



Contents lists available at ScienceDirect

Industrial Marketing Management



Understanding the service infusion process as a business model reconfiguration

Sebastian Forkmann^{a,*}, Carla Ramos^b, Stephan C. Henneberg^a, Peter Naudé^{c,d}^a Business Ecosystem Research Group, Queen Mary University of London, Mile End, London E14NS, United Kingdom^b Insper, Rua Quatá 300, 04546-042 Vila Olímpia, São Paulo, Brazil^c Manchester Business School, Booth Street West, Manchester, M156PB, United Kingdom^d Discipline of Marketing, University of Sydney Business School, Sydney, Australia

ARTICLE INFO

Available online xxxx

Keywords:

Service infusion;
 Service defusion;
 Business model reconfiguration;
 Process perspective;
 Knowledge conversion mechanisms

ABSTRACT

This study conceptualizes *service infusion* as a *business model reconfiguration* by using a *process* perspective. Service infusion is therefore understood as a process affecting the business model dimensions of transaction content, structure, and governance. The service-related reconfiguration of the business model is explained by underlying *knowledge conversion mechanisms*, which provide insights into the development of reconfiguration capacities as important enablers for business model change. Furthermore, this study introduces the concept of *service defusion* as an important counterpart to service infusion. Both concepts together are found to fully capture firms' strategic options with respect to their service offering components (transaction content), their engagement with, and disengagement from, important business partners (transaction structure), and also their interactions with these important business partners (transaction governance). The conceptually derived understanding of the service infusion process and mechanisms are exemplified via a multi-actor longitudinal illustrative case study. A conceptual grounding for understanding service infusion processes for further theory and concept development is provided, and managers gain an understanding of how to effectively manage the processes underlying service-related business model reconfigurations.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

Services are becoming increasingly important for firms competing in industrial markets (Ostrom et al., 2010; Ulaga & Reinartz, 2011). Firms that traditionally produced goods are driven to reinvent themselves to stay competitive by developing their business models through services (Mathieu, 2001a,b). This is due to a need to counter ever-quicker commoditization that threatens their product offerings and erodes their market position (Baines, Lightfoot, Benedettini, & Kay, 2009; Kowalkowski, Kindström, Alejandro, Brege, & Biggemann, 2012; Ostrom et al., 2010; Shankar, Berry, & Dotzel, 2009). Such *service infusion* as a new business model option for manufacturers is argued to increase the value of their offerings (Baines et al., 2009; Frambach, Wels-Lips, & Gündlach, 1997; Vandermerwe & Rada, 1988). It thereby provides ways in which manufacturing firms can sustain their market position, increase their competitiveness and allow them to access promising new revenue streams (Baines et al., 2009; Gebauer & Friedli, 2005; Johnson, Christensen, & Kagermann, 2008; Mathieu, 2001a,b; Oliva & Kallenberg, 2003). Several recent studies indicate the positive effects of service infusion strategies on firm performance, but they also caution

that this is not an automatic effect (Eggert, Högrevé, Ulaga, & Muenkhoff, 2011, 2014; Fang, Palmatier, & Steenkamp, 2008; Homburg, Fassnacht, & Guenther, 2003; Neely, 2008). Business environments are constantly changing and thus achieving competitiveness may require manufacturers to continuously adjust their offering composition, for example by reducing certain services while introducing new ones, or refocusing on the product-based components of their offering. Thus, manufacturing companies need to be able to increase but also to *reduce the service content of their offering*, i.e. they may engage in *service defusion* (Ivens, Henneberg, & Forkmann, 2014). From this perspective, service infusion and defusion allow manufacturers to react to changing business environments or to seize market opportunities through changing the service components of their business models (Anderson & Narus, 1995; Kindström, 2010; Kowalkowski et al., 2012).

Research into service infusion has focused on providing manufacturers with guidance as to different strategies that they can adopt to venture into service provision (e.g. Gebauer, 2008; Gebauer, Edvardsson, Gustafsson, & Witell, 2010; Löfberg, Witell, & Gustafsson, 2010; Raddats & Easingwood, 2010). The literature focuses on aspects of organizational culture, structure, and the capabilities and resources that are necessary for service infusion (e.g. Bjurklo, Edvardsson, & Gebauer, 2009; Homburg et al., 2003; Neu & Brown, 2005; Ulaga & Reinartz, 2011) as well as the network context of service infusion (Nenonen & Storbacka, 2010; Kowalkowski, Witell, & Gustafsson, 2013; Gebauer, Paiola, & Saccani, 2013; Spring & Araújo, 2013).

* Corresponding author.

E-mail addresses: s.forkmann@qmul.ac.uk (S. Forkmann), carlasdmr@insper.edu.br (C. Ramos), s.henneberg@qmul.ac.uk (S.C. Henneberg), peter.naude@manchester.ac.uk (P. Naudé).

However, the extant literature conceptualizes service infusion most often as the outcome of a change in business models, not as the change process itself. Thus, service infusion is seen as the end-result, in a static manner, while the dynamic aspect of the processes and mechanisms of how it is achieved, the *service infusion process*, remains largely under-researched (Baines et al., 2009; Steiner, Eggert, Ulaga, & Backhaus, 2014). Extant research on issues around service infusion processes focuses on aspects of the different process steps (Oliva & Kallenberg, 2003; Zeithaml, Brown, Bitner, & Salas, 2014), the dynamic and emergent nature of these processes (Biggemann, Kowalkowski, Maley, & Brege, 2013; Ferreira et al., 2013; Kowalkowski et al., 2012, 2013; Matthyssens & Vandenbempt, 2008), or the impact of processes on service infusion success (Kowalkowski, Windahl, Kindström, & Gebauer, 2015). However, process issues in the context of service infusion are usually not conceptualized around the reconfiguration of particular business model components. This represents a challenge, as practice needs guidance on how to implement service infusion as part of strategic changes, and theory depends on an understanding of the components and mechanisms underpinning the change process associated with service infusion as a business model in order to analyse aspects of performance or contextual factors associated with service infusion. We therefore focus in this article on the overarching *research objective of understanding the service infusion process*, which drives the development of service-infused business models.

