

## Chapter 5

# Mobile Banking and Payment System: A Conceptual Standpoint

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### ABSTRACT

*This study conceptualizes and proposes a well-regulated and designated mobile banking and payment system (MBPS) with the potential to strengthen the banking system, foster the regulatory framework, and to be integrated across various platforms and mobile devices. Unlike other mobile payment systems that lack convenience, scalability, and usability, the proposed MBPS contains several important functionalities and it has the potential to bring together hitherto unconnected industries—banking, Fintech and telecoms—to offer value-added services to their existing and potential customers. The ownership of the MBPS shall remain with the financial services sector including the banking and microfinance institutions. The paper concludes with a discussion on the implications and limitations of the study and proposes future research directions.*

### INTRODUCTION

One of the profoundly interesting developments of the past three decades is the electrification, automation, and digitization of business and financial services and the arrival of mobile telephony in emerging and developed economies. Each of these developments appeared when a variety of electronic payment (e-payment) systems and banking channels commonly known as alternative delivery channels or ADCs (Shaikh & Karjaluo, 2015; 2016) were developed and deployed by banks and microfinance institutions

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from the early 1990s onwards. According to Abrazhevich (2001), e-payment systems were primarily meant to bring the infrastructure necessary to facilitate payment over the internet using different devices and they are widely considered necessary for further developing e-commerce and e-business. In addition, by eliminating location and time barriers, e-payment systems and ADCs facilitate consumers accessing their banking information remotely, quickly, and conveniently without the need for visiting the bank branch. Mobile and branchless banking services, added latterly in the mobile payment and digital banking portfolio, have revolutionized the banking services landscape (Mortimer et al., 2015) and increased the outreach of retail banking to remote areas. Considering their success and growing consumer interest in the adoption and usage of these e-payment systems and ADCs, non-financial actors (NFAs) including telecoms, mobile network operators, financial technology (Fintech) firms, start-ups and other market participants such as PayPal, Amazon, and Google developing and offering a range of payment services thereby creating increased competition for diligently regulatory banks. According to Denecker et al. (2014), payments represent a beachhead for changes to the entire banking relationship, and this beachhead is under attack from NFAs.

Given the growing influence of these diverse NFAs or non-bank entrants on the payments landscape, three reasons underline the foundation as well as the purpose and objective of this article as explained below:

First, in the presence of a huge (but diversified and heterogeneous) range of digital banking channels, the banks and regulators are facing several security, privacy, strategic, operational, and oversight challenges (Denecker et al., 2014). The basic premise is that these digital banking channels both motivate the customers to become self-directed and adapt to the online world and demand new controls and risk monitoring systems, especially given their dependence on rapidly changing technology and their ubiquitous nature (International Finance Corporation, 2014). Accordingly, a large and diversified banking portfolio including services and products is likely to have a wider range of harmful effects (Allen et al., 2012) on the performance of the banks and will create unnecessary security risks for them.

The second concern is the existence of a consumer base who are not bank account holders or have any kind of formal relationship with a banking institution. Such consumers are located mainly in developing and emerging markets, and access banking and payment information on portable devices such as cell phones to conduct several different financial transactions. Unfortunately for banks, many of these consumers conduct transactions through mobile payment apps that are developed, managed, and controlled by NFAs. As a result, banking companies, long tightly regulated, are fast losing this consumer base as well as core business segments (i.e., accounts and payments) to NFAs. These developments present several challenges for banks, regulators, and policymakers, especially when NFAs and third party app developers require banks to allow access to confidential consumer data.

The third concern is that these NFAs are operating with fewer regulatory constraints, and most of them lack any significant prior experience in the banking industry (Henniaux, 2014). What is more worrying is that a few of these NFAs are providing mobile financial services in a largely isolated way involving a high risk element. Similarly, there is wide agreement that mobile apps are miniature apps and many of these have not had their codes effectively audited for security flaws prior to their release and use. Consequently, the purpose is to assess and evaluate the potential of mobile payment services and investigate how these services will be affected if unregulated actors provide critical services in the payment system?

Building on these arguments and in order to reconcile these issues, the authors have identified the need to conceptualize a versatile, integrated, and a designated new channel of distribution called 'mobile

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