Sri Lanka Institute of Information Technology

User Research Plan for People's Bank Wave Application

User Experience Engineering
Lab sheet 4

Group ID: 2021S1_REG_WE_01

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Introduction

 As the number of mobile apps keeps increasing, users often need to compare many apps, in order to choose one that best fits their needs. Fortunately, as there are so many users sharing an app market, it is likely that some other users with the same preferences have already made the comparisons and shared their opinions. Before customers download an application look at the UI. If it had satisfied UI customers, they would be tempted to download the application. User interface is the most important part of mobile applications because it can turn potential visitors to buyers as it facilitates interactions between the user and mobile application.

People's Bank WAVE application is one of the most used apps in Sri Lanka. It is used by thousands of people. This app gives a lot of services to the customers. They can check their account balance with one simple swipe, find the nearest branch or ATM, see account summary, cheque services, fund transfer etc. But there are many bad reviews regarding the user friendliness of this app. Most reviewers say that the People's Bank app has very poor user interfaces when compared to its services. They emphasize that user interfaces should be improved and look more standard and professional than this. We have some good ideas to increase the professionalism and the user friendliness of this app. We will increase some services also. We are hoping to make a standard app than the existing People's Bank app.

User researchers use various methods to expose problems and design opportunities and find crucial information to use in their design process. Research helps us to learn about the users and their behaviour, goals, motivations, and needs. It also shows us how they currently navigate a system, where they have problems and, most importantly, how they feel when interacting with our product.

For this usability test plan, a group of 2 people have been selected for the interviews. There is a Teenager and a Business Analyst. This is an app used to handle bank accounts. Using the app, people can do their day-to-day banking activities. A teenager and a business analyst are the daily users of this app. They have been selected because they are highly exposed to errors, bugs, failures, and usability problems of the app. So basically, the details about what they are looking for in the app will be revealed as outcomes in this testing process.

Test Objectives

This document describes a test plan for conducting a usability test during the development of People's Bank WAVE application. The goals of usability testing include establishing a baseline of user performance, identifying the main interests or functions of users by the application and identifying potential design concerns to be addressed in order to improve the efficiency, productivity, and end-user satisfaction.

The usability test objectives are:
- Identify main functions used by users
- Identify the expectations of the user from the application
- Disclosing UI errors and expectations
- Identify levels of user-satisfaction
- Comparison with similar applications of competitor banks

In the existing app, implemented functions are too simple and some of them are not working properly, interfaces are less attractive, and page navigation also not working properly. So, our main goal is to implement more convenient features for users and provide higher user satisfaction by developing attractive interfaces. As we see, most of the time the app does not fulfil the needs of the users. Because of that, the user does not like to continue using this app.

So that the goal of the usability testing process is to give the user the best experience through the redesign process of this app. Therefore, the current features need improvements and should develop current features as more beneficial features and to add new features to increase the user satisfaction levels.

Methodology

Three methods have been used to conduct the research. They are online surveys, online interviews and video recordings. The participants in this usability testing were 50 in total as to the participation of the online survey and video interviewing sessions. There were 50 responses of the participants from the online survey, and we have interviewed 2 participants from video interviewing sessions. First, all of them have installed the current version of People's Bank Wave app and used it for a while. Then every participant has been instructed to answer some questions regarding that app and their feedback is taken. Google forms are used to conduct the online survey and, questions with multiple choices, checkboxes, open questions were included in this questionnaire.

The participants' responsibilities will be to attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible and to provide feedback regarding the usability and acceptability of the user interface. The participants will be directed to provide honest opinions regarding the usability of the application and to participate in post-session subjective questionnaires and debriefing. The participants have been asked to install the app and they have been instructed about how the app works and what they can obtain through it. The participants will receive an overview of the usability test procedure, equipment, and software. Due to the current situation, the test has been done online. The users have to use their mobile devices for the test since this is a mobile application.

