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CUSTOMER SATISFACTION ON USAGE OF MOBILE BANKING SERVICES IN SRI LANKA

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AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The rapid growth of using technology by phones has led the banks to obtain their goals and has added a different aspect to banks. Consequently, at present mobile banking plays a significant role in providing banking services and its immense contribution to the development of the nations by simulating better financial services. This study intends to analyze customer satisfaction with the usage of mobile banking in Sri Lanka. Primary data were gathered using 100 customers in commercial banks and secondary data were collected from relevant articles, books, annual reports, and other relevant documents. Collected data were analyzed by descriptive research methods and hypothesis tests using SPSS software. The findings revealed that there are positive relationship between reliability, responsiveness, ease of use, security, accessibility, and privacy of mobile banking and customer satisfaction.

Keywords: Mobile banking; financial sector; banks; e banking; reliability; responsiveness; privacy.

1. INTRODUCTION

Online banking can also be defined as Internet banking, E-banking, and Virtual banking. Most importantly, it is a characteristic that is introduced by the bank to its customers log in to their individual registered domain account on the bank website and do almost every transaction normally they do by visiting the bank. It gives the authorization to customers to engage in financial transactions on more reliable websites handled by retail or virtual banks. Moreover, it is carried out through a personal computer that is connected to a banking website via the internet. It can even be handled with the assistance of wireless technology on Personal Digital Assistants (PDAs) and cellular phones as well as enabling to transfer money between accounts, pay bills, view statements, and perform other financial transactions over the internet. In order to eliminate the need of building branches and to give services to customers more efficiently, banks can be observed the use of the internet to transfer information about financial services, replace transactions done in the branch office. Online banking also provides 24-hour telephone support, so that customers are able to discuss their needs with bank service respective directly [1].

The use of online banking is immensely greater and as more and more customers tend to sign up for online banking, the advancement as regards remote banking (i.e. banking outside the banking hall) is gradually increasing. Hence, it is convenient for the users to carry out banking transactions because of

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online banking. However, this advantage cannot be achieved if the user is out of access to the internet. Furthermore, engaging in banking transactions is completely impossible while waiting for the bus or having lunch if someone does not have the access to the internet. In order to overcome this difficulty, mobile banking has been replaced since the user has the access to a mobile phone all day, at all times. In order to achieve a conveniently banking mode, a user-friendly and fast mode of banking has to be explored to reach the expected standards of mobile banking [2].

1.1 Concept of Mobile Banking

When it is considered the definition is given to mobile banking by Federal Reserve [3] it defines mobile banking as, "*Using a mobile phone to access your bank or credit union account. This can be done either by accessing your bank credit union's web page through the web browser on your mobile phone via text messaging or by using an app downloaded to your mobile phone*"

Mobile banking has become so convenient and widely popular over internet banking just because it enables anywhere, anytime banking services and it is possible to access their bank accounts without the need of a computer terminal [4]. Mobile banking provides customers with a number of financial functions such as merchant's commercial payments, utility bill payments, person-to-person transfers, business-to-business transfers, and long-time remittances [5]. It is essential for the customers to follow up pre-determined in the manner that process to get the services offered by the bank. As depositing, withdrawals, checking statements, balance inquiry, as well as transfers within and outside the country, require verification, authentication, and eventually transaction [6]. Mobile banking is good to be the most significant value-added service and banking facilities provided by mobile banking services have been beneficial for financial institutions to diminish traditional face-to-face transactions through automated services wherever possible [7].

1.2 Evolution of Mobile Banking

The impact on the bank services to customers which provided them access to the bank no matter was significant in the past with the use of online banking. It enabled the customers to analyze the status of the bank account as well as to be engaged in other transactions including deposit accounts and pay bills from home or office with no hassle. In order to avoid the major constraints of online banking which are the computer and the access to the internet, mobile banking has been replaced as a model of online banking, which is made easy only the mobile phone. The outstanding advantage of mobile banking, when in comparison with online banking is there are not any restrictions in space, easy access, and the rapid growth of mobile phones. However, the evolution of mobile banking arises as follows [8,9].

The introduction of GPRS technology in late 19999 and 2000
The introduction of personal office mobile services
Introduction of mobile money (2000)
The introduction of Third Generation mobile (in late 2001)

Ever since the very first mobile banking in the late 1990s it has experienced five marked stages. At the primitive stage of mobile banking, the basic mobile banking operations such as setting bills and sending SMS from the bank to the customers and vice versa were carried out. At the second stage, the accounts of depositors and related services to mobile banking services were added to the mobile banking services. In order for the effective performance of banking services carried out by mobile, other media such as the internet and telephone, intelligent hones were replaced at the third stage. Along with the development of operating systems such as Android and JP phones, it can be observed that mobile internet access and connecting to operating systems of the bank has made it easier and more effective in the fourth stage. Finally, at the fifth stage of mobile banking, modern and sophisticated technologies like radio frequency identification and chips have been replaced to perform mobile payments and banking network connections to visa card and master cards systems [9].

