Usability Report

Sign in with just a touch

Pay your bills with just a few taps

Send money to almost anyone

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Product- Chase Application

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Does the product communicate its purpose, function and value?

Is it easy to navigate between functions, features etc.?

Does the design support successful and efficient interaction?

Was the user guided through the interface or left on his/her own?

1 EXECUTIVE SUMMARY

Chase is the customer banking arm of JP Morgan Chase. It serves half of the American household with 5,100 branches and 16,000 ATMs across the country. With a massive branch network, high rated offers, and a digital product, Chase is often viewed as the country's largest banking. It has changed the modern banking system making it streamlined by providing a website and a mobile application.

Chase Banking provides complete mobile applications that enable chase users to carry on their banking activities without visiting their bank. The app allows the chase credit card and debit card owner to bank convenience from their phone. Some of their most valuable features are quick deposit, quick pay, Location services, financial monitoring by viewing overall spending into categories such as food, entertainment, gas, etc.

Chase has done a magnificent job of maximizing their user by reinforcing their digital channels and mobile application with unique features. When it comes to banking online through a mobile application, security is a significant concern for credit card owners. Chase mobile application provides fingerprint technology that adds an extra level of speed and convenience to the application. Which further helps them to established trust and maximize the user base.

Another prominent feature to attract millennial's attention is the investment ability within the mobile app. This feature appeals the young customers very early on. Further, it converts them to high valued customers at a later stage. Not only individual users, but Chase has also done a great job by providing support to business owners.

The chase mobile application has a high acceptance rate and high rate of satisfaction because of the wide range of features and the benefits it can provide. However, it still needs improvement when it comes to the ease of use of digital solutions (website and mobile). This report will focus on the evaluation of the Chase mobile application.

1.1 INQUIRY METHOD

The chase mobile application is researched by two main inquiry methods. i.e, User Interviews, and web reviews. The inquiry methods helped to understand overall usability flaws and collect deep insights about the interaction of the users with the product.

User Interview

- The user interview was conducted with 5 participants to understand the user's personal experience and pain points while using the chase mobile application.
- The user interview began by sending a screener survey to collect potential participants for the interview.
- The User interview highlights majors concerns with the application like unnecessary high no of clicks, no error prevention, misleading visual cue, missing features, etc.

Web Reviews

- The web review was done in two parts.
  - Detail review by J.D Power: an American based data analytics and customer intelligence company.
  - Customer review posted on App store and google play.
- A total of 50 reviews were considered, which was divided into five principal categories as shown in the figure
- The web review revealed more prominent problems like navigation errors, log, and update issues, etc.
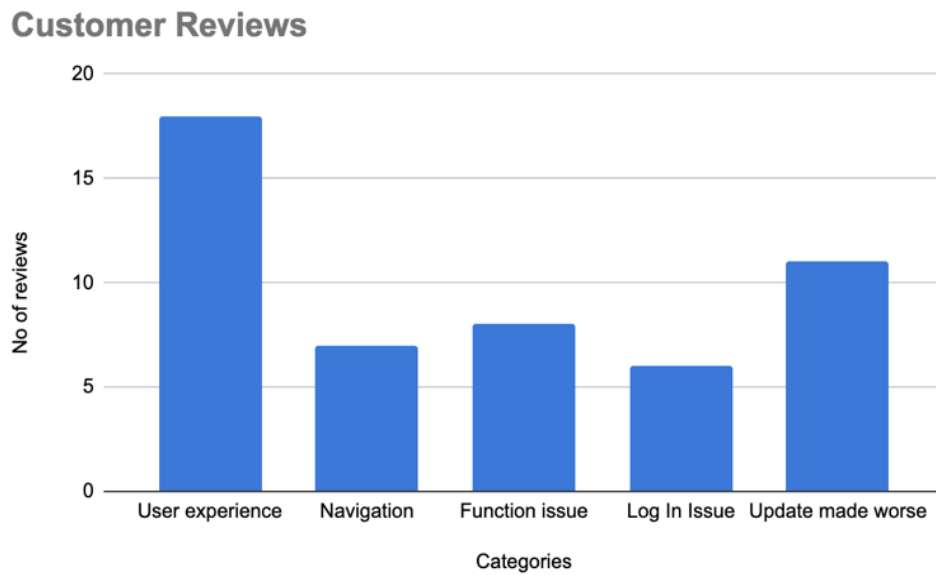
Customer Reviews

Figure 1.1 Customers review graphs

1.3 PRINCIPLE BASED EVALUATION

The usability evaluation was conducted based on following usability principle

- Consistency
- Affordance
- Feedback
- Visual Momentum
- Display Proximity

The following are the main recommendations proposed after evaluation the Chase Mobile applications bases on the above usability principle

1. Buttons that perform similar functions should look similar.
2. The icons should be comprehendible. The icon used should be able to communicate its intended meaning
3. Streamline all the icons and use the same icon for same action throughout screens. Avoid using different colors for the selection highlights.

4. The call to action should not be hidden inside interaction.
5. An arrow could help users to figure out that that the card can be swiped left.
6. Use the whole screen to capture an image.
7. The dots are enough to give the feedback that there are only two screens in the carousel.
8. Provide the titles to all screens. The title of a screen should match the element clicked on the previous screen.
9. Placing similar features near to each other will help users to make the best decision on which feature to use, based on the type of problem they are trying to solve.

1.4 INTERFACE BASED EVALUATION

After principle-based evaluation, the chase application was evaluated on screen by screen basic considering users goals. The following are the 6-screen evaluation in the app.

- Home screen
- Today's Snapshot
- Chase offers
- Schedule payment
- Sign In
- Forgot password

The following are the mail recommendation made after carefully reviewing the issues on each screen

1. Instead of a hamburger menu for main navigation, button navigation can be used to make all the frequently used features to be visible on the home page itself.

2. The offer has been added should have a "remove" icon to undo the add action.
3. The icon can be displayed with a label as represented to the left of the recommended screenshot to clearly communicate the meaning of the icon
4. A label of short description can be added to convey the meaning of the icon
5. A radio button should be used to convey that the fact that only one among three option can be selected
6. A clear solid background instead of an image background makes the icon look so prominent.
7. A clear solid background instead of an image background makes the font readable
8. The text field should not be grayed out. It should have a white background which will improve the perspective of the text field.
9. The CTA button should only come to an active state when the action related to the CTA button is done.
10. Error message should convey what went wrong.

1.5 GRADE

The global principle and interface-based evaluation gave an overview of how severe problems users face in the application. The inconsistency in visual cues, missing features, negative affordances of icons, and hamburger navigation frustrates the users. Considering the number of high and medium priority improvement that needs immediate attention, the overall grading of the existing Chase app will be C- .

2 INTRODUCTION

When it comes to the financing sector and apps that help to manage finance, Chase mobile application is the most talked-about product. This usability report is intended to evaluate the chase banking application. The report will provide deep insight into user's needs, user's pain points, and possibilities flaws within the application. These usability insights are found out by analyzing the problem the users have encountered while interacting with the application. The inquiry is done through surveys, reviews, user interviews, and usability tests. Also, a summary of findings and recommendations are provided.

2.1 OBJECTIVES OF THE EVALUATION

- Evaluating needs and issues in completing the core tasks on mobile applications.
- Identifying problems with interacting the deceive on the following basic
  - Is it easier to navigate through various features and functionalities?
  - Does the screen support effective interaction?
  - Does the application guide throughout the interface or leaves the users on their own?
- Evaluating the time, it takes to complete a specific task
- Evaluating the visual design to find out if the application demonstrates its purpose and value.
- Provide recommendations to improve the possibilities and interface flaws.

2.2 METHODOLOGY

To evaluate the Chase mobile application, it is critical to understand the users of the application and their primary needs. To understand the user's pain point two, inquire methods were used: User interview, and web review. These methods are described in detail in the 'Contextual Inquiry Methods' section.

Web review was used to examine the response of frequent used users. The users revies which was taken under consideration were well experienced with most up to date features of the app. A cognitive walkthrough of the product was also conducted to identify violation of the usability principle. The insights of the usability exercise feed information to analyze the principle and interface-based evaluation of the application.

The Principle and interface-based evaluation were rated in the order of their priority. These ratings demonstrate the urgency to address a specific flaw.

2.3 PRODUCT DETAIL

Chase application is an extensive financial platform that can mitigate the strain of managing user's financial profiles. The app allows Chase credit card or debit card owners to bank with chase from any location.

Chase application provides many useful features that make banking effortless. Some of the most popular features include Quick Deposit, QuickPay, Chase offers, and financial monitoring through Today's Snapshot.
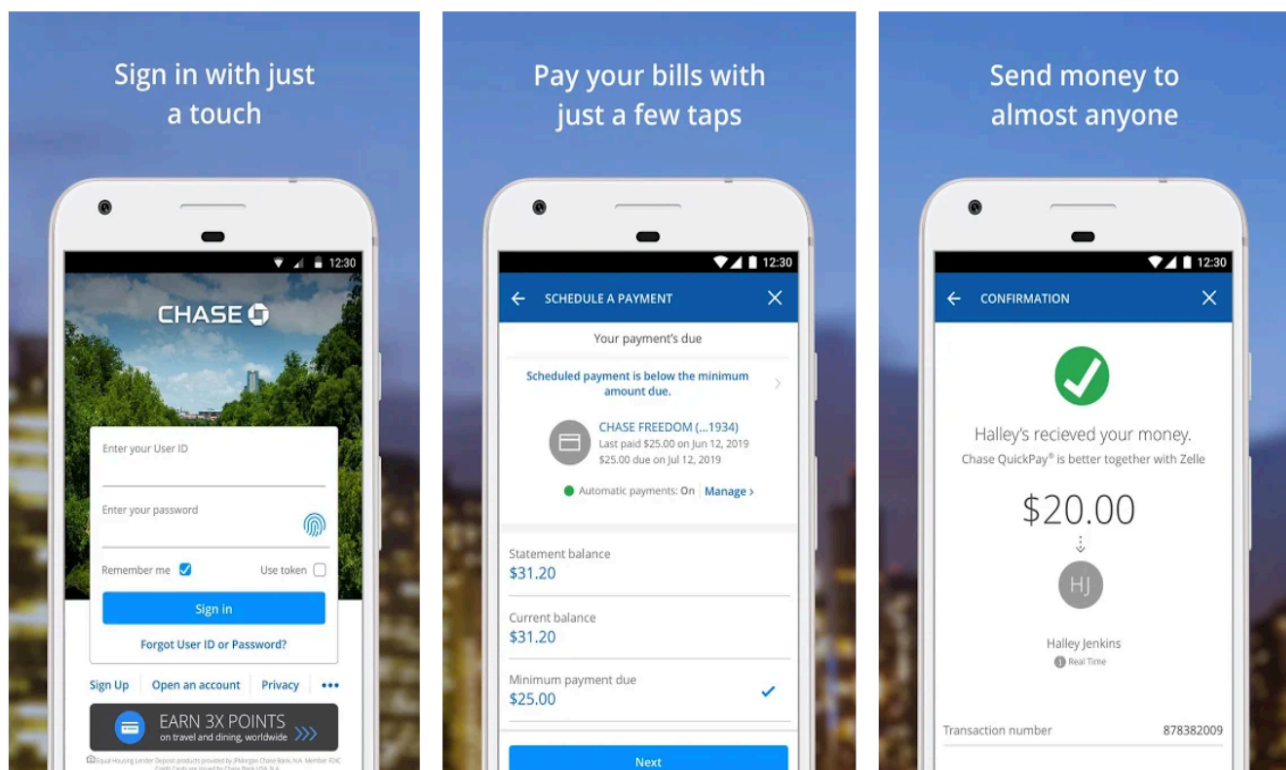Below are images of chase mobile application

Figure 1.3a Screens of Chase mobile app with important features
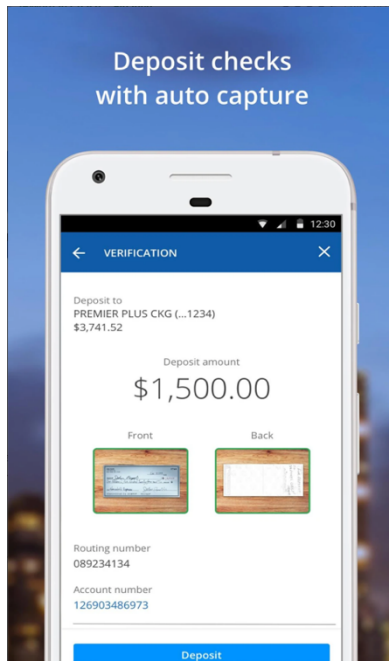
Chase application features

Figure 2.3b Quick deposit

Quick deposit

Quick Deposit is the most popular feature of the Chase application. It allows the chase customer to capture an image to make the deposit electronically. This feature is typical in the credit card industry, but its benefit certainly can't be ignored.
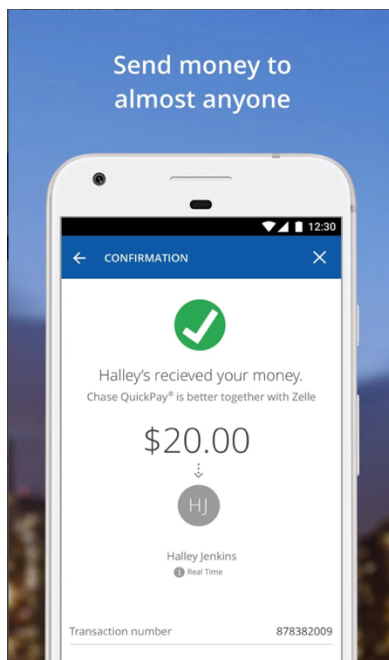

Figure 2.3 c QuickPay

QuickPay

QuickPay is another important feature of the Chase application. Using Chase application user can make person to person money transfer in real time. This feature is supported by Zelle (a payment service) which is used to transfer money to the people with no chase account.
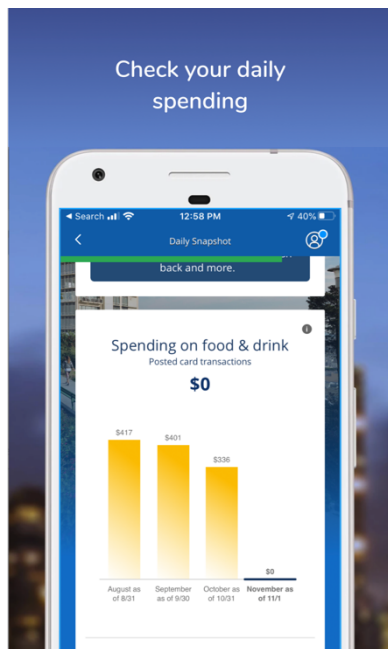
Figure 2.3d Today's snapshot

Today's Snapshot

Unlike any other financial application chase provide financial monitoring on daily expenditure through one of its unique features i.e., Today's Snapshot. This is one of the most loved features on chase application. This feature not only shows user's daily spending habits but also helps users to see their overall spending trend by breaking down their monthly spending into categories like food, entertainment etc.

Figure 2.3e Chase offers

Chase offers

Chase provides very personalized offers specific to their customers. Chase Offers is a critical feature which chase banking uses to fulfill their goal of maximizing user base.

