

Human Computer Interaction - Project Phase 1

SadaPay User Experience and Interface Assessment: A Holistic Review and Improvement Strategy

Submitted to: Dr. Shakeel Ahmed Khoja

Authors:

Asad Virani - 22787

Danish Badar Qureshi - 22890

Shaz Shoaib – 21554

Table of Contents

1	Introduction.....	3
2	Objective.....	3
2.1	Human-Computer Interaction and User Experience	3
3	Methodology.....	4
3.1	Interviews.....	4
3.2	Online Questionnaire.....	4
4	Evaluation/Discussion.....	5
4.1	Interviews.....	5
4.1.1	First Impressions.....	5
4.1.2	Navigating the App	6
4.1.3	Functional Usability.....	6
4.2	Online Questionnaire.....	7
5	Outcomes: Problems Identified.....	7
5.1	Functionality:	7
5.1.1	<i>Exploration</i>	7
5.1.2	<i>Update and Authentication Conflict</i>	7
5.1.3	<i>Minimalism</i>	7
5.1.4	<i>Discover Panel</i>	8
5.1.5	<i>Discover Videos</i>	8
5.1.6	<i>Beneficiary List</i>	8
5.2	Inclusivity and Accessibility:	8
5.2.1	<i>Multi Language</i>	8
5.2.2	<i>Terminology and Icons</i>	8
5.3	Standardization:.....	8
5.3.1	<i>Language and Terminology</i>	8
6	Recommendations.....	8
6.1	Functionality.....	8
6.1.1	<i>Home Screen</i>	8
6.1.2	<i>Discover Panel</i>	8
6.1.3	<i>Exploration</i>	8
6.1.4	<i>Beneficiary List and Search</i>	9
6.2	Multi-Language.....	9
6.2.1	<i>Language Selector</i>	9
6.3	Standardization.....	9

	6.3.1	<i>Icons and Terminology</i>	9
7		References.....	10

1 Introduction

This report provides a detailed analysis of the application interface and the user experience of the fintech mobile application, SadaPay. A survey was conducted to study SadaPay's user experience and the design features that support it.

SadaPay facilitates financial services, like money-management, and digital payments. Users can make and receive online payments, use its virtual and physical debit cards through a mobile app. It is essentially an e-Wallet that replaces cash transactions. The idea behind SadaPay is to make financial transactions as quick, easy and affordable as possible, by eliminating a middle agent like banks, and by avoiding redundant transaction costs. In addition, it strives to make the process of sending and receiving money easy and user-friendly, by making the app as simple as possible.

2 Objective

The main objectives of this report are to share the findings of the survey, by detailing the following points:

1. SadaPay's user experience and user interface design from the perspective of its consumers
2. Identify good aspects of its features and how they are used
3. Identify problems and how they can be improved

We aim to demonstrate and explain all aspects of SadaPay's user experience and user interface design from the perspective of its consumers i.e., end-users of the SadaPay mobile app. We discuss its features highlighting good aspects and how they are used and enhance the app's usability. We also see the problem areas and provide recommendations for how the design could be improved.

It is imperative that, the user experience is studied using the principles of Human-Computer Interaction.

2.1 Human-Computer Interaction and User Experience

Human-Computer Interaction (HCI) is all about how human beings and computers interact with one another. Humans, being the users of computer technology need to be able to navigate with its tools and systems with ease. This can only be made sure with an efficient system design that supports ease of use.

The idea of progressing in HCI is ultimately to enhance the user experience of the technological system. User Experience (UX) is a term that encompasses all aspects of the end-user's interaction with the system or application. This includes branding, design, usability and function. According the International Organization for Standardization (ISO), UX is "*A person's perceptions and responses that result from the use or anticipated use of a product, system or service*". UX Designers cannot control the users' perceptions and responses, but they can control the behaviour of their product, system or services. Software or any application is made to respond in a way that is user-friendly, efficient and pleasurable to use.

In addition, a part of UX designing is the User Interface (UI) designing. UI design focuses on the visual aspects and interfaces that the user sees of the application or software. The idea is to create interfaces which users find easy to use and pleasurable.

3 Methodology

We used two different ways to study SadaPay's user experience and design: Interviews using principles of Design Thinking, and Online form-base questionnaires.

3.1 Interviews

Interviews were conducted from 10 different kinds of end-users to understand the user-experience of SadaPay. The survey took inspiration from the Design Thinking model that leading companies like IDEO make use of. By interviewing users, potential users and common people, we identified the exact needs of the end-user of SadaPay. Interview format was designed to understand the following aspects:

- Personality and lifestyle of the interviewee
- Familiarity with technology and use of mobile applications, particularly, financial apps
- Features that they predominantly use in SadaPay (or other similar apps)
- Things that they like in SadaPay
- Problems they face in SadaPay
- Response to change in an existing system and importance given to standardization

Unlike traditional surveys that are focused purely on the app, we have first tried to understand the person before understanding the user of the app. After we got to know the users, we tried to understand their requirements for a fintech app. We tried to understand why users choose a particular app and how difficult or easy it is to switch to a different service, and does standardization between different apps help. With the interviewing format, we were able to make personalized surveys for different kinds of people. This gave us the flexibility to cater to specific requirements and target selected features based on individual interviewees.

