Exploring the Factors Behind the Resistance to Mobile Banking in Portugal

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ABSTRACT

M-banking has been highlighted as one of the most promising e-commerce services. However, the adoption of financial mobile services is still far behind market expectations. This study seeks to provide academics and bank managers alike with a better understanding of resistance to m-banking. Based on Ram and Sheth’s (1989) Theory of Innovation Resistance, a SEM model was built to describe resistance barriers. A total number of 3,852 observations, of which 2,344 were effective for SEM analysis, were obtained from an Internet survey at a Portuguese bank. The “functional barriers” revealed more severe barriers than the “psychological” ones. Latent scores were used to compare consumers’ perceptions and behaviour. Results indicate a significantly higher resistance among non-users, and demographic and behavioural profiles were established, promoting wider knowledge and possible enhancement of m-banking adoption. Conclusions and managerial implications are provided.

Keywords: Consumer Behaviour, Innovation Resistance, M-Banking, Modelling, Structural Equation

INTRODUCTION

The technological development of mobile devices (e.g., mobile phones, PDAs, smartphones), along with increasing wireless Internet penetration, facilitates a convergence of all in the pocket, anytime, anywhere services: games, music, photography, television, Internet, publicity, information and localization, among others.

Consumers find mobile services to be value-added, convenient and compatible with their lifestyle (Fife, 2007). However, reports show that there is a marginal use of mobile devices for transactional purposes, the rate being as low as 6% (Kleijnen et al., 2007). In Europe, the difference between consumer interest and real usage reaches 50% in some m-commerce services, such as financial services (Sybase, 2008). This finding informs both the state of incipient development and the potential of this distribution channel.
According to Eurostat (2007), the average penetration rate of mobile phones in Europe in 2006 was higher than 100%. Portugal is no exception. During 2007, mobile phone penetration achieved an impressive record of 125% (Anacom, 2008). Simultaneously, the data/voice ratio is also increasing at a remarkable pace (OfCom Statistics, 2008). The relatively low number of computers connected to the Internet, as well as the large number of mobile phones, makes Portugal a high-potential market for mobile services, such as banking.

Third generation mobile services are framed within a context of caution, where fewer risk investments and marketing actions are carried out (Bouwman et al., 2007). Therefore, insight into why consumers are not adopting mobile services is needed.

The aim of this study is to investigate the inhibitors of mobile banking in Portugal, in terms of barriers to adopting the service. According to several studies and marketers, a wider knowledge of the phenomena is needed to develop strategies aimed at enhancing mobile banking adoption.

The article includes a revision of relevant literature on technological innovation adoption and some succeeding research hypotheses are formulated. Based on Ram and Sheth’s (1989) Theory of Innovation Resistance, a higher-order SEM model was built to describe resistance barriers to mobile banking. Hypotheses with implicit difference tests were contrasted through the use of structural equations’ latent scores. Online banking users’ perceptions and behaviour were compared and results indicate a significantly higher resistance among non-users. Furthermore, demographic and behavioural profiles were established. Results are followed by discussion and a reflection on the limitations of the study.

CONCEPTUAL FRAMEWORK AND DEVELOPMENT OF HYPOTHESES

Current literature is largely concentrated on the adoption of innovation and the factors influencing adoption and dissemination of ICT technological innovations. This adoption process has been systematised in holistic models (Lin, 2003), quantitative structural models like the Technology Acceptance Model (T.A.M., Davis et al., 1989), the Extended T.A.M. or the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003). Other models have focused on the motives lying beneath resistance to innovation adoption (Ellen et al., 1991; Bowman et al., 2007). However, relatively little attention has been paid to the latter approach (the theory of innovation resistance). Some authors, like Sheth (1981), have highlighted the importance of studying the process of resistance to innovation, instead of its adoption.

According to Sheth (1981) and Ellen et al. (1991), consumer decisions on innovation are based on two main aspects: on the one hand, perception of the service’s benefits, and, on the other, the perception of risk. Ram and Sheth (1989) provide a more comprehensive analysis on resistance to innovation, focusing on psychological and functional barriers. This view argues that psychological barriers are reflected in tradition and image barriers; while functional barriers derive from usage barrier, value barrier and risk barrier.

Ram and Sheth (1989) argue that psychological barriers are created by conflicts related to customers’ prior beliefs and values rather than by the actual usage of innovation. Therefore, it seems that these barriers are related to a broader discussion about technology readiness (Parasuraman, 2000), referring to customers’ mental willingness to accept new technologies. The tradition barrier is the extent of incompatibility between an established routine and a certain innovation (Ram & Sheth, 1989). Earlier literature has also identified resistance to change as an important inhibitor in the adoption of Internet banking (Bradley & Stewart, 2002; Kuisma et
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