2.4 PRODUCT TASK AND GOALS

Goal

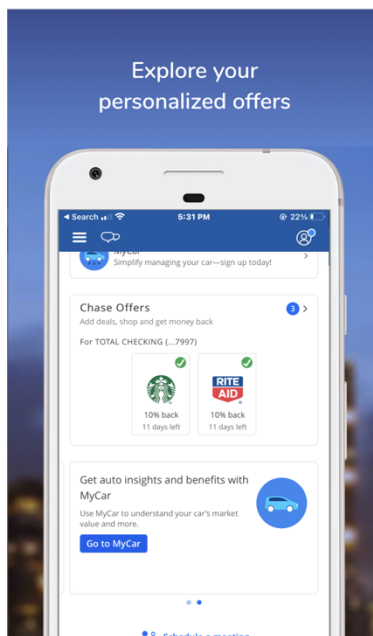- Provide faster and secured sign in process
- Making a quick payment
- Deposit a check without visiting the bank
- Viewing transaction detail of each card
- Enable location to see nearby branch
- Monitor account balance and spending
- Analyze the trend on expense categories like food, gas, shopping's etc.

Task

- Pay rent, mortgage, utilities, credit card and other bills.
- Deposit a check
- Keep track of important activities by
  - Getting free credit scores
  - Track customize view of annual spending and trends
- Enable location to find out the nearest branch
- View statement
- Avail chase personalized offers
- Take digital assistant in case of need.
- Make online investments.

Summery

Chase mobile application is a wonderful application with many beneficial features. However, it's not perfect in term of providing a user-friendly experience.

3 USERS

Primary users

- Expert users
    - Users with 4-5 years of experience with the Chase application
    - **Family account**- Users having a joint account with family
    - **Frequent travelers** - Travel lovers who make an online payment and monitor expenditure through the mobile app during their trip
    - **Allrounder users**- Users who use chase application to do banking, credit cards, and invest with JP Morgan in one place
    - **Business owners**- Users with business checking and savings account with the chase to manage cash flow and make significant purchases any time anywhere through the Chase application
- Novice user
    - **High school student -** Student with 13 to 19 years of age having chase account with parents or guardian
    - **Shopping lovers** - Users who love to avail chase offers
    - **Online bill payers**- users who make online payment
    - **No account users-** Users with no chase bank account but use chase card to have a card to pay online bills.

Secondary users

Business owners are the secondary users who need extra security to run their business for the chase application. Business owners have frequent cash flow in and out of their accounts solely for their business purposes. Business owners might use business checking, Business loans, Business credit cards, commercial banking, etc.

- Small business owners
- Mid-size business owners
- Large size business owners

3.1 USE CASES

1. Check balance on chase account and view statement
2. Capture an image of a Check and make a deposit
3. QuickPay money to a friend with no chase account
4. View todays snapshot and analyze the trend with various categories
5. Use a chase offer
6. View recent transition
7. Find nearest chase branch in an unknown location

3.2 PERSONA

Persona 1

"I love shopping but want to stay within budget, I want offers which can help me to shop more. I want a convenient way in which I can view my transition during travelling"

Name: Jina
Age: 25 years

Gender: Female
Profession: Graduate student
Lives In: San Francisco, CA
Goal:

- Make quick online payment.
- Make cashless payments
- Avail offers

Motivation:

o Handy mobile application
o Easy view to statement to keep track of her spending
o See trend of her expenditure

Proficiency: Novice
Frequent of use: medium

Jina is a grad student who has recently graduated from San Jose state university. She is on a solo trip to New York after graduation and has planned to spend her maximum trip shopping. Jina uses the chase mobile app and credit card to pay for her expenses during her trip. However, she is cautious with her spending and wants to remain within budget. She wants to espy her expenditure trends and stay abreast.

Persona 2

"I love investing my money and getting profit, but I am looking forward for financial advice"

Name: Mike
Age: 36
Gender: Male
Profession: VP of Sales
Lives In: Phoenix, Arizona
Goal:

- Make investment with JP Morgan
- Need financial advising
- Want to start investing but have no interest in dealing with their investments themselves

Motivation:

- Robo advisor for investment
- Easy-to-use platform.

Frequent of use: high
Proficiency: Expert

Mike is financially reliable and prefers to invest his earnings in expanding profits. He needs an application that can take care of his banking, credit cards, and investment information in one place. As a VP of sales, Mike remains occupied and has no time to get involved in investments' complexity. He needs a Robo advisor who can suggest to him the best fit risk tolerance and investment goals.
Also, as he has multiple cards and no time to manage each, he needs customized notifications for lows balance, large transactions, account activities, and payments.

Persona 3

 "I love my business and I have to work hard to gain profit again. I am happy that I have the support of chase application"

Name: Camila
Age: 30
Gender: Female

Profession: Owner or CAM Cafe
Lives In: Los Angeles, CA
Goal:

- During COVID she had to transit the payment process of her café to completely cashless
- Improve her cash flow

Motivation: Easy and secure payment for customers
Frequent of use: high
Proficiency: Expert

Camila owns a café in Los Angeles. She lost 75 % of her business after the COVID. Nevertheless, currently, her business is back and is doing everything to maximize her profit. She had to transit to touch-free and cashless payment completely. She also needs a secure and straightforward method to process payroll to her employees. As she manages both her customers and monitors daily transactions, a mobile application fits her need to check the cash flow without visiting the bank regularly.

4 INQUIRY METHODS

Two inquiry methods were performed to gain an understanding of how users interact with the Chase mobile application. The first inquiry method was the user interview which was conducted by 5 potential users. The interview was conducted virtually through video calling.

The second method was web review from the Apple app store, Google Play Store, and reddit.com. To collect the most relevant reviews, appropriate to the latest version of the chase mobile application, the comments were carefully observed and filtered by date and the newest reviews.

4.1 USER INTERVIEW

Goal

To understand the user's personal experience and pain points while using the chase mobile application.

Methods

Screening- The inquiry process began by conducting an online survey to recruit 5 potential users of the chase mobile application. The online survey was carried out with a google survey form. The screening survey question included questions about the following:

1. Participants details
2. Demographic information
3. Frequency of their uses
4. Satisfaction level with the chase application.

User Interview- The user interview was conducted through video calling. Each interview was conducted for 30-35 minutes. The question for the interview was pre-made and was divided into the following three sections: -

- **Perception of the product-** Questions like how long they have been using the product and what were their satisfaction level with the product were covered in this section of the interview.
- **Pain Point:** In this section user experience with the product was asked together with questions on their frustration and difficulties while interacting with the Chase mobile application.

Figure 4.1 Participant Sharing his experience with chase Mobile application

- **Expectations:** This section of the interview contains questions like what they like about the app, what do they wish to change, what other features do they use. Etc.

To make perfectly understand the participants the same questions were asked multiple times in a different manner. Follow-up and clarification questions were asked when needed.

Participants

The initial screening was completed by 24 participants out of which 5 participants were selected for the video interview. To have a better demographic distribution of the participant's age was varied from 48 to 22 years. In the initial screener questionnaire, some users also indicated a better satisfactory experience with the chase Mobile application. However, these participants were not selected for the interview. The users who use Chase mobile app daily, on a weekly basis, and

occasionally were further selected. The distribution of potential participants that were recruited with respect to frequency of use are shown below:

Frequency of use	Every day	Once in two weeks	Monthly(occasionally)
No of participants recruited	3	1	1

Table 4.1a Number of participants based on frequency of use

The distribution with "how long they have been using Chase mobile app" was also considered during the recruitment. The distribution of length of experience of potential participants are shown below:

Length of experience	More than 2 years	Last 1 year	Past few months
No of participants	2	2	1

Table 4.1b Number of participants based on length of experience

REFLECTION

	Typical Task	Atypical task	Users Wish	Pain Points	Users Satisfactions level
User 1	Money transfer, track transaction, Online investments, Manage credit card	User offers and rewards	For better navigation	Performs too many steps for a simple task like sending money	Good features but difficult to use
User 2	Pay bills, Deposit check, Online investments, Check Balance	Daily snapshots for cash flow and spending by category	For more banking features like other bank apps	It sometimes crashes on me and the offers provided are too less, there is no way to remove an offer.	neutral
User 3	Deposit checks, Pay bills, Check Balance	Track transactions	The app notifies on how much was spent weekly	Closing an account is not provide online or in the mobile app	I have spent much time to get to use it properly, so I don't like it
User 4	Deposit	Rewards,	fewer ads	It difficult	It helps but

				to edit scheduled payments	can be improved
checks, Transfer Money	Chase Offers				
User 5	The recent transaction, Credit Journey, Check Balance	Spending Summary	The detail of translation was easier to approach,	Now too many clicks to reach the recent transaction	

RESULT

Five users were interviewed through video calling. Following are the summary of responses for the questions

Background
Q How did you first come to know about the mobile app?
3 out of 5 users said they were being introduced to it by the bank. 1 user came to know about the chase mobile app by browsing online and the other was introduced by a friend.
Q Since when have you been using it?
3 out of 5 users were familiar with the mobile application for more than 2 years. 1 user was using the mobile app for the past 1 year, However, before using the mobile application he was familiar with the web application of Chase. And 1 user was familiar with the mobile app for the past few months.

Q What do you use the mobile application for?

Participants with more than 2 years of experience using the chase mobile application perform tasks like Check Balance, manage credit cards, paying bills, Investments, Deposit checks, transfer Money, check daily snapshots as well as to avail offers and rewards provided by chase bank. However, it was observed that the 2 participants who use the app for less than 2 years perform less task as compared to the other 3 participants. Examples of the task would be deposit check, pay bills, and very rarely money transfer.

The participants who were familiar with the chase mobile application for more than 2 years, use it to perform a lot of tasks as compared to the other 2 users who have been using the mobile application for less than 2 years.

Q At what frequency do you use the chase mobile app?

3 out of 5 participants use the mobile app almost every day to check the detail of the cash flow and money spent by category. 2 users use it once in 2 weeks to deposit checks or pay bills.

Feature

Q What features do you like the most in Chase Mobile app?

Keep track of spending: 4 out of 5 participants told they like to keep track of their spending along with their receipt. The participants were further asked to elaborate why they like the feature. To which 3 out of 5 replied that in case of a problem they refer to the app, see purchase or withdraw information with a phone number which allows them to be able to research the problem and analyze the details before calling the bank.

Manage bills- All 5 participants use the app to manage their bills. They were not completely satisfied with the user experience of this feature, however, the fact that this feature even exists have helped them a lot. Participants use the features like paying bills, view statements, making payments and checking balances.

Offers-2 out of 5 also liked the offer suggestion that the app provides

Q Any more features that you wish to have in the chase mobile application?
Tour guidance to better navigate for new users

- Among the 5 participants I interviewed with, 2 of them were novice users who used the app for less than 1 year. Both participants said that the app was complex to use initially and they would love to use guidance steps when you first install the app. They would love to see a tour for new users and assist them with proper setup and operation of the app.

- 4 out of 5 participants suggested that they would love to see details of the transaction on clicking it. They have experienced situations where they had online transactions and couldn't find any info on it besides disputing it.

Q What problems do you face in the chase mobile application?

- 5 out of 5 participants experienced repeated freezing of the application after the recent update. Participants show high dissatisfaction in this function and were extremely unhappy about this.

- 4 out of 5 participants said that the feature they use the most like recent transitions are hidden inside and needs 1 or 2 clicks to reach it. What they were upset about is that the relevant data were present on the home screen. However, a recent update has made the user experience worse.

- 2 out of 5 participants had only 1 account. They did not like an extra click to see details of the account.

- 1 expert users pointed out that the CTA button in the homepage is hidden (figure 4.1a) and it took him more than 6 years to discover the same.
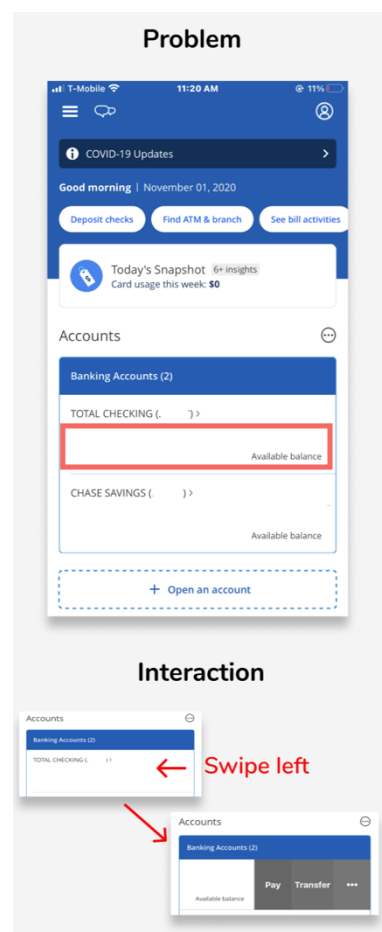

Figure 4.1a Hidden CTA

Q What frustrates you the most?

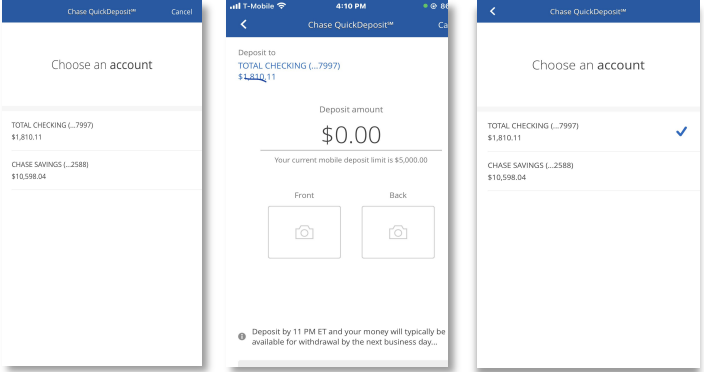All participants were frustrated with the repeated updating of the app. Participants mentioned that every time the app gets updated, they must relearn some things. Also, some or the other feature gets difficult to work with.

- 4 out of 5 users get annoyed with the feature of chase mobile app repeated auto logging out of the users. Repetitive login by entering credential frustrates the participants.
- 3 participants said that the app was not very accurate in tracking card use. Inaccurate information on the card use creates panic and frustration among the users

Q Overall comment?

All participants were happy with the features that this app provides. However, they showed dissatisfaction on the ease of use. Everyone told me that the app User experience could be improved.

Findings & Recommendations

Findings	Recommendations
The apps need more clicks to do small tasks	Overly a lot of space is wasted which could have been used to display relevant data up front. This could further reduce no of clicks to perform a task.
The app is not personalized as per used and the type of service they receive from the bank.	Some users just have only 1 account and no credit card linked to Chase bank. In such a case the app should be smart enough to personalize their homepage with the information relevant to them.
Visual design cue to complete the task are miss leading.	The image shown above represent a flow to deposit check. Users must first click on the account, and they will be taken to the 2nd image. On clicking of next on the second screen they will be taken to the three screens where they can change the account selected. This is confusing as next should take to the next step. And to choose another account the flow should rather come back to 1 page.
User take wrong action due to wrong use of label or icons	The button labels should exactly represent the action it intends to conduct.

4.2 WEB REVIEWS

Goal

To further evaluate the Chase mobile application web reviews were conducted as the second inquiry method was used. A variety of user reviews were analyzed by professional and common users' reviews and many useful Insights were gathered.

