

MOBILE BANKING DIMENSIONS TOWARDS CUSTOMER SATISFACTION IN COMMERCIAL BANKS IN SRI LANKA: THE CASE OF GAMPAHA DISTRICT

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INTRODUCTION

The rapid development of wireless technology has enabled significant growth of mobile phone subscribers in Sri Lanka. Hence, mobile phones have created a platform to facilitate banking activities conveniently and efficiently, and it is widely recognized as mobile banking. Mobile banking can be defined as “a channel whereby the customer interacts with a bank via a mobile device” (Barnes & Corbitt, 2003). Mobile banking is an application of mobile computing that provides customers with the support needed to bank anywhere, anytime, using a mobile handheld device and a mobile service (Ravichandran & Madana, 2016). The Technology Acceptance Model (TAM), a widely recognized model, focuses on several dimensions to elaborate on technology adoption in business organizations. Usefulness, one of the significant dimensions, is considered as the degree to which using a particular system would enhance the individual’s job performance (Nysveen et al., 2005), and the same has been moderated and adapted as the perceived ease of use in the Technology Acceptance Model (TAM). The relationship between perceived ease of use and its effects on a user’s behaviour has been examined and supported extensively in the literature on Information Technology and Information Systems (Gahtani, 2001).

Another dimension of Relative advantage can also be defined as an innovation that provides greater customer service than its predecessors (Karayanni, 2003). The security dimension was first introduced in marketing research as an external variable in the study of innovation diffusion, and adoption contends that the speed of adoption is negatively related to the level of security (Frambach & Schillewaert, 1999). Reliability is identified as another significant factor that affects customer satisfaction. The context of mobile banking services significantly relies on reliability, which helps to uplift customer satisfaction (Sagib & Zapan, 2014). Compatibility with the user’s lifestyle and current needs are also considered the primary sources for building a theoretical framework to identify the impact of such technological platforms on business applications according to the Innovation Diffusion Theory.

Commercial banks in Sri Lanka strive to achieve a competitive position in the domestic market by building a strong relationship with customers by providing innovative services while maintaining quality and higher security standards (Kahandawa & Wijayanayake, 2014). Therefore, banks should invest and replenish their information technology initiatives to expand the confidence and satisfaction that customer aspires to through mobile banking services. The main advantage of this service is that customers can engage in transactions and perform banking activities around the clock. According to Ayoobkhan (2018), only 20% of

banking customers use mobile banking services out of 27.38 million smartphone users in Sri Lanka. This indicates that Sri Lankan customers are unwilling to rely on banking services through mobile phones.

On the other hand, the power of mobile banking showcases the utilization of multiple mobile banking channels to understand the mobile tools needed to become the premium choice for all banking service providers. This research study is mainly focused on understanding the usage of mobile banking services by Sri Lankan banking customers, focusing on customers' satisfaction regarding security and privacy. Hence, this research study attempts to answer the question of 'What is the impact of mobile banking services on customer satisfaction?' The general objective of this study is to identify the impact of mobile banking services on customer satisfaction, and commercial banks in the Gampaha district have been focused on implementing the study. Furthermore, this study was carried out with a specific objective to identify the impact of usefulness, ease of use, relative advantage, security, reliability, and compatibility on customer satisfaction about mobile banking services.

METHODOLOGY

This study has used a deductive research approach and quantitative research method to achieve the research objectives. The study has addressed the dimensions of usefulness, ease of use, relative advantage, security, reliability, and compatibility as the measures of the independent variable. Based on the dimensions following hypotheses were formulated.

H1: The usefulness of mobile banking services has a significant impact on customer satisfaction.

H2: Ease of use of the mobile phone for banking services has a significant impact on customer satisfaction.

H3: Relative advantage of mobile banking has a significant impact on customer satisfaction.

H4: The security of mobile banking has a significant impact on customer satisfaction.

H5: The reliability of mobile banking services has a significant impact on customer satisfaction.

H6: Compatibility has a significant impact on customer satisfaction.

The sample frame of the study comprised respondents who are banking customers of four leading commercial banks in the Gampaha district; Bank of Ceylon, People's Bank, Sampath Bank, and Hatton National Bank. Three hundred ten respondents from the population based on Krejcie and Morgan's table have been selected as the sample. A random sampling method was implemented to select the banking customers, and a purposive sampling technique was employed. An online questionnaire was distributed, and data were gathered under a 5-point Likert Scale.

RESULTS AND DISCUSSION

Following the data analysis, 59% of the respondents were men, and the rest were women. 71.6% of the respondents reported being employed, while the remaining were students and

business owners. 53.9% of the respondents were between 21 and 30, and 56.8% stated that they interact with the bank at least once every one to five years. The category with the highest usage rate for mobile banking platforms accounts for once a month, with 66.5% of the respondents.

