

SE3050 – User Experience Engineering

Lab Sheet 4

Plan and conduct user research.

User Research Plan

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Introduction

Peoples Bank is known to be the second largest and a very popular state-owned commercial bank in Sri Lanka. Given the need of making banking facilities more accessible and mobile, the introduction of the People's Wave mobile banking app promised convenience and ease of use for financial transactions and stringent security features, enabling over 50 types of facilities.

However, the customer satisfaction and trustworthiness for the app has been depleting rapidly due to various design and performance issues leading up to poor user experience. The aim of this user research is to find out what issues customers encounter when using the app, identify poor user experience traits which are used in the app and understand what kind of functionality the customers expect from the app.

The user research will mainly focus on testing the user interfaces of the app, reliability and dependability to carry out different transactions of the customers and the smooth transition in user flows and navigation. Testing this will help to identify the real problems that customers face and what alternatives the customer might want to overcome those issues. It will give more insight and information on what key points need to be considered when redesigning the app.

Test Objectives

Identify positive and negative experiences of customers when using the app

Identify the customer's view on the existing app.

Identify issues that hinder customer from using the app

Identify new features that customer expects from app

Methodology

In order to garner data for the research we have used a questionnaire and we have conducted two interviews. A questionnaire is used to address a variety of people with different demographic backgrounds to gather diverse set of responses and analyze the user experience of the app thoroughly. The questionnaire is divided into different sections.

The interviews were conducted with the participation of two selected persons who use the app, where one was a university student and the other was a businessman. Due to the pandemic situation all the interviews were conducted through MS Teams. These interviews were conducted to gain more in-depth analysis on different user flows and identify the positive and negative of different parts of the app. Users were given different tasks to complete using their app as well.

Interviewing

Registration

+Hi Dimuthu hope you doing great, shall we start the interview?

-Yes, I'm doing great let's start the interview

+Are you use Online registration for registert to the app?

-Yes I am.

+when you open app first time, did you find registration page easily?

-No, when open app it initially landing to logging page, there is no button for registration, there is sentence in black color 'Online Registration', it is hard to understand that clickable & it has bad visibility because of background color.

+How you feel about registration process?

-It has six steps so i Feel frustrated & exhausted when filling form.

+What difficulties you face when you registered?

-It not done in first time, several times error occurs in some steps, so I have to start it several time again and again from the beginning.

Login

+What are the good points do you see in login interface?

-Good visible in buttons and fields.

-It easy to understand how the login flow going.

+Are there any week points you see in login interface?

-Yes..!

+(if yes) can you briefly tell us about that?

-Because of the placement of forgot password text, sometimes I mistakenly click that while trying to click sign in button.Overall logging interface not great some text are not good visible.

+Do you have any experience on forgetting your password?

-Yes..!

+(if yes) What is your idea about reset password process?

-There is a step in that reset password process, based on selecting & naming images, That is not good way I think because I have to remember the exact naming given to the image in order.

Menu

+When you landing to Menu page, can you easily identify & select services you want by just look at icon?

-Yes but some time I have to read the name.

+Do you easily find the item you want or do you hardly search for item you want in menu?

-sometimes I go throw all items and find.

+How feel about the menu Interface?

- Not so bad but I feel like old app UI. I think its better to modify the interface.

Fund transfer and Manage Favorite beneficiary function

+Do you use fund transfer option in peoples wave app and was it help full for you?

+ Yes, I am using it very frequently. It helps me to save my time a lot.

+There so many fund transfer options are given in the app , have used every one of those options ?

+ No , actually , most of the time I use only own Account transfer option and interbank transfer option .

+ Do you use manage favorites beneficiaries?

+ Yes, I do, it helps me to save beneficiary details without entering them again and again.

+Is that instruction given in manage favorite beneficiary option is clear enough?

-Actually, it took me some time to learn how to use manage beneficiary function. I think it is better to improve the instructions.

+Do you have any other suggestion to improve the usability of fund transfer and manage beneficiary functions.

+ Yes, one major issue is fund transfer and manage beneficiary not working for third party bank accounts yet.

