

Digitization and Value Co-creation

Customer Engagement, Processes, and Competencies

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Introduction

The role of products and services is changing and different needs and user perceptions together with the requirement for changing designs and technological features have led to the establishment of new business capabilities in recent years (Merli, 2013). More and more companies are adding value to their offerings by integrating the customer and his consciously and unconsciously disclosed information. Together with the initial system, this information builds the foundation for the overall offering. This evolution is strengthened by the increasing impact of digitization in consumers' everyday life. In the past decade platforms like Instagram, Twitter, Tumblr, Facebook or Flickr established a new form of consumer-centered value creation. In recent years, this development also made inroads into several product-oriented companies and governed the diversification strategies of international players. While many examples represent the digital economy (pure digital offerings), also consumer brands like Adidas or Nike, car manufacturers like Ford or Daimler, and internet giants like Google or Amazon increasingly integrate their customers into the value creation process.

The sporting goods company Adidas provides fitness tracking gear and integrates different offerings in their platform miCoach. While several car manufacturers are on their way to redefine the concept of individual mobility, the company Daimler integrated different offerings like car2go, myTaxi and several second-party public transportation offerings in their platform moovel. In early 2014 Google acquired Nest, a company specialized in smart home applications like heat meters and smoke detectors (Panzarino, 2014). With these networked devices, energy consumption can be reduced, security can be increased and abundant data can be generated, stored and analyzed, in order to constantly improve the underlying technology and the services provided (Gilles, 2014). With acquisitions like Nest, Google allows customers' to (passively) contribute information about real life activities especially when they are offline. These examples highlight a form of value co-creation (adapted from digital role-models like Facebook and Twitter) without any customer engagement beyond utilization and the conscious or unconscious consent to data usage. The ability to successfully compete in these environments substantially depends on companies' ability to direct their processes, resources and competencies towards consumer-centricity.

Approach

Common theories fall short in explaining this new form of consumer-integrated value co-creation. A new perspective on the role of consumers in the value creation process has particularly been promoted and increasingly discussed since the introduction of the service-

dominant logic (SDL) by Vargo and Lusch (2004). In general, the SDL suggests an alternative conceptual foundation for the understanding of economic exchange. Central to it is the idea that service, defined as the application of competencies for the benefit of another party, is the basis of all exchange. This perspective implies that value is always co-created in a collaborative process between firms, customers and other stakeholders (Lusch and Vargo, 2014). According to the SDL, customers are hence an inevitable part of value creation processes (Bettencourt et al., 2014).

Although the SDL provides a comprehensive extension of the understanding of the value creation process, it is a meta-level and hence, abstract paradigm, which as such cannot thoroughly explain the value co-creation process in digital ecosystems. Due to its high level of abstraction and its actor-to-actor-perspective which primarily focuses on real exchange relationships, the SDL has to be extended and specified for the observation of digital networks. Our paper seeks to overcome this limitation and discusses the following research questions:

- 1) What can be learned from the SDL perspective for digital ecosystems?
- 2) What can be learned from the phenomenon of digital ecosystems for the theory of value creation?
- 3) How do companies align their processes and competencies to the (digitized) co-creation of value?

Based on the theoretical perspective of the SDL and the concept of value co-creation on the one hand and the perspective of digital ecosystems on the other hand, we develop an extended framework for value co-creation in digital ecosystems. This framework focuses on the roles and activities of consumers in value co-creation processes and how these need to be addressed by firms' resources and competencies.

With regard to the SDL, the core points of criticism are particularly reflected by the outdated role of consumers and in its supposed active and conscious exchange of resources. Due to the ubiquity of digital ecosystems and the underlying dependence of everyday behavior, especially consumers' active participation and the conscious exchange of resources have to be questioned. Moreover, we try to get to the bottom of consumers' value contribution through participation without direct utilization. With individual empirical examples we demonstrate that there is anecdotal evidence for a certain evolution in the value co-creation process.

Findings and Implications

While the SDL constitutes a major contribution for the better understanding of economic exchange systems, it does not thoroughly cover and integrate the processes in modern digital ecosystems. Digital ecosystems are a lot more user-centric. Servitization is in progress since decades in many industries and even advanced to a level where only minor adjustments of the product-service system are made (Ceschin, 2014; Fischer et al., 2012). In digital ecosystems, however, the enhancement and success of business models is inevitably linked with the extended integration of the user (Breidbach et al, 2013; Jaakkola & Alexander, 2014). Against this backdrop, we realize that existing approaches are no longer able to explain current phenomena and business models in digital ecosystems. Service, as in servitization, does no longer only refer to a value contribution of the provider. Today, the contribution of the customer and therefore his service is the (data) marks he (consciously or unconsciously) leaves.

This describes a major shift in the classic actor-to-actor perspective of existing theoretic approaches where “as a broad, abstract perspective, businesses, households, and other organizations engage in the acquisition, integration, and transformation of resources to create new resources and then use these new resources in exchange with other actors to co-create value” (Lusch & Vargo, 2014, p. 102). However, Lusch & Vargo (2014, p. 108) also acknowledge that customers do not necessarily understand their role and impact or the underlying pattern of the process when they state: „However, that does not mean that they recognize the complexity of the exchange system.“

This leads to a change of perspective - from active to passive, from service to value dominant. Companies have to understand the difference between active customer engagement and passive co-creation. In digital eco-systems, it is comparably easy to passively contribute. No matter if consciously or unconsciously. We suppose that the processes and competencies necessary for the integration of customer information are different from the processes and competencies companies need for integrating actively contributing customers into their value creation processes. A certain sequence from active to passive and from conscious to unconscious contribution of customers can be identified. In this light our framework distinguishes four different modes:

- Active and conscious contribution: Input of personal data (e.g., age, sex, etc.)
- Passive and conscious contribution: Facebook login
- Active and unconscious contribution: Tracking data (as in tech-enriched sports gear)
- Passive and unconscious contribution: RFID-tagged goods at stationary stores

In many industries companies over a long period of time learned how to integrate customers’ needs and expectations into their offerings. With customer focus groups, open innovation or thorough market intelligence they did so by using a multitude of approaches. Now they have to learn to align their processes and competencies to digital ecosystems and the new possibilities and challenges that go along with them. Our framework seeks to support this process by helping to better understand the underlying logic and the changing roles and activities of actors in digitized environments.

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