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## **ABSTRACT**

*The Japanese industrial design is currently facing a period of major change. This is related to the fact that most corporations which has been manufacturing various industrial products are now evolving to a company that provides service and systems. With industrial design there are various cut off points but here for convenience sake we will divide it into 10 year blocks. And now in the 2010's it would have to be the "design of service". There are various examples such as the design becoming an interface to provide service and systems and the observation of the user within the design process discovering new service. In this way the design of service is generalized.*

Keywords: Good Design, Service Design, Japanese In-house Design

## **1. INTRODUCTION**

The Japanese industrial design is currently facing a period of major change. This is related to the fact that most corporations which has been manufacturing various industrial products are now evolving to a company that provides service and systems. Now we will look back at what type of change there was.

## **2. Preparing the Manuscript 2. Changing Roles of Industrial Design in Japan**

The most convenient way of reviewing the history of industry design in Japan is to examine the products that have won the Good Design Award (commonly referred to as the G-Mark) which is operated by the Japan Institute of Design Promotion ("JDP"). This G-Mark, established in 1957, is the only comprehensive system for design evaluation and commendation in Japan, under which approximately 42,000 items have been granted the award in the past 58 years [1].

The item that won the very first Good Design Grand Award was an electric rice cooker designed by Toshiba (Figure. 1). As evident from this particular product, the product development activities that were being conducted at that time in Japan were clearly geared towards the exportation of Japanese goods to various overseas markets.

The JDP has classified the period from the decade that preceded 1960, when the G Mark system was established, to today into five different phases as follows:

- 1950-1970: The age of restoration
- 1970-1990: The age of the Japan original
- 1990-2000: The age of changing values
- 2000-2010: The age of diversifying values
- 2010-present: The age of sharing



Figure 1: The very first Good Design Grand Award was an electric rice cooker designed by Toshiba [2]

Of the five phases, the JDP describes the latest phase, i.e., the age of sharing, as a time period where “the role of design in society has undergone major change [partially omitted] and intangible functions like services and systems have begun to manifest within our lives. In this changing landscape, design is taking on the role of an environmental medium.” [3] Hence, what is being required of design, or its role in society, has been changing steadily. Now, let us review these phases in more detail as follows.

Firstly 1960s can be said to be the “era of export promotion” (Figure 2). It was the first era in which high quality, cheap products were provided showcasing the good aspect of Japanese products. Next the 1970s was the era of “noticing good design” (Figure 3). It led to the discovery that things easy to use are of good design not only in domestic products but also electrical appliances.

It can be said that because of this a good relationship between design and ease of use has been understood. The 1980s was a period of design contributing to “improvement in quality of life” (Figure 4). And in this era discussion has started about improvement in public design. The 1990s was an era when the



Figure 2: Role of Good Design in 1960's [3]



Figure 3: Role of Good Design in 1970's [3]

“Japanese design” has blossomed (Figure 5). This was an era in which various design concepts have been born such as universal design, interactive design and ecology design while still maintaining the original design unique to Japan and it was an era in which variety in design was demanded.



Figure 4: Role of Good Design in 1980's [3]

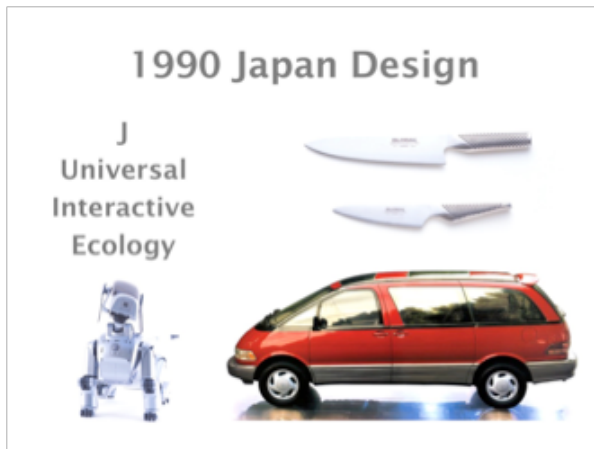


Figure 5: Role of Good Design in 1990's [3]

In the 2000s it developed into “symbiotic design” (Figure6). The design connecting two things and design contributing to certain things started to evolve. And now in the 2010's it would have to be the “design of service” (Figure 7).



Figure 6: Role of Good Design in 2000's [3]



Figure 7: 2010's Good design [4]

There are various examples such as the design becoming an interface to provide service and systems and the observation of the user within the design process discovering new service. In this way the design of service is generalized. On the other hand current design can be seen from two viewpoints of personal design and public design (Figure 8).



Figure 8: Changing the Role of Good Design in 60 Years

- 1960-1970: The age of export promotion
- 1970-1980: Insights of good designs
- 1980-1990: Improvement in quality of life
- 1990-2000: Japanese design
- 2000-2010: Symbiotic design
- 2010-present: Service design

In other words, service design is a mode of design that functions as a medium in the environment of the age of sharing as described by the JDP, which includes interface design and interaction design. As service design exists on both personal and public levels, it is a broadly defined design genre.

### 3. PERSONAL DESIGN AND PUBLIC DESIGN

In this way the design of service is generalized. On the other hand current design can be seen from two viewpoints of personal design and public design. Both types of design -- be they system design or service design-- can be then classified into four different categories by determining whether it is a stand-alone and independent design or functions in conjunction/symbiosis with other items (Figure 9).