Methods

The web review method began with a general google search which further led to various review websites. Keywords like" Chase Mobile app", "Chase mobile app reviews", "Chase mobile app problems", "Chase Mobile app features" etc. were used for searching the web review. There were two types of web reviews, one was in the form of articles which summarized the various problems with the chase mobile application out various problems as well as real users review. Reviews were also collected from platforms like Apple store, google play store, and amazon reviews. Data from J.D power were also analyzed.

The reviews that were collected from the above-mentioned platform are divided into the following categories.

- **Bad User Experience-** The reviews which pointed out the bad user experience of the chase mobile application. Few reviews also compared the app to other banking applications

- **Navigation-** The reviews that point out the problems in using the application or navigating through the application.

- **Update made the app worse-** This session included frustration with the new upgraded version which was done in the month at the beginning of October. Bad reviews were flooded with indications of the user's dissatisfaction with the user's experience of the new version.

- **Login issues-** This section covers features that indicate error and difficulty during the login of the application.

- **Function Issues-** This section includes reviews with specific problems regarding the specific feature of the application.

Following are the website that has been used to gather the reviews

JD Power:

Link: https://www.jdpower.com/business/press-releases/2019-us-banking-and-credit-card-mobile-app-studies

The J.D Power is an American based data analytics and customer intelligence company. On 27 June 2019 J.D Power released an article about their study on customer satisfaction on banking mobile applications. Customer satisfaction on the chase mobile app was compared to various other banking apps like Capital One, Citi, Union Bank, etc. A rating on 3 out of 5 (above average) was given to the chase mobile application. However, the mobile application still needs a lot of improvements.

Figure 4.2a J. D Power showing chase mobile app rating

Apple store:

Link: https://apps.apple.com/us/app/chase-mobile/id298867247#see-all/reviews
The Apple App store is an online store from where users can download and install the Chase mobile applications for iOS devices. The App store shows a good rating for Chase Mobile app because of the features that it provides. However, ease of use still needs a lot of improvements. The recent update made during the recent month has made things worse
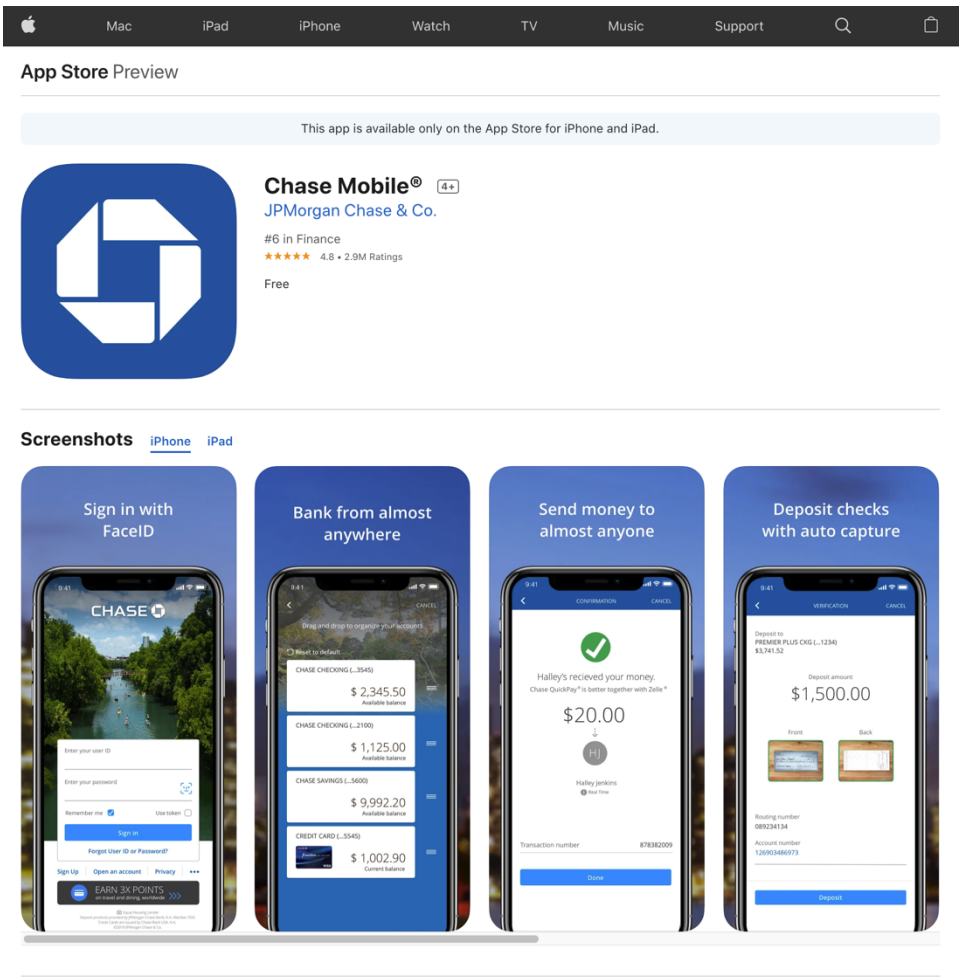

Figure 4.2b Apple store showing chase app ratings

Google app store

https://play.google.com/store/apps/details?id=com.chase.sig.android&hl=en_US&gl=US&showAllReviews=true

The google app store is an online store where users can download and install the Chase mobile app for Android devices.
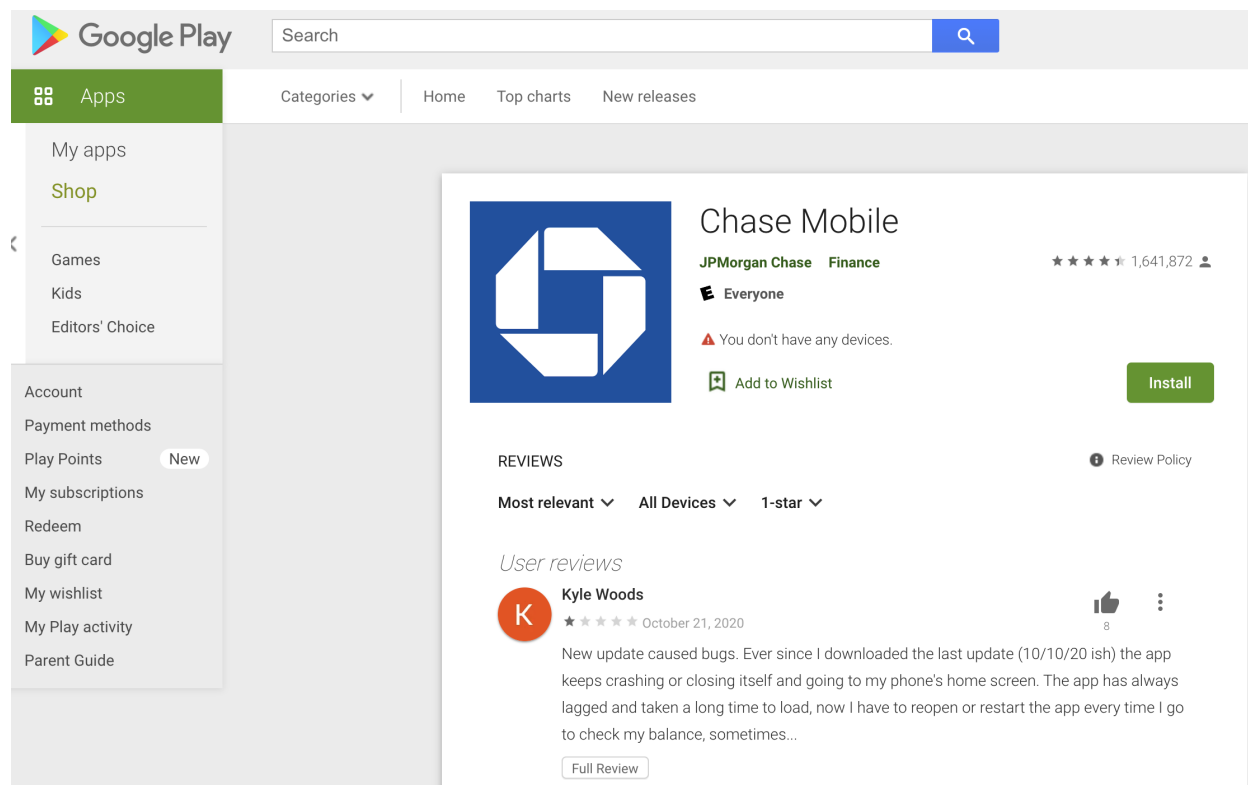
Figure 4.2c Google play showing chase app ratings

RESULTS AND FINDINGS

The reviews from google store and apple play store were divided into 5 categories and were analyzed. A total of 50 reviews were collected. The below is the distribution of the reviews. It clearly shows that users were mostly dissatisfied with the navigation and how the app works. Another important finding that is analyzed from the user review is that the recent update created many functional and usability issues in the chase mobile app.
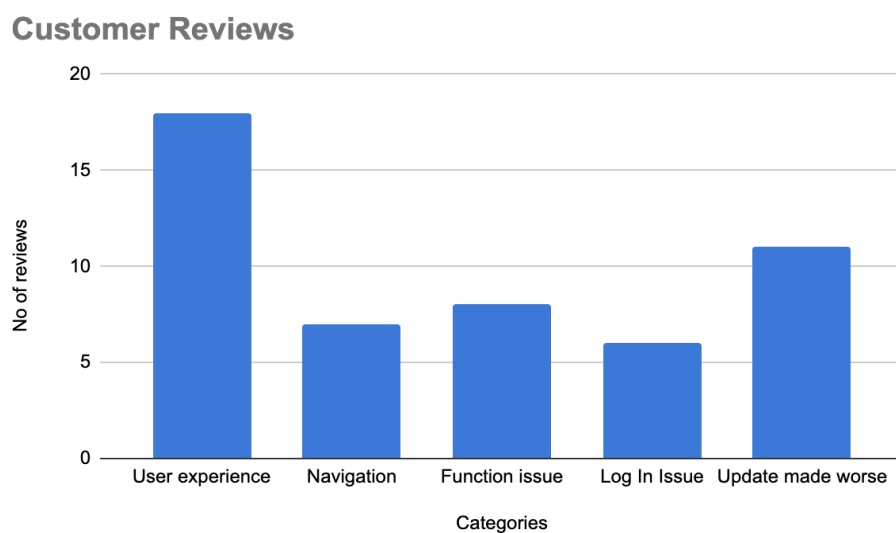
Figure 4.2d Customer review graph

Analysis table for customer Review

Category	No of reviews	Percentage
User experience	18	36.00%
Navigation	7	14.00%
Function issue	8	16.00%
Log In Issue	6	12.00%
Update made worse	11	22.00%
Total	50	100.00%

Table 4.2a Table representing categories of issues

User Experience

Most of the customers are satisfied with the Chase app because of the functionalities; however, the app's experience is claimed to be worse than any other issue. The app uses a smaller font size with grey text on the imagery background. This violates the principle of readability and creates frustration among users. Moreover, the important information is hidden inside the interactions. Out of 50 reviews analyzed, 18 reviews covered user experience and navigational feedback. 4 out of 18 reviews complained about the app is difficult to use. Below are the examples of the interface with issues and some reviews collected via google play and apple store.
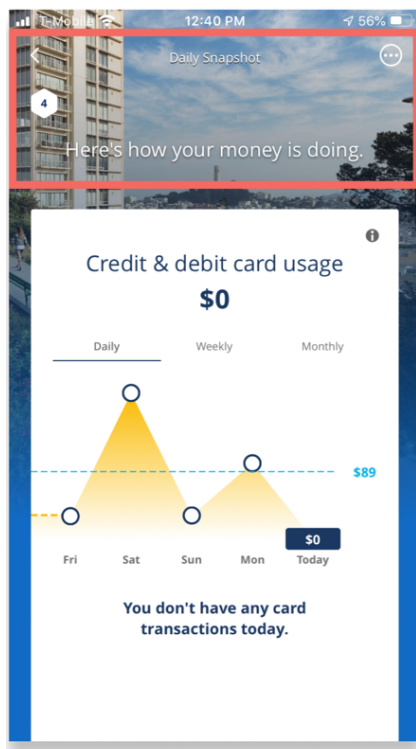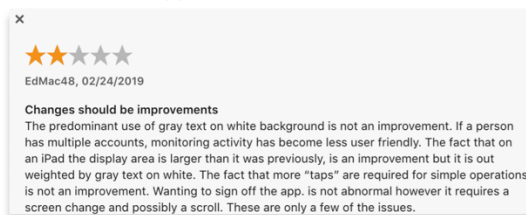

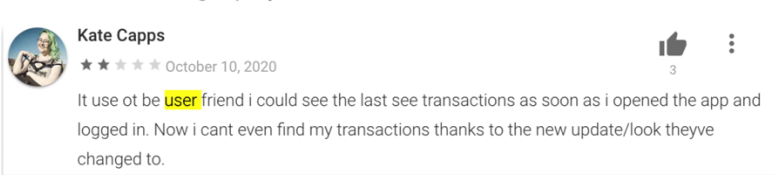Figure 4.2e Screen representing UX issues

Figure 4.2f reviews on UX issues

Navigation

The review revealed the difficulty in navigation. The critical information is hidden deep inside the app; it is almost impossible for users to discover the desired feature. The nesting of the feature might make the interaction too complicated and result in not using the application to a significant extent. Below are the examples of the interface with issues and some reviews collected via google play store.
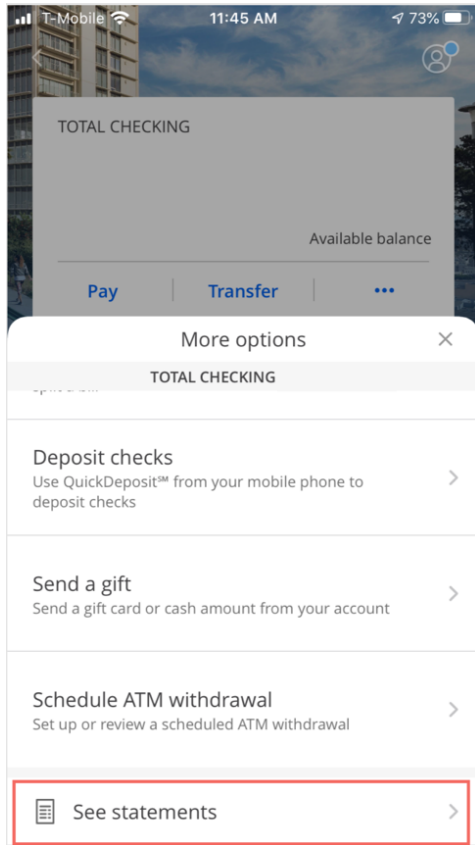

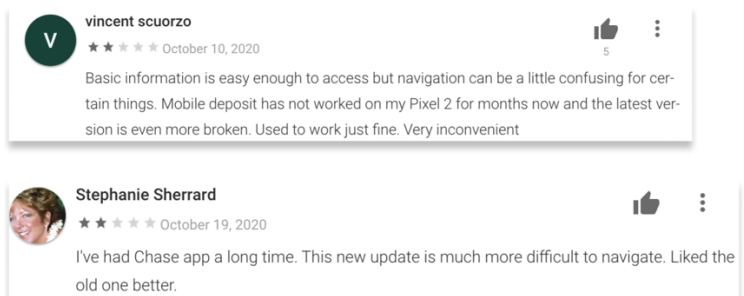Figure 4.2g Screen representing navigation issues

