

Sri Lanka Institute of Information Technology



User Experience Engineering - SE3050

Lab sheet 4 – User Research Plan

B.Sc. (Hons) in Information Technology

User Research Plan

Group Details

Group number: 2021S2_REG_WD_11

Group name: Code Rebels

| IT -Number | Name |
|------------|----------------------------------|
| IT19127538 | A.R.W.M.B.W.D. B. Jayawardana |
| IT19037998 | A. V. Joachim |
| IT19513188 | K. A. Yathushan |
| IT19062266 | S. W. R. S. I. Rathnayake |

Introduction

People's Wave is an online mobile banking application where customers can track their finances which includes checking account balance, transaction history. Customers can also make payments via People's Wave, can make online cash transactions and also current account holders can check their cheque details. The purpose of this research is to identify user behaviors, goals, motivations, weaknesses and needs of the users. By analyzing those results, it is able to create more user friendly and attractive user interfaces.

Test Objectives

- Testing navigational elements.
- Testing the size, position, width, height of the elements.
- Testing of the error messages that are getting displayed.
- Testing of the spelling.
- Testing whether the interface is attractive or not.
- The user must not get frustrated while using the system interface.

Methodology

This user research will be conducted by using digital interviews. There will be two selected clients going to participate to the interviews. Since the global pandemic situation interviews will be conducted via ZOOM and MS Teams environments. This interview will be a structured interview.

Interviewing

Interview 1

1. Initially giving a welcome and brief introduction about the client.
2. As the first section of the interview, the interviewer is asking about the login and forgot password related questions.
3. As the next part of the interview, the second interviewer is asking questions related to the interfaces and navigation.
4. After that the third interviewer is asking the client whether he/she uses bill payment or device management option.
5. As the final part of the interview 1, the fourth interviewer is asking about People's bank to People's bank fund transfer related questions.
6. Before winding up the interview giving an appreciation to the client.

| Interview 1 | |
|--|--|
| Name - (IT Number) | Questions |
| S. W. R. S. I. Rathnayake - (IT19062266) | <ol style="list-style-type: none"> 1. Are you a user of this application? 2. Are you logged in now? 3. Have you ever tried forgot password option? |
| A. R. W. M. B. W. D. B. Jayawardana – (IT19127538) | <ol style="list-style-type: none"> 1. What do you think about the interfaces, are you satisfied? 2. Is it easy to navigate between pages? What are your thoughts about that? |
| K. A. Yathushan – (IT19513188) | <ol style="list-style-type: none"> 1. Have you tried any bill payments using this app? 2. Have you used device management option? |
| A. V. Joachim – (IT19037998) | <ol style="list-style-type: none"> 1. Which task do you carry out the most and what is the reason behind it? 2. Which option do you use the most, Own account transfer or One time transfer to a third-party unregistered account or Fund transfer to a registered account? 3. When making a One-time transaction have you ever input an incorrect account number and made a successful transaction? 4. Have you faced any system errors when trying to make a One-time transaction? 5. When making a One-time transaction, have you ever disagreed or dissatisfied to provide any details of yours? 6. When making a One-time account transaction do you think that your transaction is safe through the People's Wave? |

Interview 2

1. Initially giving a welcome and brief introduction about the client.
2. As the first element the interviewer is asking about the login related questions.
3. As the second section of the interview, the interviewer is asking questions related to Interbank fund transfer option.
4. Afterwards the next interviewer is asking about the Useability related questions.
5. As the interview, the fourth interviewer is asking questions related to the bill payment option and its flaws and usage.
6. Before winding up the interview giving an appreciation to the client.

