

Chapter 21

Consideration of Service Design for Internet Service Businesses

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ABSTRACT

This chapter proposes a service design process and value co-creation model in Internet information service. Based on a service design survey and current main service design theories and methods, a value co-creation model of Internet information service is proposed, which includes “real time value co-creation” and “accumulated value co-creation.” Human-centered design process of service design for Internet information services is also proposed. This process is intended to take into account the characteristics of the co-value creation model of Internet information, improving the conventional process.

INTRODUCTION

Core values in the market have recently been transiting from products to services, and the subject of design in business has also been shifting from products to services, which corresponds to this trend. Therefore, although the expectations of service design have been increasing, research on methods of designing services and analyzing target services have just started in various business fields. There are two major approaches to service design. The first is a kind of engineering approach that is top down and the second follows a

human-centered design process that is bottom up. Researchers and designers in both approaches are trying to build appropriate service design tools, establish methods, and process their experiences and knowledge for service design.

New service businesses related to the Internet have recently been increasing, which differ from traditional human based services. Business styles, stakeholders, and value exchange processes are particularly different and should be investigated for service value creation in new service businesses. A new methodology for service design that takes into consideration such factors is proposed in this chapter based on various service design methodologies in traditional service businesses.

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First, some definitions and service design methods are surveyed through previous research or information presented at related international conferences. Then, a new service model and service design methods based on this model are proposed to develop new service businesses on the Internet. The effectiveness of the new model and methods are evaluated using practical examples.

OVERVIEW OF SERVICE DESIGN

The term “service design” is used in several fields and it is understood differently within the perceptions and definitions of the scopes of individual services. Definitions in service engineering, information services, and design research are investigated in this section, and a brief description of the definition of service design is provided. Moreover, recent research on “service design” presented at international conferences is surveyed to find the trends in research and activities in the field of “service design.”

Definitions of Service Design

Definition of Service Design in Service Engineering

Service design in service engineering specifies the values that customers ask for, and reveals the structure for the order in which to implement the requested values. Design in conventional manufacturing businesses, which is focused on product sales, concentrates on the physical structures and functions of products to meet market requirements. However, engineering services are treated as design objects and changes in the state customers acquire through enjoying these values, which is a beneficial structure to achieve. That is, there are two important steps for service design in service engineering. The first is “customer analysis” to identify values requested by customers by taking their behaviors into consideration. The second is

“conceptual design” to identify the actual plans that will provide customers with the values they ask for. The *providing* aspect contains both products (Mono) and human activities (Koto) that aim at providing the means to create services with high added values by combining both physical products.

Service Design in IT Service Management

The information technology infrastructure library (ITIL) is published as a collection of best practices for IT service management, where service design is the second of five steps in the service lifecycle of the IT system outlined in Figure 1 (A. Cartlidge, et al., 2007).

The definition of “service design” is an organized idea for a design method for IT services that reflects strategies and business needs clarified in the “service strategy” step. The service design process contain all required elements of IT services such as “service catalog management,” “service level management,” “capacity management,” “availability management,” “IT service continuity management,” “information security management,” and “supplier management.”

Service Design in Interactive Design

Birgit Mager, who is a service design network founder, has stated her service design ideas (B. Mager, 2007). She asked: “What is service design?” and she explains her service design idea as follow:

Service interfaces within service design are designed for intangible products that are useful, profitable, and desirable from the customer’s point of view, while they are effective, efficient, and different for the provider. Service designers visualize, formulate, and choreograph solutions that are not yet available. They watch and interpret needs and behaviors and transform them into future potential services.

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