+ And another major issue is that screen shots are disabled. I think it is better if we can have a screen shot as a transaction confirmation.

Manage favorite bills

Welcome Mr. Kasun. I have some questions to ask from you about manage favorite bills feature n peoples wave app.

+ Do you use this app to pay utility bills? If yes, do you use it usually or sometimes?

Yes, as a businessman I use this app to do monthly bill payments and normally use to reload my mobile phone.

+ Can you go to manage favorite bills page?

Ok give me a moment. Ok done.

- + Can you add a new favorite bill now as example?
Ok I will do it now. Wait a moment. Ok I added.
- + Did you face to any issue when you do that adding process?
Yeah, there are 3 steps to complete when adding a favorite bill. It is good if there is one step to do that. If we can search a biller then it is easy than go through a list of billers.
- + Did you see anything that need to be improved in user interface? So what need to be improved?
There is big white space in the add favorite bill interface. So it is good to make the Labels and input fields are bigger.

Credit card services

- + Now, I am going to ask about credit card service in this app.
Ok, I am ready.
- + Have you used the credit card service?
Yes, I use it to pay my peoples bank credit card payment. But I cannot do payments or transfer money to other banks credit cards.
- + What do you think about the credit card service process?
As in the manage favorite bills feature, we have to go through 3 pages to do the credit card payments. We can select bank account from a dropdown. So it makes the process easy.
- + What do you think about the user interface of the credit card service?
I think user interface is not much good. The labels and input boxes should be properly placed. There is enough space to put them properly on the page.
- + Okay, that all for the interview. Thank you for your contribution to this interview.
You are welcome.

One-time Bill Payment

- + Do you find onetime payment option useful?
 - Yes, it is very useful, I use it to make payments for non-frequent billers
- + What do you think about the user interfaces of one-time bill payment?
 - I think it looks okay. But there are some alignment issues in the form, so it looks a bit messy.
- + Could you kindly let us know your experience when trying to fill in the details for the payment?

- Yes of course, It always takes me some time to fill in the details because there are a lot of details that need to be filled. I feel that the form is lengthy even though the form is divided in to 3 steps, So the experience wasn't very great and I find that a bit annoying.

+Did you find any other difficulty when trying to make a one-time bill payment?

- Not really But I would like to make a suggestion. I think it would be better if we can have a search function to select the biller. Otherwise, it is difficult to traverse through a long list to select the biller I want.

+Are there any other impediments in onetime bill payment that you would like to share with us?

- Actually yes. When a payment is made, I don't know if the payment was successful, and I don't have any proof to show that I have made the payment. Because there is no confirmation email or screenshot taking capability provided by the app.

Account summary

Now we will move on to account summary.

+How often do you use account summary function?

- Actually, I use it almost every day.

+So, what is your idea about account summary page user interfaces?

- One thing that I like about the account summary UI is that we can see account summary of multiple accounts in one page by collapsing sections. I think that is very user-friendly design.

+ Do you have any other suggestions to improve the usability of account summary?

- Yes, one major thing that I found missing is that account summary shows only the current available balance. There is no way to see the transaction history. I think it is very useful if we can view the transaction history as well.

Thank you very much for joining us today and sharing your experiences and ideas with us!



Interview Recording Link –

<https://drive.google.com/file/d/1n9rNoz8ROcN2Ax6UdWDwwyguau9bpvPE/view>

Questionnaire

A minimum of 30 people was selected for the questionnaire. A google form was created with questions related to each of the major functions. The form generates a graphical view using visual elements like charts as well as list downs the responses.

UX Survey on People's Wave Banking App

 tharinduudana66@gmail.com (not shared) [Switch account](#) 

* Required

What is your age? *

☐ 18 - 30

☒ 30 - 55

☐ 55 - 80

What is your gender? *

☐ Female

☐ Male

☐ Prefer not to say

In which field do you work in? *

☐ Education

☐ IT

☐ Business

☐ Health

☐ Customer Services

☐ Other:

How often do you use the banking app?