In the procedural method, participants will take part in the usability test at home via a screen-sharing technology. An Android device, with the mobile application and supporting software, will be used in a typical office environment. The participant's interaction with the mobile application will be monitored by the facilitator through the online video session conducted through Microsoft Teams and Zoom. Notetakers and data logger(s) will monitor the sessions on their own computers, connected to the same meeting conducted by the facilitator. The participants' feedback, their suggestions and their behaviour will be videotaped. The facilitator will brief the participants on the mobile application and instruct the participant that they are evaluating the application. The facilitator will explain that exploratory behaviour outside the task flow should not occur until after task completion. At the start of each task, the facilitator will read aloud the task description and then the participant will follow the task. The facilitator will instruct the participant to 'think aloud' so that a verbal record exists of their interaction 6 with the application. The facilitator will observe and enter user behaviour, user comments, and system actions in the data logging application. The comments which are given by the participants, their suggestions, their behaviour, and the other information which are given by the user will be videotaped and the facilitator observes the above details.

Zoom was used to conduct the video interview and the whole procedure was recorded. With usability testing, we have focused on getting measures of educational level, user satisfaction, and demographic information such as age and language because these factors have a great influence on the app. Both the google form and video interviews were set up with considering these facts such as facts about occupation, graphic literacy, and technical literacy gained with the testing sessions and questionnaires. As well as the questions that have been asked about age and language preferences cover the demographic measures. And measures about user satisfaction were gained through interview sessions and questions focused on user perception of ease of use and usefulness of the app gained with rating the app and open questions about suggestions.

Interviewing
Script 01.

T1. Can you sign up by using unregistered bank account details. If you haven't any unregistered account details, please try to log in your Wave app by using your valid credentials.

Q1. Please try to log in to the system with your credentials (Maneesha)

Q2. What do you think about this login page? (Maneesha)

T2. Let's assume you want to add a profile picture and reset your current password. Now try to view your profile and reset your current password.

Q3. Okay, can you view your password? (Maneesha)

Q4. Do you have any other issues with this login page? (Maneesha)

Q5. What were the issues you have to face while you were registering to the system (Maneesha)

Q6. Do you have any issues with this login service? (Maneesha)

Q7. What do you think about the homepage of the WAVE app? (Ranjula)

T3. Let's assume you want to transfer money to your mother who has a BOC account. Now try to make an inter-bank money transaction.

Q8. Can you please try to transfer money to someone? (Ranjula)

Q9. What do you think about this money transferring service? (Ranjula)

Q10. Are you satisfied with this bank name and the branch name fields? (Ranjula)

Q11. Any other problems with this service? (Ranjula)

T4. Let's assume you want to add your mothers account as your favourite account. Now try to add a favourite account using the system.

Q12. Do you think it will be helpful if there is an add favourite transfers option in the same interface (Ranjula)?

Q13. Okay, now try to check your money transferring history (Ranjula)

Q14. What do you think about account summary service? Are you satisfied with it? (Ranjula)

T5. Assume that you have to do a normal bill payment using this app. So can you please try to do a normal bill payment.

Q15. Have you made any payment using this app? How's that? (Janith)

Q16. Have you experienced anything else while paying? (Janith)

Q17. Are you satisfied with the user interface and functionality of the paid service? (Janith)

T6. Have you experienced the cheque service using this app?

Q18. Have you experienced the cheque service using this app? How's that? (Janith)

T7. Let's assume you want to calculate your mother's pension, so try to calculate it using the upper navigation bar.

Q19. Have you used the pension calculation service? (Hirusha)

Q20. Have you faced any issue? (Hirusha)

Q21. Okay try to navigate any other page using the upper navigation bar. (Hirusha)

T8. Try to check currency rates in banking rates service.

Q22. Try to check currency rates in banking rates service. (Give some time) Could you find it? (Hirusha)

Q23. Have you used the pawning services page? Do you think it is user friendly? (Maneesha)

Script 02.

T1. Can you sign up by using unregistered bank account details. If you haven't any unregistered account details, please try to log in your Wave app by using your valid credentials.

Q1. Please try to log in to the system with your credentials (Maneesha)

Q2. What do you think about this login page? (Maneesha)

T2. Let's assume you want to add a profile picture and reset your current password. Now try to view your profile and reset your current password.