When mobile technologies are explained in the global context, many banks have been providing mobile banking in phases, most starting with basic SMS banking and browser and then moving to include downloadable applications. However, the banking services were powered by SMS communication which was known as SMS banking earlier. SMS banking is supposed to be the most straightforward means which is reconcilable with virtually all mobile phones. It is perfectly suitable for transactions in which customers can make a request for information and services simply by sending a SMS to a published number. Banks tend to use this service in order to alert customers regarding activities on their bank accounts [10,11]. Later on, mobile web was established and mobile banking was rendered through WAP (Wireless Application Protocol). It can be defined as a means of mobile web which makes it possible for customers to easily access their accounts

through a real-time data communication mode via mobile web pages [12]. Because of the restriction of WAP to a particular set of handsets, USSD (Unstructured Supplementary Services Data) was put into practice which made the authorization to real-time synergistic access to bank accounts on many basic handsets. USSD mobile banking is a user-friendly technology that is a menu-driven interactive service making the use of conversation the same as telecom protocol initiated by just dialing a short code allocated to a bank. Mobile APPS has acquired significant popularity all over the world because of escalated use of smartphones. As the USSD does not necessitate internet connectivity, it has become a convenient form of mobile banking [13].

At present mobile banking has made vast progress to the use of a magnificent client programme called mobile APPS which is downloadable to the mobile devices used for mobile banking, along with the expansion of smartphones. However, this is the latest generation of mobile banking applications, providing a vast range of inclusive features likewise richer user interface and mobile device specific user interface enhancing customer experience [14]. However, in order to achieve customers' experiences in the use of mobile banking, each of the above mobile banking technologies offers a different kind of function. Although each technology has its own pros and cons, when considering it as a whole they create an ideal offer that recognizes the full approach of the mobile banking network.

1.3 Mobile Banking Services

The key services of the mobile banking system can be classified as follows as claimed by Laukkanen & Pasanen in [15]

- The accessibility to acquire a wide range of facts related to customer accounts.
- Being able to purchase of stores shopping centers and costs pay in hotels
- Monitoring the reliability market, transfer buying and selling securities through mobile web
- Check and replace services
- The possibility of paying bills through mobile phones from mobile banking

Moreover, according to Mishara & Sahoo, [4] services provided by the banks on mobile banking are as follows,

- Account Details: Elucidate the facts about the accounts and followings are the main services of accounts.
- Mini-Statements and checking of account history
- Alerts on account activity
- Monitoring of terms deposits
- Payments and Transfers:
- Mobile recharging
- Commercial payment processing
- Bill payment processing
- Investment Details: Define the facts related to investment services.
- Portfolio management
- Real- time stock quotes
- Personalized alerts and notifications on security price supports
- Status of requests for credit including mortgage approval and insurance coverage
- Check book and credit requests
- Exchange of data messages and e-mail including complaint submission and tracking

2. LITERATURE REVIEW

Based on the prior researches related to mobile banking, researcher has identified the mobile banking dimensions. Hence, the following table will be shown the some of the mobile banking dimensions which have found in oldies and new previous studies. The following dimensions of mobile banking are selected regarding to the previous studies.

2.1 Reliability

If banks can perform their services in a more satisfactory and consistent manner through a mobile phone just as done by physical branches, it can be referred to the reliability. It includes stability and as well solidity which means being honored to the promises specifically made by, firm‟ billing accuracy, accurate record-keeping and carrying out the service at the designated time [16,6]. According to Wang and Lin, 2003 have mentioned the way of saving reliability in banking service is to be aware of the flow of bank counter service system, observing the probable errors of the project on the system‟s degree of influence over the counter service system. And as well as the proposed submission to optimize bank counter service dependability according to the findings. Moreover, the solidity of performance and delivery service effectively and efficiently better than the first time can be defined as the reliability and also perform what has been promised to the deist. This includes such as the precision of the accounts and files without any error, provision of effective banking service, punctuality of providing services, and as well as the solidity of the performance level of service [17].

2.2 Responsiveness

The readiness of a company to assist customers and provide swift service can be identified as responsive [18]. It scrutinizes the eagerness or willingness of employees to provide service. It necessitates promptness of service: a transaction slip is mailed forthwith, calling back the customers promptly and providing prompt service [6,].

2.3 Ease of Use

Ease or simplicity of use of pioneering product and service is one of the prime factors to affect customer satisfaction. Availability of navigation tools in the websites and the user-friendliness of domain names are important determinants of ease of use [19,20]. Moreover, due to the easiness of the process of using mobile banking, any additional skills not needed to use the application just need to install the application in their mobile (Sharma & Singh 2012). When considering, technology link to the product, the ease of use always remains a very deprecatory issue in customer satisfaction. It is obvious that the mobile handsets as a device have a major effect through comparatively small and complicated when comparing mobile banking and ATM [7]. The extent to which an individual presumes that using a specific system or innovation would be unrestricted of physical or mental effort. If a system or innovation is easy to learn and use, a customer is believed to be adopted. If the process of usage is efficient for customers, customer satisfaction on mobile banking is more probable to take place [21]. According to Asfour & Haddad, application design is to be dependent on functional and attractive elements which cause the ease of use can be identified with the standard language, page actualization, availability of a large number of clickable items, information search engine in virtual stores and clear information contents.