- ☐ Frequently (Everyday)
- ☐ Moderately (Two or three times a week)
- ☐ Rarely (Two or three times a month)
- ☐ Very Rarely (Once a month)

How satisfied are you with the design of the banking app ? *

- | | | | | | | |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | |
| Not very | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Very much |

What feature do you use the most in the banking application?

- ☐ Account Summary - Checking Bank Balance
- ☐ Bill Payment
- ☐ Fund Transfer
- ☐ Credit Card Services
- ☐ Other: _____

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[Clear form](#)

Account Summary and One- Time bill payment

Rate how beneficial you find the Account summary

1 2 3 4 5

Not beneficial at all ☐ ☐ ☐ ☐ ☐ Very beneficial

Are there any suggestions to improve the account summary functionality?

Your answer _____

Do you use the one time bill payment function frequently?

☐ Yes

☐ No

Would you like to have any kind of proof of your payment?

☐ Yes

☐ No

Rate the user friendliness of the One time bill payment user interfaces

1 2 3 4 5

Not user friendly at all ☐ ☐ ☐ ☐ ☐ Very user friendly

Menu page

Rate User Friendliness of Menu page

	1	2	3	4	5	
Worst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Super

What changes You Suggest for Menu?

Your answer

Which Menu Options yo mostly use?

- ☐ Account Summary
- ☐ Transfer Services
- ☐ Payment Services
- ☐ Credit Card Services

Can You easily identify Services by just look at Menu Icon?

- ☐ Yes
- ☐ No

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Clear form

Fund transfer and Manage favorite beneficiary function

This section contains questions about fund transfer function and manage favorite beneficiary function

Select the fund transfer methods that you have used

- ☐ Own account transfer
- ☐ Interbank fund transfer
- ☐ Branch to branch transfer

Is online fund transfer option is useful for you ?

	1	2	3	4	5	
Not useful at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very useful

Are user interfaces of transaction function user friendly enough ?

	1	2	3	4	5	
Difficult to use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Convenient to use

Is instructions given in transaction function is clear enough ?

	1	2	3	4	5	
Not clear at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Easy to understand

Are user interfaces of manage favorite beneficiary function user friendly enough ?

1 2 3 4 5

Difficult to use ☐ ☐ ☐ ☐ ☐ Convenient to use

Are instructions given in manage favorite beneficiary function clear enough ?

1 2 3 4 5

Not clear at all ☐ ☐ ☐ ☐ ☐ Easy to understand

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Clear form

Manage favorite bills & credit card service

Are the add favorite bills feature useful for you?

	1	2	3	4	5	
Not useful at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very useful

What do you think about the user interface in manage favorite bills?

	1	2	3	4	5	
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Super

How is the add a favorite bill process?

	1	2	3	4	5	
very easy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	very difficult

If the payment to other banks credit card option is added is it useful for you?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very useful

Select the credit card service methods that you use?

- ☐ own peoples bank card payment
- ☐ 3rd party peoples bank card payment

Any overall feedback for the banking app?

Your answer

Participant Profiles

The table below provides a breakdown of the participants selected for testing:

Name	Demography	Location, Date and Time
Dimuthu Wijarathna	Age- 23 Gender- Male Residential Address- Malabe Occupation- Entrepreneur running an audio engineering related business	Location- Virtual meeting using MS Teams Date- 28/08/2021 Time – 5.15 pm
Amali jayawaradene	Age- 19 Gender- Female Residential Address- Panadura Occupation- University Student	Location- Virtual meeting using MS Teams Date- 28/08/2021 Time – 6.45 pm

User Research – Tasks/Scenarios

- To observe participants, you need to give them something to do. These assignments are frequently referred to as tasks.
- Rather than simply ordering test users to "do X" with no explanation, it's better to situate the request within a short scenario that sets the stage for the action and provides a bit of explanation and context for why the user is "doing X."
- Create suitable Tasks/Scenarios. This should cover all functions and UIs selected by all 04 members.