Service infusion is built on the premise of creating and capturing additional value through services and as such presents an innovative business model. According to Amit and Zott (2001, p. 511), a firm's business model can be defined as “the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities.” Such a business model is centered around a particular firm, which ‘owns’ the business model and competes with other firms’ business models on the basis of creating value for customers, and appropriation of value for the firm (Johnson et al., 2008). Business models, such as those providing service-infused offerings, are therefore a firm's specific response to certain business opportunities, are customer-focused and include the interactions with other relevant business partners within business networks (Amit & Zott, 2001). We argue (as an extension to our research objective) that the process of service infusion corresponds to a *business model reconfiguration*, i.e. the firm's original business model structure and governance changes linked to the content-related changes as expressed in the service-infused offering.

To achieve a business model reconfiguration, firms need certain capabilities. Such change-oriented capabilities are defined by Teece, Pisano, and Shuen (1997) as a specific aspect of dynamic capabilities, in particular as reconfiguration capacities (Teece, 2007). These have previously been discussed as part of the research on service infusion (Kindström, Kowalkowski, & Sandberg, 2013). We focus specifically on an understanding of the *knowledge conversion mechanisms* that take place during the service infusion processes, in particular *creating, transforming, and exchanging* knowledge (Nonaka & Takeuchi, 1995). Knowledge is seen as a crucial resource in enabling changes, and thus underpins reconfiguration processes (Easterby-Smith & Prieto, 2008). Knowledge is therefore integral to understanding the service infusion process, and informs part of our research.

The contributions of this article are fourfold. First, we provide a conceptual understanding of the processes underlying service infusion, and thereby inform the recent literature on process characteristics and in particular the outcome-focused literature. This is important as achieving service infusion represents a considerable managerial challenge. Contingencies of achieving superior performance through service infusion are well documented and point to the importance of understanding mechanisms that drive the underlying process (Eggert et al., 2011, 2014; Fang et al., 2008; Homburg et al., 2003; Steiner et al., 2014). Secondly, we show the importance of knowledge, in particular knowledge creation, transformation, and exchange, for the service infusion process.

This provides a micro-level perspective of the change mechanisms and enables insights as well as a conceptual foundation for research on the development of reconfiguration capacities in the context of service infusion. Thirdly, we introduce the concept of service defusion as a complementary service-related strategy for business model reconfiguration. This is important as it provides an understanding of alternative service strategies in industrial markets. Fourthly, the concept of service defusion provides the departure point for a systemic perspective for business model reconfiguration in which service infusion and defusion often represent antagonistic processes within an equilibrium of business model reconfiguration dimensions. This highlights additional mechanisms for business model reconfiguration from a services perspective.

Overall, our study adds to the literature on service infusion by adopting the concept of business model reconfiguration. As such, we use a conceptual foundation which utilizes a business model perspective (Amit & Zott, 2001) on service infusion/defusion by linking the change (or reconfiguration) of such a business model to the underlying dynamic capabilities (Teece, 2010) which allow a firm to sense and seize such reconfigurations, in particular those related to the implementation and management of the change processes involved (Osterwalder, 2004; Zott, Amit, & Massa, 2011). To understand these dynamic capabilities, we employ a knowledge-based perspective, in particular the knowledge conversion processes involved in service infusion (Ernst & Kim, 2002; Nonaka, 1994), and link them with reconfiguration capacities (Teece, 2007).

The remainder of the article is structured as follows. In order to provide a theoretical grounding, we first introduce service infusion using the concept of the business model. Focussing on the process to achieve service-infused offerings, we discuss this as a business model reconfiguration, before we describe the knowledge conversion underlying service infusion processes. This is followed by an in-depth analysis of an illustrative multi-actor case study, which provides a dynamic description of the service infusion and defusion processes over time as part of the business model reconfiguration of a Northern European manufacturer of automated warehouse systems. The exemplifying and illustrative case study solidifies the conceptual framework developed on the process of service infusion as a business model reconfiguration, as well as providing examples of the underlying knowledge conversion mechanisms. Finally, we offer a discussion of the insights gained from our conceptualization and empirical exemplification of the service infusion and defusion processes, outline theoretical and managerial implications, and identify limitations and possible further research related to our study.

2. Theoretical framework

2.1. Service infusion as a business model

Service infusion (Brax, 2005; Eggert et al., 2011; Kowalkowski et al., 2012), also known in the literature as *servitization* (Vandermerwe & Rada, 1988) or *product-service systems* (Barquet, de Oliveira, Amigo, Cunha, & Rozenfeld, 2013), refers to a strategic shift in firms' offerings from “*traditional core product business [to] developing ancillary service offerings and value-added solutions*” (Eggert et al., 2011, p. 661). According to Oliva and Kallenberg (2003), the transition follows a continuum with increasing degrees of services added to the total offering of a manufacturing firm, coupled with higher integration of services and products (Vandermerwe & Rada, 1988), and more complete offerings (Penttinen & Palmer, 2007). Kowalkowski et al. (2012) argue that rather than a unidirectional transition taken in a few large steps, service infusion evolves incrementally and without clear direction. Thus, from their perspective, service infusion is an emergent strategy, based on intermittent processes driven by firms' fast-paced changing business environments (Kowalkowski et al., 2015).

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات