

# Mobile Banking App Survey for nonusers

Meddegoda M.R.P.M.  
Department of Computer Science and Engineering  
University of Moratuwa  
Sri Lanka  
prabhashi.20@cse.mrt.ac.lk

**Abstract**—Mobile Banking Applications are very useful for people to make day-to-day transactions without visiting the bank or ATM (Automatic Teller Machines) and are quite popular nowadays. Although Banks are providing such service, still there are people who tend to prefer other methods over Mobile Banking Applications. A questionnaire was carried out using people who do not use Mobile Banking Applications as respondents and the results were analyzed to identify the main reasons behind some people in Sri Lanka not using Mobile Banking Applications.

**Index Terms**—Mobile Banking applications, Automatic Teller Machine

## I. INTRODUCTION

Nowadays Mobile phones are quite popular and most people in Sri Lanka are using mobile phones. Banks are also providing the facilities to banking services through Mobile Banking Applications and a set of people are taking full advantage from this facility to do transactions without physically visiting a bank or ATM and without handling money physically. But there seems to be a number of people who are not using Mobile Banking Applications. A questionnaire was carried out with this set of people and the results were analyzed to identify the main reasons for them to not use those applications and to find reasons which encourage them to use Mobile Banking Applications.

## II. METHODOLOGY

A questionnaire was created using Google Forms and passed through social media, for the non-Mobile Banking App users to fill in. Since some people did not have online access and some did not have the knowledge to fill an online form, the questionnaire was filled by interviewing.

## III. QUESTIONNAIRE

The questionnaire collected some demographic features of the respondent and details on their awareness on Mobile Banking Apps, their transaction habits and their ideas on Mobile Banking Apps.

Demographic factors collected are as below.

- Gender
- Age
- District
- Occupation
- Highest level of Education
- Marital Status
- Monthly Income

## IV. DATA

All the answers were collected to an excel sheet and a Data Dictionary is created upon the data collected. Total of 52 responses were collected and out of those, 10 responses were from Mobile Banking App users and therefore they were not used in analyzing.

## V. RESULTS

Use the abbreviation “Fig. 1”, even at the beginning of a sentence.

All of the respondents have mobile phones and have bank accounts

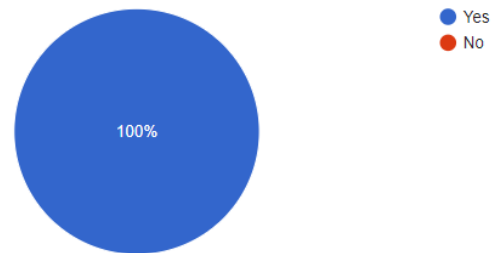


Fig. 1. Respondents: Having a Mobile phone

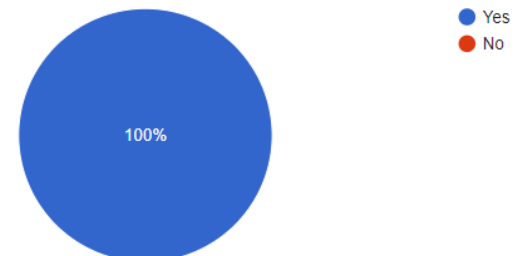


Fig. 2. Respondents: Having Bank Accounts

As in “Fig. 3” and “Fig. 4” 73.8% of the respondents are female and most of the respondents are between ages of 20 – 30.