2.4 Security

Security is the pillar of any business. Security and reliability are supported to be the key factor within the target component when making a decision on banking service [22]. Security mainly exists on the assumption by a particular party while the other makes an assurance for a commendatory to them and it has been contemplated as a means to establish a frequent platform that safeguards long-standing and interactively related [23, 29]. The tendency of customers to have a trust on traditional bricks and mortar as subjected by the human nature, the banks which do not have a foresee, weakness the prospect for creating unrelated mobile banking services, even in emerging markets In spite of the limited capability of mobile devices which make it rather difficult to communicate the brand message to the customer, however, the expansion of trust for existing bands is a strong probability (Barnes & Corbitt, 2003)

2.5 Accessibility

Investing in substitute delivery service channels which act as ATMs, caused decreasing the number of branches internationally, reducing opening costs. For instant, the Bank of America closed one-third of their *country-wide* branch network meanwhile escalating ATMs by reducing over 9% from in 1983 down to 5,876 in 1993. Service accessibility impact in many banking offices per unit of the market are, represents a significant element of the countrywide level of service provided to financial consumers, the technology of the internet has made interior banking that facilitates bank's customers to be engaged in banking transaction anywhere as long as they have the accessibility to the internet. Moreover, customers may have the accessibility to the websites or applications based on how convenient to use and effective in helping them achieve their tasks (Zeithaml et al, 2002). The significance of accessibility in the banking sector can be recognized as service accessibility as influenced by the number of banking offices per unit of the market area that stands in for an important element of service offered to financial consumers where banking offices reasonably spare. Hence, the convenient attainability by telephones waiting time to receive service is not substantial, serviceable hours of operation and convenient location of service delivery. Consumers may have easy access to the websites or applications depending on how convenient they are to use and functional they are in assisting them to attain their tasks (Jepleting et al., 2013).

2.6 Privacy

When privacy is defined, it is to what extent the mobile banking service is safe, reliable, and trustworthy towards protecting customers' banking information from any interruption. Technological shortcomings can be observed even in some developing countries as a result customers regularly oppose the transference of their personal bank accounts or transactional information over any other substitute channels outside the physical branches of the banks [24]. In other words, privacy is an E-service collaboration companies to gather information customers such as habits of purchasing, needs and details and information on the accounts and expanse of transactions and motions of the calculations and the data that has a reflection upon customer privacy

bank is on these terms to keep the privacy [17]. Therefore, any issues that occur in privacy equivalent to the mobile banking service can be assured by the banks, spontaneously be assured of the performance of the service. Hence, privacy can be considered as a key factor of customer satisfaction on mobile banking[.30,31]

3. RESEARCH METHODOLOGY

This study aims to identify the impact of mobile banking on customer satisfaction. This section mainly focused on presenting and analysing the collected data by using appropriate statistical tools and methods Data was collected from 100 customers in the commercial banking sector in Sri Lanka. Primary data were analysed using the computer-based Statistical Data Analysis Package for Social sciences (SPSS) version 22. Descriptive analysis was made on collected data and then the simple regression analysis was used to test the related hypotheses developed by the researcher.

3.1 Demographic Characteristics of Respondents

This section focuses to present the demographic information of the respondents with reference to their bank category, living area, age, gender, educational level, occupation, monthly income level, and usage period of mobile banking. Therefore, frequencies and percentages were used to determine how often respondents made a certain response in answering questions.

3.1.1 Bank category of respondents

As reflected in the following Fig. 1, 63% of the mobile banking users have been selected or deal with private banks while 37% of mobile banking users involve with state banks in order to obtain mobile banking services. Hence, Mobile banking users of private banks are higher than when compared to the mobile banking users of state banks.

Moreover, according to the above Fig. 1, it as well indicates that the majority of mobile banking users obtain their mobile banking services from private banks which record the highest percentage value. On the other hand, less number of mobile banking users have selected state banks in order to obtain mobile banking services. As far as the researcher is concerned, many mobile banking users tend to join the private banks in comparison with state banks, as a result of their effectiveness, the quality of their service, and as well as the reliability of their security system. Moreover, because of the combative competition among private banks, they tend to provide user-friendly and effective service of mobile banking in order to satisfy their customers and expand their customer base. Nevertheless, more private sector banks of Sri Lanka are working towards it compared to that of state sector banks and it might be the reason for the private sector bankers a higher growth rate of mobile banking users because of the quality of services rendered by the private sector banks [26-28]. Further, on comparing the mobile banking adoption frequency by mobile banking users on the persuasion of bankers or on their own between state and private sector banks, the results of the present study revealed that due to the lack of awareness, guidance, persuasion especially by state bankers might cause for the lower growth rate of mobile banking users in state banks in Sri Lanka. Hence, most mobile banking users tend to get their mobile banking facilities from private banks other than the states banks in Sri Lanka. [32] However, as mobile banking is a new and most user-friendly technique, there is a need for both private and state banks to work on the same priority in Si Lanka.

3.1.2 Relationship between living area and gender of respondents

According to the following Fig. 2, male users of mobile banking are higher than the female mobile banking users out of the three sectors. Out of the total male mobile banking users, the majority are from urban areas while the least amount of males users are from rural areas. Conversely, female mobile banking users are highly recorded from the urban while the least amount of females are from the rural area. Hence, it is clear that the majority of the mobile banking users are males in urban areas than in semi-urban and rural areas while the female mobile banking users are less in number when compared to the male respondents in these three sectors. When comparing the male users in an urban area and rural area, male users of mobile banking users in urban areas (29) are higher than the male users of mobile banking in rural areas (13) because of their occupation and income level. Basically, it can be found that mobile banking users in rural areas normally engage in minor businesses than the businesses handled by mobile banking users in urban or semi-urban areas. And the income level of mobile banking users in rural areas are not generally higher than the income earners of urban areas.