No.	Task Instruction	Target	Probes
1	Ask user to navigate to registration form in the app	Check whether user understands basic navigation in the app	User finds it difficult to navigate to the registration form from the landing page due to the background colors used
2	Ask user to fill the registration form	Find whether there are any difficulties when registering to the app	User found form very lengthy and filling the details was exhaustive
3	Ask user to check the account summary	Check whether user finds account summary as a useful function	User found that having just the account balance was insufficient and thought that having a transaction history would be useful.
4	Ask user to make a one-time bill payment	Check the user interfaces of the one-time bill payment	User didn't receive any confirmation or proof on making the payment.
5	Ask user to do an inter-bank transfer	Check the clearness of the instructions given to the user in the UI.	User found it difficult to understand the flow of the inter bank transfer due misleading instructions in the UI
6	Ask user to add a new favorite beneficiary account	Check the time the user takes to learn the favorite beneficiary management function	Due to the complexity of the user flow, the user wasn't able to understand it quickly.
7	Ask user to add a new biller to favorite billers	Check the user friendliness of the UI	Since the form contains a lot of sub steps the user found it inconvenient
8	Ask user to use the credit card payment function	Check whether the user is satisfied with the available facilities	User found that the app doesn't provide facility to pay for 3 rd party credit card services

Plan for Data analysis

Interviews Plan

To get the proper idea about the usability of the application we conducted the interview session by participating two participants from two different backgrounds. One participant was entrepreneur and other one was a university student. We asked two different set of questions from each participant regarding following functionalities.

- Registration and Login
- Menu and navigation
- Fund transfer
- Manage favorite beneficiary
- Manage favorite billers
- Credit card services
- One time bill payment
- Account summary

After conducting the interview, we was able to get following qualitative measurements

- Users' idea about user interfaces of each function
- To which extend user is familiar with available options in the application
- To which extend user finds the application to do day to day banking tasks
- Major obstacles that user face when using the application
- User's suggestions to improve the UI design of the application
- User's suggestions to improve the usability of functionalities

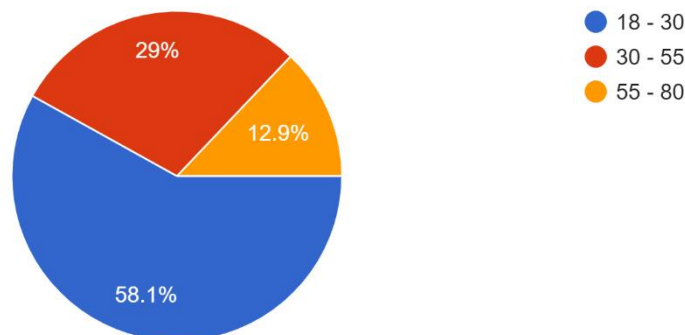
Questionnaires Plan

We conducted the questionnaire using a online google form and we was able collect data from 30 participants. When creating the questionnaire, we created it with the intention of capturing both qualitative and quantitative measurements. For example, we captured users' ideas to improve the application as quantitative data and users rating to the User interfaces as qualitative measurement. To capture quantitative measurements, we created questions that user can rate in scale of 1 to 5 and to capture quantitative data we gave users both open ended and multiple-choice questions. After conducting the interview, we were able to collect following data.

Qualitative Data

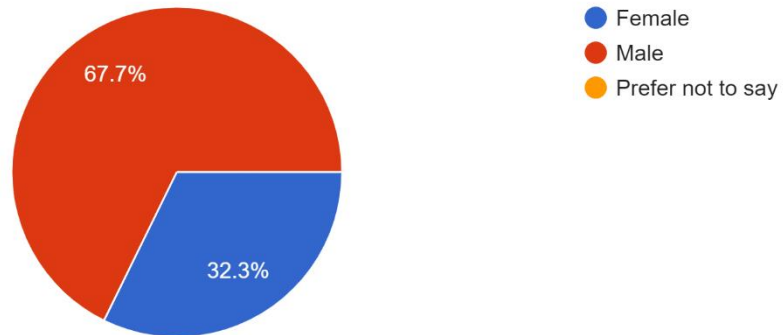
What is your age?