Q3. Okay, can you view your password? (Maneesha)

Q4. Do you have any other issues with this login page? (Maneesha)

Q5. What were the issues you have to face while you were registering to the system (Maneesha)

Q6. Do you have any issues with this login service? (Maneesha)

Q7. What do you think about the home page of the WAVE app? (Ranjula)

T3. Let's assume you want to transfer money to your mother who has a BOC account. Now try to make an inter-bank money transaction.

Q8. Can you please try to transfer money to someone? (Ranjula)

Q9. What do you think about this money transferring service? (Ranjula)

Q10. Are you satisfied with this bank name and the branch name fields? (Ranjula)

Q11. Any other problems with this service? (Ranjula)

T4. Let's assume you want to add your mothers account as your favourite account. Now try to add a favourite account using the system.

Q12. Do you think it will be helpful if there is an add favourite transfers option in the same interface (Heshan)?

Q13. Okay, now try to check your money transferring history (Ranjula)

Q14. What do you think about account summary service? Are you satisfied with it? (Ranjula)

T5. Assume that you have to do a normal bill payment using this app. So can you please try to do a normal bill payment.

Q15. Have you made any payment using this app? How's that? (Janith)

Q16. Have you experienced anything else while paying? (Janith)

Q17. Are you satisfied with the user interface and functionality of the payment service? (Janith)

T6. Have you experienced the cheque service using this app?

Q18. Have you experienced the cheque service using this app? How's that? (Janith)

T7. Let's assume you want to calculate your mother's pension, so try to calculate it using the upper navigation bar.

Q19. Have you use the pension calculation service? (Hirusha)

Q20. Have you faced any issue? (Hirusha)

Q21. Okay try to navigate any other page using the upper navigation bar. (Hirusha)

T8. Try to check currency rates in banking rates service.

Q22. Try to check currency rates in banking rates service. (Give some time) Could you find it? (Hirusha)

Q23. Have you used the pawning services page? Do you think it is user friendly? (Maneesha)

Video Recording
https://web.microsoftstream.com/video/3e493edc-4426-4c34-be8f-2d7e8c1b2726
Questionnaire
https://docs.google.com/forms/d/e/1FAIpQLScpwETEBHRMACkvqE0sNTmmmkXaA7Qqo6hQM2yaQBpyyGaZvQ/viewform?usp=sf_link

Participant Profiles.

Name	Demography	Location, Date and Time
Mr. Wathsara Vinuka	- Status - married - Age - 37yr - Sex - Male - Religion - Buddhism	Colombo, LK Friday, August 23, 2021 13:30 pm
Miss. Maleesha Kandumulla	- Status - single - Age - 18yr - Sex - Female - Religion – Catholic	Kandy, LK Friday, August 23, 2021 16:30 pm

User Research – Tasks/Scenarios

No.	Task Instruction	Target	Probes
1.	Can you sign up by using unregistered bank account details.if you haven't any unregistered account details, please try to log in your Wave app by using your valid credentials.	To find out whether the user notices, password strength validation didn't take place when signing up and password input field has been overlaid by keyboard when sign in.	He didn't notice that the password strength validation didn't take place when signing up
2.	Let's assume you want to add a profile picture and reset your current password. Now try to view your profile and reset your current password.	To find out whether the user notices, he can't view profile details.	Struggle to view details.
3.	Let's assume you want to transfer money to your mother who has a BOC account. Now try to make an inter-bank money transaction.	To find out whether the user notices, the drop down does not work properly.	Struggled with the drop down and complained about it.
4.	Let's assume you want to add your mothers account as your favourite account. Now try to add a favourite account using the system.	To find out whether the user notices, he can't add any favourite account.	Struggled to add a favourite account, and then got the notification to add internet banking.
5.	Assume that you have to do a normal bill payment using this app. So can you please try to do a normal bill payment.	To find out that the user has to waste a lot of time choosing a service provider.	Waiting long to choose a service provider.

6.	Have you experienced the cheque service using this app?	To find out whether the user notices, he can view the cheque service option.	Confused and asked about the cheque service option.
7.	Let's assume you want to calculate your mother's pension, so try to calculate it using the upper navigation bar.	To find out whether the user notices that the upper navigation bar is not working properly.	Struggled with the upper navigation bar.
8.	Try to check currency rates in banking rates service.	To find out whether the user notices that the user has to scroll one by one to find currency rates.	The user just completed the task smoothly.