Table 1 Descriptive Statistics

| Variable | Minimum | Maximum | Mean | Standard Deviation |
|--------------------|---------|---------|--------|--------------------|
| Usefulness | 1.00 | 5.00 | 4.1148 | 0.59662 |
| Ease of Use | 1.00 | 5.00 | 4.1032 | 0.65195 |
| Relative Advantage | 1.00 | 5.00 | 3.7252 | 0.67393 |
| Security | 1.00 | 5.00 | 3.4297 | 0.90716 |
| Reliability | 1.00 | 5.00 | 4.0845 | 0.52846 |
| Compatibility | 1.00 | 5.00 | 4.1639 | 0.70246 |

According to Table 1, the minimum value for ease of use, security, and compatibility can be stated as 1.00. The maximum value of all the independent variables was 5.00, except for relative advantage, which was 4.80. The compatibility factor has demonstrated the highest mean value, and the security factor has ended up with the lowest mean value according to the initial mean value analysis of data. The security factor has the highest standard deviation value at 0.90716, indicating that the data about the security factor has a higher dispersion from the mean value.

Table 2 Summary of Correlations

| Variable | Pearson Correlation | Significance Value (p-value) | Relationship |
|--------------------|---------------------|------------------------------|-------------------|
| Usefulness | 0.734 | 0.000 | Strong Positive |
| Ease of Use | 0.721 | 0.000 | Strong Positive |
| Relative Advantage | 0.552 | 0.000 | Moderate Positive |
| Security | 0.153 | 0.007 | Weak Positive |
| Reliability | 0.730 | 0.000 | Strong Positive |
| Compatibility | 0.797 | 0.000 | Strong Positive |

Pearson correlation values of usefulness, ease of use, relative advantage, security, reliability and compatibility were 0.734, 0.721, 0.552, 0.153, 0.730 and 0.797 respectively at 0.01 significance level. Therefore, it can be specified that all independent variables have a positive correlation with the dimension of customer satisfaction with mobile banking services. The correlation analysis depicted the significance value for all independent variables as 0.000, and the significance value of the 'security' variable was 0.007, which affirms the statistical significance of independent variables.

Table 3 Model Summary

| Model | R | R Square | Adjusted R Square | Durbin-Watson |
|-------|-------------------|----------|-------------------|---------------|
| 1 | .844 ^a | .714 | .708 | 1.899 |

The study has assumed multiple regression to identify the significant impact of dependent variables and factors that affected customer satisfaction in commercial banks. In this case, the

R square value was 0.714, which means 71.4% variance in the dependent variable is explained by particular independent variables.

Table 4 Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | .219 | .171 | | 1.281 | .201 |
| Usefulness | .226 | .065 | .200 | 3.486 | .001 |
| Ease of Use | .109 | .056 | .105 | 1.934 | .050 |
| Relative Advantage | .112 | .043 | .112 | 2.623 | .009 |
| Security | -.045 | .025 | -.060 | -1.772 | .077 |
| Reliability | .137 | .079 | .107 | 1.724 | .086 |
| Compatibility | .434 | .049 | .453 | 8.883 | .000 |

Based on Table 2, the following model can be derived to test the impact of mobile banking services on the dimension of customer satisfaction.

$$CSMBS = 0.219 + 0.226(U) + 0.109(EU) + 0.112(RA) - 0.045(PR) + 0.137(R) + 0.434(C) + \mu$$

The significance values for the dimensions of usefulness, ease of use, relative advantage, security, reliability, and compatibility were 0.001, 0.050, 0.009, 0.077, 0.086, and 0.000, respectively. Variables of usefulness, ease of use, relative advantage, and compatibility were considered statistically significant variables that impact customer satisfaction since the 'P' values of these four variables were less than 5% of significance. Therefore, H1, H2, H3, and H6 can be accepted. This has been proved by Nysveen et al. (2005) and Ravichandran and Madana (2016).

The dimensions of security and reliability were considered statistically insignificant variables on customer satisfaction since the 'P' value of these variables were 0.077 and 0.086, respectively, and higher than the level of 5% significance. Therefore, H4 and H5 can be rejected. This has been proved by Karayanni (2003).

CONCLUSIONS AND IMPLICATIONS

Mobile communication has reached the grass root of society as everybody can own a mobile device at an affordable cost and has laid the foundation for the emergence of several business models. Mobile banking has been identified as one of the alternative delivery channels in the banking sector. However, the success of mobile banking remains questionable, especially in the Sri Lankan setting, due to several concerns. Data were gathered from 310 respondents using an online questionnaire. Reliability testing, frequency analysis, descriptive statistics, correlation analysis, and regression analysis were conducted. Gampaha district has been selected to implement the study to identify the impact of mobile banking services on customer satisfaction. Regression analysis was this study's primary data analysis technique, and it revealed that usefulness, ease of use, relative advantage, and compatibility were significant

variables that affect customer satisfaction. On the other hand, security and reliability were insignificant variables in enhancing customer satisfaction.

The study recommends that banks customize their products and services according to customer requirements and consider usefulness, ease of use, relative advantage, and compatibility, except for security and reliability, especially concerning technological adoptions. Banks and mobile service providers must work together to revolutionize the mobile banking industry. Banks need to raise customer awareness of their offerings to meet consumer expectations. Mobile banking will enhance the services offered through technological platforms at a significant level. It will increase the number of customer adoptions of mobile banking. As a limitation of this study, the focus on urban customers of mobile banking platforms can be identified, and future research could be carried out with the respondents who represent both rural and urban communities. In conclusion, this study also helps the industry develop a clear understanding of business requirements and gain a more excellent vision to improve the knowledge and skills to integrate and utilize mobile banking platforms while reducing the risks involved.

Keywords: Commercial bank, customer satisfaction, mobile banking

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