Customer’s Perceived Value to Use Mobile Banking Services

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Abstract- Perceived value is a subjective concept that differs among bank customers. Although a number of factors have been suggested as important to understand mobile banking usage, very little attention has been given in literature to exactly what constitutes the value of mobile banking system. The aim of this paper is to examine factors affecting the value held by bank customers toward the use of mobile banking services. This study may enable banks to develop a marketing strategic plan based on perceived value from the customer's point of view.

Keywords- Mental Accounting Theory; Mobile Banking; Perceived Value; UTAUT.

I. INTRODUCTION

The advancement of digital technology within the field of information and telecommunications has spurred the growth of markets throughout the world. Importantly, Business-to-Business (B2B) and Business-to-Customers (B2C) transactions are being completed either fully or in part via the internet [1]. Innovative mobile applications are also being developed in tandem with the aforementioned revolution. This has seen manufacturers making handsets that offer such wireless application platforms as WAP, GPRS, and 3G [2]. Thus, the merging of mobile communications and the wireless internet has given birth to m-commerce, typically defined as mobile commerce via wireless applications [3].

Mobile applications have been cited as being more than just an extension of the more traditional computer user applications [4], [5]. Value-creating characteristics of m-commerce could be found on five categories needs: time critical, spontaneous, entertainment, efficiency and mobility-related needs [2]. Such characteristics, giving businesses and individuals a chance to network in real time and make the mobile phone, and m-commerce by extension, stand on its own pedestal within the information and communication industry outside of the realm of personal computers. In essence, m-commerce has curved itself a new niche in the area of business transactions, being a cheaper alternative and more convenient to use than an e-commerce counterpart [6].

New innovations are taking into account the growing demand for mobile applications; this has been the case for financial services providers around the world. Financial institutions have been creating novel products and services that are founded on the platform of mobile application is known as mobile banking service (also known as M-banking, SMS banking, m-banking, etc).

The M-banking service is among the recent innovations that use the mobile devices such as smart phone, cell phone or personal digital assistant (PDA) in banking service [7]. The concept of mobile banking is relatively new and not yet recognized at the customer side in most parts of the world [8], [9], which would explain part of the problem leading to a sluggish rate of customer adoption and usage [10], [11], [12].

The research in Information Technology to date has tended to focus on innovation attributes and user characteristics rather than the customer’s value-driven and its relative importance to adopt e-services [13]. Perceived value is a subjective concept that differs among bank customers. Although a number of factors have been suggested as important to understand mobile banking usage, very little attention has been given in literature to exactly what constitutes the value of mobile banking system. Therefore, this study proposes the necessity to examine the factors affecting the value held by bank customers toward the use of mobile banking services.

II. THEORETICAL BACKGROUND

Mental accounting theory proposed by Thaler [14] involves a process of coding, categorizing and evaluating the outcomes of the decisions. It explains the importance of transaction-related attributes associated with customer decision making in the presence of risk and uncertainty. Online purchasing decisions and the adoption of other technological applications can be explained using this theory by examining customer behavior towards the value of such technologies [15]. For users of mobile value added services, the value maximization might be their essential principle of decision-making. Mental accounting theory therefore is appropriate for the analysis of mobile banking services usage, as customers tend to make decisions based on multiple attributes. When a customer decides to avail a service such as mobile banking he goes through a mental process that considers the trade-off between what they get and what they give.

Customers’ adoption of technology to a significant level is related to decision making and thereby depending on the value
of technology, customers are expected to use a particular technology. Literature on technology adoption has keenly developed various models for use in describing the usage and adoption of technology among individuals. Venkatesh et al [16] introduced the Unified Theory of Acceptance and Use of Technology (UTAUT). This theory is based on four core determinants of intention and usage. It also deals with four moderators of key relationships. Users’ decisions in usage are keyed to what results they expect, other people’s influence, the persisting conditions, and the effort to be applied in usage. Both performance expectancy and effort expectancy have been found as important benefit factors toward new technology usage [13], [16].