Plan for Data Analysis

Interviews

Collected data: Qualitative data
Detail Analysis:

1. Script1:: Q1. Please try to log in to the system with your credentials.
    A1. okay…
    Script2:: Q1. Please try to log in to the system with your credentials.
    A1. okay

    Script1:: Q2. What do you think about this login page?
    A2.I have to navigate between two pages to type my username and the password and I think it should allow contextual details for login.
    Script2:: Q2. What do you think about this login page?
    A2. It's fine but I have to navigate between two pages to type my username and the password.

    Script1:: Q3. Okay, can you view your password?
    A3. Oh no, I can't view my password. I think view password function should be added here
    Script2:: Q3. Okay, can you view your password?
    A3. Mm…,No I can't view my password

    Script1:: Q4. Do you have any other issues with this login page?
    A4. It's kind of a dull type, I think it should be more attractive.
    Script2:: Q4. Do you have any other issues with this login page?
    A4. Mmm… I think it should be more attractive.

    - **Analysis: Login page should be fine-tuned.**

2.
    Script1:: Q5. What were the issues you have to face while you were registering to the system
    A5. I couldn't see any password strength requirements
    Script2:: Q5. What were the issues you had to face while you were registering to the system?
    A5. Mm….I hadn't faced any issue.

    Script1:: Q6. Do you have any issues with this login service?
    A6. Yeah, my login session was expired while I'm using the app

Script2:: Q6. Do you have any issues with this login service?

A6. No, I hadn't faced any.

- **Analysis: Registration function should be repaired.**

3.

Script1:: Q7. What do you think about the homepage of the WAVE app?

A7. I think large images as menu icons destroy the elegance of the app. (Thinking.) I think account balance and user important details should be visible on home page

Script2:: Q7. What do you think about the homepage of the WAVE app?

A7. I think large images as menu icons destroy the elegance of the app.

Script1:: Q8. Can you please try to transfer money to someone?

A8. Okay….

Script2:: Q8. Can you please try to transfer money to someone?

A8. Okay….

Script1:: Q9. What do you think about this money transferring service?

A9. Mmm… this form is very large so; I have to scroll down continuously to fill my details

Script2:: Q9. What do you think about this money transferring service?

A9. Mmm… I think it's good.

Script1:: Q10. Are you satisfied with this bank name and the branch name fields?

A10. It's not user friendly, to fill the bank name and the branch name separately. It's better if it is in the same field, so I could select both by one tap.

Script2:: Q10. Are you satisfied with this bank name and the branch name fields?

A10. It's not user friendly, to fill the bank name and the branch name separately. It's better if it is in the same field, so I could select both by one tap.

Script1:: Q11. Any other problems with this service?

A11. There is a problem with this selecting the bank branch option also, if I wanted to change the bank name, I can't go back without selecting any of the existing branch names.

Script2:: Q11. Any other problems with this service?

A11. There is a problem with this selecting the bank branch option also, if I wanted to change the bank name, I can't go back without selecting any of the existing branch names.

- **Analysis: Solve the branch code problem.**

4.

Script1:: Q12. Do you think it will be helpful if there is an add favourite transfers option in same interface

A12.Yes of course. It will be really helpful for me, and it will be saving my time also.

Script2:: Q12. Do you think it will be helpful if there is an add favourite transfers option in the same interface.

A12.Yes of course. It will be really helpful for me, and it will be saving my time also.

Script1:: Q13. Okay, now try to check your money transferring history

A13. (Confused) Mmm……It's not visible, but I think it should show on the home page.

Script2:: Q13. Okay, now try to check your money transferring history?

A13. (Confused) Mmm……It's not visible, but I think it should show on the home page.

Script1:: Q14. What do you think about account summary service? Are you satisfied with it?

A14. mm… I think account balance and other stuff should be more clear.

Script2:: Q14. What do you think about account summary service? Are you satisfied with it?

A14.mm…. yeah it's fine.

- **Analysis: solve the branch code problem.**

5.

Script1:: Q15. Have you made any payment using this app? How's that?

A15. Yes, I usually use this app for payment, but I can't add my favourite bills in this application. I have to use internet banking if I want to add my favourite bills.

