Deliverable 1 Document

Contextual Inquiries

BECU Mobile Banking App

Tara Knutsen

User Profile and Background

I conducted the Technology Use and Breakdown observation on Friday, January 8th around 10:30 at night in the user's home on his couch. The observation lasted for 15 minutes. The user that I observed and interviewed is in his early 20's. He is an infrequent technology user and mainly uses his smartphone for texting, Facebook, and mobile banking. The user mainly uses this app while outside of his home, especially to transfer money and view his account balance before making a purchase.

The contextual inquiry was conducted on the BECU Mobile Banking Application for iOS 8. The user's primary goals when using the app is to complete online banking related tasks.

Questions Asked and Tasks Carried Out

The first question that I asked the user was what the main tasks that they carry out with the app. He said that the three main tasks he carries out are depositing checks, view account balance, and transferring money. Following the first question, I then asked the user to demonstrate one of these three tasks. The user chose the task of depositing a check which ended up providing great information about the app and it's pain points.

The user opened the app from the home screen of his phone which lead him to the home page of the app. All that is present on the home page is text fields for login information. The user inputted his login credentials and was then brought to his account homepage. The part of the app appears to be straightforward for the user and requires no thought. The user then selected the button "Deposit" which contains an icon of a camera. This button lead the user to a page that's titled "Deposit Check". This feature allows for users to take an image of a check

and directly deposit it into their bank account. After pressing an identical "Deposit Check" button in the middle of the page, it lead him to a page that allowed him to input the monetary value of the check. This then brings up the phone's camera and allows the users to photograph the check. After that, the receiving account has to be selected. The user expressed frustration at the lengthiness of the process by saying, "It's too spread out. It would be so much easier if all of the things could be consolidated as one page." As indicated by figures 1-3, the process of inputting the data for depositing a check is too drawn out and could be simplified on one page. This sentiment is consistent throughout the other features of the app.

(Some content has been blurred for user security)

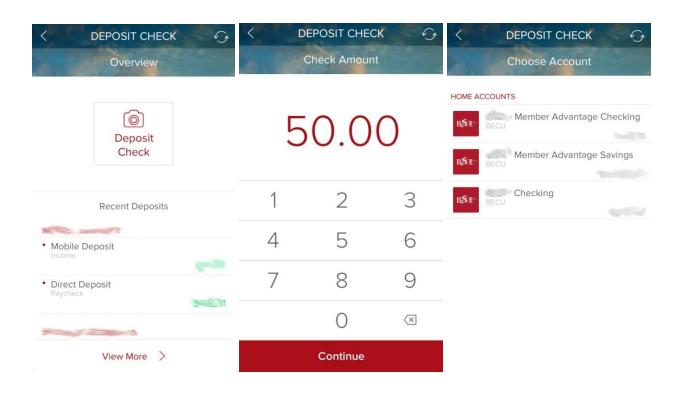


Figure 1 (Initial deposit check page)

Figure 2 (Check amount)

Figure 3 (Choose account)

In figures 1-3, notice the lack of any home button. Also note that these pages all backtrack to one another.

After the user walked me through the process of depositing his check, he wanted to go back to the homepage to view his overall balance. Since he didn't have an actual check to deposit, he was unable to complete the task and had no success message that would return him to the homepage. This is where the user identified the major pain point of the application. Unless a user completes a transfer or check deposit, the app doesn't provide a portal for the user to access the homepage.

After witness this firsthand, I asked the user if he could show me another task he would normally complete to see if a home button was present. He then went to show me his account details and was unable to locate a home button as indicated by figure 4. I then asked him to even further explore to see if he could find a home button. The app doesn't appear to have a home button whatsoever.

(Some content has been blurred for user security)

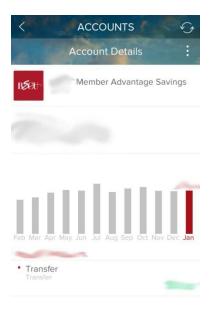


Figure 4 (Absence of a home button on account details page)

After noticing the lack of basic navigation, I then asked the user if he had any trouble accessing other information within the app. He then proceeded to show me that the app lacked the ability to view other account actions and services while engaged in a task. While viewing his account balance, the user showed me that it was impossible for him to directly access the page for him to make a deposit.

I also asked the questions provided in the assignment instructions after viewing the task the first time. I asked him why this is this least favorite app. He told me that the lack of a homepage was a major reason and also because he uses it all the time so "it mocks him".

I also asked how he works around the issue of not having a proper navigation system in place. He said that using the back arrows is "all that he can do" to alleviate these problems. Luckily, this doesn't impede his basic tasks that he carries out on a regular basis as it is only a major annoyance above anything else.