31 responses



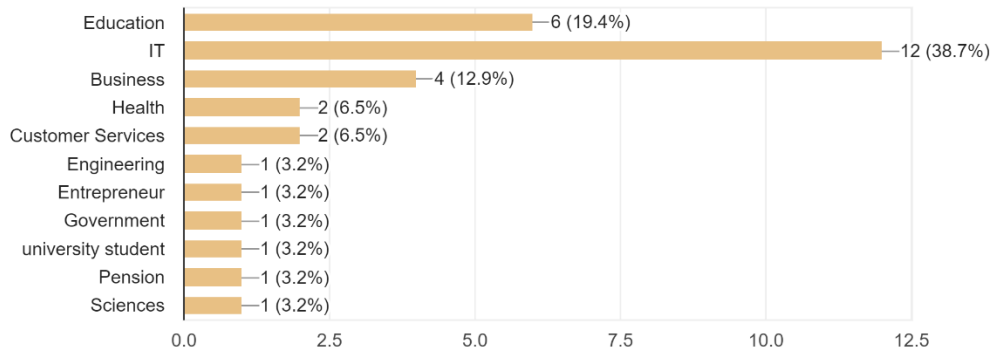
What is your gender?

31 responses



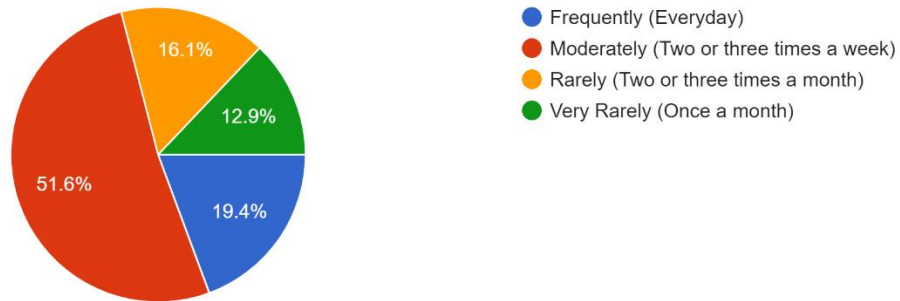
In which field do you work in?

31 responses



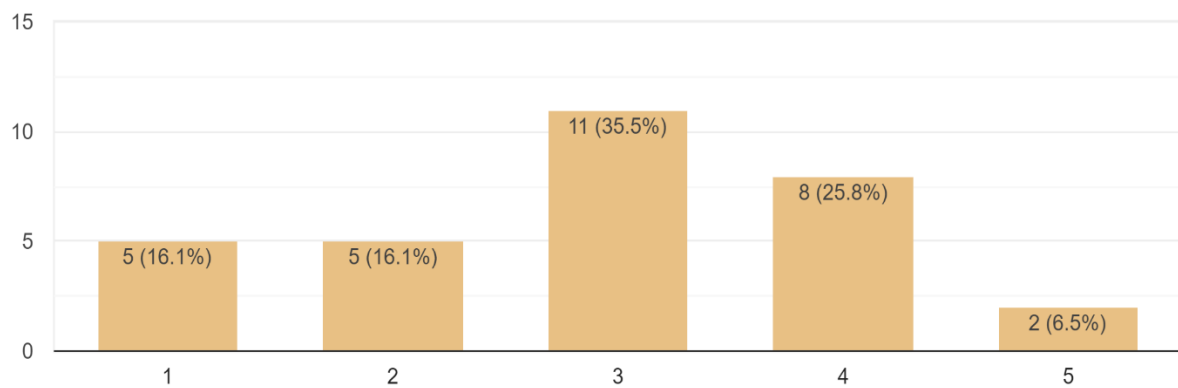
How often do you use the banking app?