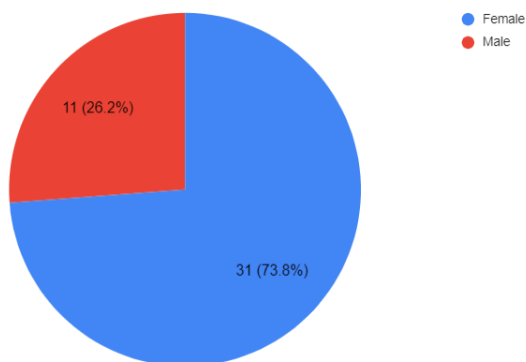


Fig. 3. Respondents: Gender

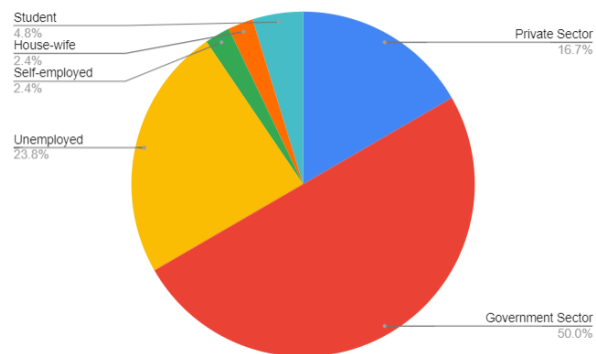


Fig. 6. Respondents: Occupation

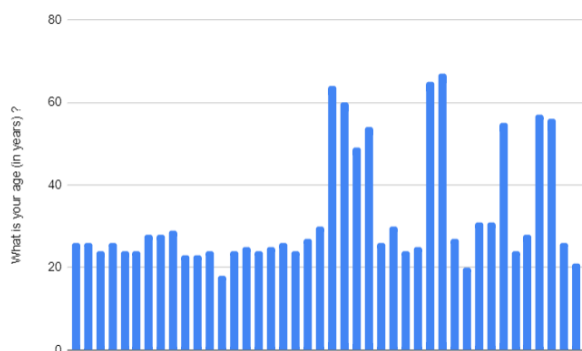


Fig. 4. Respondents: Age in years

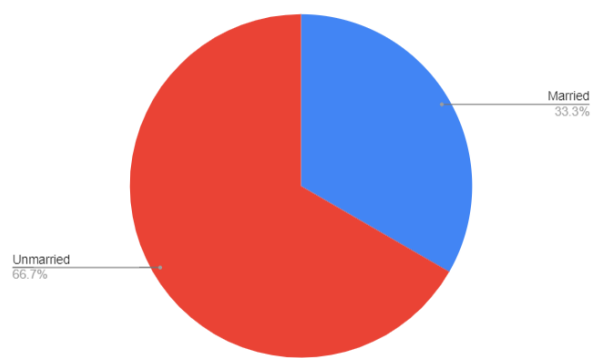


Fig. 7. Respondents: Marital Status

As in “Fig. 5” the respondents are from different districts; mostly are from Kegalle and Anuradhapura.

As it can be seen in “Fig. 8” Many of the respondents have a salary range of 30000 – 60000.

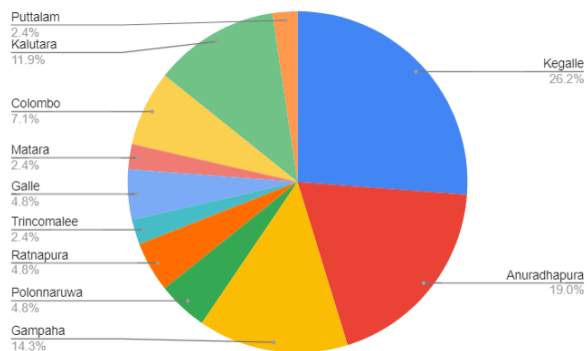


Fig. 5. Respondents: Current place of living (District)

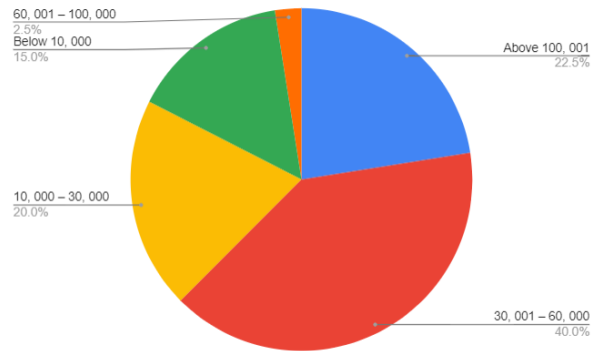


Fig. 8. Respondents: Monthly income

As in “Fig. 6” and “Fig. 7” 50% of the respondents are from government sector and 66.7% of respondents are unmarried.

More than 66% of the respondents have a higher level of education than A/Ls as in “Fig. 9”.

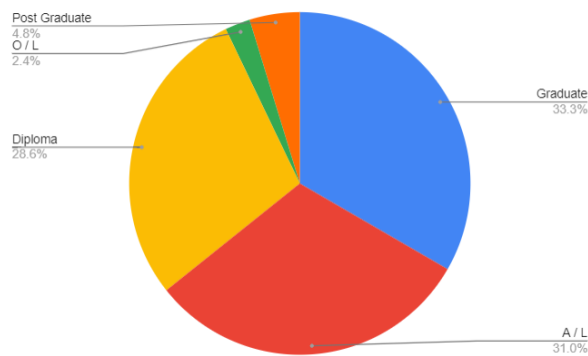


Fig. 9. Respondents: Highest level of Education

As in “Fig. 10” and “Fig. 11” 57.1% of respondents are aware of mobile banking apps and out of them, most have got to know about it from media.



