

# Introducing a Co-Creation Perspective to Service Business Models

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**Abstract:** Due to the growing importance of services for many companies and the resulting transformation of product based business models to service based business models, the paper focuses on the link between business models and services. For this purpose the business model canvas of Osterwalder is adapted to address the shortcoming relating to co-creation of extant business models.

## 1 Introduction

Services are a key driver of growth and profitability for many companies [CS06]. Particularly firms in technology industries, such as IT, aerospace, medical technology, and automotive capture an increasing share of their income and profits with services [Ne08]. Thus, for these enterprises, services have become an essential part of their business models, leading more and more of these companies to transform their product based business models to service based business models. According to this transformation approaches for modeling are necessary. As a recent study shows, extant business model approaches have a lack in focusing specific aspects regarding to services [ZB11]. This paper therefore proposes the use of an adaptation of Osterwalder's business model canvas to support the modeling of service business models.

The remainder of the paper is structured as follows. Conceptual foundations about the understanding of business models in general and the business model canvas of Osterwalder as well as a general understanding of co-creation are given in chapter two. Based on this theoretical background in chapter three we derive the problem of considering service specific aspects in recent business model approaches. Moreover, we adapt the business model canvas of Osterwalder to match the requirements of service based business models. Finally we sum up the findings and give an outlook.

2 Conceptual foundations

2.1 Business models

The academic literature offers a variety of possible conceptualizations of the business model construct. Recently, however, the different approaches seem to converge. Al-Debai [A110] summarizes a business model as “[...] an abstract representation of an organization, be it conceptual, textual, and/or graphical, of all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization, as well as all core products and/or services the organization offers based on these arrangements that are needed to achieve its strategic goals and objectives.” [A110]. Similarly Osterwalder [Os04] defines a business model as a “[...] conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams.” [Os04]. Osterwalder also developed the business model canvas, which represents a visualization of the business model dimensions [OP10]. We decided to use this approach by Osterwalder, because of the systematic and easy use of the structure as well as the handy visualization. Figure 1 shows the Osterwalder business model canvas which is based on nine different dimensions.

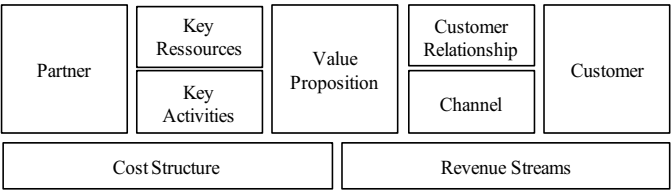


Figure 1: Business model framework (based on [OP10])

2.2 Co-creation

During the last decades the perspective of value creation turned from a value-in-exchange view where value for customers is embedded in products to a value-in-use view where value for customers is generated during the value-generating processes [Gr08]. This reflects the shift from a traditional goods-dominant logic with the focus on the exchange of goods to a service-dominant logic focusing on the creation of value [VL06].

According to this value is not created by buying products but by using them in a specific context [GKW11]. This reflects renunciation from distinct roles of customers and producers towards a broad engagement of the customer in value creation [PR04].

This new perspective emphasizes on the understanding of the customer as part of value-creation [ETG10][SP08]. From this point of view the customers can tailor the product or service pursuant to their needs, which results in an enhanced value created [KMJ08]. This also implies that customers can be part of the value creation along the complete value creating activities e.g. maybe from the development to the delivery of a product or service by providing customer-specific knowledge [GKW11].

After a brief introduction into the basics of the business model and the co-creation, the main problem of the existing business model construct will be outlined and a possible solution will be introduced.

### **3 Service Business Models**

#### **3.1 Problem**

The business model construct will be used in order to analyse, describe and evolve the business model of products as well as services [ZB10]. Nevertheless, the consideration of business models has a lack of service-specific aspects. One important gap can be found in the structure of a business model. Co-creation, as a key characteristic of services, is not considered in most business model approaches [ZB11]. If it is considered, like in the Osterwalder Business model canvas, then only with little impact on the whole business model. For example Osterwalder limits co-creation to the customer relationship dimension [OP10].

This aspect is emphasized by the graphical illustration of the business model (figure 1). The business model canvas and the arrangement of the nine dimensions follow a goods-dominant logic view, where the dimensions are organized along a value chain. This chain starts with partners and key resources as well as key activities leading to the value proposition and at the end to the handling of the customer. This structure suggests that neither customers can participate in the value creation nor partners are involved in customer-specific aspects of the business model.

#### **3.2 Proposal for a solution**

A possible way to address the described problem is to change the perspective on business models from a product to a service based point of view. To achieve this it is necessary that the framework permits a structure where the customer can be part of all aspects of the business model. A possible way for this is to change the composition of the nine blocks in Osterwalder's business model canvas. The new structure is given in figure 2.