Personal design and stand-alone:  
Equipment that is completely owned by individuals and its use only involves the individuals (i.e., refrigerators, rice cookers, etc.)

Personal and used in conjunction with other items:  
Equipment that is owned by individuals but its use requires connection to the internet, etc. (i.e., mobile phones, personal computers, etc.)

Public and used in conjunction with other items:  
Equipment used in a public area while being connected to a system, etc. (i.e., ticket vending machines, information terminals, etc.)

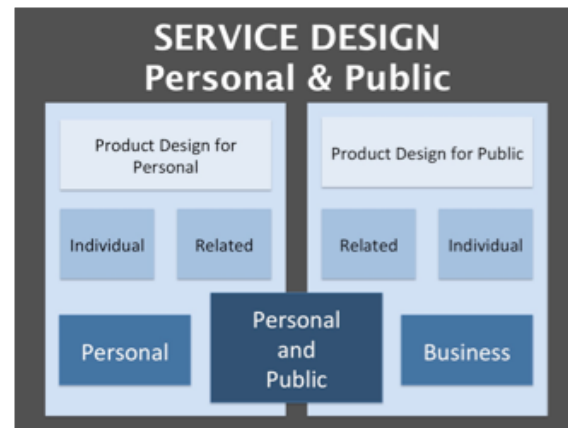


Figure 9: Public & Personal Service Design

Public and stand-alone:  
Equipment that is installed in a public area as a stand-alone unit (i.e., signs, street furniture, etc.)

Of the four categories, many pieces of the public and personal equipment that are used while connected to the internet or system involve both personal and public use. Therefore, they can be eventually classified into three categories -- personal, public, and mixture of both being connected through system -- and service design falls into the third category. Many items that appear personal in nature can actually only function properly with connection to public service. Conversely, an increasing number of items that could only be used in a public area in the past can now be accessed from home. As these changes are giving birth to completely novel services, this factor must be taken into consideration when creating designs for the upcoming era.

#### 4. DESIGN REFORMS OVER THE PAST 40 YEARS

Furthermore, if you look at the change in design from another point of view it can be grouped into several topics.

For example if you look at it from a marketing and management perspective it can be described as follows. In the 1980s the idea of design marketing was born and an analysis as to what kind of design will be favored was extensively carried out. However in the 1990s a new concept called design management was added and there was a shift in direction of using power of design as power of a company.

In addition, if you think about it from a technology evolution point of view, 3D modelling and design assistance by CAD/CAM is worthy of note. Now tools such as 3D printer have appeared.

On the other hand a concept of emotional design has been born. It is characterized by the co-existence of two ideas being what impression will a form or image give and that things will tell a certain story. In addition the interaction between emotional design and technology provides evolution called advancement in CMF, in other words, color, material and finishing (Figure 10).



Figure 10: Twelve Design Keys Related Service Design

As the peripheral areas that surround design have been expanding rapidly, new areas of design are also being created with them. As the area of service design must reflect many of these new design areas, it will be crucial to optimize design to suit each of them and to properly manage such process as well (Figure 11 and 12).

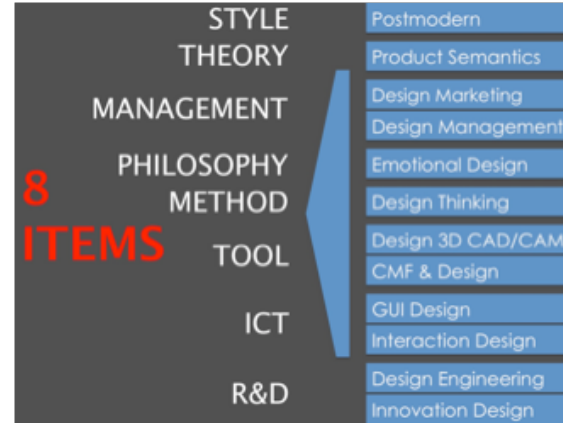


Figure 11: Eight Items of Twelve Design Keys

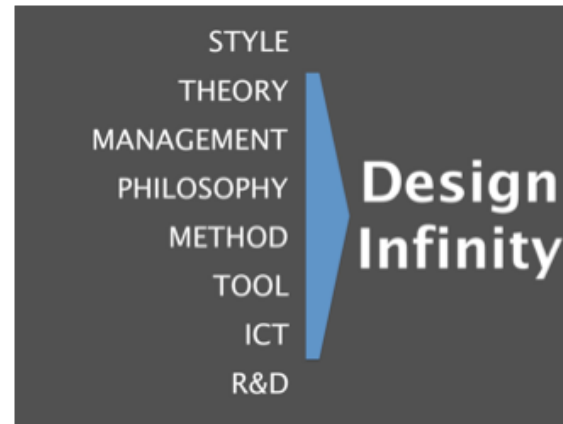


Figure 12: Eight Items for New Design

#### 5. FUTURE OF SERVICE DESIGN

Service design has been undergoing its evolutionary process by integrating various new changes as described above. The first point that needs to be considered by future service design is the users from both personal and public

perspectives as well as how best to deliver service to them. The second point to be considered by future design is how to integrate the highly diversified design areas. In reviewing these topics, the process of change in design appears to have been repeating itself for one reason or another. However, service design could very well be evolving through innovations and spiraling up by nature, as the process of change might have been taking place for the better.

In this way design is evolving. In that sense design is infinite.

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