Moreover, as indicated by the above Fig. 2, the female users of mobile banking in urban areas (16) and female mobile banking users in the rural area (9) mainly might be the reason for usage patterns, preferences and daily household activities of them. In

general, most of the females in rural areas rarely engage in occupations than the female in urban areas. In rural areas, females are generally engaged in self-employment which does not normally provide a higher income level. In addition, females in rural areas basically depend on traditional banking habits and they normally engage in traditional ways of saving money rather than the banking habits of females in urban areas. Moreover, during the period of the survey, it could be easily identified that most of the females in rural areas engage with rural banks according to patterns of their way of life. As a result that females in rural areas are less interested in using various types of technology as they normally have negative features on them. Hence, these facts might because to the lack of mobile banking users in rural areas. Further, male and female users of mobile banking in semi-urban areas are not less than the users of mobile banking in rural areas and higher than the urban areas. Therefore, female and male users of mobile banking in semi-urban have mixed characteristics of both users in urban and rural areas. Finally, it can be stated that, when comparing with mobile banking users of both males and females in urban and semi-urban areas, it can be seen that there is less interest among the males and females in a rural area to use mobile banking due to specific reasons which discussed in above.

3.1.3Age Level of respondents

The percentage of respondents according to their age is represented by the following Fig. 3. 30% of mobile banking users were from 18-28 years of age. 43% of the sample was from 29-39 years of age. 19% of the sample was 40-50 years of age and 8% of the mobile banking users were above 50 years of age. This disparity of age of mobile banking users also can be identified by the following Fig. 3.

The above figure reflects the age groups that participants fall into the least of mobile banking users of the sample were above 50 years of age. Among all the age categories considered in the study, the study shows that mobile banking users between the ages of 29-39 are in the dominant group. The reason for the high tendency of usage of mobile banking among the category of 29-39 may be they are always in touch with the trends of technology and the readiness of accepting convenient and effective methods of providing services, especially by banks. However, what has discouraged the use of mobile banking services among those above 50 years can be identified that the less interested in accepting the latest innovations of the technology particularly when engaged with banking services. Therefore, the percentage of mobile banking users in middle age groups is greater compared to youngest users of mobile banking and older age groups.

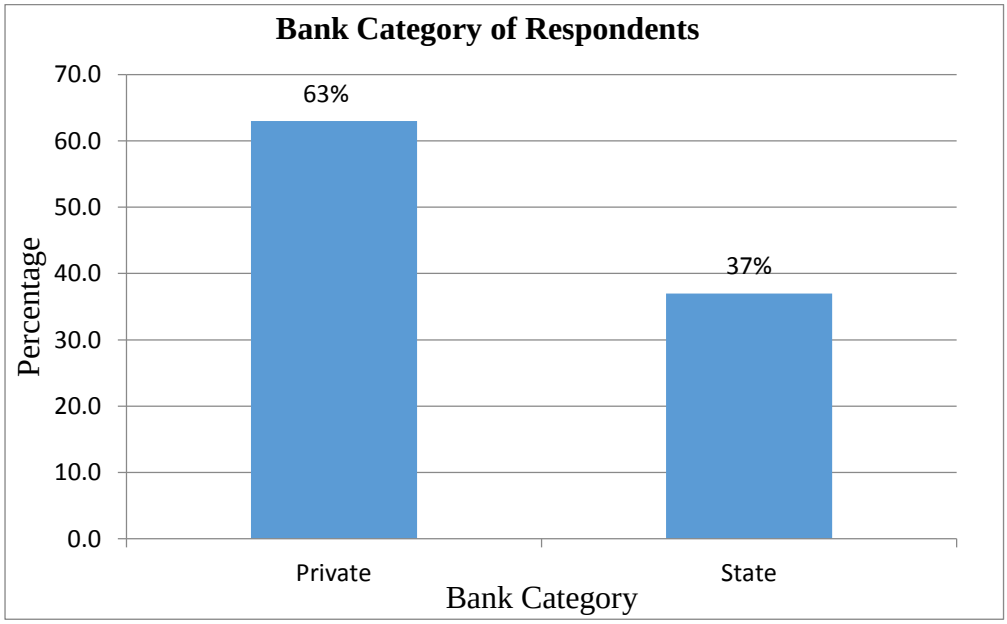

Fig. 1. Bank category of Respondents
(Source: Research Data)

