### Chapter 48

# Emergence of a Digital Platform Based Disruptive Mobile Payments Service

#### Yasmin Mahgoub

KTH Royal Institute of Technology, Sweden & Universidad Politécnica de Madrid, Spain

#### Niklas Arvidsson

KTH Royal Institute of Technology, Sweden

#### Alberto Urueña

Universidad Politécnica de Madrid, Spain

#### ABSTRACT

Banks are motivated to be interested in developing platforms to provide mobile payment services to their customer and for those to be innovative. However, the successful implementation of a mobile payments service platform is mainly determined by how much players are fully motivated to realize it. In fact, in the Swedish context, the involvement level of mobile payment service platforms are very high whereas few studies have examined the related issues of mobile payments service platform. Thus, the purpose of this article is to investigate the factors leading banks to develop platforms and how banks manage these platforms. Data was collected by conducting interviews of applicable banks. The results mainly showed that the driving factors are significantly influenced by contextual factors, mutual objectives and opportunities. This article also looks forward to providing the payment industry with applicable guidelines for efficiently implementing and designing mobile payment service platforms.

#### 1. INTRODUCTION

Sweden is a leading country towards a cashless society. According to central bank the Riksbankin 2016, in Sweden the cash transactions made up barely 2% of the value of all payments which will lead dropping to 0.5% by 2020. For instance, in merchants, cash is now used approximate 20% of transactions. Besides surprisingly, about 900 of Sweden's 1,600 bank branches no longer provide cash or receive cash

DOI: 10.4018/978-1-5225-9273-0.ch048

deposits (Sveriges Riksbank, 2013). Due to this digital wave with a high smartphone penetration, mobile payments have become a highly innovative and dynamic sector in Sweden which characterised by aggressive competition based on technology to gain dominance of the market (Ondrus &Lyytinen 2011). In this context, traditional industries such as banking, are highly resistant to transformation since the existing of strict regulation and slowly developing technologies. However, the situations have changed since last two decades (Tornjanski et al., 2015). Recently, changing occurs through a highly competitive market and disruptive technology which puts a burden on banks to innovate through understanding changes and the competitive forms and ways to handle strategic approaches (Achrol, 1991; European Financial Forum, 2015). Further, the rapid digitization has results such as collapse of industry boundaries, creation of new opportunities and increase of challenges. This phenomenon is termed as digital disruption that will play an important role to form banking industry in next coming years (Weill & Woerner, 2015). Recently, banks are forced to strengthen their competitive market through building digital platforms to provide mobile payment services (Hedman & Henningsson, 2015). Digital platforms are facilitating industry disruptions (Christensen, 2013). Recently, it is becoming obvious that the speed up of technological transformation is the most creative force and also, the most critical one in the payment services industry (Gardner, 2009). This study sets out to screen the implications of these technological innovations on the payment services industry which develop via digital platforms.

Therefore, banks are promoting new forms of strategies to accommodate changing in payments service. Digital platforms are an innovative way to manage the direct interaction between various providers affiliated with the platform to create network effect (Staykova & Damsgaard, 2015; Staykova & Damsgaard, 2014; Kazan & Damsgaard, 2013; Hagiu & Wright, 2011; Parker & Van, 2005). Frequent failures indicate that digital platforms of mobile payments service are complex to launch (Gannamaneni et al., 2015). However, this is not the case, and it is important to explore the factors which lead to the development of this digital platforms. There are few studies that have investigated how payments industry players (i.e., banks & MNOs) cooperate to create a digital platform to introduce innovative services such as mobile payments (Li & Du, 2015). This cooperation is significant since a single player cannot develop a platform. More recent research specifically applies the digital platform model to mobile payments from an economic perspective (Campbell et al., 2015) cooperation between banks and telecom operators (De Reuver et al., 2015), market cooperation in the mobile payments ecosystem (Hedman & Henningsson, 2015), entry and expansion strategies of digital platforms to dominate the market (Staykova & Damsgaard, 2015). Moreover, openness, competition and leadership issues in payment platforms have been investigated (Karippacheril et al., 2013). Despite these studies, limited is known about how the cooperation occurs between competitors (Harbison et al., 1998) in which known as "coopetition" (Bengtsson & Kock 2000). Since competing firms own appropriate resources and face similar challenges, cooperation with competitors allows the companies to establish a digital platform for innovations (Hedman & Henningsson, 2015; Staykova & Damsgaard, 2015). Digital Platform is becoming necessary to realize innovation in disruptive context (Pagani, 2013). Limited researches have studied why and how banks cooperate for pursuing alliances and design of the platform and to work on a common service for mobile payments (Hedman & Henningsson, 2015). This paper aims to address this gap through focusing on the following questions: 1. What are the factors driving banks to emerge digital platforms in disruptive context? 2. How do digital platform-based banks evolve? Drawing on a unique platform, the paper study in-depth case in Sweden where all major banks cooperate in developing a person-to-person (P2P) mobile payment service. Theoretically, the present study contributes to co-opetition theory in disruptive 19 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/chapter/emergence-of-a-digital-platform-based-disruptive-mobile-payments-service/231227

#### Related Content

#### Enhanced Formal Verification Flow for Circuits Integrating Debugging and Coverage Analysis

Daniel Große, Görschwin Feyand Rolf Drechsler (2011). Design and Test Technology for Dependable Systems-on-Chip (pp. 119-131).

www.irma-international.org/chapter/enhanced-formal-verification-flow-circuits/51398

#### Fuzzy Electronic Supply Chain System: Customer Satisfaction and Logistic Aspects

Hamed Fazlollahtabar, Hamed Hajmohammadi, Iraj Mahdavi, Nezam Mahdavi-Amiriand Amir Mohajeri (2012). *Computer Engineering: Concepts, Methodologies, Tools and Applications (pp. 1492-1504).* www.irma-international.org/chapter/fuzzy-electronic-supply-chain-system/62525

## Estimation of Irrigation Water Demand on a Regional Scale: Combining Positive Mathematical Programming and Cluster Analysis in Model Calibration

Davide Viaggiand Meri Raggi (2012). Computer Engineering: Concepts, Methodologies, Tools and Applications (pp. 897-913).

www.irma-international.org/chapter/estimation-irrigation-water-demand-regional/62486

#### Cyber Attacks and Preliminary Steps in Cyber Security in National Protection

Faruk Aydinand O. Tolga Pusatli (2018). *Cyber Security and Threats: Concepts, Methodologies, Tools, and Applications (pp. 213-229).* 

www.irma-international.org/chapter/cyber-attacks-and-preliminary-steps-in-cyber-security-in-national-protection/203507

## Sustainable Competitive Advantage Through Business Model Innovation: The Indian Perspective

Purna Prabhakar Nandamuri, K. S. Venu Gopala Raoand Mukesh Kumar Mishra (2020). *Disruptive Technology: Concepts, Methodologies, Tools, and Applications (pp. 191-213).* 

www.irma-international.org/chapter/sustainable-competitive-advantage-through-business-model-innovation/231188