| Interview 2 | |
|--|--|
| Name - (IT Number) | Questions |
| S. W. R. S. I. Rathnayake - (IT19062266) | <ol style="list-style-type: none"> 1. Are you a user of this application? 2. Have you logged in now? |
| A. R. W. M. B. W. D. B. Jayawardana – (IT19127538) | <ol style="list-style-type: none"> 1. Do you use the Inter-Bank Transaction option on daily basis? 2. How often do you use this option? 3. Can you identify the “Inter Bank Fund Transfer” option easily in “Transfer Services” menu? And are you selecting options by reading those or keep memorizing the place? 4. In “Inter Bank Fund Transfer” menu which option you use more often? 5. Do you use manage favourite beneficiary option? If you use how often do you use that option? 6. Have you ever input wrong details while adding new Favorite beneficiary? 7. Can you rate the following from 1 to 10 as a function, as a number of steps and as an interface? <ul style="list-style-type: none"> • One time fund transfer • Favourite transfer • Manage favourite beneficiary |
| A. V. Joachim – (IT19037998) | <ol style="list-style-type: none"> 1. Do you think you can handle the whole function using one hand? 2. What do you think about the interfaces, are you satisfied? |
| K. A. Yathushan – (IT19513188) | <ol style="list-style-type: none"> 1. Do you use bill payment option for paying any kind of bills? if so, what kind of bills do you pay? 2. Have you used “manage favorite bill” option? and are you satisfied with it? 3. Have you ever paid a bill by scheduling it? and what is your opinion about it? 4. How often do you use bill payment option? 5. Are there any flaws in people's wave bill payment option? 6. How do you rate the bill payments option from 1 to 10 based on the importance & user experience? |

Video recording

The meeting will be scheduled via MS Teams environment with the presence of all four members and each member presented their individual functionalities along with respective mobile UI's. Each member briefly described their respective user flows and their crud functionalities.

1. First member is presenting functionalities of user management.

Briefly describes about,

- Forgot password
- Registration
- Login/Log out
- Main menu
- Navigational drawer

2. Second member is briefly describing Interbank fund transfer option.

- One time fund transfer
- Favorite beneficiary transfer
- Add new beneficiary
- Update beneficiary
- Delete beneficiary

3. Next member is describing about fund transfer options and cheque services related options.

- One time transfer
- Manage favorite beneficiary
- Add new beneficiary
- Edit beneficiary
- Delete beneficiary
- Favorite transfer
- Cheque services

4. Last member is describing about Bill payment option and device management options.

- Onetime bill payment
- Bill history
- Mange favorite bill
- Add new favorite
- Device management

Survey on People's Wave Mobile Banking Application

The purpose of this survey is to collect comprehensive feedback on Peoples Bank's Peoples Wave Mobile Application. The collected data will be used only for educational statistical research and analysis. Your response will be anonymous. Please be kind enough to fill this form. Your contribution is highly appreciated in this educational survey.

* Required

Age *

- ☐ 18 - 25
- ☐ 26 - 35
- ☐ 36 - 50
- ☐ Above 50

Occupation *

- ☐ Student
- ☐ Private Employee
- ☐ Government Employee
- ☐ Self Employee
- ☐ Business
- ☐ Unemployed
- ☐ Other: _____

Monthly Income *

- ☐ Up to 10000
- ☐ 10000 - 25000
- ☐ 25000 - 50000
- ☐ 50000 - 100000
- ☐ Above 100000

How long do you use this People's Wave application? *

- ☐ Less than 6 months
- ☐ 6 months - 1 year
- ☐ 1 - 2 years
- ☐ Above 2 years

Why do you use People's Wave application *

- ☐ Reducing the time for transaction
- ☐ Easy to use
- ☐ Cost effectiveness
- ☐ Technology savvy

Which option do you use more frequently *

- ☐ People's bank to People's bank transfer
- ☐ Inter bank transfer
- ☐ Bill Payments
- ☐ Cheque services
- ☐ Other: _____

Do you think the application is secure *

- ☐ Very secure
- ☐ Some what secure
- ☐ Not secure

What are your thoughts about the User Interfaces *

- ☐ Excellent
- ☐ Good
- ☐ Average
- ☐ Poor

How often do you use the application *

- ☐ Daily
- ☐ Weekly
- ☐ Monthly

Do you use favorite beneficiary or favorite bill options *

- ☐ Only favorite beneficiary
- ☐ Only favorite bill
- ☐ Both
- ☐ None

Do you use this application in multiple devices *

- ☐ Yes
- ☐ No

Rate the Login, Registration and Forgot password options *

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

Rate the People's bank to People's bank transaction process

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

Rate the Inter bank transaction process

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

Rate the payment services

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

Rate the cheque services

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

Rate the overall application *

| | | | | | | | | | | | |
|------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Poor | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | Excellent |