I then asked the user what his most memorable memory using the app was. He said that one time he was trying to deposit a check and that the picture of the check wouldn't take. It took him over 15 minutes to complete a check deposit!

Lastly, I asked him what he would change or keep about the application. He said he would add a home button and hamburger menu. He said he would keep the basic functions of the app.

Pain Points

Overall, the app has three pain points that revolve around one central theme; poor navigation. The app requires extra steps, lacks a home button, and doesn't have a quick access hamburger menu to view other account actions. The app assumes that users are going to carry out a single task without wanting to go back to the homepage or view another service. As demonstrated by the user I observed, this is not the case. The user expressed extreme frustration at "the lack of freedom" that the app allocates for users. He also stated, ""Get with the program; everyone else has a home button!" The user suggested that they add an icon of a home to get users back to the home page. I couldn't agree more. The fact that a large local credit union's mobile app lacks a home button is astounding. The user also found it to be frustrating that they had to backtrack one page at a time in order to get back to the homepage. In the instance of when he showed me how he'd typically deposit a check, he had to click the back arrow in the upper left corner 6 times in order to get back to the homepage.

Conclusion

Overall, the app works for the user in that he is able to complete his banking without having to drive anywhere. Unfortunately, the user dislikes the app because of its lack of proper navigation. Without a home button, the user feels trapped when in the middle of a task that he wants out of. He is then forced to backtrack all the way back to the homepage. The lack of a quick access menu also makes the user I observed feel cornered by the app. When I asked the user about the linear nature of the app, he responded, "This app is good for you if you know specifically what you need to do. If you press buttons randomly or want to do another thing first, then this app is really annoying and unreliable."

TAPCO Credit Union Mobile Banking

Tara Knutsen

User Profile and Background

I conducted the Technology Use and Breakdown observation on Friday, January 15th around 1:30 in the afternoon in the user's home at his dining table. The observation lasted for 25 minutes. The user that I observed and interviewed is in his late 40's. He is has above-average technology experience but phone for texting, making calls, and mobile banking. This user only uses the app inside of his home as he feels it is insecure to use on a public network.

The contextual inquiry was conducted on TAPCO Credit Union's Mobile Banking Application for iOS 8. The user's primary goals when using the app is to complete online banking related tasks.

Questions Asked and Tasks Carried Out

The first question that I asked the user was what the main tasks that they carry out with the app. He said that the two main tasks he carries out are viewing account and loan balances as well as transferring money. Following the first question, I then asked the user to demonstrate one of the two tasks. The user chose the task of transferring money which ended up providing great information about the app and its pain points.

The user opened the app from the home screen of his phone which lead him to the home page of the app. The homepage of the app was unusual; as indicated by figure 1, it looked more like an advertisement slideshow rather than a banking app's home page. The user expressed frustration by saying, "This looks like a popup; it's not obvious how to navigate out of this." The user then showed me that the login button is at the bottom left of the app and said, "I shouldn't have to go out of my way to login to the app. The login should be right there where I open the app." It was obvious to me that this was a major point of frustration for the user. I could only imagine what happens when a first time user opens up the app to find the barrage of images.

(Some content has been blurred for user security)



Figure 1 (Initial home page)

Figure 2 (Account home page)

After showing me the strange initial home page, the user was able to login through a text field and a CAPTCHA. The user was then directed to the account home page (figure 2) which shows the user's accounts and balances. Since one of the two main tasks the user conducts on the app is to check balance, he clicked into account details. Here, he showed me how he views his transaction details (figure 3). He had no issues with this step. However, once he tried to go back to the homepage, he had to click on the hamburger quick access menu (figure 4). Here he ran into a few issues.

While the app does have a hamburger menu, it still lacks functionality. In order to get to the homepage, you have to click the "back button" as show in the links in figure 4. This causes a lot of unnecessary backtracking. The user found this to be incredibly frustrating. The user kept trying to press on the "TAPCO" logo to access the homepage, but it is not a functional link. Since there was no direct way to access the homepage within the app, the user kept having to press the "back" button until he arrived at the homepage.

(Some content has been blurred for user security)



Figure 3 (Initial home page)

Figure 4 (Account home page)

I asked the user to then show me other tasks in order to see if the inability to directly access the homepage was a recurring problem throughout the app. The user tried to transfer some money from where he couldn't directly go to the homepage.

I also asked how he works around the issue of not having a proper navigation system in place. He said the pressing the back arrows is the only way he can get to the homepage. The user stated that he sometimes clicks into the wrong task, so not having a direct homepage link can add another step or two.

I then asked the user what his most memorable memory using the app was. He said that he hasn't had it very long, but was incredibly confused the first time he opened up with app because of all of the pictures.