Figure 4.2h reviews on navigation issues

Functionality

Some of the customers were highly dissatisfied with the deposit and notification functionalities. Out of 50 reviews, nearly eight reviews complained about the deposit feature. Some features were also found missing, for example, in the offers as shown in the figure below. There is no way to remove an offer once it has already been added. Below are the examples of the interface with issues and some reviews collected via google play and apple store.
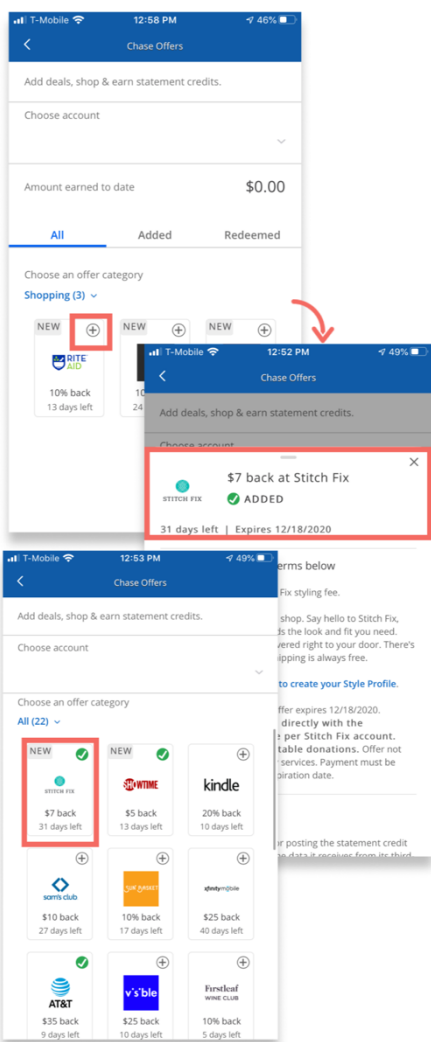

Figure 4.2i Screen representing functional issues
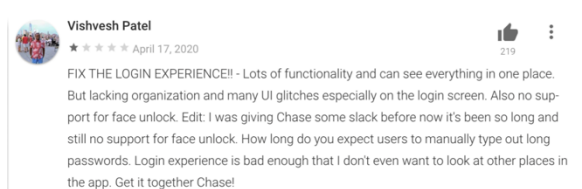

Figure 4.2j Reviews on functional issues

Review from apple store

Login

The review pointed out that the customers face problems while logging into the application. Log in is the first step to onboard the users; hence it needs to be faultless. However, most of the users expressed their dissatisfaction because they could not log in to the application. The figure to the left shows examples of some reviews collected via google play and apple store.
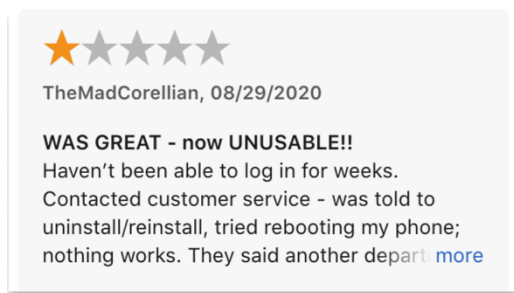
Review from Google play

Figure 4.2k Reviews on login issues

Review from apple store

Update made it worse

The reviewers faced most of the problem after the update. Hence among 50 review that were being analyzed almost 12 reviews just covered the fact that the recent update of the app increased the problems. Below are examples of some reviews collected via google play and apple store. The figure to the left shows examples of some reviews collected via google play and apple store.
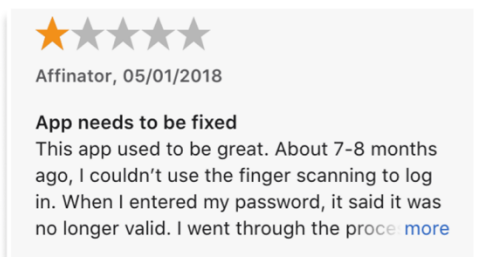
Review from Google play

Figure 4.2L reviews on updates
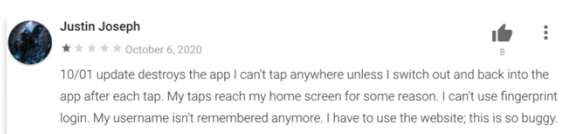
SUMMARY

The overview of the web review revealed five significant issues on the chase application.

- Many bad reviews covered the issues they face in the user's experience. They pointed out the face of the feature is difficult to discover.
- Expert users revealed the problem that the navigation is complicated in the chase application. Users with multiple accounts pointed out that it's almost impossible to monitor multiple accounts.
- The app is good with overall functionality; however, web reviews suggested that some apparent features like notification and deposit are not functioning correctly.
- Many bade reviews also covered the fact that a smooth experience on the onboarding and login process of the chase application is challenging to achieve.
- The nesting of the feature might make the interaction too complicated and result in not using the application to a significant extent.

5 PRINCIPLE BASED EVALUATION

Definition:

Principles are the set of predefined guidelines in the human factors domain that helps human factors professionals (researchers and designers) to evaluate and improve the usability of a product.

This section provides definitions of various usability principles, and examples of the principles that have been violated. This section also provides recommendations on how each can be improved. Each principle that is violated in the product i.e., chase mobile application is analyzed, and then examples and recommendations of the violation are provided. Each violation is marked with the priority levels i.e., high, medium, low to indicator the urgency to resolve the issue. The key priority is listed below:

Priority : Low	**Low Priority:** The issue or the problem that has a low impact on the user's experience while interacting with the mobile application but not as much as some other issues are categorized under low priority
Priority : Medium	**Medium Priority:** The issue or the problem that has some impact on user experience with the chase mobile application and needs to be fixed before low priority issues are categorized under medium priority.
Priority : High	**High Priority:** The issues or the problems that have a higher impact on the user experience of the chase mobile application and need to be fixed immediately are categorized under high priority.

5.1 CONSISTENCY

Definition: Consistency is a way to leverage the usability of an interface by creating uniformity. It is defined as making the elements of the interface the same in terms of look feel, and behavior. The elements that look alike should behave in the same way. For instance, if information in an interface is indicated with the " ℹ️ " icon. It should be uniform throughout the interface. Users should not have to wonder if different words, situations, or action means the same thing or different.

Violation 1: Buttons are not consistent
Inconsistency in the button used in the chase application is observed. Some buttons have rounded corners whereas others have flat corners. Primary buttons of the chase mobile app also differ in their look. Some primary buttons are filled with color whereas other buttons are just outlined with stroke.
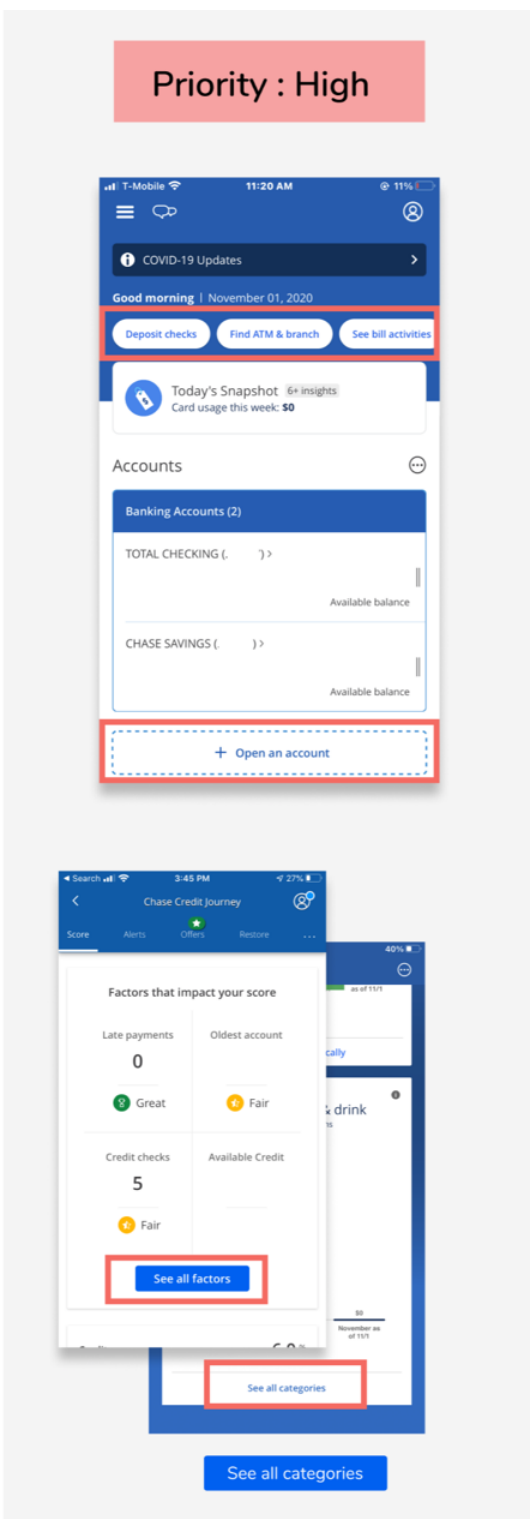
Figure 5.1a Buttons are not consistent

Problem: Various buttons that perform similar functions are represented differently in the application. The deposit check, open account are main features of the application which trigger with a button. However, the look of these buttons is very different from each other. "See all factors" and "See all categories" perform a similar function. However, they still look very different to one another.

Impact: Such difference in the look of the "open account "button makes users think if this is the correct button or "open account" feature will appear if they slide the carousel that contains the "deposit checks" button.

Recommendations: Buttons that perform similar functions should look similar.

● Open account and deposit check are the key features of the mobile application and are two of the most frequently used buttons hence they should give a similar look and feel.

● Every see all button is a feature to extend the view of a category and hence they should look similar. The appearance of the buttons should be as below.

Violation 2: Different icons performing same action

**Figure 5.1b Same action
different icons**
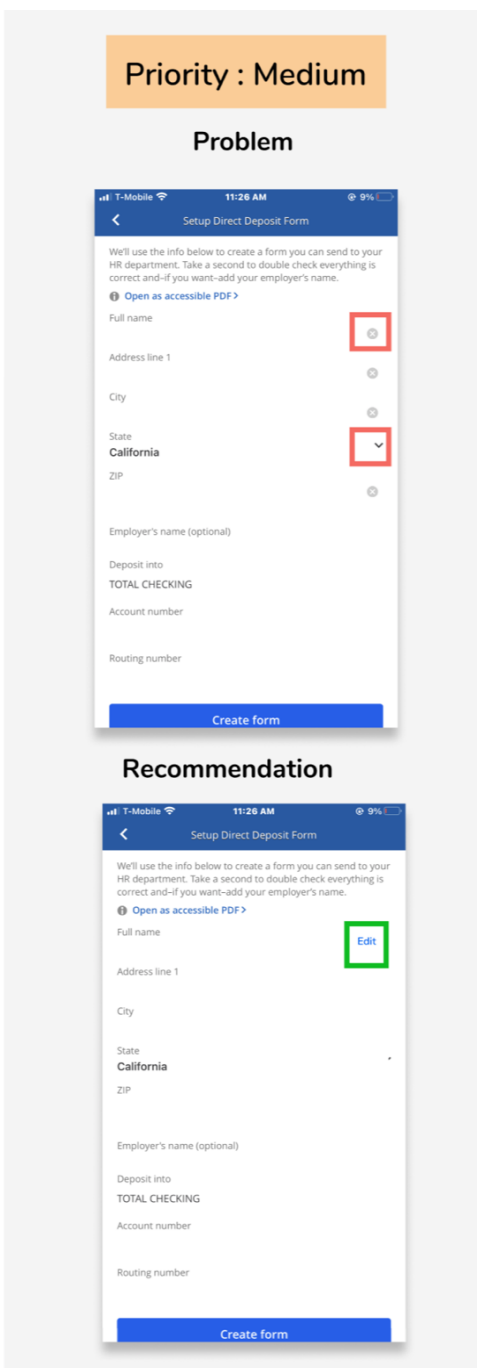
P**roblem**

The icons that perform similar tasks are not consistent throughout the Chase mobile application. Some screens contain close icons to edit a text field however others contain a dropdown to edit a different text field.

Impact

The close and the dropdown perform the same function i.e to edit the information of the users however users of different icons confuse the users.

Recommendation

Using the same icon for the same action will be beneficial in this case.

This can further be done in two ways:

● Making a global action "edit" to edit the information (shown in the image to the left)

5.2 AFFORDANCE

Definition: Affordance is defined as the property of an object that indicates what can be done with that object. These are the cues that give users a hint on how to interact with the same. Usually, great products have positive affordances and bad products have negative affordances which further trigger users to perform errors.

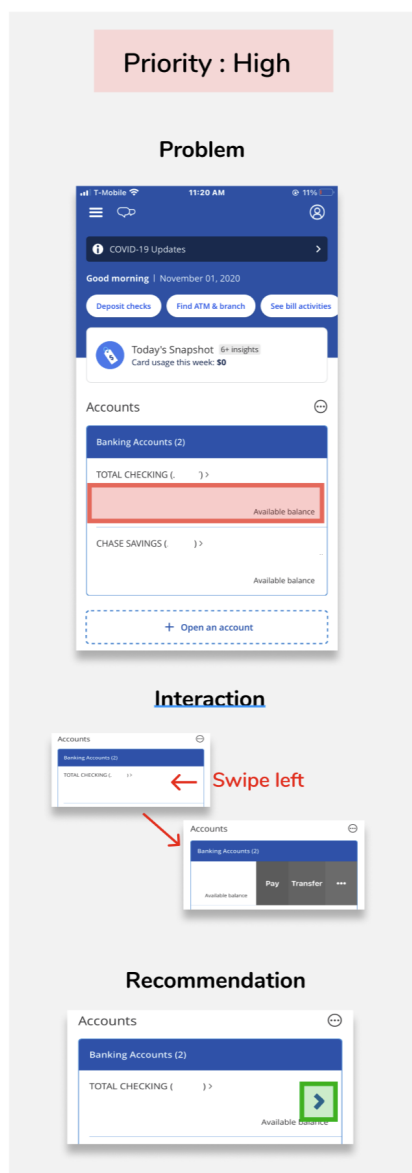**Violation 1: Call to actions is hidden**

Figure 5.2a CTA are hidden

Problem

The account details highlighted in the left image is perceived as no CTA (call to action) to view more options. In other words, the interaction is completely hidden and it's very difficult to discover more options. However, on the left swipe, we can find three different interaction options.

Impact

Due to the hidden interaction, most of the users failed to figure out that they have the option to pay or transfer directly on the home page.

Recommendation

As indicated in the image to the left, an arrow could help users to figure out that the card can be swiped left.

Goal Users main goal is to see transaction details which is hidden(defined in the intro section). This design does not support user goals. As shared by one of the expert user during the interview, the interaction was discovered by him after using the chase application for more than 6 months.