Fig. 10. Respondents: Awareness on Mobile Banking Apps

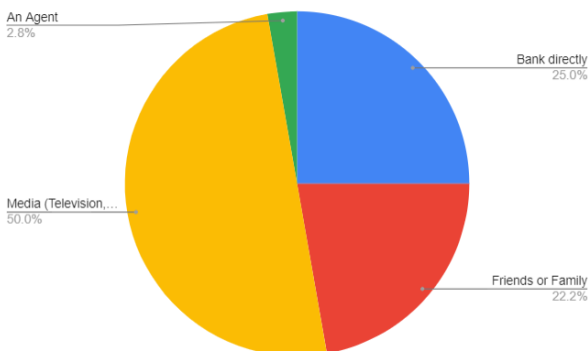


Fig. 11. Respondents: Source of information on Mobile Banking Apps

As it can be seen in “Fig. 12” the main reason for respondents to not to use mobile banking apps is that they are not fully aware of Mobile Banking.

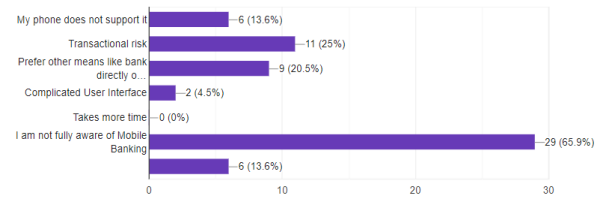


Fig. 12. Respondents: Reasons for not using Mobile Banking Apps

Most of the respondents do transactions several times per month and most of the respondents use Automatic Teller Machine (ATM) as their method of doing transactions. These can be observed in “Fig. 13” and “Fig. 14”

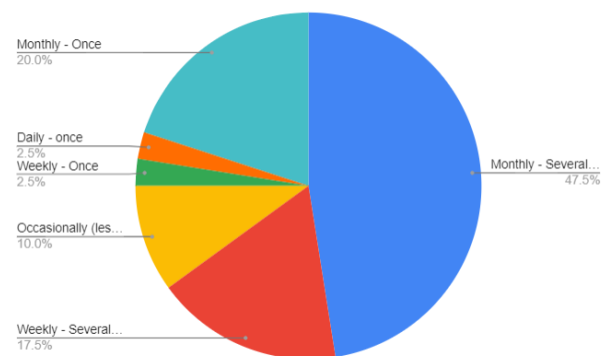


Fig. 13. Respondents: Transaction Frequency

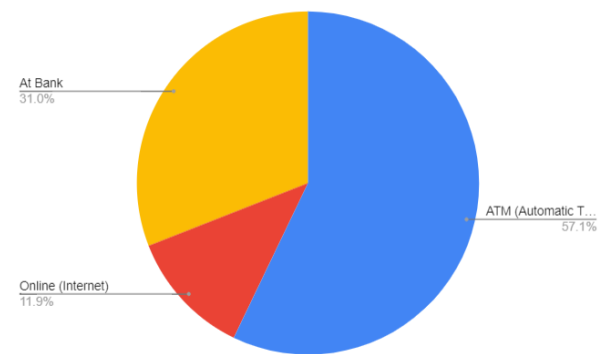


Fig. 14. Respondents: Transaction Medium

Respondents have given their rankings on statements on Mobile Banking. 50% of them disagree that they are fully aware of mobile banking. Nearly 50% of them agree that they prefer other methods over mobile banking. These observations can be made using “Fig. 15” and “Fig. 16”