What are the faults in the application (Not required)

Your answer _____

Submit

Participant Profiles

| Name | Demography | Location, Date and Time |
|--------------------|--|--|
| Achintha Devinda | He is an undergraduate of University of Colombo. He is currently working as an intern at Mass Holdings. He is living in Mawanella He has been using people's Wave banking application around two years. | Location: -No69 Hemmathagama, Mawanell. Date: - 2021/08/20 Time: - 7.30 pm |
| Sachini Jayasinghe | She is a business person. She is running her own business of beauty cosmetics. She is currently living in Digana. She has been using people's Wave banking application since 2020. | Location: - No 55 Digana, Rajawella. Date: - 2021/08/20 Time: - 8.50 pm |

| No. | Task Instruction | Target | Probes |
|-----|--|---|--------|
| 01 | Sign into the mobile application | Test the user experience on the sign in process. | |
| | Check the forgot password | Checking the proceeding time of the forgot password functionality | |
| | Navigate between interfaces | Test the usability of the interfaces | |
| | Enter the invalid details to the input fields and see the response | Check the input validations and the error responses | |
| 02 | Sign into the application | Test the user experience on the sign in process. | |
| | Doing a particular process using one hand | Check the usability of the application | |
| | Read the headings of the options | Check the user friendliness | |
| | Asking to use the device management option | Checking the experience of the user | |

Plan for data analysis

Interviews

Digital Video

<https://drive.google.com/file/d/1bqls4mNU8EIYGNbOaBTRsnj00FbWH9qZ/view?usp=sharing>

Interview 1

1. Are you a user of this application?
:Yes
2. Are you logged in now ?
:Yes, (after looking at the phone) Oh! it seems the account is logged out right now, because the session is expired. OK, let me login to the application now. Looks like I entered a wrong username, but it hasn't validated. It seems a problem for me. OK, please let me try again. OK, I'm logged in
3. Have you ever tried forgot password option?
:Yes, it also not validating the username. So, I have to re-enter the username with password again
OK, that's all for my part. Thank you, sir. now others will ask their questions.
4. Sir what do you think about the interfaces, are you satisfied?
:No! of cause not. Comparing to the other mobile banking application this application has some interfaces that are less attractive.
5. Sir, is it easy to navigate between pages? What are your thoughts about that?
: Yeah! well I must tell that it is not easy to navigate but it also not difficult. For some functions they have properly organized the navigations. But in some other functions it takes too much time to verify.
6. Have you tried any bill payments using this app.
: No, I haven't
7. Sir, in this app which task do you carry out the most and What is the reason behind it?
: Well, as you already know, that I'm doing an internship, so I transfer some money to my parent's account.
8. Which option do you use the most, Own account transfer or One time transfer to a third-party unregistered account or Fund transfer to a registered account?
: Mostly I used the One-time fund transfer.
9. When making a One-time transaction have you ever input an incorrect account number and made a successful transaction?
: Yeah! Well, I remember one such situation where I input an incorrect receiver's account number which in result displayed an error related to the mobile number rather displaying an account number error.
10. Have you faced any system errors when trying to make a One-time transaction?
: Yes, of cause, it has happened to me several times as I remember when I was trying to make several transactions continuously it suddenly displayed an error message where it didn't allow me to carry out the process further.
11. When making a One-time transaction, have you ever disagreed or dissatisfied to provide any details of yours?

: I don't know about the others but It's OK for me.

12. When making a One-time account transaction do you think that your transaction is safe through the People's Wave?

: I trust the bank. It's their responsibility to keep my transaction safe.