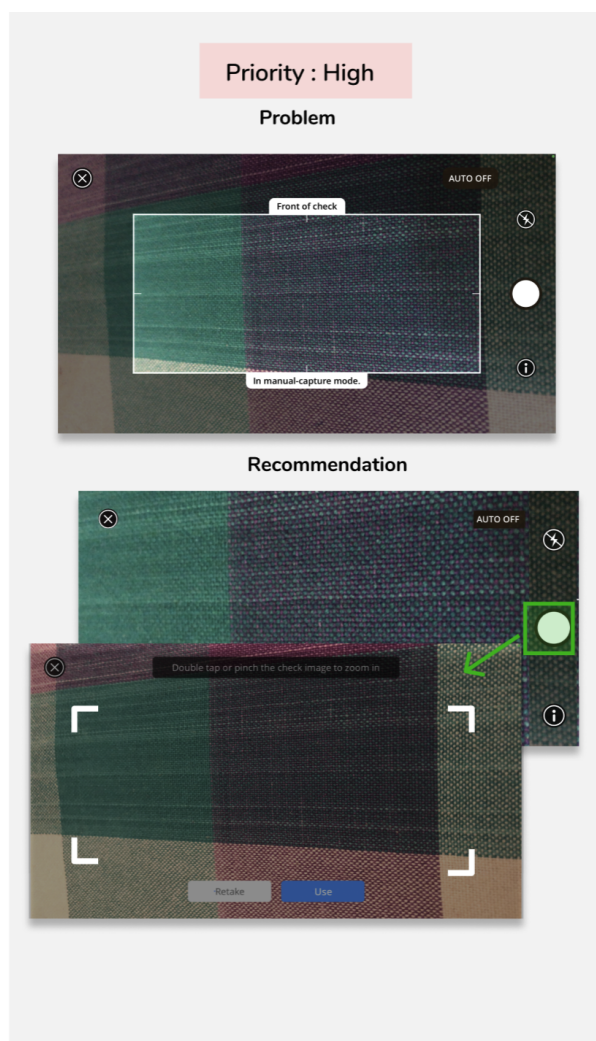**Violation 2: Negative affordance on cropping the image**

Figure 5.2b Negative affordance on cropping image

Problem

While capturing the check to deposit the white border gives the impression of cropping the image. However, the intention of the white border-box is to place the check within the box. Moreover, while capturing the check it is difficult to place the image within the box itself.

Impact

Users always try to drag the box to place, crop the image, and then capture it.

Recommendation

For better interaction, the white border-box should be removed and the whole screen should be used to capture the check.

Once the check is captured the users should be provided with crop features (as indicated in the figure 5.2b) where they can manually crop the check and use the image to deposit the check.

Goal The current design does not support users' goal to make a quick deposit (*defined in intro section*).

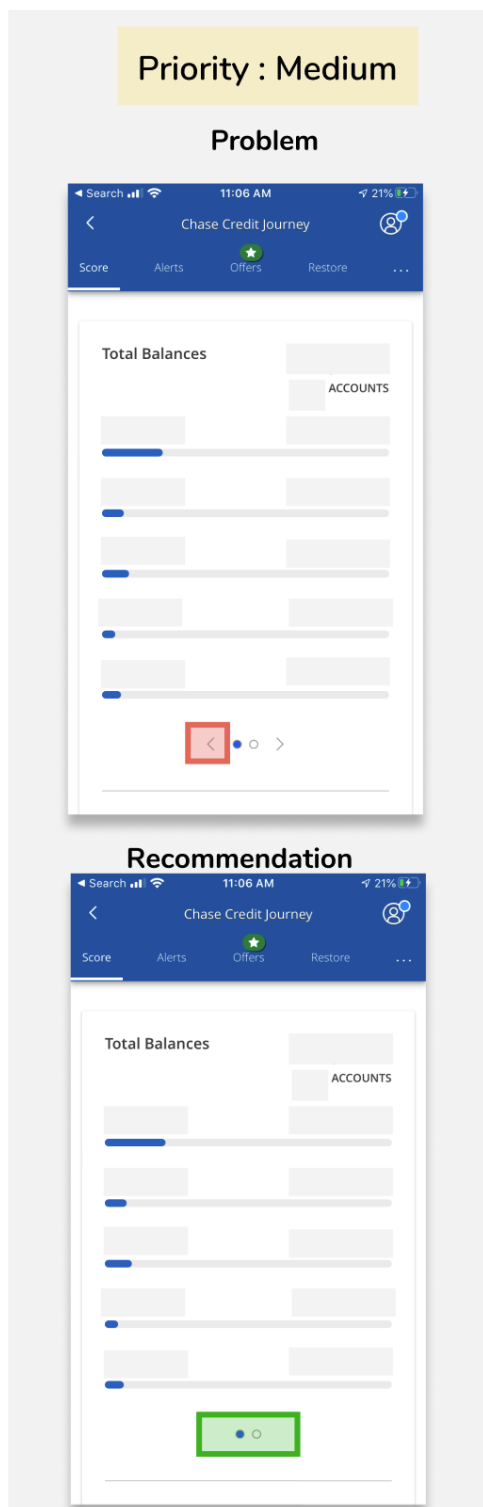## Violation 3: Arrow marks give a negative affordance of more screen

Figure 5.2c Arrow mark gives negative affordance of more screens

Problem

The chase credit score as demonstrated to the left has two screens and the dots below the history are the feedback for the same. However, the arrow icons to the left and right give a false affordance that there are more than two screens.

Impact

Users generally click on the left arrow even when they are on the 1st screen. The same happens on the second screen, the user clicks the right arrow when they are viewing the 2nd screen with the hope that there are more screens. This creates confusion among users as the right and left arrows to indicate that there are more screens to view.

Recommendation

The left and right arrows should be totally removed from the carousel. The dots are enough to give the feedback that there are two screens in the carousel.
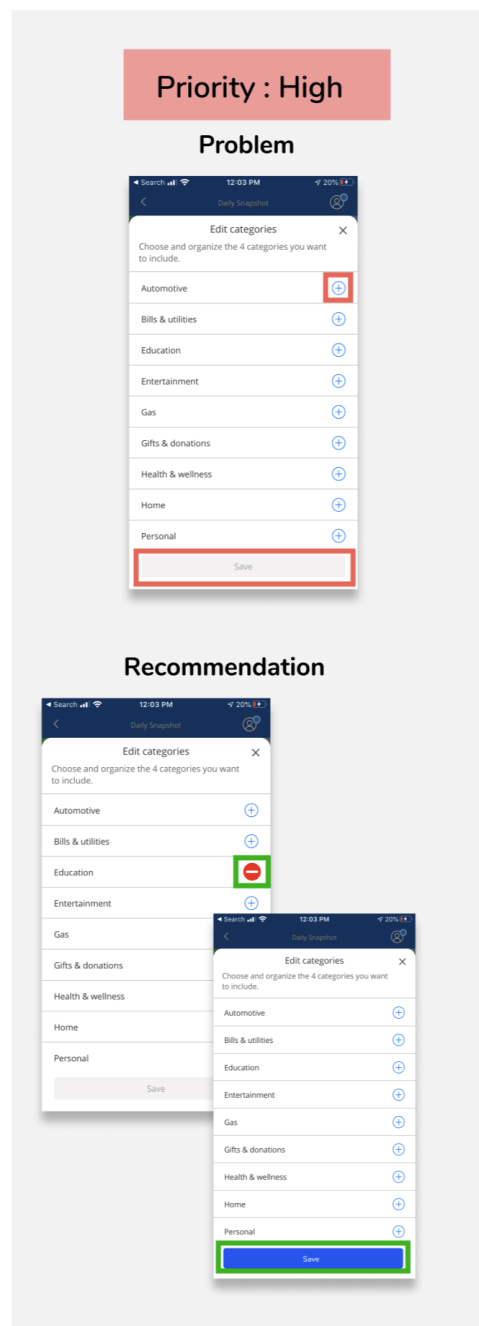
5.3 FEEDBACK

Feedback is a principle that responds to users' action by providing information that the action has been completed, in process or failed. Feedback is generally driven by the interface and is done by changing status, mode, highlighting etc. Feedback is not only visual but also can be haptics, auditory etc.

Violation 1 Adding category- No feedback
Problem
On the daily screenshot page shown to the left, on clicking "edit category", users have the option to add categories. However, on clicking the "+" icon to add a category, there is no feedback to depict the category is finally being added or not. The save option after adding a category does not change all the time.

Impact
Users click on a category to add but with no action provided they keep clicking the "+" icon of the same category again and again. Only when users scroll all the way up, they can find out if the category is being added or not.

Recommendation
For better feedback, the "+" icon needs to be replaced by the "_" icon. This will give users enough clues that the category they have selected is being added. Also, if the save icon changes its status from inactive to active (as shown in the image), this will also give users the feedback that the category is being added.

Figure 5.3a Adding category gives no feedback

Violation 2- The map icon - Misleading feedback

Figure 5.3b Map icon is misleading

Problem

When location access is not allowed in the user's iPhone, the "find ATM" icon page looks like the image shown to the left. In such cases the map icon is misleading. The map icon to the right does not give any clarity that it is already in active mode and the map is not visible because location access is not allowed, or it still needs to be clicked to get the map.

Impact

Even if the location is not allowed the map icon is displayed, this gives the user an expectation to see the map view. However, on clicking the map icon no feedback is provided hence users keep clicking the map icon repeatedly.

Recommendation

If the location access is not provided already, clicking the map icon should provide feedback to communicate that the user needs to grant location access to see the map view. As shown in the figure, a pop up is a good way to communicate the required message.

Goal

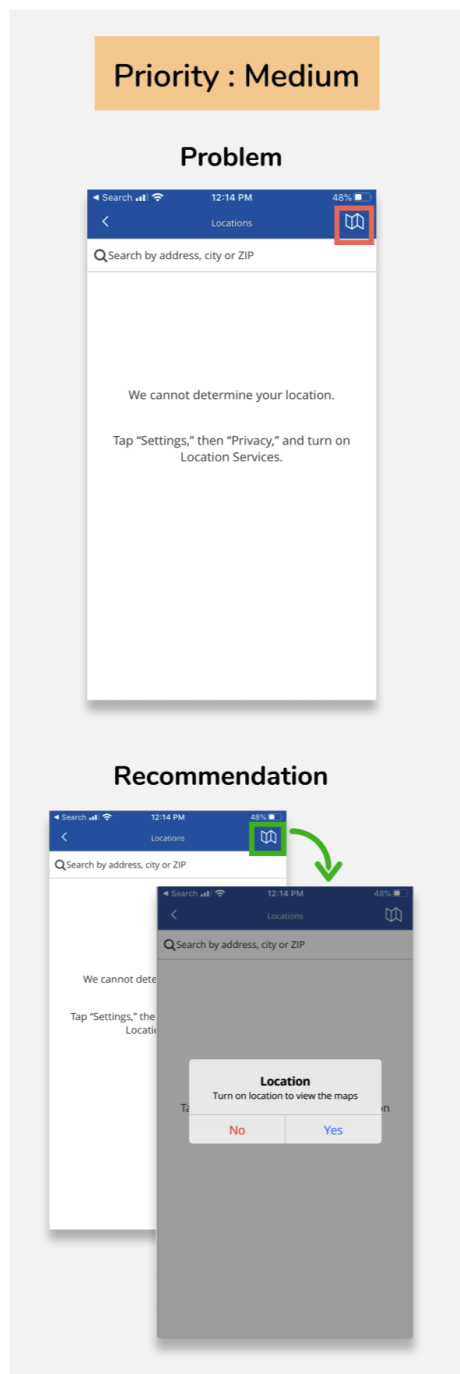User's goal is to enable location to see nearby branch(*defined in the intro section*)and the screen transaction doesn't guide users to the same. Novice users must face difficulty while interacting with this feature.

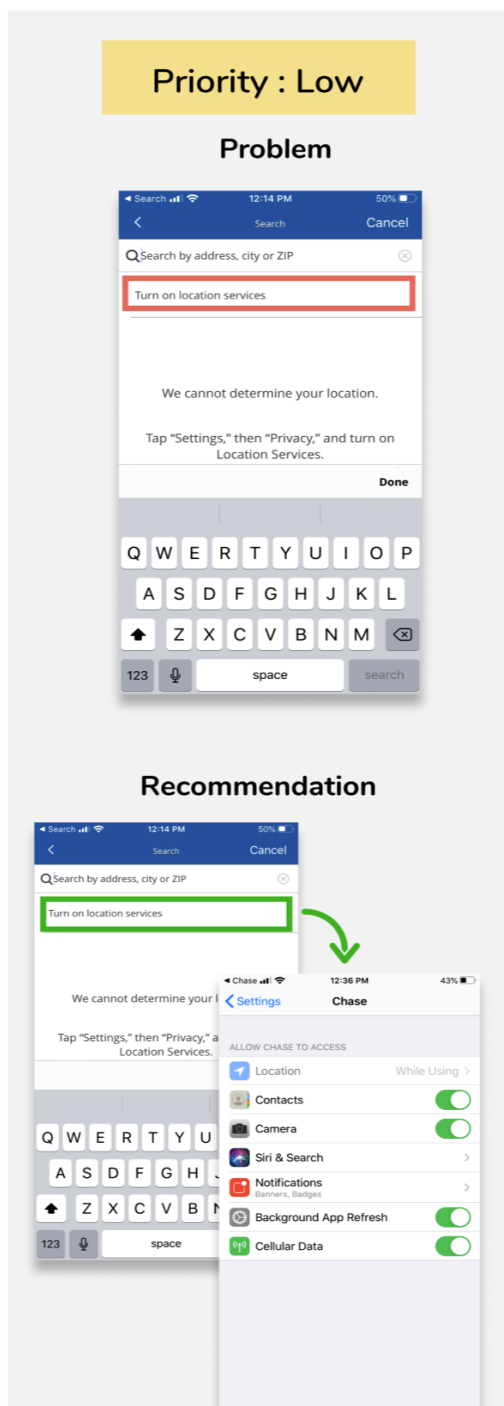## Violation 3 - Turn on location-No feedback

Figure 5.3c Turn on location gives no feedback

Problem

When the location is turned off while searching for an ATM, the "turn on location service" appears. However, it gives no feedback on clicking the same. The message displayed on the blank screen tells the users what to do next however it is not that helpful because the message distracts the user flow which might encourage the user to ignore the interaction altogether.

Impact

On clicking "turn on location service" no feedback is provided to the users. This creates confusion among the users on what to do to move forward. The message displayed in the blank screen tells the users what to do however it is not that helpful as most of the time users tend to ignore the message.

Recommendation

Instead of a message asking the users to go to their iPhone setting and switch on the location, the "turn on location service" should take the user to the settings page.

Goal

User's goal is to enable location to see nearby branch (*defined in the intro section)* and the

screen transaction doesn't guide users to the same. Novice users must face difficulty while interacting with this feature.