Lastly, I asked him what he would change or keep about the application. He said he would change the way the home page looks.

Pain Points

Overall, the app has two paint points that vary in origin. The initial opening of the app's home page is of concern to the user. A credit union/bank should look professional and not spammy. The home page should just feature the login fields so that the user can get right into the app. The other paint point with this application is that the app lacks a home page link/button. The user kept trying to access the homepage from various tasks and kept clicking on the TAPCO logo. Unfortunately, the logo is purely decorative and serves no functional purpose. Instead, the user had to manually click back to go back a page until he arrived at the home page.

Conclusion

Overall, the app works for the user so that he can do simple tasks with his account. Both pain points are mild annoyances rather than deal-breaking frustrations to the user. The user did however express that he prefers the desktop browser version the best. If a simple home button was added, then the user would be able to go directly to the home screen without problems. Additionally, the app should not look like a billboard when immediately opening it.

BECU Contextual Inquiry

Chris Kubec

The person I interviewed and observed for this contextual inquiry was completed on the 15th of January, the observation session took 20-30 minutes. The user observed is a female college graduate in her 30's, her technical background could be considered above average. She uses social media sites such as Facebook, Instagram and Tumblr. Having two part times jobs makes her also rely on mobile tech on her smartphone such as using mobile banking on the go to know about her bank accounts. For further reference and anonymity this user will be referred to as Amy. Both observations took place at my place of residence.

For her banking needs Amy uses BECU as her primary banking account, and she uses the mobile app both at home and in public spaces such as coffee shops and other places she partakes in any financial transactions.

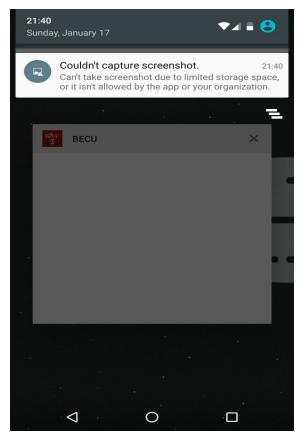


Figure 1: Due to security features of the app screenshots are being blocked, therefore further visual aids will be screenshots taken from the app store.

After settling in I asked Amy what her primary focus was in using the mobile banking application. She stated that her primary focus and need of the application was for transferring of funds from one account to another while also being able to see her balance. For further understanding of how the application suits her needs my user decided to share her overall experience using the application. Opening the application she shows me the login screen pointing out that overall interface is clear a box for her username and password, with an option of saving her username to save time with a Remember Me checkbox(which was unchecked) and one clear button at the bottom labeled Log In. I asked her why she didn't use the Remember Me checkbox since it would save her time in only needing to type her password. She told me that she didn't want her phone to save that information if it ever got stolen or misplaced that her username would then also not be stolen saying her personal information staying private was of utmost concern.

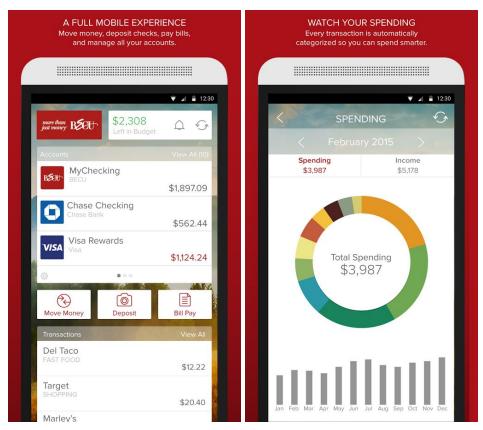


Figure 2: Home Screen once logged in.

Figure 3: Spending Tab

Continuing with the demonstration of how Amy uses the app she inputs her username then tries to press on the password input box. After 3-4 attempts the box reacts to her pressing and switches from the username box to the password input box. I asked if this happens every time and Amy states that almost every time she has issues switching from the boxes and that it is frustrating to her especially when she needs to transfer money in a hurry. She states that there really isn't a workaround and just deals with the frustration of trial and error stating "I try to click the box closer to the left side of the box where it says the word password and it usually works more than the center of the box."

Going past the login screen we reach the main account or home screen a sample of which is shown in figure 2 above which slowly loads her accounts into the app. Amy's accounts being the first clear thing on the screen then below a clear Move Money button is shown. Moving through her usual motions she shows a clear easy way of using Move Money, she told me she found it very strange first coming into the app that instead of using the word transfer like the browser based version of the site they used the word Move Money. However has gotten use to associating the two together.