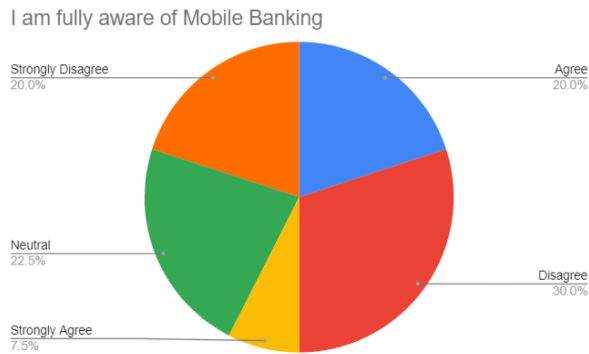


Fig. 15. Results for I am fully aware of Mobile Banking statement

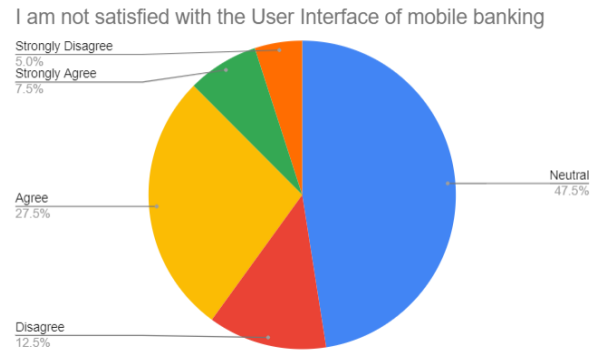


Fig. 18. Results for I am not satisfied with UI statement

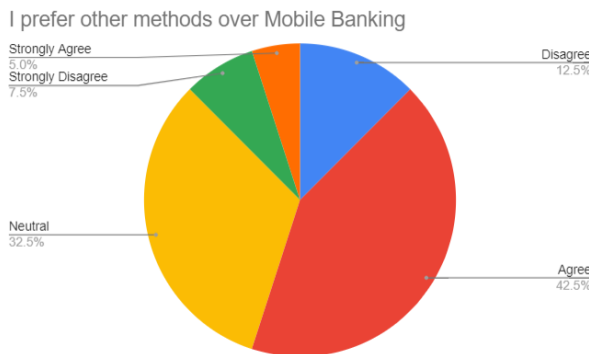


Fig. 16. Results for I prefer other methods over Mobile Banking statement

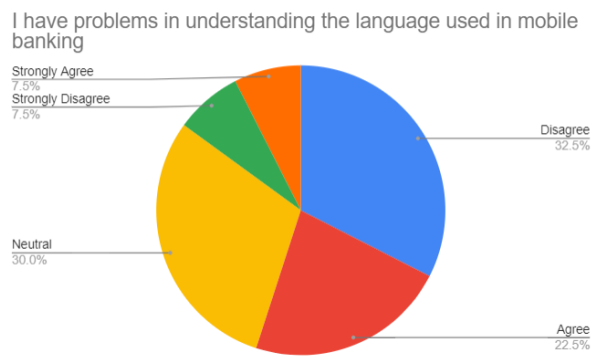


Fig. 19. Results for I have difficulty in understanding the language statement

Other rankings are neutral by overall for “Fig. 17” , “Fig. 18” , “Fig. 19” and “Fig. 20”

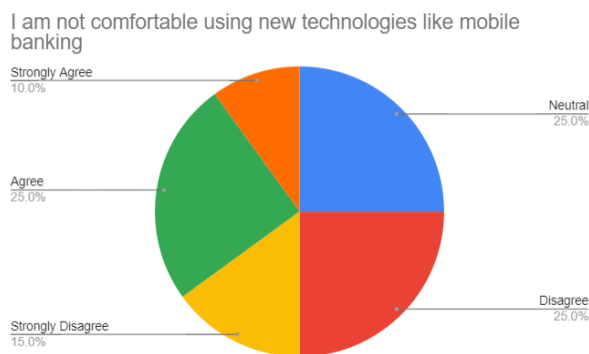


Fig. 17. Results for I am not comfortable using new techs statement

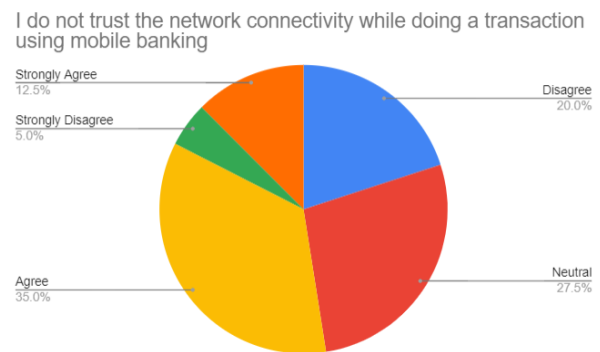


Fig. 20. Results for I do not trust network connection statement

They also have a concern about the security in using mobile banking apps; due to possibilities of identity theft, fraud, hacking as in “Fig. 21” or mobile service provider might not perform well and process the payment incorrectly as in “Fig. 22”.

