

## Communication and Adoption of Mobile Banking Services in Sri Lanka

### ABSTRACT

The Rapid improvement of Information and Communication Technology (ICT) has significantly influenced the banking sector. Although Mobile Banking Service (MBS) was introduced to Sri Lanka 20 years ago, only a few customers use it for transactions. Banks use various communication tools to promote mobile banking services, but the number of users still needs to grow. The problem is whether banks communicate with customers about MBS adequately and whether the communication reaches the target customers as expected. This research comparatively analysed the responses of 91 customers from two selected Sri Lankan banks to address this issue. The study reveals that the respondents were aware of MBS from interpersonal communication channels such as bank officers and family and friends. In contrast, banks often use social media and television advertising to promote MBS. Only a few respondents used television and Facebook advertisements to increase awareness about MBS. The study also found a significant difference between the respondents' awareness and the usage of MBS. Most respondents had at least a basic knowledge of MBS, but only a few customers used it. The findings show that making customers aware of a banking facility is not enough to convince them to adopt that facility. The study shows that building up trustworthiness is essential to convince customers, and the best communication method is interpersonal communication channels.

*Keywords: Mobile Banking Service, awareness, adoption, communication*

### 1. INTRODUCTION

The banking sector often uses ICT for day-to-day business purposes. With the enhancement of technology, they introduced "Mobile Banking" for a more efficient service. The number of MBS users worldwide has increased during the COVID-19 pandemic. For instance, the African government introduced policies encouraging social distancing to reduce the virus's spread, forcing banks and other financial institutions to provide online services (Dauda & Nma, 2021)[1]. Similarly, the Sri Lankan government implemented travel restrictions in Sri Lanka during the pandemic. Banks made several attempts to promote online banking among their customers to continue their services. However, the result was not as expected.

According to Kemp (2022)[2], by January 2021, Sri Lanka had a population of 21.46 million. There were 30.41 million mobile connections in Sri Lanka, and 612 thousand improvements can be seen between 2020 and 2021. There are more mobile links than the population in Sri Lanka. There were 10.90 million internet users in Sri Lanka, which increased by 800 thousand between 2020 and 2021. However, Sri Lankans show the least interest in using Mobile Banking Applications. According to Kemp (2021)[2], by January 2021, 73.6% of people had a bank account in a financial institution. Still, only 2.4% of people actively use mobile banking facilities, have a mobile money account on their mobile devices, and 6.2% pay bills online. Especially 8.3% of men make transactions online, whereas only 4.4% of women do.

The banks use various communication channels to promote MBS since such services are not well-known to many social groups. The question is whether the banks effectively use those communication channels to disseminate information about MBS so that the information reaches the target customers as expected. Answering this question may help bankers understand and address the significant communication challenges in persuading customers to use MBS. This study also bridges the knowledge gap regarding communication and mobile banking in Sri Lanka.

## 1.1 Conceptual Framework

The communication process between the bank and the customers is illustrated below.

