Customer integration within service development—A review of methods and an analysis of insitu and exsitu contributions

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ABSTRACT

This article aims to contribute to a better understanding of how to integrate customers within service development by assessing different methods of obtaining use information. The article reviews and classifies methods for customer integration and it also presents a new framework that suggests four modes of customer integration in which data is classified either as **insitu** (data captured in a customer's use situation) or **exsitu** (data captured outside the use situation) and as either **incontext** or **excontext**. Context is defined as a resource constellation that is available for customers to enable value co-creation. Accordingly, incontext refers to methods in which the customer is in the actual use context and has access to various resources, while excontext refers to a situation in which the customer is outside the use context and, therefore, has no direct access to the resources.

1. Introduction

Users are a potential goldmine of information for service development; not only in the idea generation phase but throughout the development process. Many existing approaches have aimed to understand the interplay with potential users in order to co-opt user competence and experience. Such approaches include user contribution systems (e.g., NASA), open source techniques (e.g., Microsoft, Cisco), social media (e.g., Facebook, YouTube), simulations (e.g., IKEA's kitchen planner), independent customer websites (e.g., airlinequality.com), and company websites that include certified users and super users (e.g., Lego). These are all examples of users playing active and important roles in developing services. Nevertheless, the understanding of how to methodically integrate users in service development process remains limited.

Involving key stakeholders like customers, suppliers and even competitors in innovation processes, has proven to be beneficial. Ritala and Hurmelinna-Laukkanen (2009) discussed the importance of, and challenges in, the cooperation with external stakeholders and argue that "the ability of a firm to reap benefits in innovation-related cooperation is contingent on factors that enable collective value creation and on those that facilitate the individual isolation of the innovations and any subsequent profits" (p. 819). Collective value co-creation is argued to be especially important in high-tech service contexts. Chang et al. (2006) found that supplier involvement contributed positively to the innovation of manufacturing flexibility. Knowledge management systems (KMS) often fail to capture insights from customers; although there are studies and ways of designing and using KMS that are successful. See e.g. Lai et. al. (2009) have identified critical factors that affect employees' satisfaction with KMS and put forward the facilitation of personalization as a particular important factor. This implies a deep interaction with potential users. However, instead of working through employees in order to capture customer needs, companies can with various methods capture the information directly from customers, which will be the focus in this article. Prahalad and Ramaswamy (2000) showed how customer competencies can be obtained and how customers can be integrated within service and quality development by using open source platforms.

The concept of service is currently undergoing a paradigm shift, from defining services as a category of market offering to a perspective of value creation; emphasizing value-in-context and the resulting customer experiences. While the old school of thought focused on the differences between goods and services, the new school focuses on what goods and services can do for the customer, the experienced customer value. This renders the old dichotomy between goods and service obsolete. The new school is most often referred to as service-dominant logic (SDL), a term coined by Vargo and Lusch (2004a). An implication for service

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development is that customers should be involved and that use situations are critical for understanding value creation. Value should be evaluated through the lens of the customer's use experiences. The focus is not on the service or product, per se, but on the value-creating process and the outcome of that process. Although SDL brings a fresh perspective to service and co-creation, scholarly research has done little so far to develop and assess methods for involving customers in the co-creative development process.

The main premise of this article is that issues related to the nature of service (activities, collaboration, customers as resource integrators and value co-creation) are important when selecting and using methods for providing useful and critical information in order to better understand customers' experiences of service and value co-creation. However, the article's main argument is that it is important to capture information on value in the use context in order to understand customers and the aspects of value co-creation that are critical for them. We will develop four modes of relating use information to methods for service development from the categorization of the situational and contextual aspects of value co-creation and suggest which methods are most appropriate to capture information from customers in each mode.

The article aims to provide a basis for a better understanding of how to appropriately integrate customers in service development processes. We review different methods of obtaining user information and suggest a new framework that includes four modes of customer integration. The article starts by describing its theoretical framework. It then defines customer integration in service development and continues with an overview and analysis of the methods for service development and innovation reported in scholarly journals. Based on this critical review, the article suggests a new framework with four modes of customer integration in service development, based on customers' use situations and resource contexts. The paper concludes with a discussion of its research contributions and managerial implications.