Interview 2

1. Are you a user of this application?

:Yes

2. Have you logged in now?

: Not yet. Let me log in. (logged in successfully)

3. Ma'am can you tell me do you use the Inter-Bank Transaction option on daily basis?

:Yes

4. Ma'am, how often do you use this option?

: As a business person I have to transfer funds between many bank accounts with different banks by daily, So I think two or three times per day.

5. Ma'am, can you identify the "Inter Bank Fund Transfer" option easily in "Transfer Services" menu? Are you selecting options by reading those or keep memorizing the place?

:Usually, I navigate to the required page by only reading the heading of the option.

6. In "Inter Bank Fund Transfer" menu which option you use more often?

: Mostly I use Favorite transfer because it makes my transferring process easier.

7. Do you use manage favorite beneficiary option? If you use how often do you use that option?

: Yes of course, as a businessperson I have to handle lot of new clients, so in order to make payment to those new clients, so I use Manage favorite beneficiary option usually once a week.

8. Have you ever input wrong details while adding new Favorite beneficiary?

: Yeah, as I remember once I input a wrong account number with 14 digits then it displayed an error message with the mobile number, so I got confused at that time. And also, the app is not validating the account numbers so always make sure that I'm not entering an invalid account number.

| | Rating for the function (Out of 10) | Rating for number of steps (Out of 10) | Rating for Interface (Out of 10) |
|--------------------------------|--|---|-------------------------------------|
| One time fund transfer | 6 | 6 | 4 |
| Favorite transfer | 7 | 6 | 4 |
| Manage favorite beneficiary | 6 | 6 | 4 |

9. Do you think you can handle the whole function using one hand?

: Absolutely not! I have small hands and the buttons are at the bottom of the page.

10. Ma'am what do you think about the interfaces, are you satisfied?

: No! not at all. The user interfaces are not much user friendly. I think People's bank should think about the user experience of their customers.

11. Do you use bill payment option for paying any kind of bills? if so, what kind of bills do you pay?

:Yes, I have used the bill payment option in order to pay my postpaid dialog bill, to pay insurance for my business in HNB assurance and to pay vehicle insurance in people's insurance. so, I mostly use this option in nowadays because of the covid-19 pandemic.

12. Have u used managing favorite bill option? and are u satisfied with it?

:Yeah, I have used it. and I think it is useful, since every month I have to pay my bills so using the manage favorite bill option it makes my bill payment process easier.

13. Have you ever paid a bill by scheduling it? and what is your opinion about it?
Mumm, no, I have not. and in my opinion paying a bill by scheduling it have some issues. such as if I scheduled a bill payment and at that time if my account does not have the required money to pay the bill the scheduled bill payment process will not proceed. So, I think paying a bill by scheduling it is a complicated process.
14. How often do you use bill payment option?
:I use this bill payment option mostly once a month or twice
15. Are there any flaws in people's wave bill payment option?
:Yeah, I think there is one major flaw in this bank's bill payment option. that is after paying a bill I will not get any downloadable receipt option. So, because of that when my business's accountant manages the book of accounts there will no receipt for verify the payment of business's insurance and because of that he need to look at my monthly banking statement in order to verify the insurance payment.
16. Finally, how do rate the bill payments option from 1 to 10 based on the importance & user experience?
:6

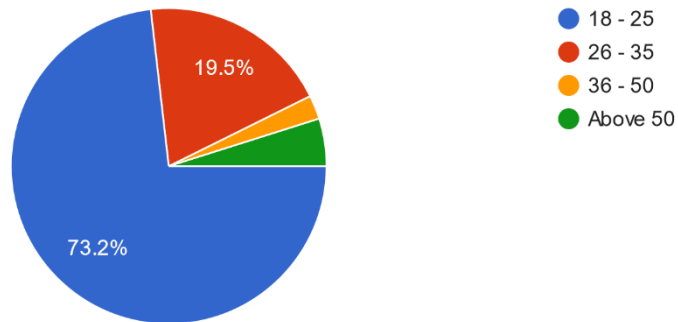
Video recordings

<https://drive.google.com/file/d/1Dy0IIRyy6Qx3ybwLAIRxDiXEYEPx7UNs/view?usp=sharing>

