

Open Service Innovation Platforms and Experience

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Abstract

Open Service Innovation (OSI) platforms invite customers and other users to co-create innovative ideas and generate experiences that will potentially create value. In this paper, we propose a framework for designing experiences for service users of OSI platforms. The framework utilise the following four types of experiences described by Polaine et al.'s (2013): user experience, customer experience, human experience and service provider experience by the properties relevant within the OSI context. Our framework might provide useful insights to OSI platform designers and help them to effectively involve users in the innovation process.

KEYWORDS: open service innovation platform, experience design, service experience.

Introduction

The concept of Open Innovation (OI) refers to the interaction and collaboration of a company with the external environment, including various potential external or internal actors, e.g. customers, suppliers, institutions, universities and employees (Chesbrough, 2011). The open innovation model can be applied in the services and use of Open Service Innovation (OSI) to turn a company into a platform for users to build on. An OSI platform is both a collaborative technology tool and a community portal, which acts as an entry point for users and hosts community support services, such as idea submissions, discussions, etc. Many companies have adopted OSI platforms, including General Electric, Philips and LEGO¹, in order to invite entrepreneurs, institutions and companies to offer their innovative ideas. Representative examples of OSI platforms include Innocentive, Ninesigma and MyStarbucksIdea². OSI platforms can create value for both users and companies that run

¹ See www.ge.com/about-us/ecomagination, www.simplyinnovate.philips.com, <http://lego.cuusoo.com>

² See www.innocentive.com, www.ninesigma.com, <http://mystarbucksidea.force.com>

the platform. The value for users could be, for example, that their contribution to innovation tasks is rewarded either monetarily or non-monetarily. The value for service providers is increasing the innovativeness of their products and deepening their relationships with customers. It is critical for designers to understand the behaviours and emotions of OSI platforms' users. This will enable including them in a collaborative design process, and might in turn lead to better services.

A service can potentially be viewed as an experience that is co-created by the users and the service organisation. Users in this context are those who utilise the OSI platform of a service-oriented company and could be customers, employees, other companies, etc. They might have different and overlapping roles. Experiences with OSI platforms have a significant impact on their usages and could inspire users to contribute innovative ideas. Designers should, therefore try to enhance the experience of the OSI platform users. The purpose of this research is to propose a framework for designing immersive experiences for users of OSI platforms. In the rest of the paper, we first describe the interrelation of OSI platforms with service and experience. We then describe four types of experiences and their design implications. Finally, we conclude and describe future work.

Experience of Open Service Innovation Platforms

The experience with an OSI platform could be defined as *the experience of the users with a platform for open innovation*. The OSI platform preserves the characteristics of services as a “time-perishable, intangible experience performed for a customer acting in the role of a co-producer” (Fitzsimmons & Fitzsimmons, 2001, p. 4). As the experience is a very dynamic, complex and subjective phenomenon, it depends upon the perception of multiple sensory qualities of a design, interpreted through filters relating to contextual factors (Buchenau et al., 2000). In the experience of an OSI platform, users exist in dynamic relationship with other people, places and objects. Additionally, the quality of users' experience with an OSI platform may change over time as it is influenced by variations in multiple contextual factors, time pressure, social circumstances and company changes.

Figure 1 presents the interrelation of experience, OSI platform and the service. The elements of the triangle affect each other, involving the total experience of the user as a part of the system. The service utilises a platform as a communication channel with users, who experience the service through the platform. The experiential factor also affects the way that users utilise the OSI platform and perceive the service. Polaine et al. (2013) proposed considering the following four categories of experience in the context of service design: User Experience (UX), Customer Experience (CE), Service Provider Experience (SPE) and Human Experience (HE). We apply this classification in the context of OSI platform usage. In order to conceptualise OSI platform users' experience, we propose a framework based on these categories. The framework attempts to provide useful insights to OSI platform designers by examining the different roles of the users, including how they can effectively be involved in the innovation process.

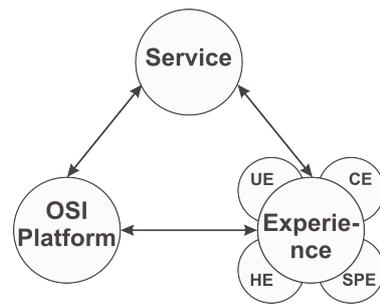


Figure 1: The interrelation of experience within a service company and with an OSI platform.

User Experience (UX) of OSI platforms

In Polaine et al.'s (2013) work, the concept of UX is related mainly with task-based experiences, short time frames and interaction with nonhuman contact points. The UX concerns the experiences of the users with technology or technology-enabled services and applications within a specific context (Hassenzahl & Tractinsky, 2006). This concept could thus be applied in the context of OSI platforms. UX with OSI platforms can be seen as a combination of service experience factors and user experience factors (Olsson, 2013). In OSI platforms the characteristics that affect UX include the social navigation, the temporal experience, the multiple interaction styles and the intangibility of services (Wäljas et al., 2010). The social navigation refers to different interactions among users. These interactions can be explicit, e.g. messaging, or implicit, e.g. letting other users see their interaction behaviour, including ratings, navigation paths or purchasing data. The temporal experience refers to the fact that the service changes dynamically and evolves over time, e.g. in terms of its content, functionalities and user interface. The intangibility of services means that an OSI platform does not produce a physical product for the users.