31 responses



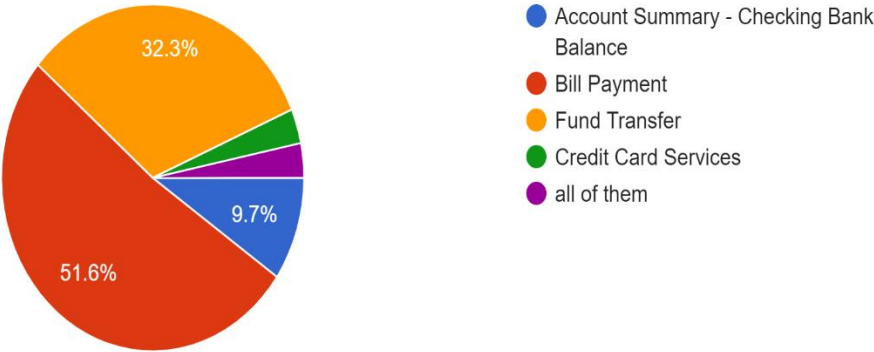
How satisfied are you with the design of the banking app ?

31 responses



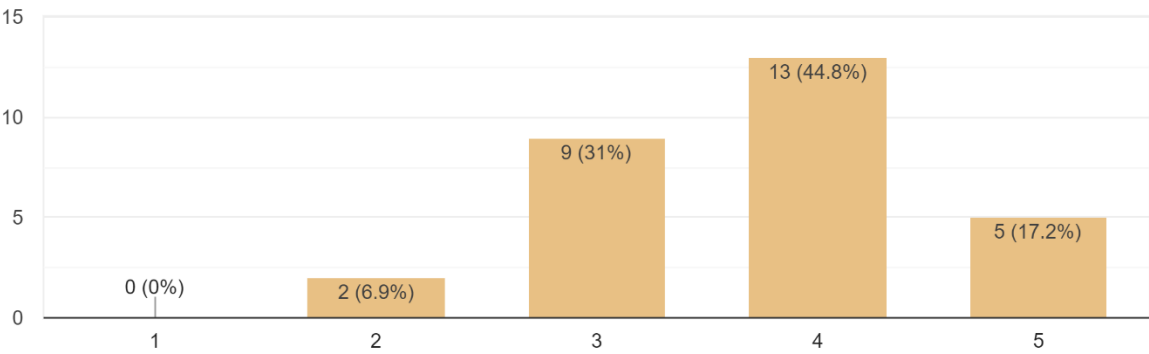
What feature do you use the most in the banking application?

31 responses



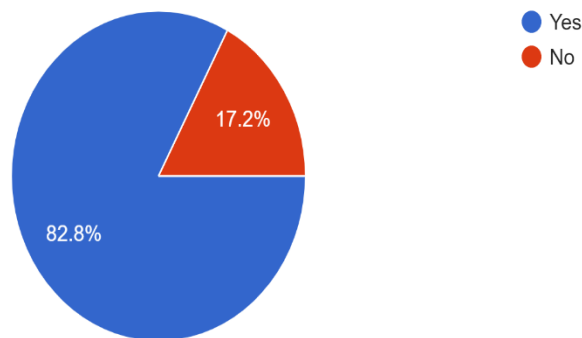
Rate how beneficial you find the Account summary

29 responses



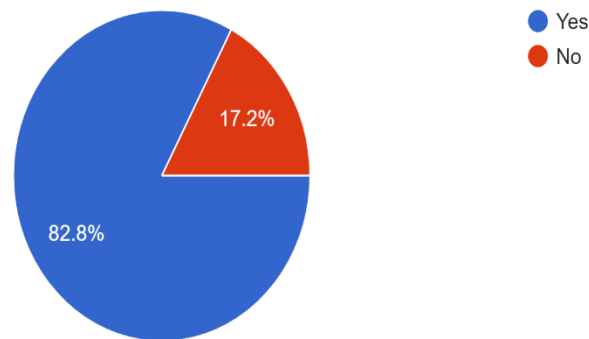
Do you use the one time bill payment function frequently?