Questionnaires

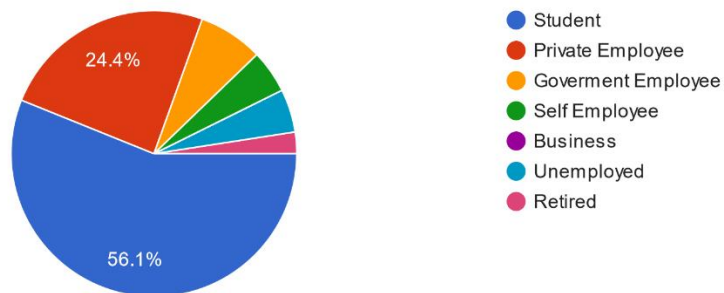
Age

41 responses



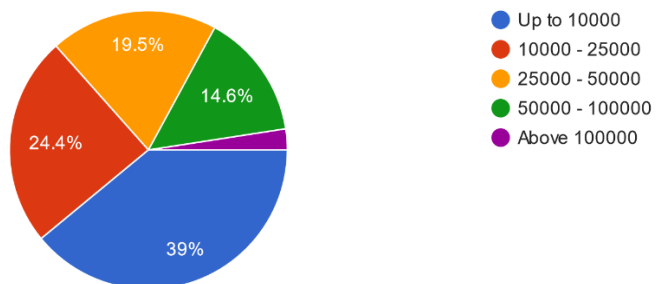
Occupation

41 responses



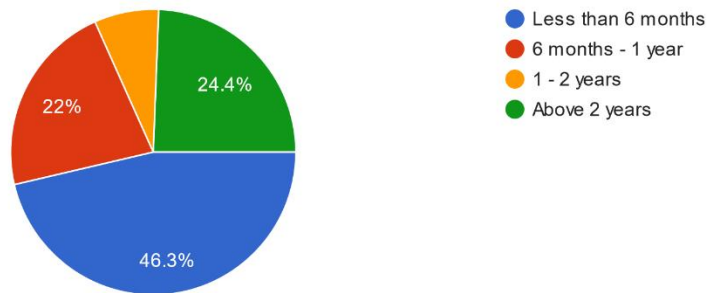
Monthly Income

41 responses



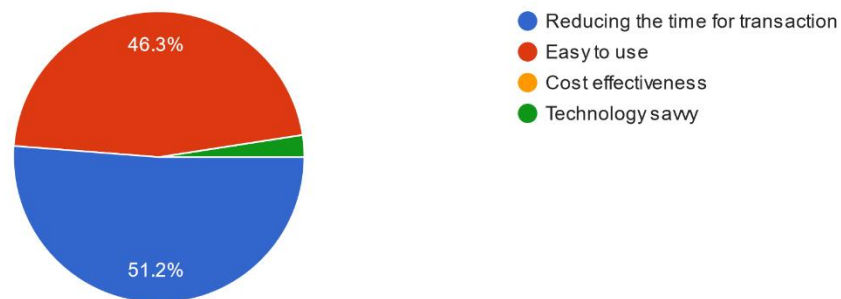
How long do you use this People's Wave application?