5.4 VISUAL MOMENTUM

Visual momentum is defined as the usability principle that addresses interaction, context, and transitions between multiple screens. It is the ability to understand how the movement of one representation relates to another along an ordered or grouped set of pages. For example, the name of the link or button should be the title of the next page. If the next page title does not match, it will create confusion among users

Violation 1 Title mismatch on amazon rewards screen
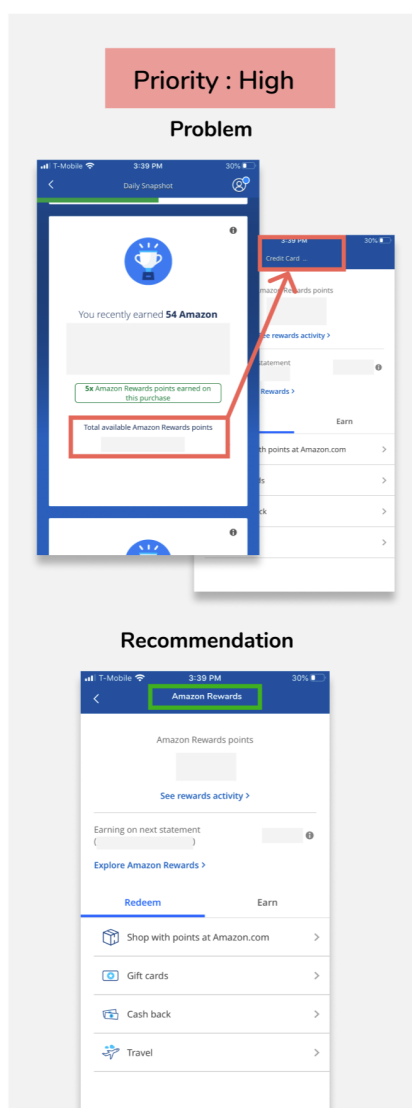
Problem

On clicking rewards on screen 1, the title of screen 2 shows a credit card number. The link is clicked on screen 1 does not match with the title name on screen 2.

Impact

The users think they will see details of rewards however, the name of the card creates some confusion. Only when the user sees the details of the page, they can conclude that they have landed on the correct page.

Recommendation

A clear title that matches the link of the previous page will keep the visual momentum of users and communicate users' local position within a set of pages.

Figure 5.4a Title mismatch on amazon rewards screen

Violation 2 Unexpected screen hampering visual momentum
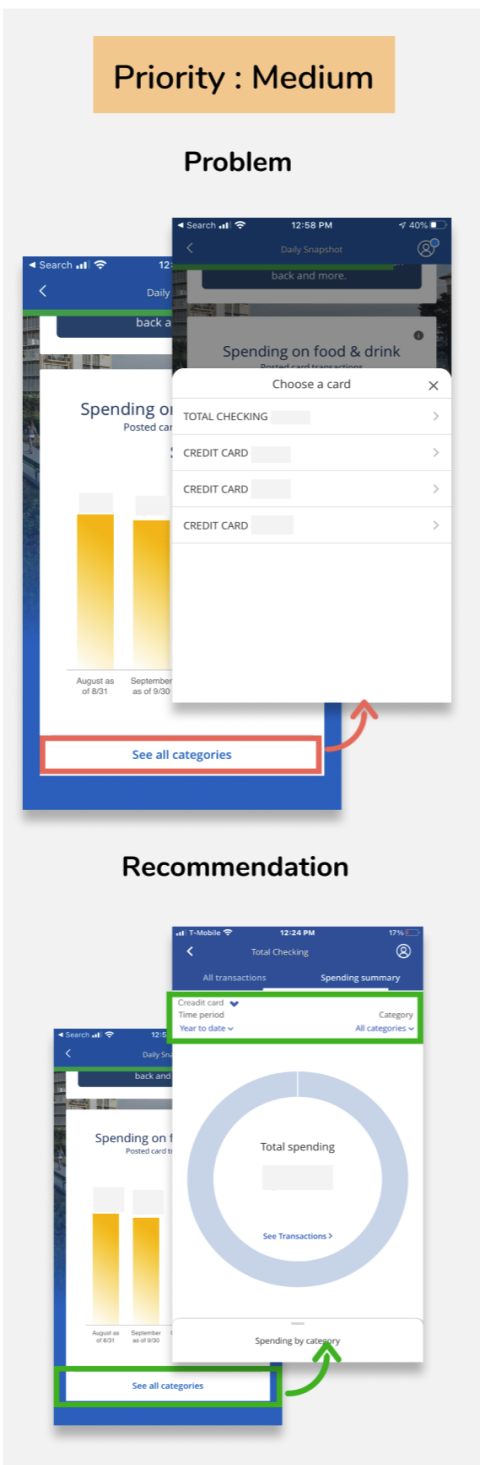
Figure 5.4b Unexpected screen hampering visual momentum

Problem

On clicking see all categories, users expect the category page to open directly. However, there is an extra step added to the user flow to select credit cards. This breaks the expectation of users. Also, the credit card is previously selected in the flow.

Impact

Increase the cognitive load of users by making them think if they are on the right path. It makes the user wonder if they have made any mistake. Most of the users click bake to check if they have clicked a wrong button.

Recommendation

Instead of making users choose the credit card number first and then take them to the category page, it is better to take the users directly to the category page. Choosing a card number should be in the category where users can change the view of the category any time they like, without interrupting their visual momentum.

5.5 DISPLAY PROXIMITY

The control or the call actions button that perform similar tasks and are connected in interaction should be placed near to each other at proximity.

Violation 1 Similar functions places apart

Problem

Digital assistants and scheduled meetings are similar actions to take help from the bank however they are not placed near each other. Digital assistant is a chat feature where users can take assistance in case, they need any help with their bank. Similarly, users can also schedule a meeting with the assistant in case of any help they need. Both features are like each other and should be placed at proximity.

Impacts

As both, the features are away from each other users are not aware of which feature among the two will help them the most based on the type of action they intend to perform. Oftentimes, users use the digital assistant feature, and eventually they are being told to schedule a meeting as a solution to the problem they face.

Recommendation

Placing both the features near to each other will help users to make the best decision on which feature to use, based on the type of problem they are trying to solve.

Figure 5.5a Similar features placed apart

Violation 2 Category and the chart representing the category

Priority : Low

Problem

Problem

Every time the users change the category the pia chat changes to represent the selection. These two elements of design are related to each other however they are placed apart from each other.

Impacts

As they are not placed near each other users take time to figure out how to change the category of the pie chart.

Recommendations

Placing the pie chart and the category selection close to each other will be easier for users to interact with the chart view.

Goals

Users main goal check spending in a specific category *(defined in intro section).* Current design might be good for expert user who already know how to interact with the interface however this design is not convenient for novice users.

Figure 5.5b Category and the chart representing the category are placed apart

5.6 SUMMARY

Several systemic issues have been categorized under the following Usability Principle:

- Consistency
- Affordance
- Feedback
- Visual Momentum
- Display Proximity

These issues have been found to be systemic i.e it is spread across several users flows, functions, and features across the Mobile application. As a result of these violations, the goal for an average user is difficult to achieve.

Principle	Violation	Recommendation	Priority
Consistency	Violation 1: Buttons are not consistent	Buttons that perform similar functions should look similar.	High
	Violation 2: Same action represented by different icons	Use edit icon to edit a text box instead of a close icon	Medium
Affordance	Violation 1: The action is hidden inside the interaction	An arrow could help users to figure out that that the card can be swiped left.	High

	Violation 2: While capturing the check to deposit the white border gives the impression of cropping the image	Remove the white box and use the whole screen to capture the image	High
	Violation 3: The arrow icons to the left and right give a false affordance that there are more than two screens.	The dots are enough to give the feedback that there are only two screens in the carousel.	Medium
Feedback	Violation 1: On clicking the "+" icon to add a category, there is no feedback to depict the category is finally being added or not.	The "+" icon needs to be replaced by the "_" icon, once the categories are being added	High
	Violation 2: The map icon to the right does not give any clarity that it is already in active mode and the map is not visible because location access is not allowed, or it still need to be clicked to get the map.	If the location access is not provided already, clicking the map icon should provide feedback to communicate that the user needs to grant location access to	Medium

		see the map view.	
	Violation 3: When the location is turned off while searching for an ATM, the "turn on location service" appears. However, it gives no feedback on clicking the same.	Instead of a message asking the users to go to their iPhone setting and switch on the location, the "turn on location service" should take the user to the settings page.	Low
Visual Momentum	Violation 1: The link that is clicked on one screen does not match with the title name on the next screen.	A clear title that matches the link of the previous page	High
	Violation 2: An unexpected extra step to select a credit card.	Choosing a card number should be in the category where users can change the view of the category any time they like, without	Medium

		interrupting their visual momentum.	
Display Proximity	Violation 1: Digital assistants and scheduled meetings are similar actions to take help from the bank however they are not placed near each other.	Placing both the features near to each other will help users to make the best decision on which feature to use, based on the type of problem they are trying to solve.	Medium
	Violation 2: Every time the users change the category the pia chat changes to represent the selection. These two elements of design are related to each other however they are placed apart from each other.	Placing the pie chart and the category selection close to each other will be easier for users to interact with the chart view.	Low

6 INTERFACE BASED EVALUATION

This section covers specific interface problems that occur on each screen of the chase mobile application. The evaluation is feature-oriented, focusing on interface elements like icons, text fields, buttons, etc. This section also evaluates how transition between screen supports users' goals.

Each of the evaluations listed below starts with pitching out the core functionalities on each screen. Then the problem on each screen is described, together with the impact on the user. Finally, a recommendation is provided for each issue. Each Problem is marked with the priority levels i.e., high, medium, low to indicator the urgency to resolve the issue. The key priority is listed below:

Priority : Low

Low Priority: The issue or the problem that has a low impact on the user's experience while interacting with the mobile application but not as much as some other issues are categorized under low priority.

Priority : Medium

Medium Priority: The issue or the problem that has some impact on user experience with the chase mobile application and needs to be fixed before low priority issues are categorized under medium priority.

Priority : High

High Priority: The issues or the problems that have a higher impact on the user experience of the chase mobile application and need to be fixed immediately are categorized under high priority.
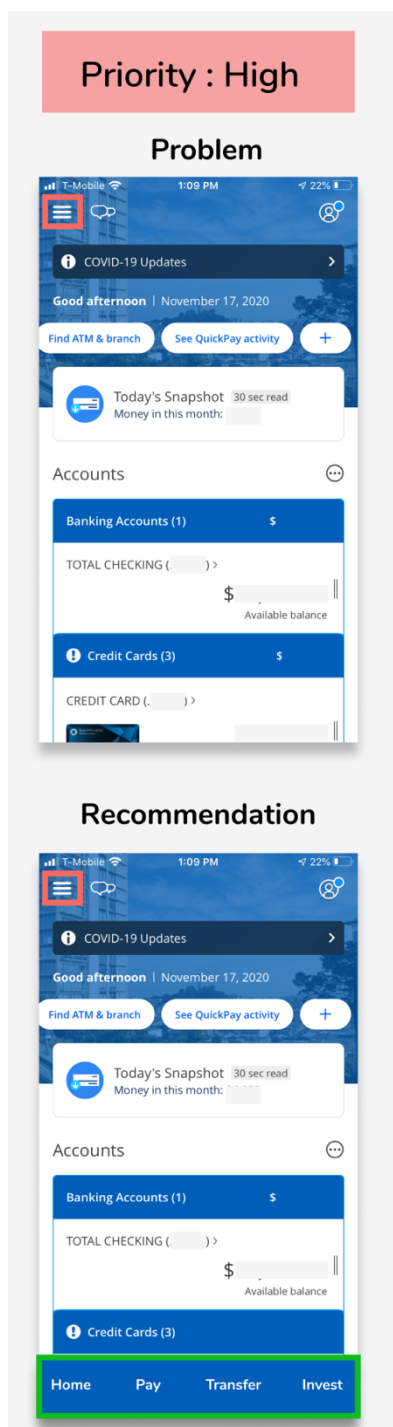
6.1 HOME PAGE /LANDING PAGE

Figure 6.1a Home screen (hamburger hides important actions)

Issue - 1

Problem

The main navigation for the chase mobile application is the hamburger menu. The frequent actions such as pay bills, transfer money, and invest are hidden inside the hamburger menu. Hence it violates the principle of discoverability in making it difficult for the user to find certain features. During the interview phase, some users showed discomfort using the hamburger menu as the primary navigation.

Impact

Difficult to click the hamburger to reach the desired feature. Difficult to click. It also lowers down the traffic of the app by hiding some important features inside the hamburger menu.

Recommendation

Instead of a hamburger menu for main navigation, button navigation can be used to make all the frequently used features to be visible on the home page itself.
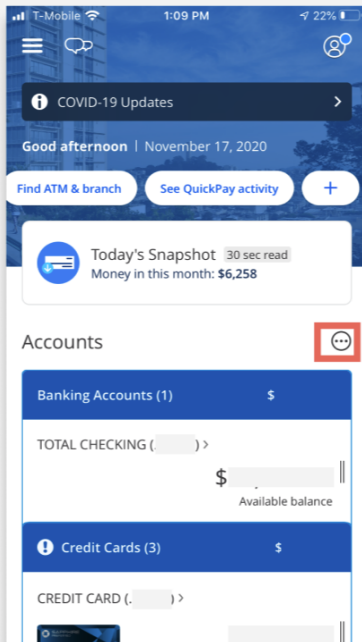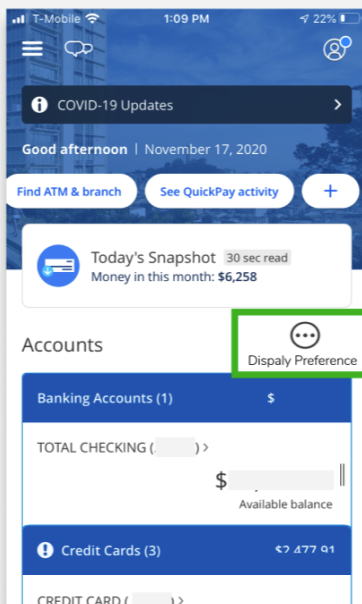
Figure 6.1b Home screen
(incomprehensible icon)

Issue 2

Goals

The home screen does not support user's goals. From the usability exercise and interview, I discovered that user want to see recent transaction upfront. Seeing transition details is one of the first goals users wish to achieve. This design serves best only to the expert users who already know to locate desired features.

Problem

Most users click on the account display icon represented in figure 6.1b. However, the icon used does not facilitate the intended meaning. During the inquiry method, it was discovered by the user interview that most users misunderstood the icon as "more option" for the account setting and expected features such as "pay bills" and "transfer money", however clicking the icon displayed to the left of the screen opens display preferences for the account settings.

Impact

Users may click the icon to fulfill goals like pay bills or transfer etc. the CTA for the above-mentioned features are further hidden inside the accounts.
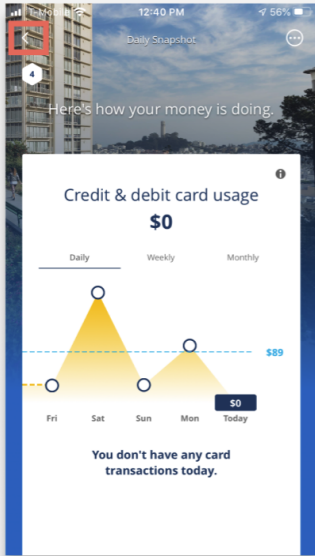
Recommendation

The icon can be displayed with a label as represented to the left of the recommended screenshot to communicate the meaning of the icon.

6.2 TODAY'S SNAPSHOT PAGE

Issue- 1

Figure 6.2a Snapshot screen (invisible icon)

Goals

Users with multiple credit cards wish to see how their money is doing on each card. Current screen as represented in fig 6.2a does give the information of cards. This screen does serve any persona because even expert users find it frustrating to view their transaction of each card.

