Chapter 3
Modeling of Service Value Creation based on Multidisciplinary Framework

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ABSTRACT

Service value is successfully created when customers enjoy the benefits of services provided through the service system. Such service value creation requires a multidisciplinary approach such as finding challenging ways of doing this in recent service science. This chapter focuses on visualizing the process of service value creation in actual service enterprises based on modern-service or knowledge-creation theory. The proposed model describes the shift of service values, focusing on the three axes of the "location where the service is provided/used," "the level of user needs," and the "degree of customer participation in value co-creation." The methodology based on this model is demonstrated through case studies involving accommodation services including "o-motenashi" hospitality and network-based information services using smart devices.

INTRODUCTION

The modern service market has been influenced by globalization and increasing freedom of choice through expanded information technology such as that involving mobile devices and cloud networks. These trends have thus enabled service companies and even manufacturing companies to lead service value creation that was unheard-of in the past to generate new service values, and to refine business positioning to deepen the originality of service values (Kameoka, 2006; Katzan, 2008). It has generally been pointed out that recent information technology has influenced the service business model by:

- Lifting restrictions on time and space,
- Unifying customers and service providers like those on YouTube or Facebook, and

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- Increasing new business opportunities through concentration of information like that on Amazon.

Japan is currently facing problems with low birthrates and an aging society. This has increased the demand for not only life support services for healthcare and care-giving but also for more satisfactory services together with regional communities than those before the era of high economic growth(JSCA, 2012). Baby-boomers had been expected to seek satisfaction not only through possessions but safety, relaxation, and comfort in their everyday lives, which was enhanced by extraordinary experiences, impressions, and the establishment of new human bonds (Perelman, 2007). That is expected to enable various service providers to achieve more suitable services and cooperatively create service values with customers through infrastructures as service channels to provide service content.

For example one of the main aims of high-level hotel accommodation services is to produce "unforgettable heartfelt experiences" that are unique to individual visitors, and therefore information about users' tastes is used in employee training to instill higher-level consciousness and sense of value as they prepare for the most appropriate response. Human service orientation may be further facilitated by information and communications technologies (ICT) and even by automated equipment such as robotics technologies (RT) with smart devices as represented by radio-frequency chip identification (RF-ID). For example, the introduction of ICT and RT with smart devices has enabled us to enhance not only the entire backstage as a service infrastructure but also the front stage for contact with customers as a place where services are used (Rosie & Tugrul, 2009). Human resources and labor are freed from boring backstage routines and are concentrated on the front stage, helping to achieve more satisfying customer experiences. An example is robotized conveyance to rooms in a hotel, which frees up time so staff can provide more personalized attention to their guests.

However, we generally need to apply knowledge from many disciplines to conceptualize and propose new original service businesses with the possibility of generating new service values by increasingly using technology to achieve service systems (Spohrer & Maglio, 2008). The accumulation of multidisciplinary or interdisciplinary knowledge to bridge the gap between various disciplines occurs in the early stages, and the academic definition of service value creation appears in the process of establishment (Cambridge, 2007; Maglio et al, 2010). The present author proposed a scheme for generalizing service value creation (Nakamura & Ikawa, 2009; Nakamura, 2009) in an attempt to clarify service value creation based on a multidisciplinary framework. Service value creation is thought to be successfully achieved when customers enjoy the benefits of services proposed through a system of service channels offered by a service provider (Nakamura, 2009). The approach to service value creation focuses on the "service value" provided by service providers and its value co-creation with service customers.

The importance of the evolving role of customers from passive recipients to active co-creators in the value creation process (Normann & Ramirez, 1993; Praharard & Ramaswamy, 2004) has been remarked on in value co-creation, especially from the service dominant perspective (Vargo & Lusch, 2004). The present article further refines the proposed scheme of service value creation including the aspect of co-creation with service customers. The viewpoint of such value co-creation in Japan can be recognized as its root in the history of the traditional "o-motenashi" hospitality culture, with the "host-guest bond" concept such as that in the Japanese traditional "Way of Tea" as a typical example (Saddle 1993; Anderson, 1991). Thus, the original cultural background plays a significant role and must be taken into consideration.

Four main actual cases of both kinds of high-level accommodation services and informational/