41 responses



Why do you use People's Wave application

41 responses



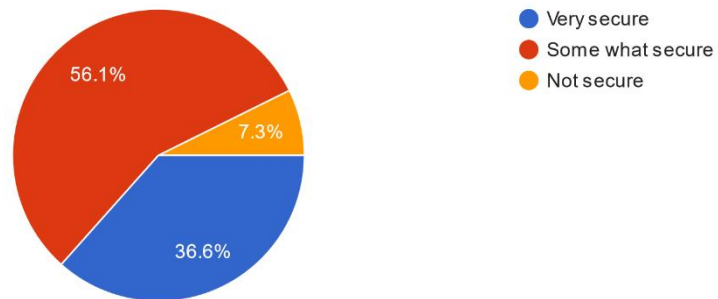
Which option do you use more frequently

41 responses



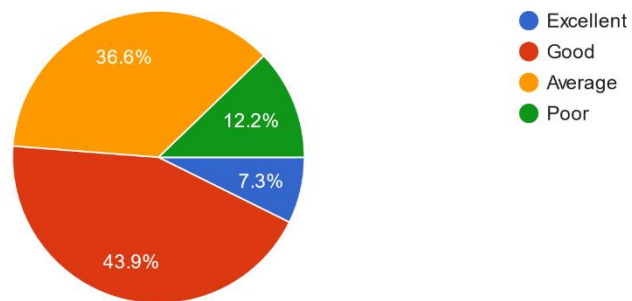
Do you think the application is secure

41 responses



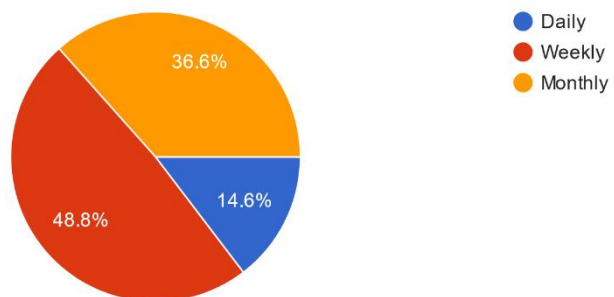
What are your thoughts about the User Interfaces

41 responses



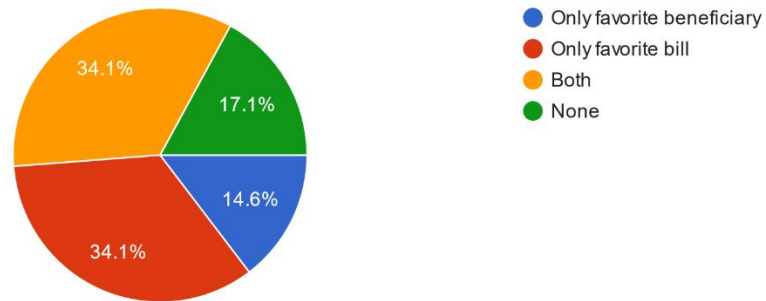
How often do you use the application

41 responses



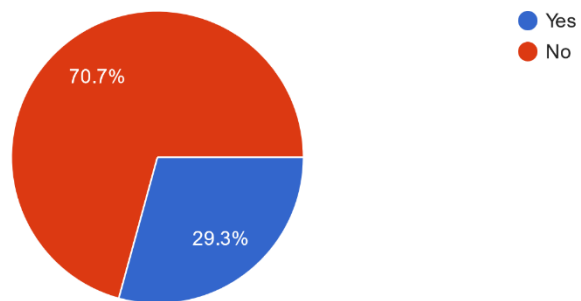
Do you use favorite beneficiary or favorite bill options

41 responses



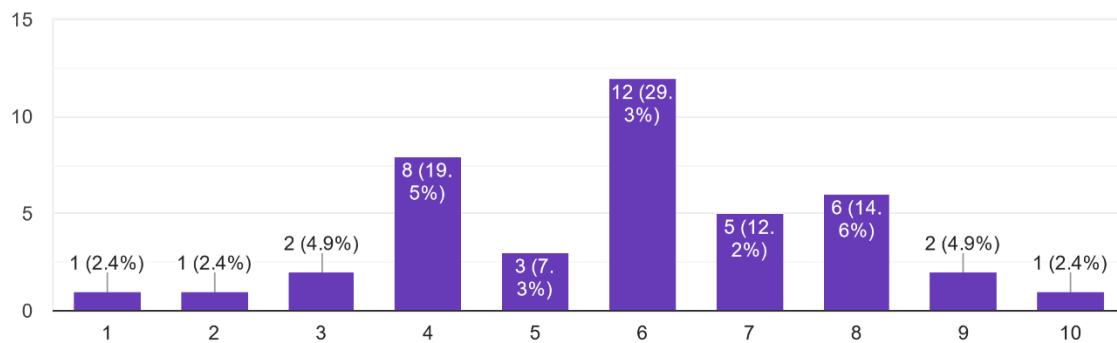
Do you use this application in multiple devices