Problem

The back icons are on top of a light color image hence the back button is not prominently visible. Such a UI design violates the principle of visibility and accessibility. As the saying goes "out of sight, out of mind" If the back option is not visible prominently, the user would be confused while using the icon

Impact

Users might not understand how to navigate back to the home page.

Recommendation

A clear solid background instead of an image makes the icon look so prominent. This will improve the navigation flow for users.

Issue 2

Priority : Low

Problem

Recommendation
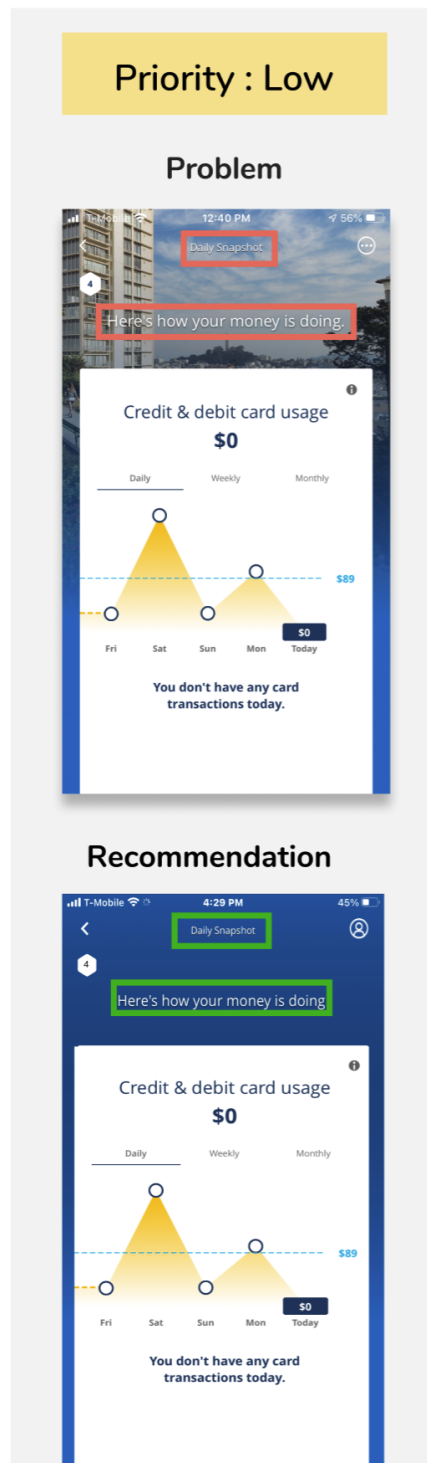
Figure 6.2b Snapshot (Invisible title and description)

Problem

The title i.e., "Daily Snapshot" and the description of the page "Here is how money your money is doing" are overlaid upon an image (figure6.2b). Hence it is not visible. This design violates the readability principle by not communicating with the users exactly what the users are looking at.

Impact

Users might get confused and feel lost when they reach this page. Users must scroll and check the whole screen to understand and comprehend the screen. This might create frustration within users.

Recommendation

A clear solid background instead of an image makes the title and the description of the screen look so prominent. This will improve the navigation flow for users.

Issue 3

Priority : Medium

Problem

Recommendation
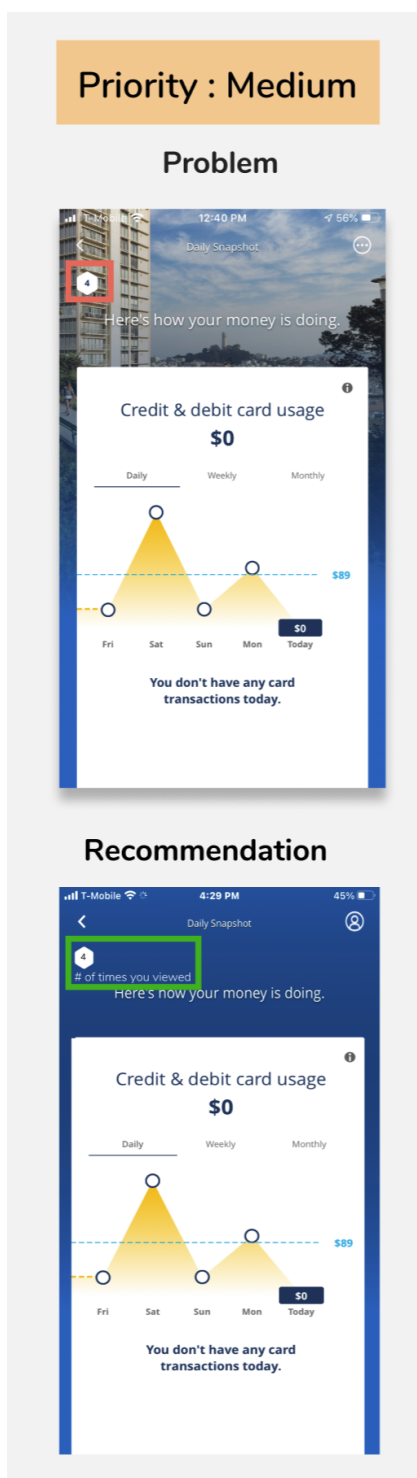
Figure 6.2c Snapshot
(incomprehensible elements)

Problem

The icon with a number to the top right corner is not comprehensible. The icon is not event clickable, so it is highly misleading what the icon is for and what the number represents.

Impact

Users repeatedly click on the icon to find out what the icon represents. As the icon is not clickable this might create frustration among users and increase cognitive load.

Recommendation

A short description should be added to the icon to communicate the fact that the icon is just an insight into the no of times users visited the page.

6.3 CHASE OFFERS

Figure 6.3 Chase offers (Missing remove feature)

Issue 1

Goal

Users have two goals while interacting with the chase offers i.e add an offer and remove an offer if added by mistake. The transaction of these screen represented in figure 6.3 doesn't support user's goals.

Problem

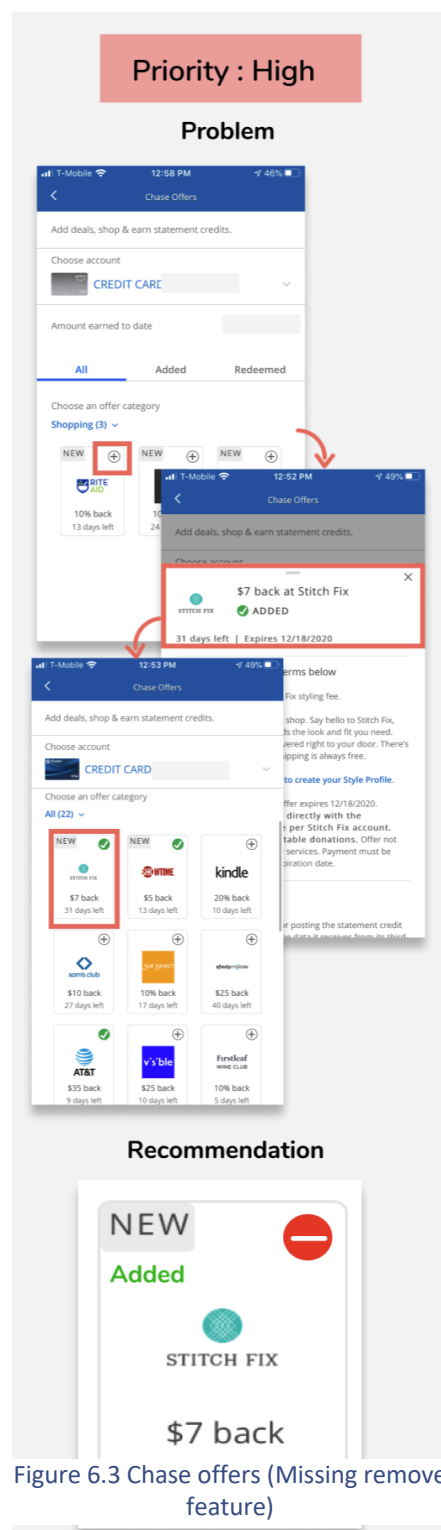The chase offer screens provide various offers for users to use. Users can click on "+" icon to add and offer. The detail pop-up pops out to show the offer has been added with other detailed information about the offer. However, there is no way to remove that offer that has already been added. This hampers user control and freedom as the application interface does not provide undo the action. The same insight has been discovered during the interview phase.

Issue

Users often added an offer by mistake. In such a scenario, there is no option for the user to leave the unwanted state. I.e., added state. This makes the user helpless.

Recommendation

As represented to the left of the image, the card that represents that the offer has been added should have a "remove" icon to undo the add action.

6.4 SCHEDULE A PAYMENT
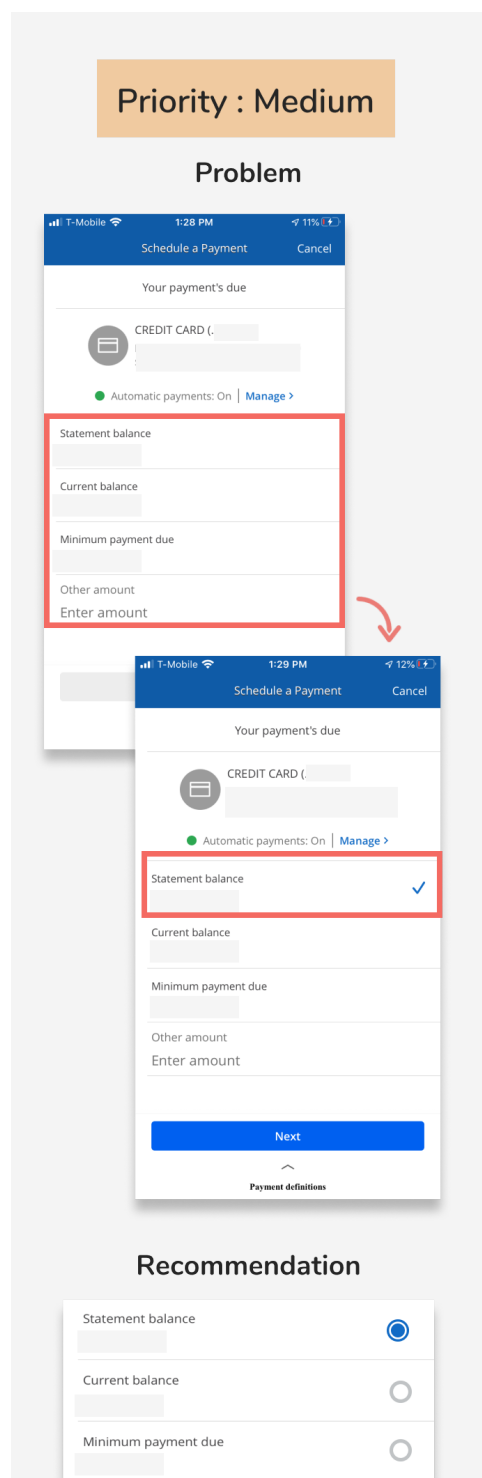
Figure 6.4a Schedule payment screen (unclear feedback)

Problem

Schedule a payment screen includes various options like statement balance, current balance, and minimum payment due to make a payment for the credit card. However, these options cannot be perceived as selection options, until users click on it. There is feedback (no radio button or checkbox) to explicitly communicate the user's fact that these three are options for the user to choose from.

Also, Once the user clicks on one of the three options, a checkmark appears as shown on the left of the image. Checkmark can be perceived as multiple selection options. However, only one option can be selected on this screen.

Impact

● It is difficult to understand how to move forward with this screen and make the payment.
● Difficult to perceive that only one option can be selected among the three.

Recommendation

A radio button is better to convey the fact that the option is closable and only one option can be chosen among the three.

6.5 SIGNIN
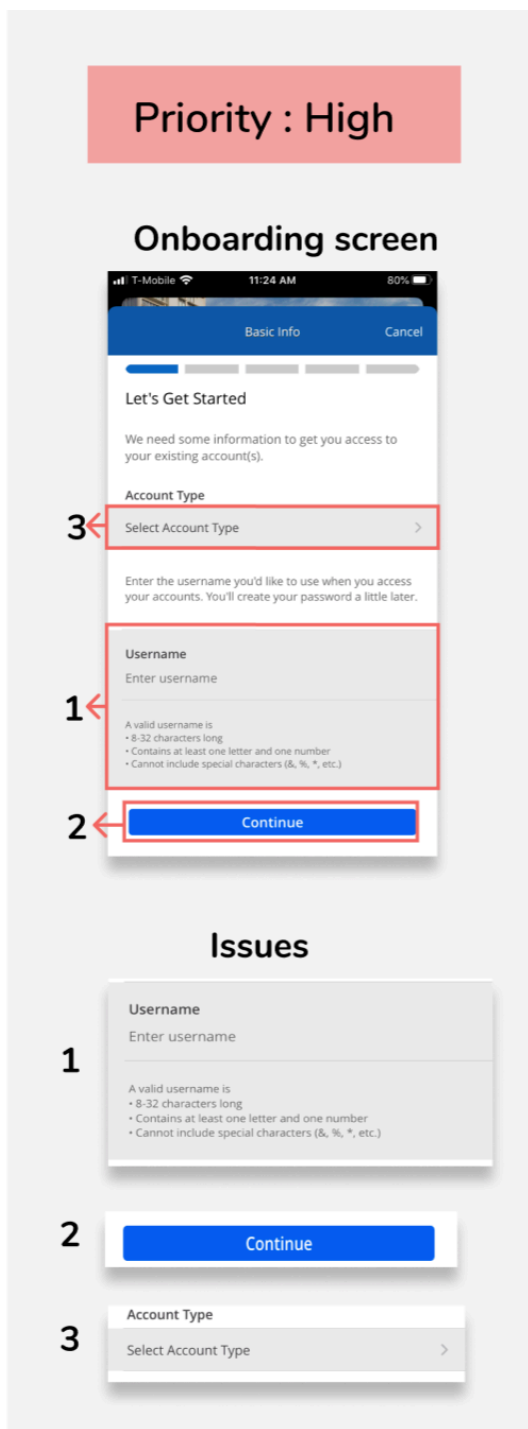
Figure 6.5 sign in screen

Problem:

The text field i.e., "Account type" and "username" indicated by number 1 and 2 respectively, are grayed out as shown to the left of the image. This gives the user the impression that the fields are not clickable or editable.

Impact

Users generally fail to perceive that the text field is indeed clickable. It is only when they click on continue and receive the error message, they get to realize that they could grayed text fields are editable.

Recommendation

The text field should not be grayed out. It should have a white background which will improve the perspective of the text field.