Script2:: Q15. Have you made any payment using this app? How's that?

A15. Yes, I usually use this app for payment, but I can't add my favourite bills in this application. I have to use internet banking if I want to add my favourite bills.

Script1::Q16. Have you experienced anything else while paying?

A16. Yes, sometimes I have to waste a lot of time choosing a service provider and I can't avoid it because of its required fields. I think if customers can find it and pick it up, it will be very user friendly for customers.

Script2:: Q16. Have you experienced anything else while paying?

A16. Yes, sometimes I have to waste a lot of time choosing a service provider and I can't avoid it because of its required fields. I think if customers can find it and pick it up, it will be very user friendly for customers.

Script1:: Q17. Are you satisfied with the user interface and functionality of the paid service?

A17. I think that interface and functionality should be more user friendly.

Script2:: Q17. Are you satisfied with the user interface and functionality of the payment service?

A17. Yes. It's okay for me.

- **Analysis: Solve favourite bill and service provider problems.**

6.

Script1:: Q18. Have you experienced the cheque service using this app? How's that?
A18. No, I do not use cheque services because I use a savings account. But I think the cheque service section should be hidden for people who use savings accounts.
Script2:: Q18. Have you experienced the cheque service using this app? How's that?
A18. No, I do not use cheque services because I use a savings account.
- **Analysis: hide cheque service.**

7.

Script1:: Q19. Have you used the pension calculation service?
A19. Yes, I have used it for my mother's pension calculations.
Script2:: Q19. Have you used the pension calculation service?
A19. Yes, I have used it for my grandmother's pension calculations.

Script1:: Q20. Have you faced any issue?
A20. Of course, it's open date is not selected automatically, I had to select it manually and the date picker also is not working, I think.
Script2:: Q20. Have you faced any issue?
A20. Of course, it's open date is not selected automatically, I had to select it manually and the date picker also is not working, I think.

Script1:: Q21. Okay try to navigate any other page using the upper navigation bar.
A21. Ooo…. Actually, it does not clearly appear for me, I think it needs to be fine tuned.
Script2:: Q21. Okay try to navigate any other page using the upper navigation bar.
A21. Ooo…. actually, it's not clearly appear for me, I think it needs to be fine tuned.
- **Analysis: repair the date picker and the upper navigation bar.**

8.

Script1:: Q22. Try to check currency rates in banking rates service. (Give some time) Could you find it?
A22. (confused)Yes, I could…. but I had to scroll one by one to find currency rates, it would be easy if there was a search bar.
Script2:: Q22. Try to check currency rates in banking rates service. (Give some time) Could you find it?
A22. (confused)Yes, I could.

Script1:: Q23. Have you used the pawning services page? Do you think it is user friendly? A23. No, I haven't used it earlier, but it would be more efficient if I could see the pawning rate and more details..

Script2:: Q23. Have you used the pawning services page? Do you think it is user friendly?

A23. No, I haven't used it earlier, but it would be more efficient if I could see the pawning rate and more details.

- **Analysis: repair currency rate and pawning service functions.**

Video Recordings

Collected data: Qualitative data
Detail Analysis:

1. Can you sign up by using unregistered bank account details. If you haven't any unregistered account details, please try to log in your Wave app by using your valid credentials.
   - He didn't notice that the password strength validation didn't take place when signing up.

     Analysis: Add password validation.

2. Let's assume you want to add a profile picture and reset your current password. Now try to view your profile and reset your current password.
   - Struggle to view details.

     Analysis: Add View profile details.

3. Let's assume you want to transfer money to your mother who has a BOC account. Now try to make an inter-bank money transaction.
   - Struggled with the drop down and complained about it.
     Analysis: Repair the drop-down.

4. Let's assume you want to add your mothers account as your favourite account. Now try to add a favourite account using the system.
   - Struggled to add a favourite account, and then got the notification to add internet banking.
     Analysis: Create add favourite account function.

5. Assume that you have to do a normal bill payment using this app. So can you please try to do a normal bill payment.
   - Waiting long to choose a service provider.
     Analysis: Repair normal bill payment.