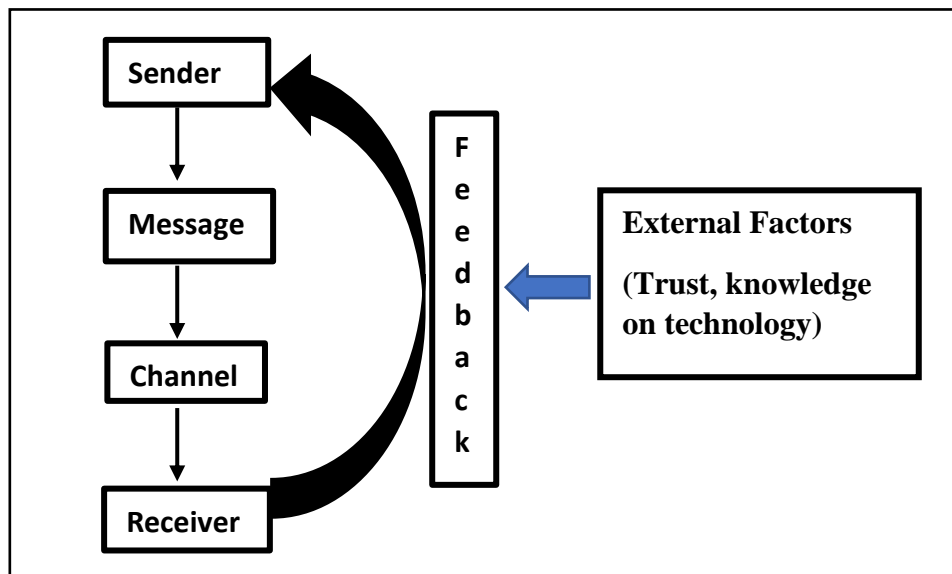


Figure 1. Communication process between the bank and the customers  
Source: Communication skills by Dalia El-Shafei (slideshare.net, 2015)

Here, the sender is the bank or banker; the message is information regarding mobile banking; the channel may be verbal, written, oral, through Television, Radio, or printing materials; the receiver is the customer of the bank, and feedback is the adoption of mobile banking facility. The feedback depends on the effectiveness of the channel and the message and other factors, such as trust between customers and the bank and the customer's being techno-savvy.

## 2. METHODOLOGY

This research used Purposive and Snowball sampling because banks denied giving confidential customer details. In a purposive sample, the researcher identifies the characteristics of the target population and identifies units that match these characteristics to include in the sample (Haute, 2021)[3]. Snowball sampling is a non-random sampling method that uses a few cases to help encourage other cases to be in the study, thereby increasing the sample size. This approach is most applicable in small populations that are difficult to access due to their closed nature (Breweton & Millward, 2001)[4]. One state bank and a private bank were selected based on Fitch ratings of Sri Lankan banks (2021)[5]. The selected banks are the Bank of Ceylon (BOC) and Commercial Bank PLC (Com Bank). From the two banks, 91 customers (47 from BOC and 44 from Com Bank) were selected conveniently. The respondents were above 18 years old and from Embilipitiya, an urban area in Sabaragamuwa province.

Primary data were collected through structured and semi-structured interviews. Structured interviews were conducted with 91 customers from the two banks, and semi-structured interviews were conducted with two bank officers to determine the communication tools they used to inform and persuade customers to adopt MBS. The quantitative data were analysed using a Microsoft Excel spreadsheet and descriptive statistics. The variables used in the analysis are gender, age, educational level, income, communication channels, awareness, and adoption of MBS. Qualitative data were comparatively analysed using thematic analysis. The themes used to categorise data are communication tools used by the banks, types of details given through the communication tools, frequency of sharing information, adoption of mobile banking, security of mobile banking, and reasons for low adoption of mobile banking by the respondents.

### 3. RESULTS AND DISCUSSION

Table 01 describes the demographic information of the 91 participants selected among the two bank customers.

**Table 1. Demographic Data**

Bank	Gender		Age			Education		Employment		Income			Smartphone		
	Male (%)	Female (%)	17-30 years old (%)	31-45 years old (%)	Above 45 years old (%)	Secondary Education (%)	Tertiary Education (%)	Employed (%)	Unemployed (%)	Income < Rs. 25000 (%)	Income Rs.25001 - 50000 (%)	Income 50001 - Rs.100000 (%)	Income >Rs.100001 (%)	Available (%)	Not Available (%)
BOC	49	51	44	25	31	54	46	77	23	26	60	14	-	75	25
Com Bank	55	45	93	7	-	26	74	98	2	5	40	49	6	100	-

