

User engagement with digital service innovation

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Summary

Service innovation is a top strategic priority for managers as it facilitates company competitiveness and can have an impact on profitability. With the proliferation of information and communication technology (ICT), digitalization has become a key enabler for service innovation as it allows service providers to introduce innovation at a faster pace. In spite of companies' efforts to improve their users' experiences through digital service innovation, it is not yet clear how that impacts user engagement with the service (i.e., how users feel about the service, what they think about it and how they ultimately use it). Therefore, in this dissertation I take the perspective of consumers as actual users of services and examine why and how they interact with digital service innovation and what elements of the resulting experience affect their (long-term) engagement with the service. I do so through three empirical chapters each exploring a different, yet complementary facet of user engagement with a digital service (i.e., on an affective, behavioral and / or cognitive level), thus achieving a broader and deeper understanding of this extremely relevant contemporary phenomenon.

In Chapter 2, I examine a new-to-the-market digital service innovation: the introduction of contactless mobile payment (CMP), a service that allows users to pay with smartphones instead of cash or bank card in retail locations. I argue that to increase their engagement with the CMP service users need to develop stable habitual behaviors (e.g., over time, locations or merchant categories) and that such behaviors are facilitated by the satisfaction of psychological needs (e.g., for autonomy, for competence or for relatedness). I combine objective (i.e., usage behavior) and subjective (i.e., user surveys) data from consumers participating in a CMP roll-out and show that satisfying users' need for competence is key to the development of stable habitual behaviors. Furthermore, I show that habitual behaviors pertaining to stability in location (i.e., consumers using CMP dispersed across supporting retail locations) drive affective, behavioral and cognitive user engagement with the new-to-the-market service innovation.

In Chapter 3, I examine a sequential digital service innovation: the introduction of a new version of a first-person shooter video game in a popular franchise. I argue that while behavioral user engagement with such an innovation can vary for each user over time, a homogenous user developmental trajectory across

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all users can influence subsequent engagement and the user experience. I draw on objective (i.e., telemetric) longitudinal data and show that a common developmental trajectory featuring an initially positive behavioral engagement level and a negative rate of change in this engagement can be observed across users in the first weeks after the new version was introduced. Furthermore, I show that the growth factors (i.e., the initial engagement level and the rate of change) enhance user engagement with the video game and have some positive influence on how gratified users are with the experience one year after the introduction.

In Chapter 4, I examine a gradual digital service innovation: the introduction of an updated version that adds new features to an existing online socialization service. I argue that users appraise how the innovation changes their experience as something predominantly threatening or challenging. Consequently, users attempt to manage the change by employing coping strategies (e.g., problem-focused, emotion-focused or social support coping) and by leveraging a coping resource (i.e., self-efficacy). Subjective data (i.e., user surveys) from field and an experimental study show that employing problem-focused coping can positively influence cognitive engagement irrespective of innovation complexity (i.e., the number of new features added) being made salient or not. Nevertheless, making users aware of the complexity of the innovation in the existing service activates their self-efficacy with negative influences on the coping strategies employed.

This dissertation builds on rich contexts, data and methods and paves the way towards achieving a better understanding of why (e.g., satisfying different types of psychological needs, cognitive appraisal) and how (e.g., developing habitual behaviors, employing coping strategies) users interact with digital service innovation. The resulting experience can have long-term influence on affective, cognitive and / or behavioral user engagement.