



Emergence of Service Design

Yuriko Sawatani
Professor, Entrepreneur program
Bionics, Computer and Media Sciences
Tokyo Engineering University Graduate School

What is service design? Service design is the concept of designing a new service system that can identify customers' serious requirements (pain points), transform businesses and organizations, and work like a pain killer. Companies that have implemented this system can offer excellent service and earn profits. This means that service design is indispensable both to companies and customers.

Birgit Mager, President of Service Design Network (SDN)⁽¹⁾, defines service design as follows:

"Service design aims to ensure that service interfaces are useful, usable, and desirable from the client's viewpoint and effective, efficient, and distinctive from the supplier's viewpoint."

The Center for Services Leadership of Arizona State University, which leads service research, defines it as follows.

"Service design is focused on bringing service strategy and innovative service ideas to life by aligning various internal and external stakeholders around the creation of holistic service experiences for customers, clients, employees, business partners, and/or citizens."

The important point is the recognition that service design is concerned with business strategies, not limited to designing the frontline organization that deals with customers. There are various improvement plans in the field, which are derived from the feedback of customers. Many of those plans can probably be carried out in the field. However, if a dramatic change of course is needed, managers and top management will lead the activity in terms of how to shift from the previous direction. Service design may cause a significant impact, which may change the strategy and mission of a company.

Let's look back on the history of service design. Early research on service design started around 1990, in which the relation with other design areas was recognized, and the

difference between service design and existing design areas was emphasized. Then, mainly in the U.S. and Europe, the foundation started to be built by accumulating R&D results from other design areas and various related areas including marketing, management, and engineering.

In the design area, the R&D range was extended from interface to interaction. In interaction design, user-centered design (UCD), and human-centered design (HCD), mainly the user interface and user experience (UX) of products are holistically designed. Meanwhile, R&D on service interaction is based on those results and its objects include management elements regarding organizations such as redesigning roles. This activity targets not only users but also various stakeholders.

In addition, based on service science and product-service systems (PSS), targets of R&D have been extended to service systems and service lifecycles. In this way, the scope of service design research has broadened since 1990, from the interface to the holistic design of interaction, user experience, and service systems.

While its academic area has expanded, service design itself has developed as a business; design companies and consulting firms were set up to offer service design. In 2004, global service design companies set up SDN, an international organization for spreading service design. A branch was established in Japan in 2013. Designers and researchers on design work together, and service design is now shifting to a new phase of co-creation with theory and practice.

This trend is being enhanced by the service economy. In December 2004, the U.S. Council on Competitiveness submitted a report titled "Innovate America: Thriving in a World of Challenge and Change (Palmisano Report)" to the Bush administration. This report advocates the need to create

services science by melding established fields together, in order to solve the problem. Vargo and Lusch proposed service dominant logic⁽²⁾, looked at service from beyond the frame of industry, and defined it as “co-creating value by customers and providers.” Now, researchers and business people are globally involved in building a knowledge base for supporting service innovation and developing human resources.

Since 2000, the service economy has been progressing. The service business is expanding, and the target of innovation is shifting from products to a service system including value co-creation by customers and providers. The conventional manufacturing industry is required to transform its business model. Under these circumstances, research and development, which was the driving force of innovation in the manufacturing industry, is expected to contribute to service innovation. For this purpose, it is important to build a system for creating and industrializing a service system and continuing service innovation. Although service design produces new service systems, its value is not limited to the service industry.

Consider SAP as an example of transformation of the manufacturing industry to the service industry. SAP is a German software firm founded in 1972. Although the company succeeded in the field of enterprise resource planning (ERP), it fell into the “innovator’s dilemma” and then overcame it with design thinking. The company is now growing as fast as start-ups in Silicon Valley. In the midst of the “dilemma,” Hasso Plattner, co-founder of SAP, felt a sense of crisis with the arrival of the digital economy. One day he came across an article on design thinking written by David Kelley, founder of IDEO. After this encounter, they jointly set up d.school in 2004. They embedded design thinking in strategies, introduced it into research and development, and rolled it out in all departments; they made it a common language to return to the customer view and co-creation with customers.

New business started with a workshop with students on the theme of “Create a business model that defeats ERP.” Through this activity, they found that customers do not want to be offered ERP products; rather, they want a platform with which they can make decisions based on data in real time. This marked the moment of shifting from the materialism of making goods and selling them to customers, to a service dominant logic, in which business people returned to the starting point of emphasizing customer needs and aiming to create a service system jointly with customers.

Do you think the term “service system” is too abstract? Imagine a business with a front stage and a back stage, such as a bank. The front stage is the counter, where tellers take care of customers. Behind that, there is a back stage with financial assets to be dealt with, approving persons, and back-end systems such as IT systems. Service design recognizes both stages as a service system, and designs them. Targets

of service design are not limited to physical things but cover a wide range: persons, information, processes, IT systems, customers, partner companies, systems, and society.

A crucial point for creating a service system is reframing⁽³⁾. To create a new service system, reframing (considering matters with the frame removed) is indispensable. In particular, creating a new service system is determined by whether engineers can go beyond the existing frame. There are three points to expand the frame.

First is the definition of “technology.” Brian Arthur defined technology as a “means to fulfill a human purpose”⁽⁴⁾. The embodiment of technology may be material or nonmaterial, depending on purposes of organizations, actions, and logic. According to Peter Thiel⁽⁵⁾, “a new and better way of doing things is technology.” The objectives of research and development will increase by broadly interpreting technology as a design method, organizational strategy, or pricing strategy for service systems.

Next is problem-solving from the customer’s viewpoint. First, extend existing boundaries to cover customers and partner companies and identify problems through outside-in thinking. Then, create new service systems that integrate technology to solve these problems. To commercialize new service systems, it is necessary in some cases to redesign the inside and outside of an organization and revise missions. It is important not only to create new service systems but also to work flexibly on making an organization that offers these systems.

Finally, open innovation is a key to service innovation. By promoting loose networks beyond the boundaries of companies, open innovation connects various organizations and improves the effect of intellectual exploration and the mechanism of value propagation. A global company will need to accommodate various stakeholders and promote value co-creation, in order to create products and services that are truly needed.

Even a business involving a large-scale, complicated service system must be human-centric; the starting point is the connection among humans. Business people, including those who are engaged in research and development, are required to meet various people, create the future beyond the existing frame, and drive service innovation.

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