From the sample, the number of male respondents is greater in Com Bank (55%) than that of the BOC (49%), whereas the number of female respondents is greater in BOC (51%). Based on gender, differences can be seen regarding the awareness and adoption of MBS. The results show that more male respondents are aware of MBS, and more of them adopt it than female respondents. Laukkanen and Pasanen (2008)[6] also reveal that “men are more likely to use mobile banking services than women,” and Joshua and Koshy (2009)[7] mentioned that males are more likely to access the Internet than females. The male respondents’ interest in technology and the internet must be why men tend to adopt MBS more than women. The study also reveals that more male respondents received information from social media, whereas more female respondents received information from interpersonal communication channels. Hossain and Prodhan (2020)[8] claim that Facebook is the most frequently used and most popular social media site among males. This study also shows that the number of female respondents who adopt MBS is less than those who are aware of the service. The results show that information regarding MBS alone has not convinced the female respondents to adopt it.

When the age is considered, 44% of BOC respondents were between 17 and 30. There were 31% of respondents above 45 years of age, and 25% of respondents were between 31 and 45. In Com Bank, 93% of customers were between 17 and 30. Respondents between 31 and 45 were very few (7%). There were no respondents above 45 years old in Com Bank. Of all the respondents (91), only 79% respondents had a basic awareness of MBS, and among them, a large number of respondents between 17 and 30 years of age had awareness (73.41%) and usage (61.53%) of MBS. Most respondents used social media and Interpersonal communication channels to obtain awareness regarding MBS. The majority of those who use social media were 17-30-year-old respondents. Most of the respondents

above 45 used interpersonal communication channels to obtain information and none of them adopted MBS. The findings show that the age group of 17 to 30 tends to adopt MBS more than the other respondents. It might be because young adults are techno-savvy. Olson et al. (2011)[9] also revealed that younger adults reportedly used most of the technologies more frequently than the aged.

Regarding education, more Com Bank respondents have tertiary-level education (74%) than BOC respondents (46%). BOC has more respondents with secondary level education (54%) than Com bank respondents (26%). The study shows that more respondents with tertiary education were aware of MBS than those with secondary education. Hendawi and Nosair (2020)[10] also reveal that those with a higher awareness of technology and who adopt mobile banking are typically customers with a higher educational background.

The majority of respondents (97%) from Com Bank were employed, and only 2% of Com Bank respondents were unemployed. When considering the income of the respondents, the majority of the BOC respondents' (58%) income level is between Rs. 25000 – 50000, whereas most of the Com Bank respondents' (46%) income level is between 50000 - 100000. The results show that the respondents with income lower than 25000 show more tendency to use MBS, whereas those who earn more than Rs. 25000 show less interest. This finding contradicts the findings of Sulaiman et al. (2007)[11]. He claims that MBS adoption is prevalent among high-income earners in Malaysia. This difference may be because Sri Lanka has not yet developed an online financial culture within the country.

### 3.1 Awareness of Mobile Banking Services

Of all the respondents (91), the majority of the respondents (86.8%) had at least a basic awareness regarding MBS. Only a few respondents (13.2%) were unaware of MBS. The percentages of participants who are aware and unaware of MBS are given in Table 2.

**Table 2. Awareness regarding the Mobile Banking Service (MBS)**

Awareness	BOC	COM Bank
Aware	82.9%	90.9%
Not Aware	17%	9.1%

Of the respondents who receive banking facilities from BOC (47), 82.9% have at least a basic awareness of MBS. Of the participants with bank accounts in Com Bank (44), 90.9% have a basic awareness of MBS. Although more Com Bank customers are aware of MBS than BOC customers, this difference in awareness levels is insignificant. The customers mentioned receiving more information about MBS from interpersonal communication channels than the other channels. The summary of the percentage of customers and the communication channels they used to receive information on MBS are given in Table 3.