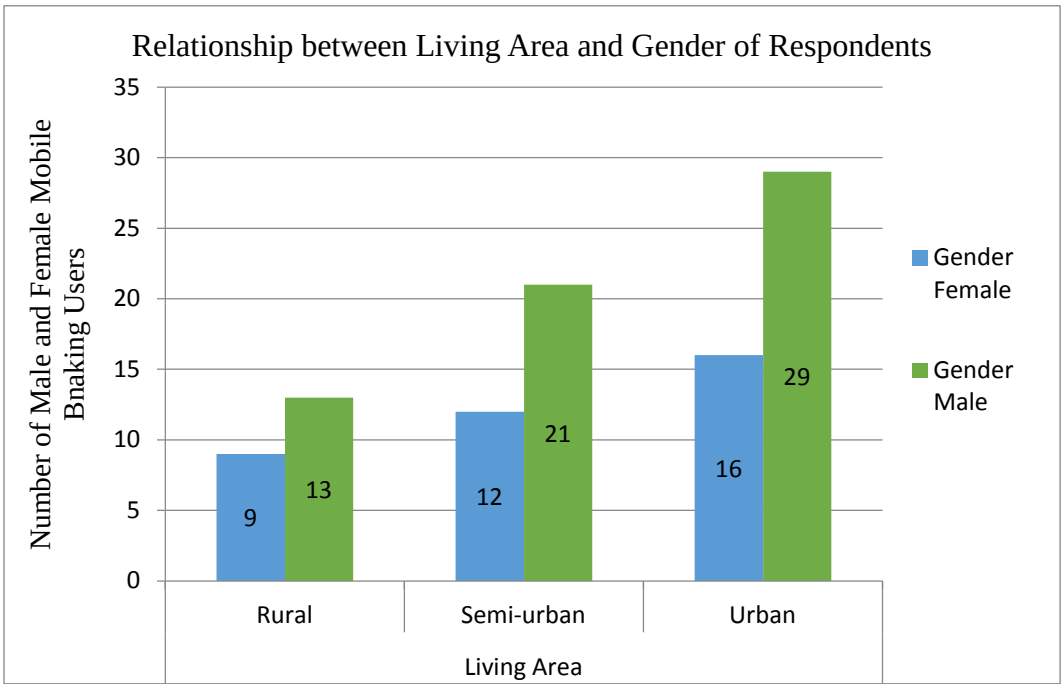

Fig. 2. Relationship between living area and gender of respondents

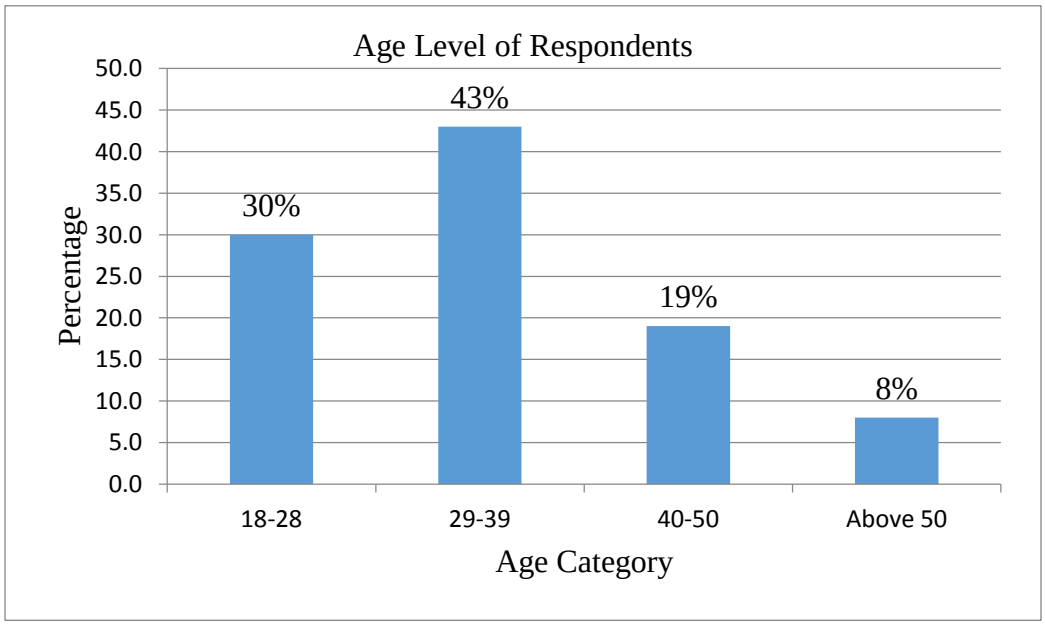

Fig. 3. Age Level of respondents
(Source: Research Data, 2016)

3.1.4 Education level of respondents

According to the following Fig. 4, in the present study, 16% of the mobile banking users have completed their studies up to O/L s. Conversely, 30% of mobile banking users have completed their up to A/L s. 20% of mobile banking users are diploma holders while 34% of mobile banking users are degree holders. The following diagram also indicates the mobile banking users according to their education level.

According to the above figure, the majority of the mobile banking users were degree holders. The least of them of the mobile banking users belonged to the category who have completed their primary education

(up to O/L s). However, in the researcher's point of view, more well-educated people are interested in using mobile banking services as the fact that they can easily cope with the service although it is sophisticated. On the other hand, it could be found that while carrying out the survey, less educated people, particularly users who completed their education up to O/L s find it difficult to be engaged in the services and necessity have to ask for the assistance of employees of the bank in order to operate the mobile banking services. Therefore, it shows that the higher educated category is widely adopted in mobile banking.

3.1.5 Monthly income level of respondents

According to the monthly income levels of the respondents of mobile banking that illustrated in Fig. 5, 16% of the mobile banking users belong to below Rs.20,000 income level category and 29% of the mobile banking users belong to the Rs.20,001-50,000 income category. 32% of mobile banking users have earned Rs.50,001-100,000 and 23% have earned more than Rs.100,000 per month. This state also can be identified by considering the following Fig. 5.