2. Theoretical perspectives and framework

2.1. The concept of service and service development

The current debate regarding what has been termed service-dominant logic (SDL) (Lusch et al., 2007; Vargo and Lusch, 2004a, 2008) or service logic (e.g., Grönroos, 2000, 2006; Norman, 2001) raises the question of how service development can best contribute to the creation of value for both customers and providers. Vargo and Lusch (2004a, b) defined service as "… the application of specialized competences (knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself". In a similar vein, Edvardsson et al. (2006) defined the 'service concept' as "…linked activities and interactions provided as solutions to customers' problems". Both definitions consider the notion of a positive outcome ('benefits' or 'solutions'), in the eye of the beholder, to be an essential element in terms of the purpose of a service.

The outcome of the service development process is a value proposition and a supporting configuration of resources for customers to integrate and operate on creating value for themselves and thus for other stakeholders. In this article, the term 'configuration of resources' refers to the set of resources made available for the intended user. Value is co-created by the user when they apply their skills and knowledge to the resources, thereby creating value and the experienced value differs depending on their needs and preferences. A service business that is based on the paradigm of SDL is essentially customer-oriented

and relational (Vargo and Lusch, 2004a, 2008). This represents a major conceptual shift from an emphasis on output to an emphasis on mutually satisfying interactive processes. It also represents a shift from static resources (such as plants and equipment) to dynamic resources (such as employees, competences, value-creation partners, and customers). In its ideal form, SDL envisages the co-creation of value through resource integration (Vargo and Lusch, 2008).

When arguing for value-creation, Vargo et al. (2008) made a distinction between two categories of resources: operand and operant. Operand resources are typically physical (such as raw material, physical products, information), while operant resources are typically people; customers and employees (e.g., their knowledge, skills and motivation). Knowledge and skills are used when the operand resources are activated. The resources brought into and used in the co-creation process may also come from the customer or the service environment.

SDL holds that value is co-created with the customer and is experienced and assessed when the service is realized within the user's own context (Vargo et al., 2008). Accordingly, customers use their knowledge and skills, in conjunction with the resources of a company (or several companies), when value is co-created and assessed, for example, when using a mobile phone to communicate.

Vargo et al. (2008) stated that value is uniquely and phenomenologically determined by actors on the basis of value experienced in a certain use context. Value-in-context implies not only that value is co-created but also that it is dependent on the integration of other resources and is therefore defined and assessed contextually. To illustrate, consider the purchase of a mobile phone. The benefits of using the mobile phone represent value-in-use but the total value – the effect that the user is seeking and willing to pay for – is dependent on the integration of other resources from the user (e.g., operating skills, maintenance, etc.), resources from other companies (e.g., subscriptions to other related service offerings, functions made available by the mobile phone), and on the use context, when integrating the mobile phone and its services with daily activities such as communicating at work or with family members.

The implication of the SDL for service innovation is that customers should be involved in various states of the service development process, and those customers' use situations and value co-creation activities and interactions are critical. When developing a new and attractive service, it is essential to learn from and with users in their own habitat or use situations. Some of the common reasons why service does not create value-in-context as intended include the service not fitting customers' needs, being too complicated for users or not allowing the user to integrate or interact with other resources. Part of the reason for this lack of accurate, complete and action-oriented customer information is that the research methods used have mainly focused on the expressed needs of customers, which is far too narrow a focus (Matthing et al., 2004).

Therefore, the challenge in service development is to develop competitive value propositions and the resource constellation that is necessary for value co-creation, which will result in attractive customer experiences. The potential success of a value proposition depends on its ability to understand customers' value creation. Consequently, since customers are a resource in value networks (Lusch et al., 2010) and the value creation process, this article advocates that customers should be integrated within service development in order to achieve attractive use value. While customer integration has always been an issue in service development, previous research has shown that the particular way in which customers are integrated has a major impact on the quality of use information gained, and therefore on service