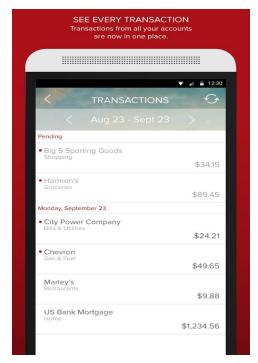


Figure 4: Transaction History Sample Image

Running through all the motions Amy takes me through features she quite doesn't understand. For example figure 3 shows a budgeting type spending tool that Amy could understand using on a desktop browser but thought was awkward to use on her phone and never used fully. She decided to show me how easy it was to look into her transaction history (figure 4) to see where she has spent her money for the week. Backtracking through her transactions the application crashes and freezes on the screen. Amy gets frustrated "this happens way too much", "this is why I only use this app to check my balance and transfer money in need". Asked whether she has looked into the crashes she tells me no she just deals with them by logging back in if needs be or just closes the frozen app and goes on with her day.

When asked about what she wished could be improved with the application she stated that she wished the overall speed of the app improved while also crashing less and she would be happy with it just working as advertised.

I asked what her fondest memory of the application was and she started laughing, stating she has never quite had the most funds in her account so logging in after any payday and seeing she got paid more than what she was expecting for the week.

In overview the user is satisfied with the application in that she can log in see her funds and if need be transfer money from her savings to checking relatively quickly. The applications downfall being its relatively unstable behavior which the user also understands being the app is upkept by a relatively less financed credit union rather than a big bank or corporation.

Credit Union 1 Alaska Mobile Banking App

Date: January 16, 2016

Location: Participant's Apartment, Tacoma, WA

Duration: 30 minutes

Participant: Alice Walker (Anonymized)

Interviewer: Lola Howell

The person I interviewed for the use of banking mobile application is Alice Walker. She is 56 years old and is not very tech savvy. She uses IPad for most daily tasks such as completing purchases, writing emails and watching videos. She uses iMac for other tasks that require close attention to detail such as filling out applications, managing her shop, etc. as she explained bigger screen is easier on her eyes.

The mobile banking application that she uses is for Credit Union 1 bank, that is based in Alaska (www.cu1.org). She owns IPhone 6S and she uses this application to accomplish two tasks: to check her account balance and her son's and to transfer money from her account to her son's account. Alice and her son have two separate accounts, however they are linked together and could be accessed from either his unique login or hers. She uses this application most often to complete task of checking her balance and she does it mostly when she is at the store or out of the house.

I asked her complete her first regular task which is check her account balance. In order to complete it she used her phone. When she opened the application, she had the Remember username option checked, therefore she didn't have to type in her username. She commented that she doesn't like that, but it makes the process of logging in faster (see Figure 1). I asked why she doesn't like it and she answered for security reasons. In case she loses the phone someone will have her username information.

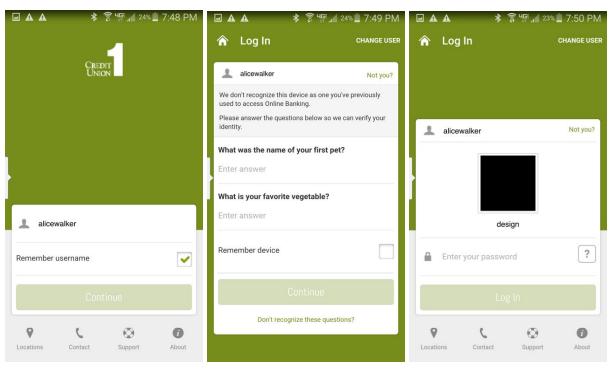


Figure 1. Log-in: Username

Figure 2. Log-in: Questions

Figure 3. Log-in: Password

The next screen was asking for her for security questions and answers (see Figure 2). She commented that if she would want to skip this step then she has to check the option

"Remember Device" then it would bring her straight to the Password screen. I asked her why she doesn't do it and she gave me the same reason, security reasons.

The next screen was the password screen which contained security image (blacked out for the anonymity purposes) and her security passcode. She said wasn't even sure what was the word needed for underneath the picture, but she was prompted to type one in when she created the online access for her bank account (see Figure 3).

On the next screen after she typed in the password there was system alert pop up, which notified that banks will be closed in observance of the martin Luther King, Jr. Day (see figure 4). She tapped the OK button several times, it was obviously frustrating her after such a long process of logging in.

