Volume 15 • Issue 1 • January-March 2019

## FinTechs as Service Innovators - Understanding the Service Innovation Stack

Mikko Riikkinen, University of Tampere, Tampere, Finland

Saila Saraniemi, University of Oulu, Oulu, Finland

Kaisa Still, VTT Technical Research Centre of Finland, Oulu, Finland

#### **ABSTRACT**

Fundamental internal and external changes coupled with digitalisation have enabled new market entrants, FinTechs, to innovate services, creating competitive solutions to incumbents' offering. The purpose of this article is to understand the service innovation approach of FinTech companies. The complexities of service innovation are explained with a theoretical concept of service innovation stack, which presents the multiple components needed for successful service innovation. The usefulness of this construct is observed with a longitudinal case study of 10 FinTech startup from Finland using interviews and other data. These are shown with a visual representation, which ties in the internal activities with the external ones and shows the interplay between them. With the representation of the service innovation stack, the service innovation within financial industry can be better understood and further developed. The authors further suggest that though the framework is based on cases from FinTech startups, it might be relevant also for the incumbents.

#### **KEYWORDS**

Financial Innovation, FinTech, Banking, Service Dominant Logic, Service Innovation

#### INTRODUCTION

Currently, digitalization is contributing towards the fourth industrial revolution, and it has affected different industries and their innovation approaches. Several industries have been going changes in business models and re-thinking their business. Since banking and financial services have been regarded as being ahead of other industries in the digitalization, they are seen as the first ones to deal with related issues (Komulainen et al., 2018). Accordingly, financial industry has been experiencing tremendous changes influenced by a phenomenon called "FinTech", referring to the infusion of digital industry into financial services, including banking, insurance, transactions and payment services (PWC, 2017). In this study, we examine emerging actors called FinTechs and their innovations.

We draw on existing service innovation discussion and development of it to explore the disruptive power of FinTechs. Traditionally, innovations in banking and financial industry have been modifications to the existing services by the existing and established actors (PWC, 2015). Thus, established actors have not actively searched for opportunities beyond provider-pushed innovations (see Gallouj & Djellal, 2010) i.e. efficiency in their own processes. Hence, in financial sector, established actors have not been reinventing their businesses and have been slow in innovation activities. As

DOI: 10.4018/IJEBR.2019010102

Copyright © 2019, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

Enders et al. (2006) summarised, "Managers in incumbent firms are unwilling to support disruptive innovations because: (1) they usually do not fulfil the needs of the firm's existing and most profitable customers and (2) they offer a much lower profit margin than sustaining innovations do". This emphasis has created room for more agile actors, which are able to produce new services based on thorough customer understanding.

FinTechs have been focusing on improving specific parts of the broad product/service portfolio and have been able to establish a niche market position, which has been referred to as "unbundling" by Basole and Patel (2018). It has been stated that (Internet of Business, 2018): "Google's infrastructure is based on microservices and open source software, and the idea that you build everything yourself. This is very different to the way banks used to be built, where you'd go out to market, get a vendor, and they'd build the product and give you a warranty period." Hence, this means that banks are under threat of being disrupted from technological perspective. This includes the change in how the core banking system is built and how new technologies such as blockchain, big data and different kinds of analytics are utilised. However, these technological aspects are not the only challenges banks face. Regulative changes such as Payment Directive Services 2 (PSD2) forces banks to open up their Application Programming Interfaces, better known as APIs, for the 3<sup>rd</sup> party service providers. This, furthermore, leads to the pressure of banks being in the need to understand and find their new role in the financial services ecosystem. (Riikkinen et al. 2018)

Previous innovation research in financial services has focused on the service innovations of incumbents such as banks, with topics such as internet banking and mobile banks. Hence, there is a need for further understanding of how these new market entrants (FinTech start-ups) are innovating new services and business models in this novel, emerging ecosystem. For example, the risks for adapting new services has been in the core of banking. Jih et al. (2005) investigated the nature and sources of customers' perceived risks in internet banking and found out that there exist significant relationships among involvement, familiarity, perceived risks, and customer willingness to adopt Internet banking services.

FinTechs, in general, are scarcely studied in academia and most prior work on FinTech is predominantly practitioner oriented (Basole and Patel, 2018). Further, of these studies, only a few handle FinTech start-ups, particularly (e.g. Riikkinen et al., 2018), but mainly discuss them as a reason for established companies to pursue their digitalization and development of new services (e.g. Silic & Ruf, 2018; Sinha et al. 2018). In addition, FinTechs have been discussed from the perspectives of customer value (e.g. Komulainen et al., 2018; Riikkinen et al., 2017), and Fintech ecosystem has been studied and visualized (e.g. Basole and Patel, 2018).

The term Fintech hold promises of technological innovation, which raised our interest for studying the components of innovations. What is the innovation actually based on in this context? Is it a technological innovation or actually a new service? For exploring this issue, we define the purpose of the study as being: to understand the service innovation approach of FinTech companies. Therefore, our main research question is:

• What are the service innovation components of new market entrants in the case of FinTech start-ups?

Toward this purpose, this paper proceeds as follows. First, we review service innovation literature particularly from the perspective of understanding of characteristics of innovation. Based on theory, we construct a "service innovation stack" showing the evolution for exploring the locus and components of service innovation. In the empirical part, we implement the analysis of this construct in 10 FinTechs, all from Finland, using a longitudinal study approach. The findings are then synthesized into a service innovation stack of Fintechs.

In order for banks to find their new role in the changed world of financial services innovation, it is essential for them to understand how FinTech start-ups achieve their innovations. From academic perspective, the radical change of a source of innovation moving from incumbents to the new market

# 16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/article/fintechs-as-service-innovators---understanding-the-service-innovation-stack/219225

### **Related Content**

## Sharing Views, Information, and Cross-Enterprise Culture in the Corporate Situation Room

Bob Robertsand Adamantios Koumpis (2008). *Agent and Web Service Technologies in Virtual Enterprises (pp. 160-173).* 

www.irma-international.org/chapter/sharing-views-information-cross-enterprise/4997

## Influencer Review Effect on Customer Purchase Intention: An Extension of TAM

Ruhi Sethiand Deepa Kapoor (2021). *International Journal of E-Business Research* (pp. 1-15).

 $\underline{\text{www.irma-}international.org/article/influencer-review-effect-on-customer-purchase-intention/267942}$ 

## The Rugby Player and the Handbag: Extending a Model of the Factors of Influence in Online Auctions

Val A. Hooper, Sid L. Huffand Jon MacDonald (2009). *International Journal of E-Business Research (pp. 22-38).* 

www.irma-international.org/article/rugby-player-handbag/37435

#### Designing Agent-Based Negotiation for E-Marketing

V. K. Murthy (2003). *Architectural Issues of Web-Enabled Electronic Business (pp. 287-299).* 

www.irma-international.org/chapter/designing-agent-based-negotiation-marketing/5206

## Automatic Transformation of Generic, Validated Business Process Security Models to WS-SecurityPolicy Descriptions

Sven Feja, Sven August, Andreas Speck, Meiko Jensenand Jörg Schwenk (2012). Handbook of Research on E-Business Standards and Protocols: Documents, Data and Advanced Web Technologies (pp. 293-320).

www.irma-international.org/chapter/automatic-transformation-generic-validated-business/63476