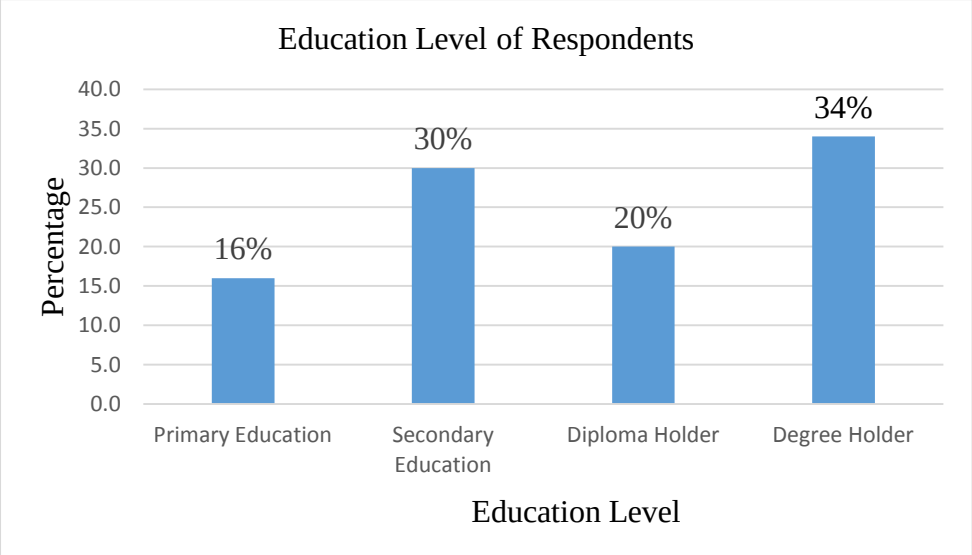

Fig. 4. Education level of respondents
(Source: Research Data)

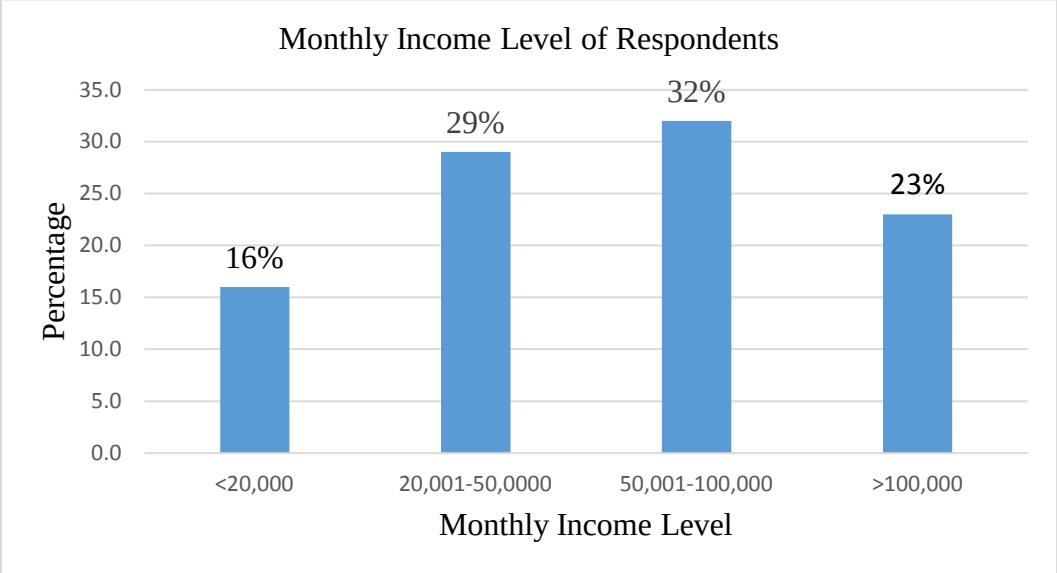

Fig. 5. Monthly income level of respondents
(Source: Research Data,)

According to the above figure 5 which indicates the monthly income level of the mobile banking users, out of the total mobile banking users belong to the Rs.50,001 to 100,000 income level category. On the other hand, the least number of mobile banking users belongs to below Rs.20,000 in the income level category. The people who have high monthly income levels can also be observed using mobile banking services as they fact that being engaged with financial transactions and expect high safety and security for their money. Because of the high cost of obtaining mobile banking services more people who have low income do not tend to use mobile banking. Hence, it shows that the level of monthly income is a core factor and has a strong effect on the adoption of mobile banking services.

3.2 Effect of Demographic Characteristics on Selected Mobile Banking Dimensions

The present study related with some cross-tabulations is presented below in order to identify the effects of demographic characteristics on selected mobile banking dimensions. Hence the following section will present the results of the cross-tabulations which was used to identify the effects of demographic characteristics on selected mobile banking dimensions.

3.2.1 Relationship of period of usage and reliability

Table 1 shows that when the period of usage is higher it caused to increase in the satisfaction of mobile banking users. However, they are not extremely satisfied or satisfied with the reliability of mobile banking. Most of the users have a neutral level about the reliability of mobile banking. It shows that although the increment of a period of user satisfaction is caused to higher due to some security problems which arise in the mobile banking system, it causes the neutral level for the reliability of mobile banking. On the other hand, although they have a neutral level on the reliability of mobile banking, they do not focus to get rid of using mobile banking as mobile banking responds to them promptly.

3.2.2 Relationship of education level and ease of use

Table 2 shows that higher educated respondents are positive in their answer of ease of use of mobile banking services. Moreover, among the respondents who have below level of education, maximum **is** neutral about the ease of use and the users who have education at the higher level are positive with their **answers.** Therefore, it realized that education level has **a** strong effect on the ease of use of mobile banking. Higher the education level, mobile banking users are more satisfied or positive about the ease of use.

3.2.3. Relationship of age level and security

Most of the respondents are between 29-39 age of years. Among the respondents aged 18-29 are positive about the security of mobile banking. The majority of the mid-aged mobile banking users are with neutral satisfaction level compared with the other age groups. On the other hand, mobile banking users who are aged between 40-50 and above 50 are negative about the satisfaction regarding the security of mobile banking services with comparing to the other age groups. Therefore, it is clear that the age range affects the security of mobile banking services. Low-aged people have more trust about the security factor of mobile banking services than higher age. The more the age range people are more reluctant about the security of mobile banking services.