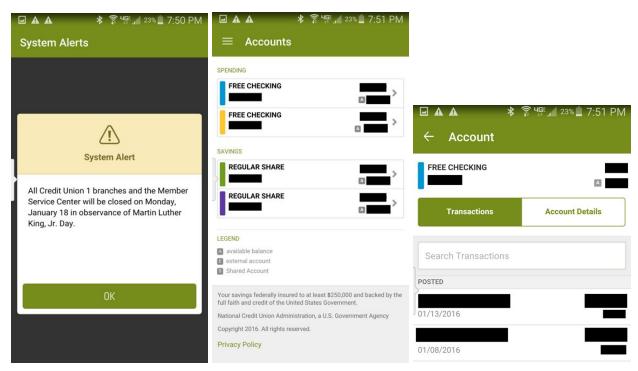


Figure 4. Alert

Figure 5. Account Balances.

Figure 6. Transactions

After the pop up closed, she finally saw the account balance screen. She said that she liked this screen because it was easy to see all balances at once (see Figure 5). She asked me if I saw how "many hoops" it took her to jump just to see the balances. There were two sections spending and savings. Spending had two account numbers one was hers, other was her son's, spending accounts were each linked to two separate debit cards. The savings section had two accounts also one for each person. Across from each account was the balance before the pending transactions were included. Next to the letter "A" was the available balance, the balance after pending transactions were included.

When she pressed on one of the accounts to look at the transactions, she said that it doesn't show the pending transactions, only the posted ones. She said that it would be a very nice feature to have, because doesn't like to use computer every time she wants to check on those (see Figure 6).

The next and the last task she walked me through was the transfer. She opened the menu on the left upper corner and picked "Transfer" (see Figure 7).

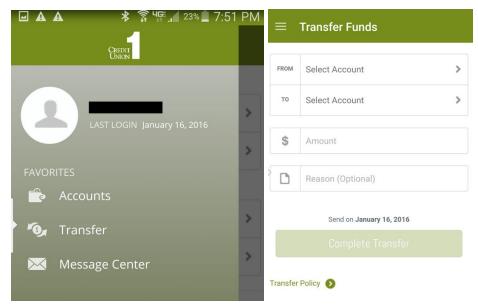


Figure 7. Menu

Figure 8. Transfer

Next screen was the Transfer screen, which she said was stress-free (see figure 8). However, she commented that before you could make transfers to other bank members if you knew their account number, now they removed that feature. She said it was easy and convenient when she wanted to put money on her other family members accounts.

When I asked her what was the most noteworthy memory concerning the use of the of this app, she said it was the log in experience. It took too long and was frustrating as well as the the system alert pop up. The biggest change she wants to see is making the logging in faster and easier. What she does like about the app is the transfer experience it's easy and fast. When I asked him follow up question if there is anything else she wants to share, she said that "Remember the username" option and the "remember device" option were rising security questions, however that is something she had to do if she wanted to make the loggin in faster which made her feel like she has no choice.

US Bank Mobile Application

Date: January 16, 2016
Location: Participant's Home
Duration: Around 40 minutes

Interviewer: Audrey Chavarria Calderon

I interviewed a 45 year old woman, here known as the *participant*. She gets around her smartphone with most things but does not spend a lot of time trying to figure out how things work, and easily gets desperate when something doesn't seem to work.

The application she uses for mobile banking is the US Bank App. She uses this app mostly at home. She has heard that it is better to do "money things" at home because that way is safer rather than using Wi-Fi at public places. She uses this app to check her savings and checking accounts, to see things she has purchased, and to see deposits she has received.

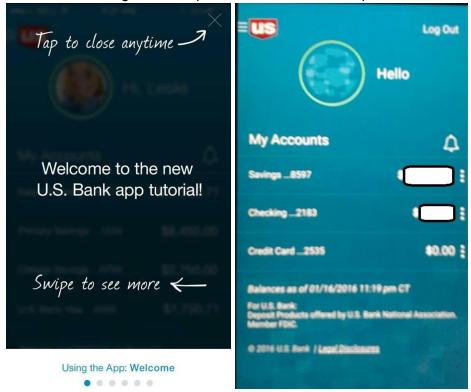


Image 1 Image 2

When she first logged in she was presented with a small set of tutorials that normally appear to first-time users of this app. She liked this tutorials as they explained a bit better on how to do the basic things (see image 1). Then she was presented with the main screen (see image 2).

From the main screen she was able to see the amount that she currently has in her checking and savings accounts. She clicked on the amount, but she expressed that she did not like how when you touch on something it doesn't have that kind of effect like buttons do. I asked her to tell me more about that effect. And she said she prefers that all these apps show her when something can be clickable. She said she liked when the clickable things had a border and when you pushed on them they looked like they were being pressed. Because that way she knows when she clicked on something.