29 responses



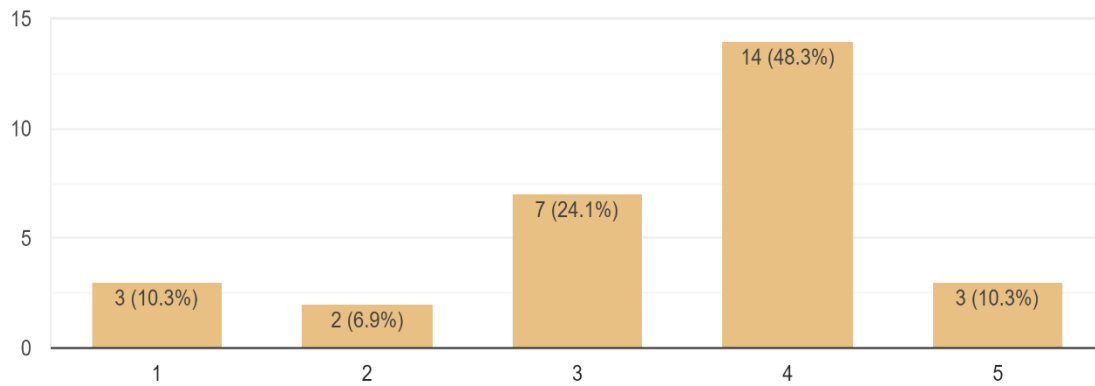
Would you like to have any kind of proof of your payment?

29 responses



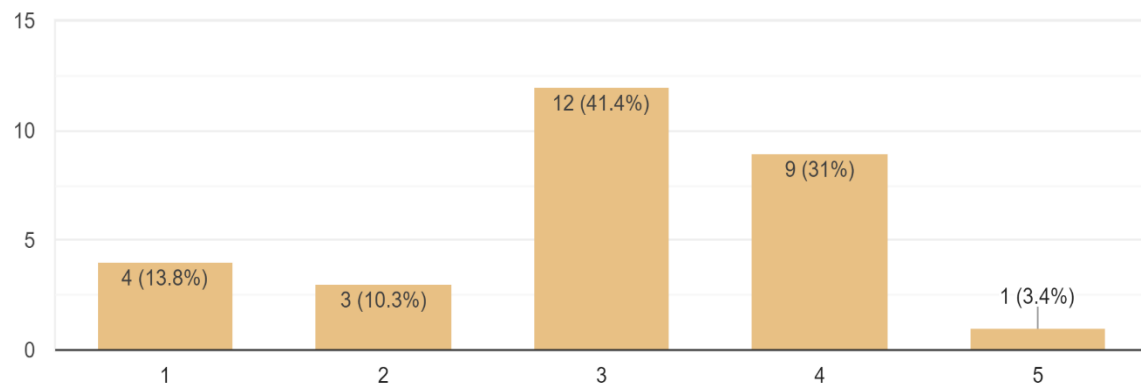
Rate the user friendliness of the One time bill payment user interfaces

29 responses



Rate User Friendliness of Menu page

29 responses



Qualitative data

Are there any suggestions to improve the account summary functionality?

12 responses

No

Better to have included a transaction history

Requires the addition of transaction history also

Improve the account summary interface

please show transaction history

Add transaction history

It should be shown in more meaningful manner with proper eye catching dynamic stylings

Its good to have transaction history

Can review transactions history

What changes You Suggest for Menu?

11 responses

add one time bill payment to the menu then we can do it quickly

i frequently use bill payment so it is good to have it on menu

User attraction

UI should be redesigned according to modern UI practices

looks like a very old design

Menu is not attractive

It should be more eye catching

Anything

Should be more quick

Any overall feedback for the banking app?

9 responses

Average good app

Its not user friendly. Very difficult to handle when compared to other banking apps like frimi

UI should be redesigned according to modern UI principles

Fix issues that occurred when dealing with third party banks

some interfaces do not have a modern look. Add some frequently use services to menu.

Comparing with the other banking apps in Sri Lanka , this app also not that bad :)

App is good. Very useful

New updates which are provided more frequently are discouraged enthusiasm towards online payments

Not bad, but its good to improve all interface, I feel it as old mobile app