Chapter 2
The Use of Technology Acceptance Model in Mobile Banking

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ABSTRACT

This chapter aims to determine the variables that explain using mobile banking. This study identifies and investigates the factors that influence the adoption of mobile banking, and specifically focuses on the evaluation of mobile banking application with users or non-users. The research model includes the basic concepts of the technology acceptance model. The technology acceptance model (TAM) tries to explain the adoption process and underlying influencing factors in technology acceptance. The survey was conducted to gather data which was coded in SPSS 17. Confirmatory factor analysis was used to analyze data, and structural equation modeling using Amos 17 software was used to validate the research model. The result shows that perceived ease of use, perceived usefulness, and perceived normative pressure significantly influences customer attitude, which affects the adoption of mobile banking.

INTRODUCTION

With the development of technology, as a result of the concept of mobile banking, bank users can easily perform banking transactions in anytime and anywhere. In recent years, many banks have been able to make mobile access transactions easily.

The developments in information technologies have continuously affected the banking sector. With the increasing use of mobile devices with internet access, banking applications have been moved to mobile platforms, and a new distribution channel has emerged in banking (Pousttchi & Schurig, 2004:1). With the spread of mobile devices, the utilization of mobile banking in the 2010’s began to rise rapidly. The ability to do so easily with mobile devices also increased the rate of use. The fact that mobile devices are easy to carry and size is smaller than other technological devices are other reasons that increase

DOI: 10.4018/978-1-5225-8015-7.ch002
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their usability. With the increase of the usage rate of mobile devices, the banking sector has started to offer applications for mobile applications. Mobile banking has started to develop in parallel with mobile software and has become very popular nowadays.

Mobile banking has become more effective as the internet becomes widespread. Mobile banking is the mobile branch that is entered via mobile phone by creating a security password that is connected by mobile phone. Mobile banking services in Turkey have services in the bank branch digital channels banking with only digital channels or with no branches systems. Mobile banking offers customers the privilege of being able to provide 24/7 service without having to be physically present at the branch for banking transactions and without depending on the bank opening hours. In this way, it gives its customers more advantage than the usual banking system to prefer mobile banking and remain as a permanent customer. In Turkey, 37,374 people now use mobile banking.

When domestic and foreign literature is examined, it is seen that there are few studies about mobile banking in Turkey. Chauhan (2012), McCloskey (2006) and Rogers (2003), Devadevan (2013), Zhou (2011), Malaquias and Hwang (2016) investigated the effect of trust on mobile use. Cheah, Teo, Sim, Oon, and Tan (2011), Dasgupta Paul and Fuloria (2011), Teo, Tan, Cheah, Ooi, and Yew (2012) examined the factors affecting mobile banking adoption. Bankole and Cloete (2011), Hanafizadeh, Behboudi, Koshksaray and Tabar (2014), Safeena, Date, Kammani and Hundewale, (2012), Jabri and Sohail (2012), Chaouali, Souiden and Ladhari (2017), Sharma, Govindaluri, Muharrami, and Tarhini (2017) in the studies, that have the purpose of determining the factors affecting the adoption of mobile banking in different countries. The study by Chen (2013), Z. Deng, S. Deng, and Zhang (2010), Huili and Chunfang (2011) found that the most important factor affecting the adoption of mobile banking is security.

The aim of the study by H. Çam and A. Çam (2016) is to determine the effect and relationship between financial behavior and attitudes and level of use of mobile banking applications. As a result of the analysis, it was determined that the most important factors affecting the decision of individual customers to use branchless banking services were reliability and competence. Ayhan Korkulu, Erkan Oktay and Yusuf Akan (2018) is to determine factors that may have an impact on the demand of mobile banking use, possible issues of mobile banking raised by customers and the reason of not using mobile banking for non-users as mobile banking seems to be significant advantages for both customers and banks.

As far as the studies no study has been found in which mobile banking is explained by technology of acceptance model. This research, we will investigate the adoption of Mobile Banking as a new technology by using the technology acceptance model (TAM) thata well-known model of information technology-adoptation and use Structural equation model (SEM) will be used introduced to explain the causality of the proposed model.

BACKGROUND

Technology of Acceptance Model

Davis et al.’s (1989) Technology of Acceptance Model (TAM) is one of the most popular approaches that have been used in this stream of research to explain factors affecting usage intention of a technology (Mortimer et al., 2015). The background behind the origin of this model is based on in order to increase
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