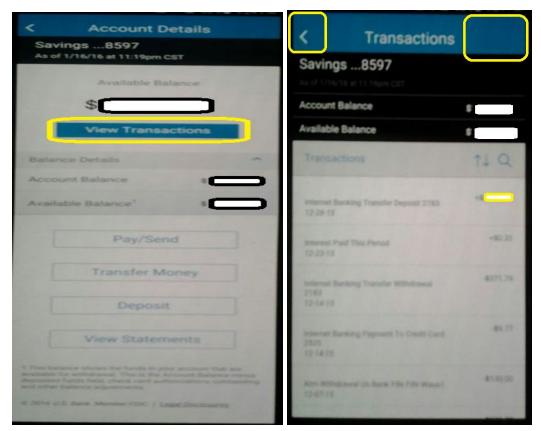


Image 3 Image 4

What came up on the next screen was what you can see on (image 3).

What she expected to see was the list of all her transactions not more menus that prevented her from seeing what she really wanted. After that she clicked on the "View Transactions" button. She said she liked how the buttons was distinguishable from the background.

The next screen, (see image 4) showed her all her transactions on her checking account. After scrolling a bit through some of these, she wanted to go back to the home screen but the only button she was able to see was the back button at the top left side of the screen. She went ahead and pressed that button hoping that she would get to the home screen. But then she had to press the back button one more time to go back. She said that that was a bit annoying. She wished they had put a home button on the top right corner of every screen that way if she wanted to escape back to the home screen she would only have to click one button and not go back all the way through the previous pages.

When she went back to the home screen she noticed the three dots next to the numbers on her checking account and she went ahead and pressed them. But once again she thought these dots ought to be highlighted when she clicked on them to make the impression of a button. And that they should be bigger so that her finger could touch on it. After she clicked on them that line moved to the left and three options appeared (see image 5). She said the three did not represent what had just happened. She said maybe replacing the three dots with a right arrow would have let the user know that there was more info hidden to the left.

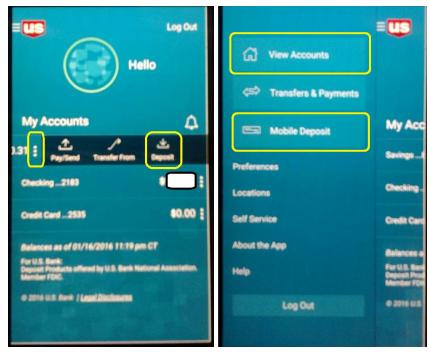


Image 5 Image 6

She said she liked the idea that you could deposit money from your phone with just an image, but she thought the button was too hidden. As a final note she said she didn't like how the home button was labeled as "View Accounts" (see image 6). She said when she thinks of the image of a house she thinks of the word "Home" so she finds it weird when she has to think of the home screen and the words "view Accounts". I asked her what words she would prefer to see next to that icon instead. She replied she would prefer to see "Home Page" or "Main Page" or change the icon to something that goes with the words "Accounts" but not A house because a house does not equal "Accounts".

Pain Points Aggregation and Analysis

| Арр | Scenario | Pain point | Reason | Workaround | Unsatisfactory nature |
|------|--|-----------------------------------|--|--|--|
| BECU | Deposit a Check | Too many steps involved | Data input fields are spread out across too many pages | Other than patience, N/A | Takes too long and is tedious |
| BECU | Quit an active task and go back to home page | No direct way to access home page | No home button | Has to hit back button until the homepage comes up | Tedious; lacks a very commonly accepted navigation feature |

| BECU | Go from one active task to another | Cannot access other tasks while completing another | No hamburger quick menu linking to other tasks | Has to hit back button until the homepage comes up, then go to the task he wants to do | Tedious, takes too long, and lacks a very commonly accepted navigation feature |
|------------------------------|--|---|--|---|--|
| TAPC O Credit Union | Open app | Looks like advertisements | Barrage of images; login button is hidden in bottom left corner | Find login button at bottom of page | Looks like spam |
| TAPC O Credit Union | Exit out of current task back to home page | No direct way to access home page | No home button | Has to hit back button until the homepage comes up | Tedious; lacks a very commonly accepted navigation feature |
| US Bank | She clicks on an item on the main screen | She gets irritated that the button didn't look like it was pressed or pushed, like when the shadows or the color of the button change | The place where she clicks does not provide her with visual or sound clicks | She just has to wait a couple of seconds to wait and see if what she clicked on was a clickable or not, she has to do trial and error to see what can be clicked on | She wastes time, and doesn't know what is clickable on the screen |
| US Bank | She wants to see her account history when she clicks on her account | Instead of showing her account history, she is presented with one more menu | She just wanted to see her account history, if she wanted more options she could have looked for them once and after she saw her account history | She has to press one more button to get to her account history | She wastes time and gets irritated when she doesn't have enough time click around. She doesn't need those options unless she specifically looks for them |
| US Bank | She wants to go to the home screen from her account history screen | She has to go back up all the previous screens she came from to get back to the home screen | The app doesn't provide a home button on all screens, only a back button | She has to go back up the screens to get back to the home screen | She wastes time going back through all the screens, and she gets annoyed she has to do this when she just wanted to go to the home screen |
| US Bank | She sees the three dots on the right next to her account | She thinks the dots are not intuitive and should be a right arrow instead to | After you click on the three dots, a menu appears to the right of them | She clicks on the buttons and sees the menu | If it was an arrow to the right she could swipe and see more info |