41 responses



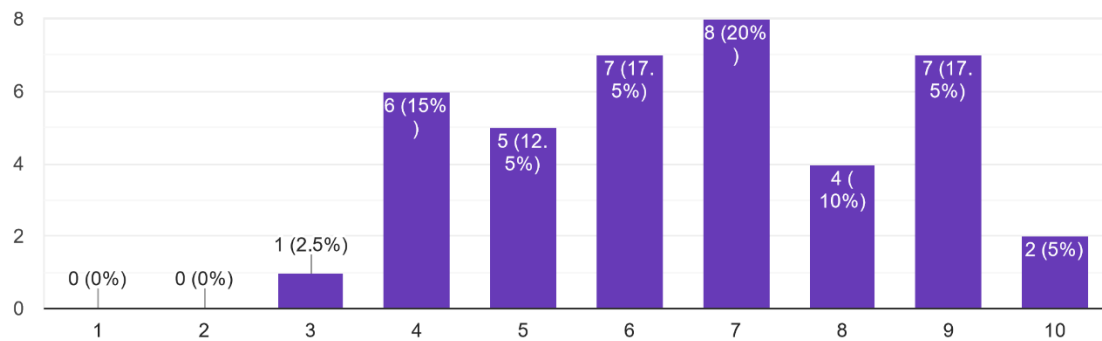
Rate the Login, Registration and Forgot password options

41 responses



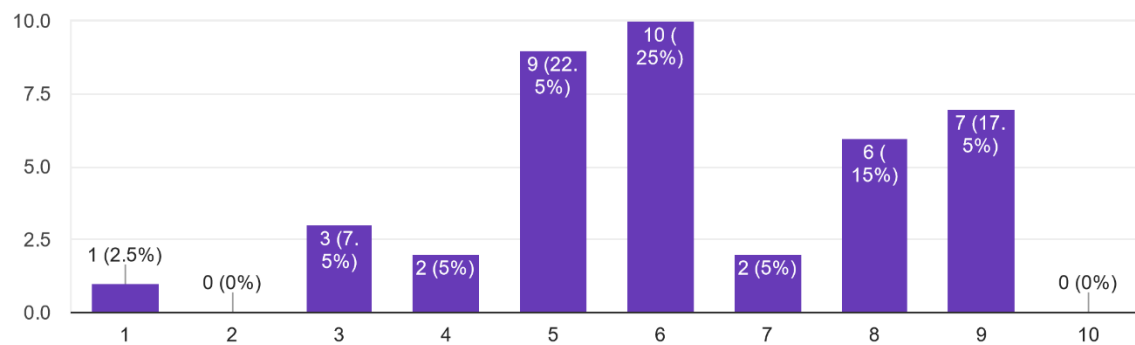
Rate the People's bank to People's bank transaction process