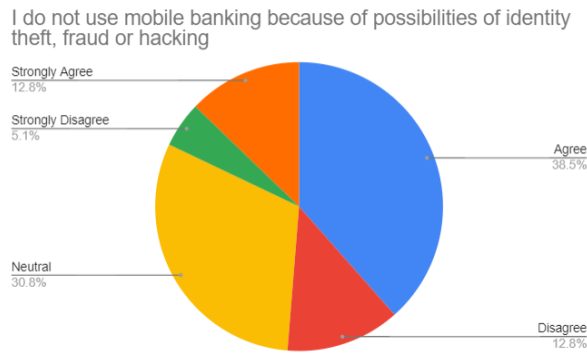


Fig. 21. Results for due to possibilities of identity theft, fraud and hacking statement

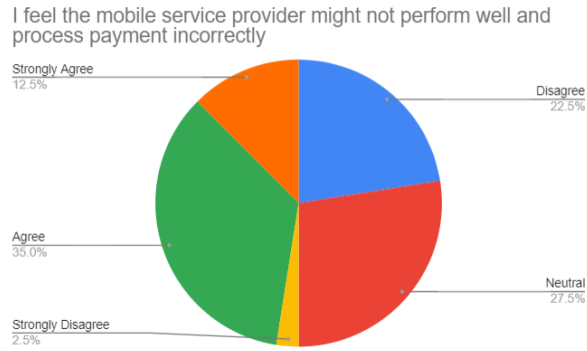


Fig. 22. Results for I feel mobile service provider might not perform well statement.

Their motivations for using mobile banking apps are increased awareness on mobile banking, reduced risks involved in their transactions and improved user interface, as in “Fig. 23”



Fig. 23. Respondents: Motivations to use Mobile Banking

## VI. ANALYSIS

Stat-Key is used to perform Hypothesis Testing. Randomization Test for a Difference in Means is used with 1000 samples generated.

Hypothesis: Is there a relationship between the ages and the awareness of Mobile Banking apps?

$\mu_1$  = Average age of people who are aware of Mobile Banking

$\mu_2$  = Average age of people who are not aware of Mobile Banking

H0:  $\mu_1 = \mu_2$

Ha:  $\mu_1 \neq \mu_2$

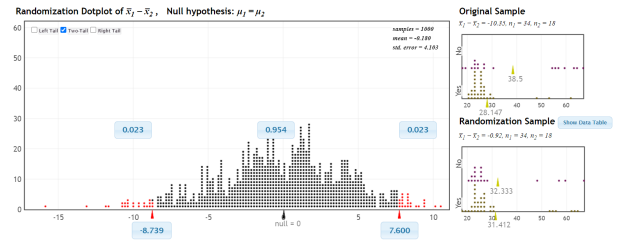


Fig. 24. Randomization Test for a Difference in Means for age and awareness

P-value =  $0.046 \leq 0.05$ . Therefore Null Hypothesis can be rejected. It can be stated that the mean of the ages of people who are aware of not who are not aware of Mobile Banking is different.

Hypothesis: Is there a relationship between the education level and the awareness of Mobile Banking apps?

$\mu_1$  = Average educational level of people who are aware of Mobile Banking

$\mu_2$  = Average educational level of people who are not aware of Mobile Banking

H0:  $\mu_1 = \mu_2$

Ha:  $\mu_1 \neq \mu_2$

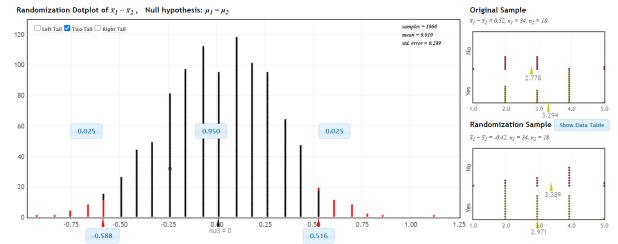


Fig. 25. Randomization Test for a Difference in Means for education level and awareness

Here P-value  $\geq 0.05$ . Therefore we do not have enough evidence to reject Null Hypothesis of mean educational level of respondents who are aware of Mobile Banking is as same as educational level of respondents who are not aware of Mobile Banking.

## VII. CONCLUSION

According to data, many were not aware of Mobile Banking and many were not fully aware of Mobile Banking; making that the main reason for not to use it. They have mentioned it as one of their motivations to use Mobile Banking also. And also, it can be seen that the main medium of awareness for the ones who are aware of Mobile Banking is media (television, radio etc.). So, we can use media to increase awareness of Mobile Banking between people and when giving awareness, we need to provide them sufficient knowledge on how to initiate and use those.

According to Hypothesis Testing, it can be stated that the mean of the ages of people who are aware of not who are not aware of Mobile Banking is different. But the statement of mean educational level of respondents who are aware of

Mobile Banking is as same as educational level of respondents who are not aware of Mobile Banking cannot be rejected

This sample is not truly random since they were collected from friends, family and families of friends and therefore cannot finalize the conclusions for population.

Github link: <https://github.com/Prabashi/MobileBankingAppNonUsers>

#### REFERENCES

- [1] Mohammad Rokibul Kabir "Factors Influencing the Usage of Mobile Banking: Incident from a Developing Country"