| | and she presses them | show that more options are to the right. She also doesn't like that the dots are not highlighted and are small | | | |
|---------------|---|--|--|---|--|
| US Bank | She looks on the burger menu for the home button | She doesn't agree that the Home button should be called "View Accounts" because the words and icon do not make sense in her head | The icons and words do not make sense | She clicks on the home button but ignores the words | She thinks the words do not match with the icon |
| US Bank | She needs to make a deposit to her account from a check | She thinks is a little bit of digging to get to the button that would let you do that | The places where the "Deposit button" appear are a little hidden | She stumbled on the buttons and found that option | The buttons are a little hidden and should be made more visible in such a way to motivate user to use it as well as introduce it, many people do not know, as the participant of this inquiry that deposits through your phone was an option now |
| BECU | Logging in | Selecting password box | Box improper boundaries set | Instead of click box when in previous box hit next -> in the corner | Can't click easily to where needed |
| BECU | Security | Worrying about vulnerability of service | Relative insecurity of WiFi networks and Cell networks | Using mobile banking mainly at home or trusted networks | Can't use app everywhere in most secure way |
| CU1 Alaska | Logging in | Typing in information too many times. | Too many steps to log in. | Let the app remember the | Raises security questions. |

| | | | | username and device. | |
|---------------|---|--------------------------|--|---|-----------------|
| CU1 Alaska | See account balance | Alert System pop up. | Another wall to bypass before she can see her account balance. | No workaround, has to deal with it. | Annoying. |
| CU1 Alaska | Check transactions | Pending transactions. | There is no option to see pending transactions only posted ones. | Use computer to accomplish this task. | Inconvenient. |
| CU1 Alaska | Transfer money to another bank member | Can't accomplish it. | It doesn't exist. | She has to go to the bank. | Time consuming. |

User Segmentation and Focus

- 1. Tech-savvy, on the go These are users who know how to get around their phone. They know way more than using their phone to make calls, text, surf the web, and use their social media accounts. They know more in depth knowledge based on their experiences, such as digging deeper under setting in their phones or specific apps to alter them to meet their needs. We chose this segment because in some instances our participants had some knowledge on how to do some features that were a little more advanced than the basics users. They would dig a little deeper to see if there was a solution provided to their needs. They would also use mobile banking application when out of the house.
- 2. Non-tech savvy, at home These are users who just want to use their smartphones for basic apps such as mobile banking, email, and maybe social media in addition to calls and texting. These users are either unaware or know little about advanced setting with their phones and apps. They also would only use application while in the house, using their wifi, it was for security reasons.
- 3. Non-tech savvy, on the go After completing contextual inquiries, we concluded that many of our users use the app on the go and their tech knowledge was basic. Therefore it was important for them to be able to complete their tasks such as checking account balances/transactions, transferring/depositing money fast and easy.

4. Tech-savvy, at home - Some of our users had more than just basic tech knowledge, however they would prefer to use mobile banking application only at home, on their wifi, for security reasons.

Main Focus Segmentation

We have decided to focus mainly on "Non-tech savvy, on the go users", because most of our users were the ones who were older, their tech knowledge was basic and they were using the application mostly while they were out of the house. Therefore it was very important for them to be able to do banking tasks easily and fast, since they didn't have much time to dig around the application or advanced tech knowledge.

Persona

Emily Peterson



Who she is:

- Emily is elementary school teacher
- She loves her profession and very often comes up with many different educational games for the kids in her class. Therefore, on many weekends she goes shopping at the local store for items that are necessary for her games.
- Emily is in her 40's.
- She wants to help kids reach their creative potential and make learning new concepts fun and not tedious work.
- In her free time, she loves to read children psychology books, she thinks it would help her to be a better teacher.

Technology Use:

- Moderate computer user she uses it to do some grading, write papers and emails.
- Moderate cell phone user she uses her phone primarily to make calls, send texts and check her bank accounts. Since she is very busy, and makes a lot of purchases, she likes the ability of using her phone on the go. If she is at home she still likes to use phone to check her balance because it's more and convenient and secure.
- Heavy iPad user she uses her iPad to watch videos, do some reading. Though
 when it comes to thick books, she doesn't like to read them on iPad. She prefers
 the feel of the real book rather than the iPad.