40 responses



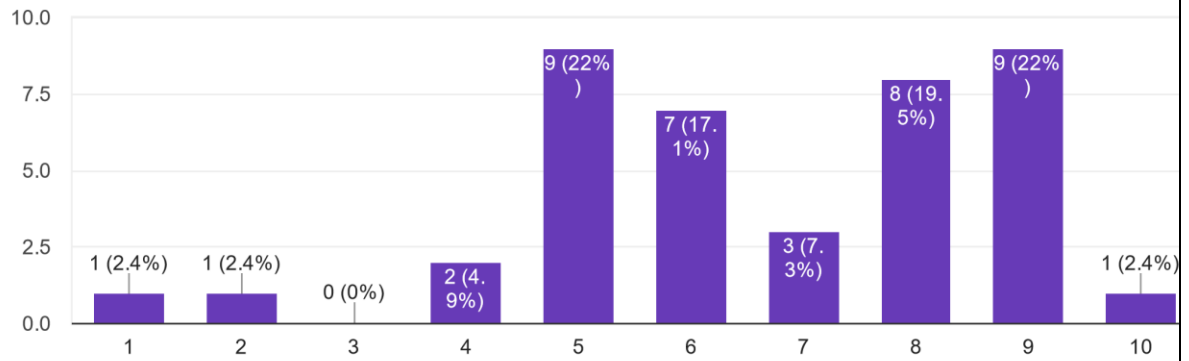
Rate the Inter bank transaction process

40 responses



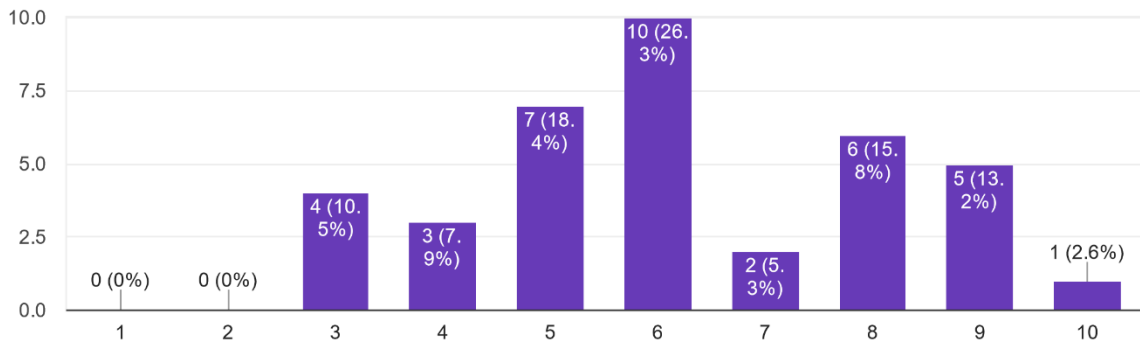
Rate the payment services

41 responses



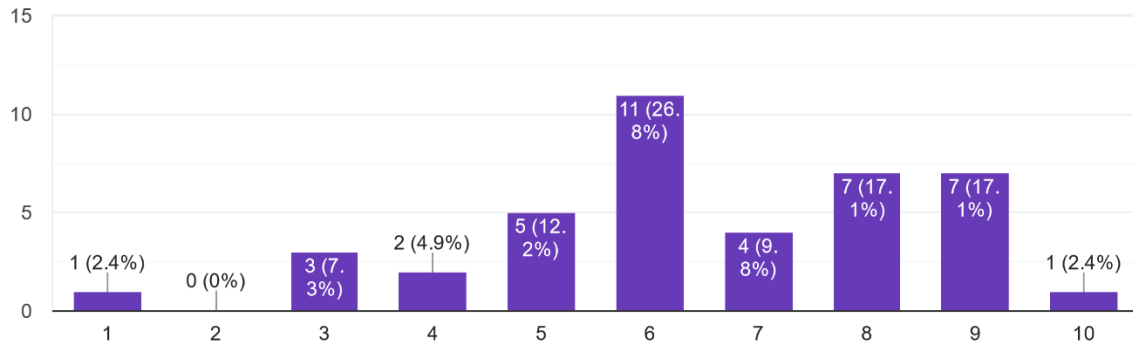
Rate the cheque services

38 responses



Rate the overall application

41 responses



What are the faults in the application (Not required)

22 responses

No receipts

Not satisfied with the interfaces

Not satisfied with account number validation in interbank fund transfer option

Do not let anyone make this kind of apps, i suggest to hand it over to viraj technologies there wont be any faults

Can not identify the incorrect field when transferring funds through bank to bank

Interface and font size is not eye pleasing

Not user friendly

Interface not familiar also password reset takes considerable amount of time

What are the faults in the application (Not required)

22 responses

Not good user interfaces

Can not find the incorrect input in funds transfer services

Difficult to use as an app

Can not make multiple transactions at a time it will pop up an error message

Quick time out, Can't get the receipt

User interfaces are not user friendly or attractive enough

Its not user friendly

This application is not much user friendly. So this should be improved further.

Can you fix the login option.because we cannot use passcode always.we need fingerprint option or something.

Login process is very slow

Very bad application. but service is good

No

No faults

I didnt find any such faults