III. COMPONENTS OF PERCEIVED VALUE

The most widely accepted definition of perceived value is the Zeithaml’s definition that is “the overall assessment on the product (or service) utility determines by customer’s perceptions of what is received and what is given” [17, p. 14]. In services, it involves the comparison of what one is getting (i.e., benefits) and what he has to give up (i.e., sacrifices) in order to receive the service [18]. Therefore, perceived value of mobile banking service in this study mean the customers’ overall perception of it benefits and sacrifices needed to use it.

From the conceptualization, perceived value consists of benefits and sacrifices. This study based on the thought that benefits and sacrifices are sometimes not equal. The difference could be positive or negative. The positive result will be customer perceived value, and the negative result will be customer perceived worthlessness [19].

The benefits include the value desired by the customer while sacrifices include monetary and non-monetary considerations [14]. Monetary sacrifice includes the price of the service, while non-monetary sacrifice includes elements like time and efforts. Therefore, to maximize the customers’ perceived value, firms must either enhance the perceived value like quality, relative advantages and/or decrease their sacrifice (e.g. cost paid, risk to take).

A. Benefit Factors

Customers are highly interested in the benefits that a service would offer them once it is used. In essence, the customer seeks to establish the value that the service will add in his or her life before making the decision to adopt. Accordingly, the service must be able to satisfy the needs of the customer and provide benefits that make the service worth to adopt. This study addresses the benefit factors that mobile banking customers look out for performance expected and level of effort required.

Performance expectancy denotes the degree to which customer believes that using the system will likely to improve his or her job performance [16]. Customers basically have high expectations whenever they undertake a particular service to satisfy their needs. They expect that the service will guarantee value for their money and that it will perform in accordance to their expectations. Information System adoption research proposes that “a system that does not help people perform their jobs is not likely to be received favorably” [20, p. 537]. In the context of the mobile banking services usage, performance expectancy can be defined as the degree to which the mobile banking could extend benefits to individuals in their banking activities [21].

Effort expectancy denotes the degree of ease with which an individual is likely to grasp the use of a system [16]. Ease of use is enhanced by the use of simple technology and applications that are easy to operate; such that little technical knowledge is required in using the system. Low effort expectancy can be said to be a benefit factor in the adoption of new technology and thus an important factor in explaining the usage of mobile banking. In this study, effort expectancy is defined as the degree of effort that a bank customer believes he or she needs to spend on using mobile banking services [22].

B. Sacrifice Factors

The costs of the service is considered as one of the most imperative factors in the decision making process. This is because it determines the customer’s ability to use the service depending on availability of the specified amount and their set budget. Perceived cost is the perceived quantifiable costs of acquisition and use of technology [24]. Referring to Luarn and Lin’s [11] definition, perceived financial cost is defined as “the extent to which a person believes that using mobile banking will cost money.”

Customers also think of the risks they undergo if they adopt the new banking through mobile services; especially due to the rising number of hackings and identity theft that has invaded the e-commerce sector. Many people feel like they have exposed themselves to the possible theft and misuse of their bank accounts in the event that hackers get access to their secret codes or from friends and relatives who are likely to access their mobile phones [1]. The customer may feel at risk and exposed to insecurity and uncertainty that makes him or her anxious about adopting mobile services such that they end up not enjoying the benefits derived from the mobile banking[25]. This study adopted Featherman and Pavlou’s [26] definition of perceived risk in electronic service context. Thus, perceived risk is defined as “a bank customer’s expectation of potential loss in the pursuit of a desired outcome of using mobile banking.”

IV. THE PROPOSED MODEL

The perceived value from the customer’s point of view based on mental accounting theory is the foundation of the
research model as depicted in Fig. 1. The mental accounting theory postulates that the customers undertake the analysis of a transaction in two stages. They tend to evaluate potential transactions, which are the judgment process and approve or disapprove each potential transaction, which is decision process [15]. Thaler [14] has outlined two types of utilities for evaluating potential transactions – acquisition utility and transaction utility. Acquisition utility represents the value of product or service received as compared to the total outlay while transaction utility refers to the perceived merits and risks of a specific transaction or a deal. Total utility of a service is the sum of the acquisition utility and transaction utility [14], [15].