Goal

Users goals while onboarding is to undergo a quick sign in(*defined in the intro section*). However, current design doesn't fulfill the user's goals

6.6 SIGN IN: CTA BUTTON ALWAYS ACTIVE
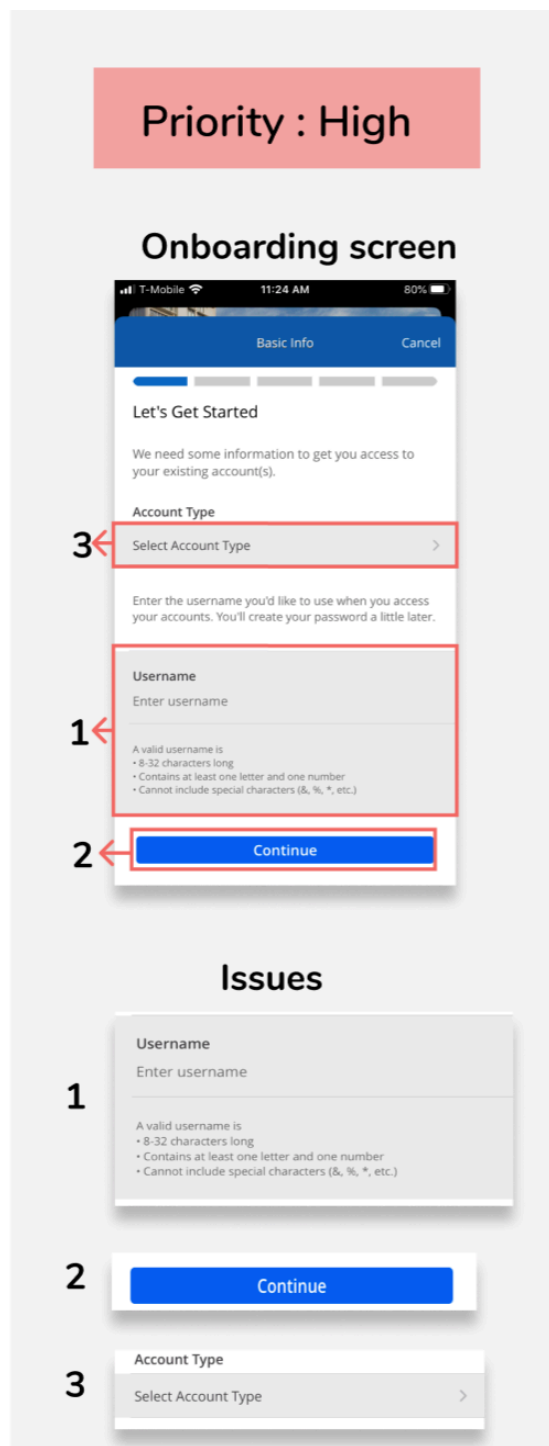
Figure 6.5 sign in screen

Issue 2 : CTA button always on active state

Problem

The CTA button (represented by number 2 on the left)on the Sign In page just has only one state i.e active state irrespective of the condition that the text field i.e the username and account type are filled or unfilled.

Impact

As the CTA button is active and the text fields are inactive (discussed on issue 1 above) the user tends to directly click on continue and move forward with the process. This design gives a false affordance to the users and makes them click the button before filling the details.

Recommendation

The CTA button needs to be in an inactive mode until the user has filled all the required details to move forward.

Goal

Users goals while onboarding is to undergo a quick sign in(*defined in the intro section*). However, current design doesn't fulfill the user's goals

6.7 SELECTING ACCOUNT TYPE

Issue 3: Select account type
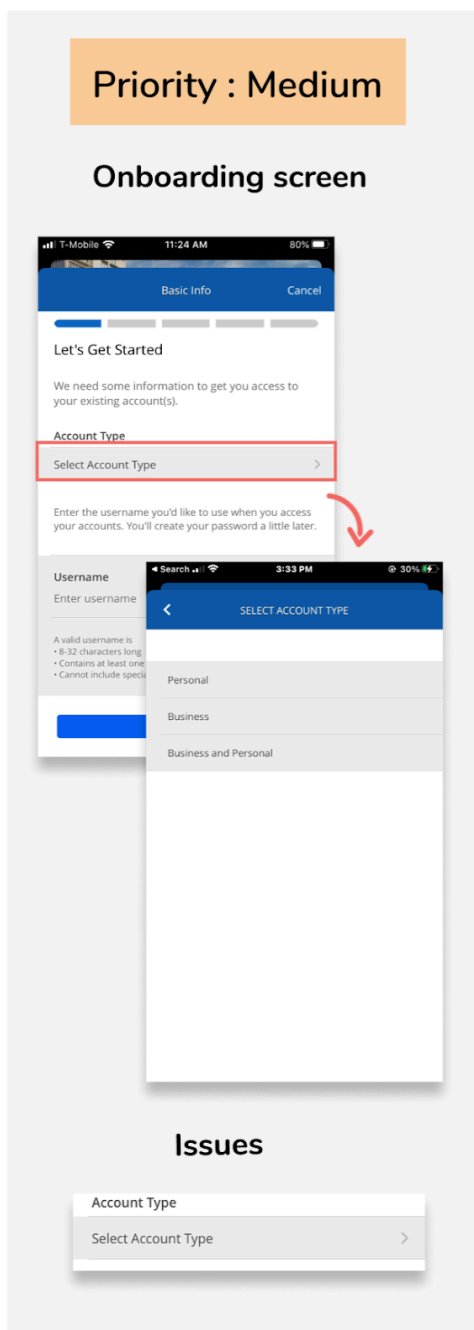
Figure 6.7 selecting account

Problem

Account types are typically three option as shown to the left of the image. To select an account type user, need to click on the select account type page and they are taken to the next page. Taking the user to the next screen just to select an option and bringing back to the same screen is an extra click.

Impact

The interaction disrupts user flow. By interviewing 2 new users I found out that the users were annoyed by going back and forth repeatedly to complete simple tasks like selection.

Recommendation

The design can be improved by providing the selection option in the same screen which will further avoid an extra click and extra screen navigation.

6.8 ERROR MESSAGE
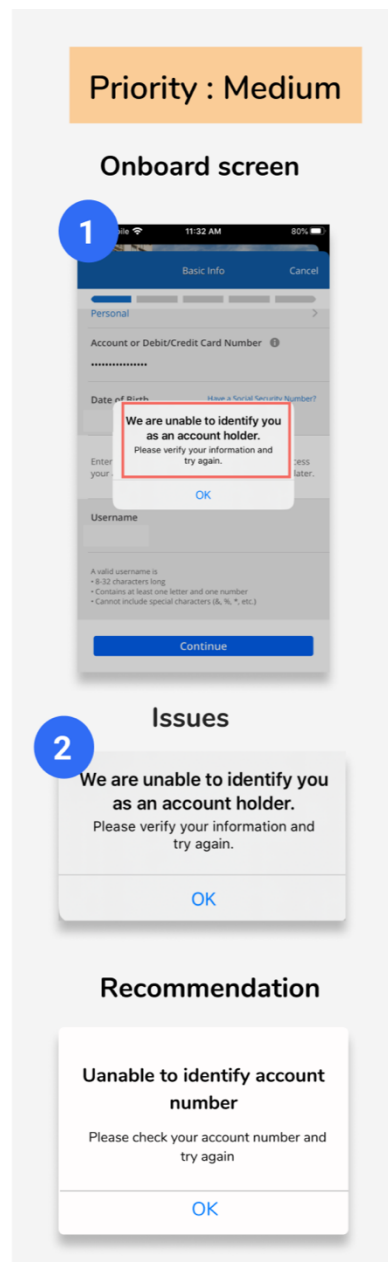
Figure 6.6 error message

Goal

Once the error occurred, user's goal is to figure out what went wrong. Current error message represented to the second figure does not support user goals.

Problem

When a user makes some error in filling the details while signing up, they get the error message as shown in the figure to the left. However, the error message does not give any specific details on what error has been made and what needs to be done to correct the error.

Impact

Users are left with no clue on how to move forward with the process or what to modify. The error message does not provide enough feedback to continue the interaction in a user-friendly manner.

Recommendation

1.   This design can be improved by specifying the detail on what went wrong in the interaction. An example would be "Please check account number and try again" shown in the figure to the left.

2.   Proper feedback can be provided by validating the account number. By displaying an error message for the account number in the same screen right after the account text field is being filed.

6.9 FORGOT USERNAME OR PASSWORD
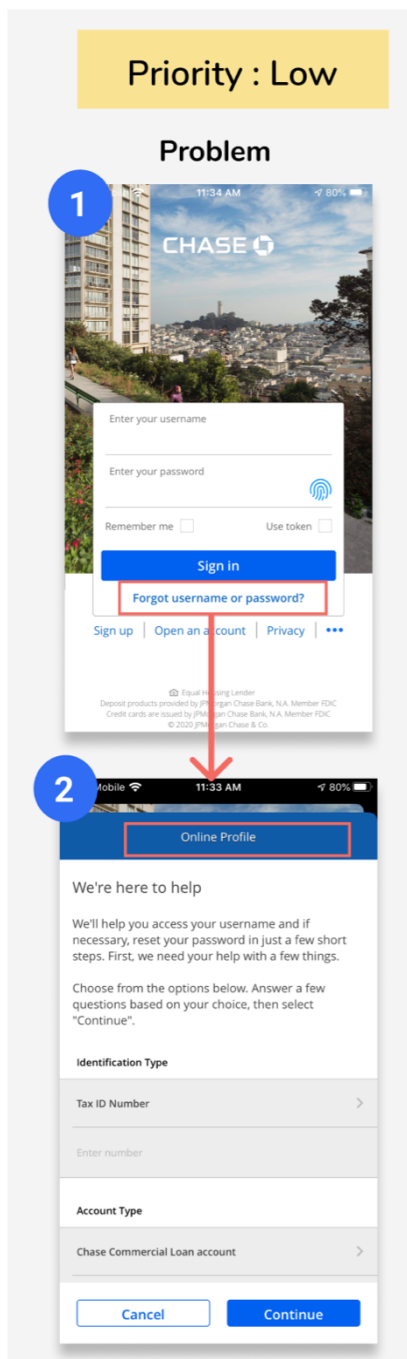
Figure 6.9 Forgot password

Goal

User's goal is in this screen to recover username or password. Title if the second screen of figure 6.9 doesn't support users' goal because of mismatch title.

Problem

In the forgot password flow the link "forgot username or password?" does not match with the title of the next screen. This creates a violation in the visual momentum.

Impact

Because of the mismatch of the liked clicked and the title of the next screen user gets confused if they have clicked on the correct link as intended or not. Users generally go back to the previous page to confirm their selection.

Recommendation

The level of the link clicked must match with the next screen that is being displayed.

6.10 SUMMARY: INTERFACE BASED EVALUATION

Several interface issues have been discovered on the above section. Some of the interface evaluation insight such as incomprehensible icons, were also pointed out by users during the inquiry phase. After identifying various pain points that the user encounter on screen-by-screen interface analysis and improving the interface as per the recommendation provide in this report, we hope to improve the overall user experience for the users.

Interface Based Issues	Recommendations	Priority
Hamburger menu hides many features and it's difficult to click	Instead of a hamburger menu for main navigation, button navigation can be used to make all the frequently used features to be visible on the home page itself.	High
There is no way to remove that offer that has already been added.	the offer has been added should have a "remove" icon to undo the add action.	High
Text field appears inactive	The text field should not be grayed out. It should have a white background which will improve the perspective of the text field.	High
CTA button always on active state	The CTA button needs to be in an inactive mode until the user has filled all the required details to move forward.	High
The icon used does not facilitate the intended meaning.	The icon can be displayed with a label as represented to the left of the recommended screenshot to clearly communicate the meaning of the icon	Medium

The icon with a number to the top right corner is not comprehensible.	A label of short description can be added to convey the meaning of the icon	Medium
Unnecessary extra clicks to complete a simple task	The design can be improved by providing the selection option in the same screen which will further avoid an extra click and extra screen navigation.	Medium
Error message does not guide user action.	The design can be improved by specifying the detail on what went wrong in the interaction. An example would be "Please check account number and try again" shown in the figure to the left.	Medium
Checkmark can be perceived as multiple selection options	A radio button should be used to convey that the fact that only one among three option can be selected	Medium
Mismatching title	The level of the link clicked must match with the next screen that is being displayed.	Low
The back icons are displayed on top of an image hence not visible	A clear solid background instead of an image makes the icon look so prominent.	Low
The title of the page is not readable	A clear solid background instead of an image will make the font readable	Low

7 REPORT SUMMERY

Based on the contextual evaluation report and heuristic evaluation results, we summarize the evaluation report by answering the following questions.

Does the product communicate the purpose, function, and value?

The purpose of the mobile chase application is to provide financial monitoring and support to the users. However, it lacks the accuracy of the financial details that are being displayed in the application. For instance, the account balance of an account is not up to date, past transaction details, Transfer money details. , inability to log in to the application quickly, and incomprehensive icons. This results in losing the user's trust in the product. Other financial applications seem to be doing better than chase applications in the above mention context. However, Chase provides unique features like financial monitoring, business support, Quick deposits. This exceptional feature makes the chase application stand out in the digital banking platform and gains user's satisfaction.

Is it easy to navigate between functions, features etc.?

Navigating with the mobile application interface might be easier for experienced users who have been using the chase application for years. However, it is not so convenient for novice users to navigate through various features. Experience users might be aware of all the app's features and where exactly to find it. However, novice users might be frustrated because of the effort they need to discover a feature. Chase's application violates the principle of discoverability. Moreover, some of the critical call-to-action buttons are hidden inside the interaction. It is almost impossible for novice users to discover the same without any visual cues.

Does the design support successful and efficient interaction?

The application has done an excellent job keeping the home screen less cluttered and highlighting the critical information like the account details. However, in doing so, many of the vital functions are hidden inside. These essential functionalities are typically more than two clicks away. The overall number of clicks to carry on the desired function takes much time. The non-linked text, different representation of different buttons, misleading titles, and incomprehensible icons makes the application's overall interaction less user-friendly.

Was the user-guided through the interface or left on his/her own?

The intuitive interface promotes users to move through the application smoothly. However, the unfamiliar icons, the hidden interface action and functionalities within the screen, and missing levels and titles prevent users from exploring and learning the application.

8 CHECKLIST OF PROBLEM

Checklist of problems sort by serial number

Sl No	Description of problems	Priority
1	Buttons are not consistent	High
2	Same action represented by different icons	Medium
3	The action is hidden inside the interaction	High
4	While capturing the check to deposit the white border gives the impression of cropping the image	High
5	The arrow icons to the left and right give a false affordance that there are more than two screens.	High
6	On clicking the "+" icon to add a category, there is no feedback to depict the category is finally being added or not.	High
7	The link that is clicked on one screen does not match with the title name on the next screen.	High
8	An unexpected extra step to select a credit card	Medium
9	Digital assistants and scheduled meetings are similar actions to take help from the bank however they are not placed near each other	Medium
10	Every time the users change the category the pia chat changes to represent the selection. These two elements of design are related to each other however they are placed apart from each other.	Low
11	Hamburger menu hides many features and it's difficult to click	High
12	When the location is turned off while searching for an ATM, the "turn on location service" appears. However, it gives no feedback on clicking the same.	Low
13	There is no way to remove that offer that has already been added.	High
14	Text field appears inactive	High
15	CTA button always on active state	Medium
16	The icon used does not facilitate the intended meaning.	Medium
17	The icon with a number to the top right corner is not comprehensible.	Medium
18	Unnecessary extra clicks to complete a simple task	Medium
19	Error message does not guide user action.	Medium
20	Checkmark can be perceived as multiple selection options	Medium
21	Mismatching title	Low
22	The back icons are displayed on top of an image hence not visible	Low
23	The title of the page is not readable	Low

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22	The back icons are displayed on top of an image hence not visible	Low
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8 CONTACT DETAILS

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