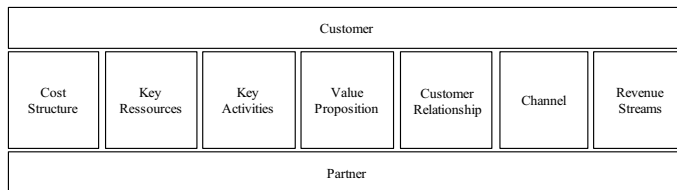


Figure 2: Adapted business model canvas (based on [OP10]).

As figure 2 shows by encompassing the rest of the blocks with customers as well as partners the deep integration into the value co-creation is represented. With this adaptation it is possible to reflect business models where a customer may have influence on each dimension of the business model. In the following examples are given, which represent potential resources of co-creation.

In many cases of service provision there is a need for customer integration. This is due to the fact that most services need to be provided individually for the customer. This leads to a dynamic role of the customer in the service provision where the provider’s mission is to help the customer to create value according to the specifications [GR11]. The value creation is focusing on shared monetary benefits and revenue, for example, sharing of financial gain and gaining joint contracts. Moreover, the relationship with the customer can be designed based on the desired customer experience. Analogous to this the channel has to be chosen. Further, customers have to be integrated into communication, sales and distribution as well as into open innovation processes, for example, through social media. On the one hand, customers can provide resources like infrastructure or technology and on the other hand they can influence the selection and use of resources. The service provision is directly influenced by the customers and delivered by joint activities. Depending on the objectives of the service provision costs are borne by customers. Table 1 sums up the outlined impacts of co-creation in service business models.

Element	Customer perspective – Evidence of co-creation in business model elements
Cost Structure	<ul style="list-style-type: none"> <li>Cost incurred / borne by customers</li> </ul>
Key Resources	<ul style="list-style-type: none"> <li>Customer providing resources</li> <li>Customers influence on resource selection and use (e.g. selecting a specific consultant or varying volume of demand)</li> </ul>
Key Activities	<ul style="list-style-type: none"> <li>Joint activities</li> <li>Customers influence on activities</li> </ul>
Value Proposition	<ul style="list-style-type: none"> <li>Specification of how service provider helps customers to create value</li> </ul>
Customer Relationship	<ul style="list-style-type: none"> <li>Desired customer experience</li> </ul>
Channel	<ul style="list-style-type: none"> <li>Derived customer experience</li> <li>Open innovation</li> <li>Integration of customers in communication, sales and distribution (e.g. through social media)</li> </ul>
Revenue Streams	<ul style="list-style-type: none"> <li>Shared monetary benefits / revenue (e.g. sharing of financial gain and gaining joint contracts)</li> </ul>

Table 1: Customer perspective –Evidence of co-creation in business model elements

In addition to the customer, partners can also affect the service business model and influence all dimensions. On the one hand, the provider can request help from partners, on the other hand the provider can offer a platform for his partners to distribute own services and products. In this case the service provider holds an infrastructure that can be used by partners to access customers. An example of this kind of business model is Apple Inc., which is selling devices with access to an app store where partners are able to offer products to their customers. Therefore the main differences between partners and customers can be found in the elements Value Proposition, Customer Relationship and Channel, where partner support the provision of the service. The influence of the partners of the business model is shown in a table 2.

Element	Partner perspective –Evidence of co-creation in business model elements
Cost Structure	<ul style="list-style-type: none"> <li>• Cost incurred / borne by partners</li> </ul>
Key Resources	<ul style="list-style-type: none"> <li>• Partner providing resources</li> <li>• Mutual influence on resource selection and use</li> </ul>
Key Activities	<ul style="list-style-type: none"> <li>• Joint activities</li> </ul>
Value Proposition	<ul style="list-style-type: none"> <li>• Partner enhances co-creation of provider and vice versa</li> </ul>
Customer Relationship	<ul style="list-style-type: none"> <li>• Provider opens customer relationship to partners and vice versa</li> </ul>
Channel	<ul style="list-style-type: none"> <li>• Partner opens channels to customers for partners and vice versa</li> </ul>
Revenue Streams	<ul style="list-style-type: none"> <li>• Shared monetary benefits / revenue</li> </ul>

Table 2: Partner perspective –Evidence of co-creation in business model elements

#### 4 Conclusion and Outlook

The paper shows how an adaptation of Osterwalder’s business model canvas can be utilized to take co-creation into account of business modeling, which is a main shortcoming of recent business model approaches. Hence, the adapted model gives a framework that is eligible to model service businesses, because one of the main characteristics of them is supported considering customers as well as partners. This allows representing a deep integration of the customers and partners in the value creation. According to the understanding of business implied by service dominant logic this is a critical aspect and is not applied in recent business model approaches. Furthermore with the adapted model it is possible to analyze, describe and evolve business models with emphasis on services.

As this paper represents research-in-progress the described solution cannot be seen as a complete solution for all paucities of recent business model approaches, but it gives an implication how to deal with service specifics in the context of business modeling. The next step on the research agenda addresses a refinement of the business model canvas according to service-dominant logic. Further, a meta model for the service business model will be abstracted. Beyond this it will be necessary to prove the adaptation by specific examples in order to evaluate the adapted business model canvas.

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