**Table 3. Communication channels used by the customers to receive information about MBS**

Main Category	Communication Channels	Customers
Mass media	Electronic Media	8.9%
	Print Media	1.3%
Social Media & websites	Social Media	38%
	Web Sites	5.1%
Interpersonal Communication	From Bank officers	39.2%
	Family & Friends	29.1%

According to Table 3, the majority of the respondents (68.3%) received awareness from interpersonal communication channels such as bank officers (39.2%) and family and friends (29.1%). Second, most respondents (43.1%) received awareness from social media (38%) and websites (5.1%). This factor is common to both banks. Findings show that the most effective communication channel to promote MBS

is interpersonal communication channels. The reason for this must be the trustworthiness of the interpersonal communication channels. Kirchmajer and Patterson (2003)[12] also revealed that interpersonal communication is a major criterion for building trust between service professionals and clients. When asked about the customers who do not adopt the MBS, most stated that they lack trust in dealing with money through a mobile app rather than doing it in person. Most (40.7%) of the BOC respondents received information from bank officers when opening a new account. However, most (27.8%) of the COM Bank respondents received information from YouTube videos published by outsiders. The second highest number of respondents from BOC (33.7%) received awareness through Mobile banking officers, and Com Bank respondents received information from Facebook-sponsored advertisements published by the bank and the leaflets.

### 3.2 Communication Channels Used by the Banks to Persuade Customers

According to the details given by the Commercial Bank marketing officer, the bank uses mass media and social media for marketing. It also conveys information to the customers through interpersonal communication channels. BOC uses more communication tools than Com Bank to encourage customers to adopt MBS. The communication channels the two selected banks use to communicate with their customers are given in Table 4.

**Table 4. Communication channels used by the banks to communicate MBS**

Commercial Bank		
Mass Media	Social Media and New Media	Interpersonal Communication channels
<b>Electronic Media</b> <ul style="list-style-type: none"> <li>• Television advertisements</li> <li>• Television advertisements with celebrity endorsements</li> <li>• Radio advertisements</li> <li>• Radio endorsements</li> </ul> <b>Print Media</b> <ul style="list-style-type: none"> <li>• Newspaper Advertisement</li> <li>• Leaflets</li> </ul>	<b>Social Media</b> <ul style="list-style-type: none"> <li>• Facebook advertising</li> <li>• Facebook posts</li> <li>• Instagram advertising</li> <li>• Instagram posts</li> <li>• LinkedIn posts</li> <li>• YouTube Videos</li> </ul> <b>New Media</b> <ul style="list-style-type: none"> <li>• Official website</li> <li>• Email marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Through Digital Bank Officer</li> <li>• From Bank officers when opening a new account</li> </ul>
Bank of Ceylon		
Mass Media	Social Media and New Media	Interpersonal Communication Channels
<b>Electronic Media</b> <ul style="list-style-type: none"> <li>• Television advertisement</li> <li>• Television advertisement with celebrity endorsements</li> <li>• Radio advertisements</li> <li>• Radio endorsements</li> </ul> <b>Print Media</b> <ul style="list-style-type: none"> <li>• Newspaper Advertisement</li> <li>• Leaflets</li> <li>• Billboards</li> </ul>	<b>Social Media</b> <ul style="list-style-type: none"> <li>• Facebook advertising</li> <li>• Facebook posts</li> <li>• Instagram posts</li> <li>• YouTube Videos</li> </ul> <b>New Media</b> <ul style="list-style-type: none"> <li>• Official website</li> <li>• Email marketing</li> </ul>	<ul style="list-style-type: none"> <li>• Through Mobile banking officer</li> <li>• From bankers when opening a new account</li> <li>• From bank assistant (school leavers)</li> <li>• By visiting customer's sites</li> </ul>

Commercial Bank often uses social media marketing to inform and convince customers to adopt MBS. From various social media, Facebook is their primary communication tool, and Instagram, YouTube,

and LinkedIn are also used for advertising. In contrast, BOC uses television and radio advertisements to attract customers to MBS.