6. Have you experienced the cheque service using this app?
   - Confused and asked about the cheque service option.
     Analysis: Repair the cheque service option.

7. Let's assume you want to calculate your mother's pension, so try to calculate it using the upper navigation bar.
   - Struggled with the upper navigation bar.
     Analysis: Repair the upper navigation bar.

8. Try to check currency rates in banking rates service.
   - The user just completed the task smoothly.
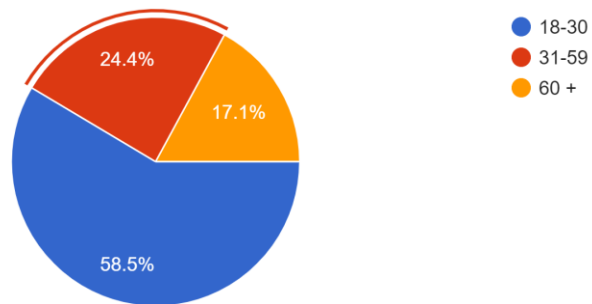   **Analysis: Repair the currency rate problem.**

Questionnaires

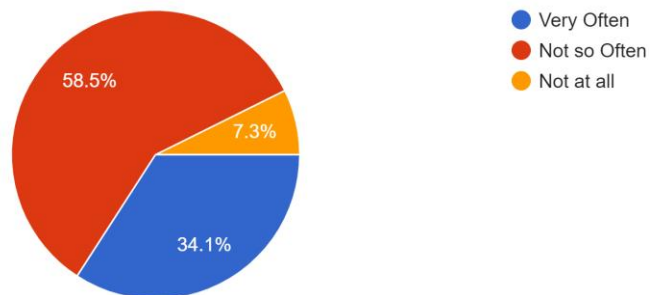**collected data:** Both Qualitative and Quantitative data
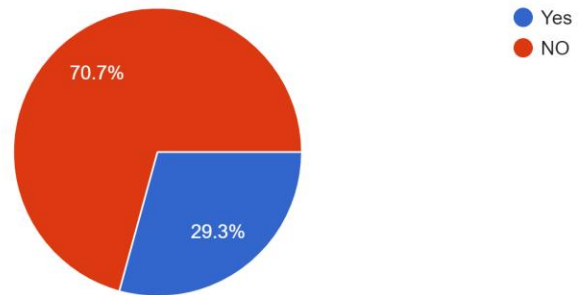
Details Analysis:

Age
41 responses

- 18-30
- 31-59
- 60 +

24.4%
17.1%
58.5%

How often do you use People's Wave App?
41 responses

- Very Often
- Not so Often
- Not at all

58.5%
7.3%
34.1%

Is the app user-friendly ?
41 responses

- ● Yes
- ● NO

70.7%

29.3%

How often does the application crash
41 responses

- ● Very often
- ● Often
- ● Not at all

26.8%

56.1%

17.1%
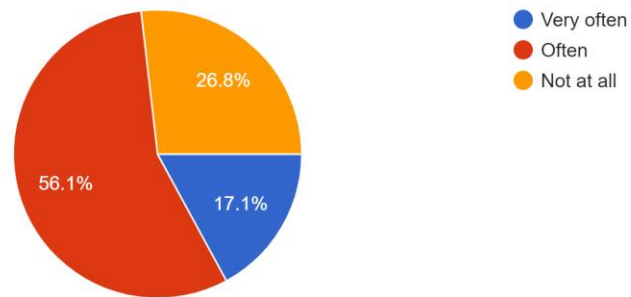
Please State your level of agreement for following:

