Chapter 12

Understanding the Behavioral Determinants of M-Banking Adoption: Bruneian Perspectives

Afzaal H. Seyal
Institut of Teknologi Brunei, Brunei

Mahbubur Rahim
Monash University, Australia

Rodney Turner
Monash University, Australia

ABSTRACT

M-banking has become an important alternative to electronic banking and a popular medium in the developed world. This important mode of business has not been very widely used in the developing world. The acceptance of m-banking appears to be affected by several factors, some of which may be the personal attitudes of the users, influences of normality, and the context in which it is used. The study focuses on two hundred customers from major banks in Brunei Darussalam and explores m-banking adoption by combining the Technology Acceptance Model (TAM), Rogers’ Diffusion of innovations (DOI) attributes of adoption, and the decomposed theory of planned behavior with eight antecedent variables: perceived usefulness, ease of use, compatibility, credibility, image, financial cost, motive to use m-banking, and influence of reference groups leading towards customers’ attitudes that determine the m-banking adoption. The results are discussed in depth further into the study.

INTRODUCTION

In recent years, there has been a surge in the demand for 3G/4G mobile devices and, at the same time, enormous developments are taking place in wireless infrastructure across developed and developing nations alike. Capitalizing on the novelty of the mobile technologies and associated infrastructure developments, many banking institutions have begun to offer applications intended to deliver banking services via mobile networks. These applications are commonly known as m-banking.
Understanding the Behavioral Determinants of M-Banking Adoption

systems. Several success stories of innovative m-banking initiatives for the developing countries’ context (e.g., M-Pesa projects in Kenya, “Celpay” in Zambia and “G-cash” and “Smart-money” in the Philippines and “Mobilink Bill Payment” in Pakistan) have also been widely publicized (http://www.foreignpolicy.com/articles/2010/08/27/the_m_banking_revolution). However, despite the publicity of m-banking systems, the widespread uptake of these systems is still slow. We argue that uncertainty associated with initial adoption decision by individuals is a major barrier for the diffusion of m-banking systems, and hence better understanding adoption decisions is a pre-requisite to ensure success of these systems. We further suggest that it would be inappropriate for the bank management to assume that the introduction of their m-banking systems would automatically result in their spontaneous acceptance and subsequent usage by bank customers due to three reasons: a) possible imbalance in the perceptions of benefits may occur between bank management and their customers, and b) hesitation and even reluctance can be observed among bank customers as these systems operate on mobile devices that support limited screen size and small keyboard, and c) customers’ perceptions towards security and ease of use may seriously affect their attitudinal dispositions towards adopting m-banking systems.

The success of m-banking systems is thus largely influenced by the bank customers’ initial adoption decision and their intentions to continue to use these systems. Therefore, understanding the initial adoption decision by bank customers represents a key research concern.

Another motivation for this research is influenced by a theoretical concern. Current literature even though has paid much attention to study the cognitive aspects of individuals’ attitudes towards m-banking systems adoption; it is quite fragmented and lacks theoretical comprehensiveness. Hence, there is a need for better modelling the adoption decision behaviour of individual bank customers with regard to m-banking systems. In particular, a review of the current m-banking literature indicates the dominance of Theory of Reasoned Action (TRA) (Fishbein & Ajzen’s 1975) or Theory of Planned Behavior (TPB) (Ajzen, 1991) inspired models. We argue that, although existing studies have made praiseworthy contribution, there is still a need to examine the influence of several other less cited (but no less important) factors (e.g., perceived credibility, perceived image, financial costs, individuals’ motives), in conjunction with the constructs derived from TRA and TPB, to better understand individuals’ attitudinal dispositions towards adopting m-banking systems.

Yet another motivation for this research is shaped by our belief (which is also shared by many adoption scholars) that adoption of innovative information technologies is often moderated by contextual characteristics. As a result, there is a need to apply existing theoretical frameworks to a wide range of empirical settings. We thus argue that it is necessary to evaluate m-banking adoption model to a relatively unexplored national settings.

Brunei Darussalam (a small sultanate located in South East Asia with a population of less than 1 million) is culturally quite different in some aspects from those of the European, African, and some advanced Asian countries (e.g., Japan, Korea), and hence further research attention is required to examine how adoption theories relate individuals’ to m-banking adoption attitudes and intentions for Brunei Darussalam context.

Motivated by these concerns, we thus report the development of a conceptual model (which integrates four additional factors with the key constructs borrowed from TRA and TPB) and determine how the model help explain the variations of individual bank customers’ attitudinal dispositions towards adopting m-banking systems for Brunei Darussalam context. The remainder of this paper is organized as follows. The next section presents a synthesis of the relevant the background literature. It is followed by a section on a theoretical foundation underlying our conceptual model presented later in this paper.