According to the Commercial Bank marketing officer, their customer base is over 3.5 million. They do social media advertising through database marketing. This is because the bank has all the details of its customers, and it can run an advertising program targeting the exact customers. The bank often uses Facebook as its advertising platform. This social media marketing is done by Commercial Bank employees who are experts in the field. Their target audience is between 24 and 35 years old. Commercial Bank Marketing officer mentioned that, unlike other communication methods, social media marketing has become very effective because the younger generation is more inclined towards technology. The possibility of persuading them to use mobile banking through social media advertising is relatively more effective than persuading other age categories. The officer also explained that Electronic Word of Mouth (EWOM) is also highly influential. Thus, social media marketers track the reviews, comments, updates, and ideas of the customers through social media, and the bank personally contacts the customers and resolves the problems regarding MBS.

BOC targets customers below 40 as their target audience. The BOC marketing officer mentioned that they target people who are familiar with technology. It also conducts large social media campaigns via Facebook, Instagram, and YouTube to inform the customers. Both banks target customers below 40 as their target audience. From the total, 86.8% of customers who are aware of MBS are below 40 of age, and 99% of the customers below 40 from both banks use MBS. It seems that selecting customers below 40 as the target audience to promote MBS is effective for both banks.

Other than social media, the banks give their sponsorship to different television channels to promote MBS. Television, radio, and newspaper advertisements are some other tools used for marketing. Commercial Bank uses television, Radio, and Newspaper advertisements to provide awareness to customers. Unlike Com Bank, BOC uses radio advertisements, endorsements, and newspaper advertising for mass marketing. The banks periodically provide information and awareness about mobile banking through emails and SMS. Com Bank conducts very few outdoor promotions, for they are less helpful in creating trust in mobile banking among customers. BOC periodically conducts SMS and email marketing campaigns. Unlike Commercial Bank, BOC runs billboard campaigns and outdoor promotions to promote mobile banking. According to the Commercial Bank marketing officer, mobile banking itself is a revolution in digital technology. Thus, using a traditional medium like billboards to promote MBS is pointless. However, printed leaflets are distributed by the branches to the customers with details of MBS.

Commercial Bank marketing officer mentioned that sharing details through the Digital Banking officer at the branch is another major communication strategy they use. He stated that Digital Bank officers, Digital Bank Assistants, and other bank officers also give awareness about the MBS to those who visit the bank branch. Information about the mobile app is given to everyone who opens a new account and to the existing account holders when they visit the bank. Mobile banking officers stated that Interpersonal communication tools are effective in attracting customers, but some customers are not willing to stay in the bank to get information. There is no difference between the banks regarding the interpersonal communication they use. However, unlike Com Bank, BOC visits customers' sites such as DS offices, government offices, and BOIs and uses interpersonal communication channels to promote MBS. They have trainees at every branch to canvas and register the Banking app users.

As discussed above, banks use different communication channels to provide awareness and knowledge to customers. According to the bank officers, banks spend more money on Mass Media and social media. However, most respondents received basic awareness of MBS through interpersonal communication channels, such as bank officers. The findings show that spending more money on Facebook advertising is less effective than expected.

### **3.3 Adoption of MBS**

Of all (91) respondents, more than half of the respondents do not use MBS, and only 42.9 % of respondents use MBS. When comparing the usage with the awareness, the results show a gap. Although most of the respondents are aware of MBS, less than half of the respondents used the service. This shows that the awareness of MBS does not impact much on the adoption. When the two banks are compared, a slight difference between the adoption level of MBS can be seen. The findings are given in Table 5.

**Table 5. Comparison of adoption and awareness of Mobile Banking Services between banks**

<b>Bank</b>	<b>awareness</b>	<b>adoption</b>
BOC	82.9%	38.3%
Com Bank	90.9%	43.2%

In BOC less number of respondents (38.3%) use MBS compared to Com Bank respondents (43.2%). In both banks, the number of customers who do not use MBS is greater than the customers who use the MBS. Thus, the findings show that making customers aware of a banking facility is not enough to convince them to adopt that facility.

