive to customers is that this form of publishing can greatly enhance the participation of users. Customers can choose parts according to color and material preferences. In the case of DIY, the installation steps of the product are completely combined as shown in IKEA's product. This is a real method for users to participate in design. In order to improve the added value of products and user satisfaction, and improve the sense of achievement of user participation. Service design concept. Secondly, IKEA's open sales concept, that is, the mode of opening warehouse for picking goods, has also become a unique title in the market. This is also an embodiment of the user participation mechanism. Open sales method can not only make customers carefully choose their products, greatly reduce transportation costs, but also allow more people to have more time to provide services for more customers. IKEA's sales system not only promotes the innovation of furniture sales industry and manufacturing industry, but also greatly promotes IKEA's global speed. It explains the important role of service design concept in product production and sales process.

## **5. Conclusion**

Innovation is the spirit of enterprise development and the driving force of promoting market economy. Innovation based on service design concept can make the relationship between products and consumers better and form good communication and experience with customers. The rationality, effectiveness and quality of service system are important design ideas to improve the added value of products. The research on the related issues of product innovation is the process of product design infuses the concept of service design, effectively develops product innovation methods, unifies the product market, and the ratio of service design research investment of product innovation can be strengthened. That's an important tool for businesses and products.

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