■ Strongly disagree   ■ Disagree   ■ Neutral   ■ Agree   ■ Strongly agree

Position of messages on the screen is consistent   Error messages are helpful   reading characters are clear
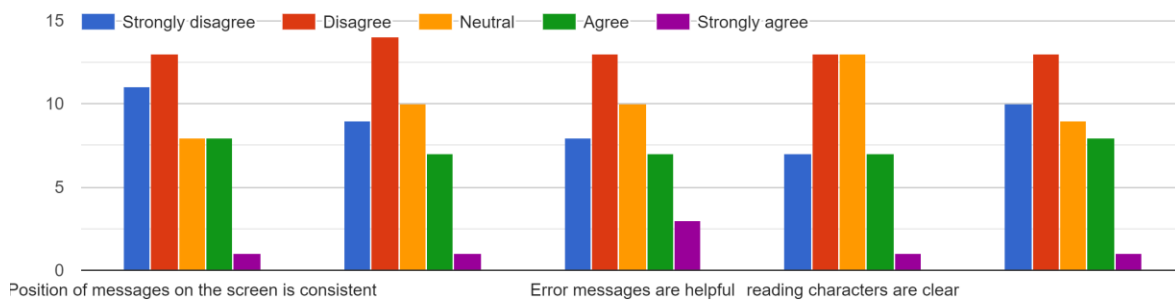
In which areas of the app having more issues
41 responses

Area	Responses
Money transactions	23 (56.1%)
Pay bills	11 (26.8%)
User profile	18 (43.9%)
Pension calculator	12 (29.3%)
Account Details	11 (26.8%)
Exchange rates	15 (36.6%)
Dashboard	23 (56.1%)
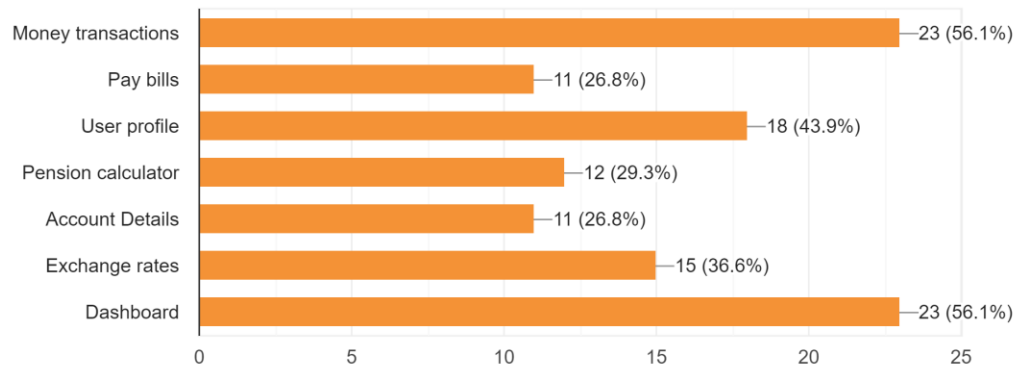
What other features do think should be added or changed ?
41 responses

Feature	Responses
Dashboard screen should be c…	23 (56.1%)
Need to add detailed transactio…	19 (46.3%)
login screen should be more us…	21 (51.2%)
Need to display user profile det…	11 (26.8%)
pension calculator should be m…	15 (36.6%)
Need to add search engine feat…	9 (22%)
Nothing at all	6 (14.6%)
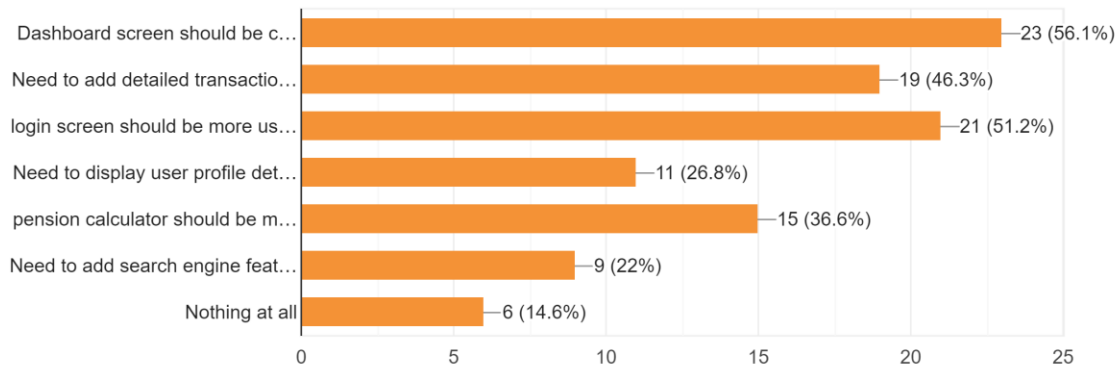
How satisfied are you with the People's Wave
41 responses