### **3.4 Reasons for Not Using MBS**

Most respondents (61.9%) mentioned that they do not trust modern technology as traditional banking methods for money transactions, and 33.3% of respondents stated that they are not willing to use MBS because they are not techno-savvy. A few respondents mentioned that they do not want to use MBS because, for the initial registration, they have to visit the bank in person, and it is unnecessary trouble. When the two banks are compared, there is no big difference between their answers. However, most Com Bank customers mentioned that lack of trust regarding modern technology and lack of technical knowledge are the only reasons for them not to use MBS. The findings show that although most respondents had an average awareness of MBS, enough information exchange did not happen to avoid the fear of respondents having to do banking using new technology and providing knowledge about how to use MBS.

### **3.5 Communication Channels and Creating Trustworthiness of MBS**

The respondents listed out from which channels they receive trustworthy information regarding MBS. Out of all the respondents (70.9%) who obtained knowledge regarding MBS, the majority (46.3%) stated that they received trustworthy information from interpersonal communication channels such as bank officers, family, and friends. Secondly, they trusted information received from sponsored advertisements published by the banks on social media. The findings show that mass communication channels are ineffective in creating trustworthiness among customers. By considering the findings, I claim that interpersonal communication channels are the best media to create the trustworthiness of the customers toward MBS.

The majority of the respondents commented that providing details regarding safe ways to money transactions and sharing their own experiences creates trustworthiness among customers. Most of the respondents expected details regarding the security of the money, updates of the mobile application, and safety from cyber-attacks. Further, the majority of the respondents commented that clear and full explanation of all functions in the MBS application, additional charges for MBS, guarantee for security of the money, conditions regarding MBS, online quick support services when problems occur, and opportunity to register with online banking through online by their self are the necessary details and arrangements for them to adopt MBS.

The majority of the respondents also commented that the details regarding the benefits of the MBS and the user-friendliness of the Mobile application may convince more customers to adopt MBS. They also expected the details regarding new features of the application, details of loan facilities, and real-time online support to attract more customers toward MBS. Respondents commented that they need the details regarding the efficiency of the MBS to ease the transaction process and an explanation of all features of the application, details of rules and conditions, and real-time online support to adopt MBS. By comparison of the two banks, there is no significant difference but commercial bank customers specifically ask for clear explanations regarding different applications because a variety of applications are created by the commercial bank for the users and they expect an explanation of changes in the application after updates.

## **4. CONCLUSION**

According to this study, the majority of respondents have at least an average awareness of MBS. Majority of respondents received information on MBS through interpersonal communication channels. According to the findings, both banks use both traditional and digital marketing strategies. Com Bank

give priority to social media platforms like Facebook, Instagram, and YouTube. Commercial Bank, with a customer base of over 3.5 million, uses database marketing to target specific customers. The bank also emphasizes the role of Electronic Word of Mouth (EWOM) in influencing customer opinions and resolving MBS-related issues. On the contrary, BOC uses traditional communication tools, such as television, radio, and billboards.

The findings reveal that despite a high level of awareness, less than half of the respondents actually use MBS. The primary reasons for not using MBS are a lack of trust in modern technology for money transactions, lack of technical knowledge, and the inconvenience of in-person registration. These reasons are common among customers of both banks. Comparatively, the respondents identified interpersonal communication channels, such as bank officers, family, and friends as the most trusted sources of information about MBS. Respondents also expressed a need for clear and comprehensive information about MBS, including details about safe transaction methods, security of money, updates of the mobile application, and safety from cyber-attacks. They also desire real-time online support and user-friendly applications to enhance their banking experience.

In conclusion, the study highlights the importance of addressing customers' concerns and providing them with comprehensive information through trustworthy communication channels to promote the adoption of MBS. It also highlights the need for banks to continually update and improve their mobile applications to meet customer expectations and build trust in MBS. This multifaceted approach may help bridge the gap between awareness and adoption, leading to higher utilization of MBS among bank customers.

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