The distinction between acquisition utility and transaction utility can be established on a theoretical basis. However, establishing such difference conceptually and empirically may be difficult because of the overlap in the total amount that a customer is expected to acquire or use the service [27]. Because of this difficulty, many previous studies have considered acquisition utility as conceptually similar to perceived value (total utility) [15], [27], [28]. Considering the empirical and conceptual feasibility, this study has undertaken step in measuring the transaction utility and total utility only. Transaction utilities represented by benefit and sacrifice factors in the research model (the judgment stage), i.e. that is measured from both monetary perspective (perceived cost) and non-monetary perspective (performance expectancy, effort expectancy and perceived risk). While total utility represented by perceived value (decision stage) in the research model.

P1: Performance expectancy has positive effect on perceived value in using mobile banking services.

P2: Effort expectancy has positive effect on perceived value in using mobile banking services.

On the other hand, service value has consistently been modeled as the difference between service quality attributes and sacrifice [31], [32]. In this context, sacrifice is construed as a broad construct that comprises monetary and nonmonetary costs. Research in retail service setting provides insignificant findings on the sacrifice–value relationship [33] while another research [31] found sacrifice to be a strong predictor of value across multinational and multiservice settings.

The perceived sacrifice includes all the costs the consumer has to undertake when using a service. While enjoying the benefits of mobile banking services, the customers have to bear some sacrifices including economic cost and non-economic cost. Economic costs include the purchase cost of the device and the subscription payable to the mobile service provider; the non-economic costs include the potential risk of using the facility. When users evaluate the mobile banking services they will consider the economic cost as an important determinant of adoption. If in the opinion of the users the economic cost is higher they will perceive lower values from the service, which is likely to have a negative influence on the usage of the service. Reference [30] results indicate that perceived costs of mobile banking service negatively affect perceived value. In addition, Gupta and Kim’s [15] study focused on the effect of perceived value on online purchase decision making such as online book-store. The study found that the perceived risk and perceived price negatively influence perceived value. Thus, current paper also proposes that sacrifice factors have negative effect on perceived value.

P3: Perceived cost has negative effect on perceived value in
using mobile banking services.

P4: Perceived risk has negative effect on perceived value in using mobile banking services.

V. CONCLUSION

Recent developments in mobile technology have enabled users to convert their handsets from plain tools of communication to more composite m-commerce gadgets. Nevertheless, only a handful of customers appear to be benefiting from the m-banking user application features that such technologies largely embody. This paper presents a new model as an attempt to a better understanding of mobile banking usage based on perception value using benefit factors (performance expectancy and effort expectancy) in conjunction with sacrifice factors (cost and risk). Improving customer usage rate of m-banking would have the effects of expanding the information and telecommunications sector along with the financial services industry. Hence, this paper may enable banks to develop a marketing strategic plan based on perceived value from the customer's point of view.

REFERENCES


BIographies

Layla Alsheikh was born in Jeddah, Saudi Arabia, on February 13, 1978. She graduated from the King Abdul Aziz University, Jeddah, Saudi Arabia in 2001 when she was awarded with the bachelor degree in computer science. In 2007, she was awarded with the master degree in public administration from the King Abdul Aziz University, Jeddah, Saudi Arabia.

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In addition to marketing of technological products, Dr. Bojei research interest also includes that of customer relationship marketing (CRM) and related areas, marketing strategy and services marketing. And of late, he has also embarked research in halal related issues in business particularly that of marketing and management. Had published in the areas of marketing (advertising, R&D-Marketing Interface), customer relationship marketing, and “halal business”.

International Conference on Management, Behavioral Sciences and Economics Issues (ICMBSE’2012) Penang, Malaysia