The UX of an OSI platform is based on these four characteristics. They can therefore be used to inform design. An example of a platform with social navigation is Induct³, which provides many different types of user interaction, such as messaging, voting and following ideas.

Customer Experience (CE) of OSI platforms

The CE is defined as “the sum of the task experiences involved in using a service” in Polaine et al.'s (2013, p. 134) work. Additionally, the CE could be defined as “the internal and subjective response of customers when they have any direct or indirect contact with a company” (Meyer & Schwager, 2007, p. 2). The design of the CE is considered important to service success and is now incorporated in many service development approaches (Clatworthy, 2012). CE is accompanied with expectations in terms of quality and value that an OSI platform should create for its users. Moreover, these expectations are set by the brand, the company that runs the platform and the previous experience of users with similar services. If the experience does not match the expectations, the users become disappointed and frustrated, and that emotional state affects the perceived quality of the platform (Polaine et al., 2013). An OSI platform enables a company to encompass all the involved users in creating the CEs.

³ www.inductsoftware.com

Ritter and Walter (2003) suggest the importance of the following four characteristics when involving customers in the development process: mutual adaptation, mutual trust, mutual commitment and mutual relationship management. These could be used when considering how to incorporate CE into the design implementation of OSI platforms. LEGO Cuusoo is a representative example of an OSI platform where users create unique CEs, not only for themselves but for other users as well. More specifically, users submit idea projects that might be produced and the CE is enhanced by the company's brand.

Human Experience (HE) of OSI platforms

The HE contains a range of emotions, such as pride, shame, joy, embarrassment, euphoria and despair (Polaine et al., 2013). These involve both physical and cognitive events. The HE with OSI platforms might evoke rich emotions related to the users' motivation. Motivation has been described as the "energisation and direction of human behaviour" (Reeve, 2005, p. 6), and is thus a fundamental concept for designers seeking to understand, regulate and support human behaviour. Motzek (2007) discusses the motivation factors of open innovation that could be used by companies. These factors are similar to the general knowledge regarding motivation factors for entrepreneurs. Other studies demonstrate that users in the OSI context can be motivated by fun, reward, participation in a community and desire to innovate (Antikainen et al., 2010). Gamification refers to the use of game elements, game mechanics in a non-game context to increase motivation. We believe that gamification might enhance the HE of OSI platform users. MyStarbucksIdea is one example of an OSI platform with gamification elements. The best ideas proposed by the users are rewarded.

Service Provider Experience (SPE) of OSI platforms

In many cases, service experiences are co-produced by the customer and their interaction with a contact point (Polaine et al., 2013). The SPE can be defined as "the cognitive, emotional and behavioural responses that are created during the process of performing in a service role" (Parish et al., 2008, p. 221) in the context of an OSI platform. Parish et al. (2008) proposed evaluating the SPE with respect to the following two dimensions: the user's immersion and the intensity of the service role. In the context of an OSI platform, the immersion refers to the time that a user spends with the OSI platform, while the intensity of the service role refers to the amount of knowledge, skills and emotional and/or physical labour is required by a service role.

Service providers are now more aware that the creation of customer and brand experiences requires more than just service provider control. Philips provides an attractive OSI platform for users, especially industrial designers, who want to participate in the design of Philips products. The changing nature of the user-company interaction as the locus of co-creation and co-extraction of value redefines the meaning of value and the process of value creation (Prahalad & Ramaswamy, 2004). Design implications for SPE might include the immersion and intensity of the service role with respect to the simplicity and attractiveness of innovation tasks and user interface design. Furthermore, the reliability and robustness of the platform could support the user immersion in the platform.

Conclusion

In this paper, we proposed a framework for designing experience for OSI platform users based on the experience categories proposed by Polaine et al.'s (2013). The framework

attempts to provide useful insights to OSI platform designers in order to examine the different roles of the users and effectively involve them in the innovation process. Specifically, User Experience, Customer Experience, Human Experience and Service Provider Experience were discussed as they are important to consider when designing experiences for this context. This framework attempts to create immersive experiences for users that are expected to contribute with innovative ideas. It might be useful for designers of OSI platforms as well.

As companies are beginning to consider user innovation as a strategic asset for developing new ideas for innovation and support in the innovation development process, designing better experiences for users of OSI platforms is an increasingly important priority. The presented framework can be seen as a 'rule of thumb' and a useful foundation for the reader to build on. Future research includes the evaluation of the design framework described herein in case studies and development of guidelines for design of OSI platforms.

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