3.2 Online Questionnaire

We also conducted a small-scaled online form based survey targeting a sample of 20 people. It was divided into two sections targeted to gather users' personal information and their usage of SadaPay.

Section 1: This section comprised general questions designed to gather information about the respondents. It included inquiries about their age, gender, profession, program of study, the banking apps they use, and their preferred features in a banking app.

Section 2: In the second section, we asked specific questions targeted at SadaPay users. These questions included:

- For how long they had been using SadaPay?
- How did they come to know about the app?
- How often did they use the app?
- Overall satisfaction with the app?
- How many features of the app they were familiar with
- Other alternative considered

4 Evaluation/Discussion

4.1 Interviews

We conducted interviews of 10 different individuals, users and non-users to understand their perspectives of the SadaPay mobile app. The sample was carefully selected ranging from regular and occasional users, to completely unfamiliar people. We mimicked the principles of Design Thinking and studied their personalities, and how they interacted with technological systems in their day-to-day lives. We then focused on their financial management and any apps that they used. Furthermore, we directly asked them to use SadaPay using the principles of *Cognitive Walkthrough* and *Think A Loud Protocols* to observe their first impressions, navigation of the app, and how they identified different functions and features in the app. Finally, we studied how they find SadaPay's user interface visually and is it pleasurable to use.

Most of the people are daily users of technological systems and mobile applications. They use some kind financial management apps, including their Online Banking Apps and other e-Wallets like EasyPaisa, JazzCash and NayaPay. Individuals are also mostly familiar with using a smartphone and use multiple apps in their day-to-day lives. Users understand what makes an app easy to use and efficient. We discuss each of the findings in detail below:

4.1.1 First Impressions

Positives:

1. User interface is beautiful and eye-catching
2. Novel colour scheme is used
3. Simple to use with fewer functions on the first page, and a navigation bar below which has just 3 different buttons making it easier to navigate

Negatives:

1. Too few options visible
2. Help section difficult to locate
3. Does not look like any other online banking or e-Wallet app
4. No urdu or other language options
5. First time users cannot explore the app without signing up first and without verification.

Most of the users are impressed by the first impressions of the app. They find the user interface beautiful and eye-catching, as comments specifically appreciating the colour and design are heard during the interviews. The app seemed simple to use with fewer functions on the first page, the navigation between different apps was self-explanatory.

However, people also noticed that the app was in some areas too minimalistic. The first screen had only 3 features that were prominent: Send Money, Load Money, Account Balance. There seemed a lot of space that was unutilized. People compared it with other similar apps that have a lot of cards on the home screen making more functions prominent. Individuals that saw the app for the first time found it difficult to access a Help or FAQ section in the app. Lastly, the app's default language is English, so people who were unfamiliar with the language complained regarding the unavailability of other language options like Urdu.

Users who installed the app for the first time complained that SadaPay provides no way to explore the app without signing up. This reinforced their reservation to provide sensitive information like CNIC pictures and fingerprints without even seeing what they were getting in return. Furthermore, after signing up, it takes 1 working day to verify user information, so users

complained that even after providing all the information, they should at least be able to explore the app.

4.1.2 Navigating the App

Positives:

1. Navigation panel is visible on all screens with labelled buttons
2. Clickable and interactive cards throughout the screen
3. Easy to explore, as fewer screens and a small, scrollable window
4. Common functions like Send and Load Money easy to locate
5. Learning curve is easy

Negatives:

1. Certain features like 'Help' and 'Utility Payments' are not visible clearly
2. Does not use familiar terms that other apps use
3. Most elements do not have icons

Users found that the app was concise and with only 3 main screens, it was easier to move around and come back if there were any problems. The fewer screens combined with smaller scrollable windows allowed for easier exploration and quick access of functions. This also enabled for a smoother and shorter learning curve. In that way the app was forgiving. Users were impressed that the most needed feature of sending and receiving money was at the home page and very easy to navigate to and within. People liked using the interactive cards and well-labelled buttons.

Certain groups of individuals pointed out difficulties in accessing a Help section or tutorials since it is not visible clearly, in addition to being labelled with the term 'Discover' which users usually associated with a section providing hidden or extra features of the app. Similarly, bank app users complained that terms like "Send Money", and "Mobile Top-Up" were used instead of the standardized terms like "Fund Transfers" that they were accustomed to see. There was also difficulty in navigating to other features as the app was too different from others in the market. Utility payments and mobile top-ups were hidden under the 'Payment' sections instead of being more clearly on the screen. Users also suggested that more icons would be beneficial to navigate the app.

4.1.3 Functional Usability

Positives:

1. Most common functions easy and quick to perform with prompt notifications
2. Hidden card details
3. Tutorial Videos explain common functions
4. Support/Chat with customer care is responsive and efficient

Negatives:

1. Beneficiary or favourites list is absent
2. No search feature in the Quick transfers list
3. Card details can be made visible with just one click
4. Long video tutorials broken down in time segments instead of logical segments

SadaPay users liked that the more common functions like Send and Load Money were self-explanatory and functioned really quickly. Sending money to anyone was very easy and

required very little information. They found the video tutorials within the app very helpful to learn to use the app. The chat support provided within the app was very responsive and usually resolved complains very quickly.

