Whitepaper

Definition of Service Platforms based on a Service Systems Understanding

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Objective and Definition of a Service Platform

Platforms are central to key industries (Evans 2003) and evolve to a crucial role for innovation. Companies like Uber, Airbnb, Spotify, and Amazon exploit opportunities of digitization and introduce innovative service business models that bear the potential to disrupt existing customer interaction and value propositions. Hence, establishing a platform is an essential challenge in the development of a digital strategy (Ross et al. 2016). The main reason for the relevance of platforms is their facilitating role in value creation and innovation (Lusch and Nambisan 2015; Parker and Van Alstyne 2017; Semmann and Grotherr 2017; Zolnowski and Warg 2018). In particular, we understand the main *objective* of platforms as follows.

> ***Platforms bundle resources that by their usage enable new transactions between actors***.

Depending on its context, however, the definition of platforms alternate. Platforms are defined as systems with cross-group or indirect network effects (Caillaud and Jullien 2003) that lead to economies of scale and positive feedback (Shapiro and Varian 1998), foundations for developing complementary services and products (Gawer and Cusumano 2002; Gawer and Cusumano 2008; Gawer and Henderson 2007), commonly used components across a product family (Boudreau 2010), systems for matching and connecting buyers and suppliers (Hagiu and Wright 2015), and sales channels (Ceccagnoli et al. 2012). A more practice-oriented definition describes a platform as a "set of business and technology capabilities that enable rapid development and implementation of [..] innovations." (Ross et al. 2016)

In the context of service research, platforms are the main factor in establishing innovative service business models. Platforms form ecosystems (Smedlund 2012) and foster service innovation (Lusch and Nambisan 2015). In the context of creating service innovations, Lusch and Nambisan (2015) define a service platform as "[…] a modular structure that comprises tangible and intangible components (resources) and facilitates the interaction of actors and resources (or resource bundles)." Service platforms are complex, multi-sided systems which facilitate interactions of different actors and create different types of network effects (Böhmann et al. 2014; Parker et al. 2016). The main target of service platforms is to liquefy resources and enhance resource density (Lusch and Nambisan 2015). Service platforms integrate resources of different actors and enable direct transactions between providers and customers (Hagiu and Wright 2015). Thus, service platforms enable service exchange and value co-creation. Service platforms facilitate service innovation in many different ways. Among other things, they (1) enable the provider to inform customers about value co-creation processes, (2) improve value co-creation processes, (3) facilitate new services, (4) enable resource liquefaction, and (5) integrate customers into value creation and delivery (Demirkan et al. 2015; Demirkan and Delen 2013). Hence, in service research, platforms are the main factor to achieve unique value propositions and thus, service innovation.

Focusing on resources and their integration through service platforms, a service systems perspective is valuable. Service systems are defined as "[…] a dynamic value-cocreation configuration of resources, including people, organizations, shared information (language, laws, measures, methods), and technology, all connected internally and externally to other service systems by value propositions." (Maglio and Spohrer 2008; Spohrer et al. 2007; Spohrer et al. 2008). Hence, a service system is an "[…] open system (1) capable of improving the state of another system through sharing or applying its resources, and (2) capable of improving its own state by acquiring external resources." (Spohrer et al. 2008). Emphasizing this perspective, we define a service platform as follows.

> ***A service platform is an actor and resource integrating and orchestrating service system that facilitates interactions between different systems to enable value propositions.***

Using this definition, we emphasize the resource-based character of service systems with a focus on resource integration and management and interaction between different systems.

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