3.2.4 Relationship of Bank Category and Responsiveness

According to Table 4, mobile banking users in the private bank sector are more satisfied with the responsiveness of mobile banking services than the mobile banking users of state banks. This also may be a reason for the use of mobile banking services although mobile banking users are reluctant about reliability and security. However, as they get prompt responses about their services they do not get rid of using mobile banking. Moreover, it is also clear that private sector banks are a good response to their mobile banking customers than the mobile banking customers in state banks. Furthermore, as the result of shift responses made by private banks to the customers whenever an error occurs in the security system of mobile banking when compared to state banks, more people are satisfied with the service provided by private banks in spite of sudden breakdown in the security system. Thus, it can be concluded that when responsiveness cause to increase then it results in increasing in the satisfaction level of mobile banking users. Particularly, the higher response rate of private banks compared to state banks cause higher satisfaction of mobile banking users in private banks.

3.3 Mean and Standard Deviation of Study Variables

Table 5, indicates the mean values and the standard deviations for the study variables. The mean values for the study variables are varying from 8.69 to 12.50

while the standard deviation varies from 2.263 to 1.583. However, according to the above results accessibility got the highest mean value (12.50) with a standard deviation (2.263). Conversely, security got the lowest mean value (8.96) with a standard deviation (1.825). Based on the index which constructs to identify the degree of satisfaction by considering the mean values of study variables shows that, mobile banking users are satisfied with accessibility, ease of use, and responsiveness while mobile banking users have neutral satisfaction on reliability, security, and privacy. When ranking the variables according to their mean values accessibility at the first 12.50) and then ease rank of use (11.83) and responsiveness at the third rank (10.66) and security got the lowest rank among all dimensions. However, according to the results, they indicate that generally mobile banking users of Sri Lanka are positive or satisfied with the accessibility of mobile banking as it supports them to access anywhere and anytime rather than the physical branch banks. Hence it cause to get the first rank among the mobile banking dimensions while the security got the lowest rank as the majority of mobile banking users are highly concerned about the security of mobile banking and most of them have neutral satisfaction about the security of mobile banking.

Table 1. Cross tabulation of period of usage and reliability

Period of Usage	Reliability			Total
	Dissatisfied	Neutral	Satisfied	
<6 Months	1	14	11	26
6-12 Months	7	22	13	32
>1 Year	3	19	10	42
Total	11	55	34	100

(Source: Research Data, 2016)

Table 2. Cross tabulation of education level and ease of use

Education Level	Ease of Use			Total
	Neutral	Satisfied	Extremely Satisfied	
Primary Education (Up to O/L)	7	6	3	16
Secondary Education (Up to A/L)	6	14	10	30
Diploma Holder	2	14	4	20
Degree Holder	0	19	15	34
Total	15	53	32	100

(Source: Research Data, 2016)

Table 3. Cross tabulation of age level and security

Age Level	Security			Total
	Dissatisfied	Neutral	Satisfied	
18-28	3	18	9	30
29-39	2	37	4	43
40-50	5	9	5	19
Above 50	5	1	2	8
Total	15	65	20	100

(Source: Research Data, 2016)

Table 4. Cross tabulation of bank category and Responsiveness

Bank Category	Responsiveness			Total
	Neutral	Satisfied	Extremely Satisfied	
Private Bank	20	33	10	63
State Bank	11	20	6	37
Total	31	53	16	100

(Source: Research Data,)

Table 5. Mean and standard deviation of study variables

Variable	Mean	Standard Deviation	Degree of Satisfaction
Reliability	9.67	1.583	Neutral
Responsiveness	10.66	1.671	Satisfied
Ease of use	11.83	1.741	Satisfied
Security	8.96	1.825	Neutral
Accessibility	12.50	2.263	Satisfied
Privacy	9.89	1.645	Neutral

(Source: Research Data,)

3.4 Hypotheses Testing and Discussion of the Results

The study is mainly based on five main hypotheses to identify the impact of mobile banking on customer satisfaction. Hence, in this section researcher will focus to test and analyse the results of the study hypotheses.

H1: There is a significant impact of reliability of mobile banking on customer satisfaction.

To test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the reliability of mobile banking service and customer satisfaction in this research was (R=88.9%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of reliability of mobile banking in Sri Lanka is not less than the acceptable percentage as (R2=0.791). Hence, (79.1%) of the total difference in customer satisfaction on mobile banking is determined through the reliability of mobile banking services.

Therefore, researcher reject the null hypothesis as it prove that there is a positive impact of reliability on customer satisfaction (β=0.906) at the significant level of (0.000).

H2: There is a significant impact of responsiveness of mobile banking on customer satisfaction.

In order to test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the responsiveness of mobile banking service and customer satisfaction in this research was (R=90.9%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of responsiveness of mobile banking in Sri Lanka is not less than the acceptable percentage as (R2=0.827). Hence, (82.7%) of the total difference in customer satisfaction on mobile banking is determined through the responsiveness of mobile banking services.

Therefore, researcher reject the null hypothesis as it prove that there is a positive impact of responsiveness on customer satisfaction (β=0.877) at the significant level of (0.000).

H3: There is a significant impact of ease of use of mobile banking on customer satisfaction.