The app did not implement anything like the beneficiary list of bank apps depriving of users of storing any accounts they found difficult to remember. The only close feature for it is the “Quick Transfers” list, which is only sorted by recency and does not provide an option to search for an account within it, so users have to scroll and manually search the list.

Users also noticed that the card details that are hidden by default can be accessed with just one tap on the “View” button making it prone to unauthorized access. They suggested that the app should ask for the pin-code again if someone taps the unhide button. Lastly, user found that they could only move forward in the video tutorials by moving over a timed segments to skip over any irrelevant information. Since the segments are in fixed time intervals, it feels like an *Instagram* story and they are prone to miss information. The segments could be segmented in terms of logical progressions of the video tutorial.

4.2 Online Questionnaire

The online form based survey re-affirmed our finding through the interviews. We identified that people were generally satisfied with SadaPay. The survey highlighted an important element of SadaPay, which was that it supported very smooth online and card transactions. It helped us understand that users were not being notified of SadaPay’s advantages without them exploring it, for example many users did not know that SadaPay offered 3 free ATM transactions per month.

Some of the key findings through this survey were:

1. SadaPay’s interface is easy to use and the functions are easy to learn
2. Most frequently used functions are most prominent
3. The app did not provide information about benefits of SadaPay unless explored in detail

5 Outcomes: Problems Identified

The main problems extracted were as follows:

5.1 Functionality:

5.1.1 Exploration

The signup process is relatively easy; however, it still feels inconvenient as the app does not allow users to explore before the completion of the signup process, this includes waiting for up to one business day for a manual id verification. A minority of users never opened the app again after signup.

5.1.2 Update and Authentication Conflict

In the case where the app requires an update, an update popup comes up. This is then quickly followed by a fingerprint authentication popup; this hides the update message and authenticating the app then does not allow the user to sign in either as the app is not updated. This is therefore very counter intuitive.

5.1.3 Minimalism

The Home Screen has a very minimal design which is good for simplicity, however it has also been described as too minimal by many users.

5.1.4 Discover Panel

The Home Screen has a discover section which has videos on how to use the various features of the app, however its presence in the Home Screen is very confusing for many new users as it is not a functional feature but rather a help section.

5.1.5 Discover Videos

The videos on the discover panel are segregated but this is a useless segregation as it is based upon the time duration of the video. It is not a logical segregation of the video being played. Therefore, skipping a section leaves you confused as to what step you are currently in.

5.1.6 Beneficiary List

Majority of users reported that they wanted a beneficiary or contact list to help them send/request money, often mentioned along with a Beneficiary search option.

5.2 Inclusivity and Accessibility:

5.2.1 Multi Language

The app is not well suited for non-English readers as it does not provide any option to change the language.

5.2.2 Terminology and Icons

The Terminology being used as well as the icons are completely alien for uneducated people.

5.3 Standardization:

5.3.1 Language and Terminology

The app does not conform with banking app terminology and therefore is harder to grasp at first glance for users with banking background.

6 Recommendations

The following recommendations are concluded from the problems identified.

6.1 Functionality

6.1.1 Home Screen

The Home Screen should have slightly more content on display, However the Discover Panel should be removed from here, this would avoid confusion with the discover panel being a functional panel instead of a information panel, and would also deviate from being over-minimal.

6.1.2 Discover Panel

This Panel should be within a Help or Information Section. This would further clarify to users that all content here is for help and information only, while being easily recognizable.

6.1.3 Exploration

All users should be able to open the app without first being forced to sign-up and create an account while giving away Personal Information, this would make the users first impression more pleasant and memorable.

6.1.4 Beneficiary List and Search

When Sending/Requesting Money users should have a beneficiary list with saved users. There should also be an option to search through this list to find users. This would be following up on what majority of users feel lacks in the app.

6.2 Multi-Language

6.2.1 Language Selector

At the first launch of the app, there should be a language selector, this way users can easily choose their preferred language from the beginning and feel more comfortable. This language setting should also be changeable later.

6.3 Standardization

6.3.1 Icons and Terminology

Universal Icons and Terminology should be used within the app. This would help many users with experience in other financial apps.

7 References

1. Interaction Design Foundation - IxDF. (2016, June 6). *What is Human-Computer Interaction (HCI)?*. Interaction Design Foundation - IxDF. <https://www.interaction-design.org/literature/topics/human-computer-interaction>
2. Interaction Design Foundation - IxDF. (2016, June 1). *What is User Experience (UX) Design?*. Interaction Design Foundation - IxDF. <https://www.interaction-design.org/literature/topics/ux-design>
3. Interaction Design Foundation - IxDF. (2016, June 2). *What is User Interface (UI) Design?*. Interaction Design Foundation - IxDF. <https://www.interaction-design.org/literature/topics/ui-design>