To test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the ease of use of mobile banking service and customer satisfaction in this research was (R=85.6%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of ease of use of mobile banking in Sri Lanka is not less than the acceptable percentage as (R2=0.732). Hence, (73.2%) of the total difference in customer satisfaction on mobile banking is determined through the ease of use of mobile banking services.

Therefore, researcher reject the null hypothesis as there is positive impact of ease of use on customer satisfaction (β=0.792) at the significant level of (0.000) (Appendix 3).

H4: There is a significant impact of security of mobile banking on customer satisfaction.

To test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the security of mobile banking service and customer satisfaction in this research was (R=86.9%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of security of mobile banking in Sri Lanka is not less than the acceptable percentage as

(R2=0.755). Hence, (75.5%) of the total difference in customer satisfaction on mobile banking is determined through the security of mobile banking services.

Therefore, researcher reject the null hypothesis as the results of simple regression revealed that there is a positive impact of security on customer satisfaction (β=0.768) at the significant level of (0.000).

H5: There is a significant impact of accessibility of mobile banking on customer satisfaction.

To test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the accessibility of mobile banking service and customer satisfaction in this research was (R=89.0%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of accessibility of mobile banking in Sri Lanka is not less than the acceptable percentage as (R2=0.792). Hence, (79.2%) of the total difference in customer satisfaction on mobile banking is determined through the accessibility of mobile banking services.

Therefore, researcher reject the null hypothesis as the results of simple regression analysis revealed that there is a positive impact of accessibility on customer satisfaction (β=0.634) at the significant level of (0.000).

H6: There is a significant impact of the privacy of mobile banking on customer satisfaction.

In order to test this hypothesis, the researcher computed simple linear regression as shown in the following table. According to the results, it showed that the strength of the relation between the privacy of mobile banking service and customer satisfaction in this research was (R=86.0%). Moreover, according to the coefficient of determination (R2) which explained the difference percentage in the customer satisfaction due to the influence of privacy of mobile banking in Sri Lanka is not less than the acceptable percentage as (R2=0.740). Hence, (74.0%) of the total difference in customer satisfaction on mobile banking is determined through the privacy of mobile banking services.

Therefore, researcher reject the null hypothesis as the results of simple regression analysis revealed that there is a positive impact of privacy on customer satisfaction (β=0.844) at the significant level of (0.000)

Table 6. Impact of reliability of mobile banking on customer satisfaction

Independent Variable	*β*	T	Sig
Reliability	0.906	19.249	0.000

(R=0.889; R^2=0.791; F=370.531), significant level at P≤0.05
(Source: Research Data)

Table 7. Impact of responsiveness of mobile banking on customer satisfaction

Independent Variable	*β*	T	Sig
Responsiveness	0.877	21.625	0.000

(R=0.909; R^2=0.827; F=467.656), significant level at P≤0.05
(Source: Research Data, 2016)

Table 8. Impact of ease of use of mobile banking on customer satisfaction

Independent Variable	*β*	T	Sig
Ease of use	0.792	16.356	0.000

(R=0.856; R^2=0.732; F=267.513), significant level at P≤0.05
(Source: Research Data, 2016)

Table 9. Impact of security of mobile banking on customer satisfaction

Independent Variable	*β*	T	Sig
Security	0.768	17.396	0.000

(R=0.869; R^2=0.755; F=302.633), significant level at P≤0.05
(Source: Research Data, 2016)

Table 10. Impact of accessibility of mobile banking on customer satisfaction

Independent Variable	β	T	Sig
Accessibility	0.634	19.321	0.000

($R=0.890$; $R^2=0.792$; $F=373.307$), significant level at $P\leq0.05$
(Source: Research Data)

Table 11. Impact of privacy of mobile banking on customer satisfaction

Independent Variable	β	T	Sig
Privacy	0.844	16.720	0.000

($R=0.860$; $R^2=0.740$; $F=279.550$), significant level at $P\leq0.05$
(Source: Research Data)

Table 12. Summary of the hypotheses testing

Hypothesis	Results
H1: There is a significant impact of reliability of mobile banking on customer satisfaction	Accepted
H2: There is a significant impact of responsiveness of mobile banking on customer satisfaction	Accepted
H3: There is a significant impact of ease of use of mobile banking on customer satisfaction	Accepted
H4: There is a significant impact of security of mobile banking on customer satisfaction	Accepted
H5: There is a significant impact of accessibility of mobile banking on customer satisfaction	Accepted
H6: There is a significant impact of privacy of mobile banking on customer satisfaction	Accepted

(Source: Author developed)

5. CONCLUSION

The study revealed that the six hypotheses were proposed in the study in order to examine the relationship between mobile banking and customer satisfaction. The simple regression analysis is carried out with the customer satisfaction on mobile banking as a dependent variable were reliability, responsiveness, ease of use, security, accessibility, and privacy of mobile banking as independent variables. The results of the simple regression show a significant positive relationship between dependent and independent variables at a level of 5% level of significance. Hence, all the hypotheses were supported and they were at the accepted level. It means that reliability, responsiveness, ease of use, security, accessibility and privacy of mobile banking significantly and positively impact customer satisfaction of mobile banking. Moreover, it revealed that higher reliability, responsiveness, ease of use, security, accessibility, and privacy then it cause a higher level of customer satisfaction. Therefore, the study results indicate that all the mobile banking dimensions of mobile banking service which are reliability, responsiveness, ease of use, security, accessibility, privacy affect the customer in Sri Lanka as all study hypotheses were accepted.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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