Key Goals:

- Be able to log in fast and secure to the mobile banking applications.
- Be able to complete her banking tasks such as check account balance or transactions as fast and as easily as possible.
- Be able to make deposits without any hustle.

First-person Persona Story - Emily



It's the week before school starts. That means it's time for me to buy classroom supplies for my 4th grade classroom. Who knows what theme I should go with! Or should I rotate the theme every month? That sounds good!

I get my car and drive to the nearest by classroom supply store. I step out of my car with all my reusable bags. I briskly walk inside gripping a note with a few ideas scribbled down as to what I could do with my classroom this year. I'm still debating on a monthly or a seasonal theme.

I find a Calendar that comes with monthly themes. This will be good for rotating out the months and letting the kids know what day it is. I throw it into my cart and glance at the price tag; it's \$35. I walk another aisle down and find some paint supplies. I throw some brushes and paint sets into my cart. I see pastel sets and add them to my cart as well. And colored pencils. And some markers. Oh, don't forget the erasers and paper. Would you look at that? It looks like a set of styled scissors!

I've had too much fun in the art supply isle. Not including the calendar, I'm in really gotten anything to decorate my room yet. I look across the room and notice some flashy borders. Those are the things that I'm looking for! I decided to go with the monthly theme to keep up with the calendar. I know that I only have to buy decor for 9 months, so it shouldn't be too hard to find stuff. I find some whimsical animal cutouts, festive stickers, and a ton of construction paper. Then I have an idea; I can have the kids help make room decor each month for art projects!

After completely filling my cart up, I get in line to be rung up. As I start putting my supplies onto the counter I realize that I'm not sure if I have enough money in my checking account to pay for everything.I quickly pull out my phone and open my mobile banking application. After logging in, I'm not sure if I have enough money to pay for everything since I only have \$102.71 in checking. I transfer \$75 from my savings account just to be sure that I have enough to pay for everything. The cashier finishes ringing up my supplies while I complete the transfer. She then informs me that my total comes out to \$134.89. I'm so glad that I had the ability to transfer the funds over with my app on the go!

Scenarios: Core and Secondary

- 1. Checking balance of account
- 2. Checking transaction history
- 3. Transferring money
- 4. Making a deposit

Core:

Scenario 1: Checking balance of account

Persona: Emily Peterson

Prerequisite: The user has a cellular or Wi-Fi connected mobile smart phone or tablet device with the mobile banking app installed.

Setting the Scene: Emily wants to check her balance of her account while dining out with a friend. Being a teacher on the go, Emily wants this information quickly and informatively. She opens her mobile banking app and is able to access her account balance in order to confirm that she has enough money to pay for her food and then for some clothes on a shopping trip after lunch.

Secondary:

Scenario 2: Checking transaction history

Persona: Emily Peterson

Prerequisite: The user has a cellular or Wi-Fi connected mobile smart phone or tablet device with the mobile banking app installed.

Setting the Scene: Emily wants to check her accounts' history to find what stores she spends most for her school related needs. Being a teacher on the go Emily wants this information quickly and informatively. She opens her mobile banking app and views her account transaction history.

Scenario 3: Transferring money

Persona: Emily Peterson

Prerequisite: The user has a cellular or Wi-Fi connected mobile smart phone or tablet device with the mobile banking app installed.

Setting the Scene: Emily needs to transfer money from her savings over to her checking. Standing nervously in line for her daily ritual of drinking a 12 oz coffee before running to school to get in class before the 9am bell of first period. Emily opens her mobile device selecting the mobile banking application. After verifying her identity the app logs Emily into her accounts. The user identifies her balance as low and transfers money so she can continue to stand in line for the morning ritual of her 5 dollar coffee.

Scenario 4: Making a deposit

Persona: Emily Peterson

Prerequisite: The user has a cellular or Wi-Fi connected mobile smart phone or tablet device with the mobile banking app installed.

Setting the Scene: Emily just got her first paycheck as a new teacher in Sunset Elementary and she would like to deposit it to her bank account. Emily doesn't have time to go the bank or an ATM, so she decides to deposit her check at home using her mobile banking app.

One-Pointed Vision

"Fast and easy banking on the go for technophobes."

Competitive and Comparative Analysis: Scenarios

| Product name | URL | Core scenarios (the ones that are most obvious and easy to do) | 2ndary scenarios (all other scenarios) |
|--|---|--|---|
| TAPCO Credit Union Mobile Banking | https://itunes.apple.co m/us/app/tapco-on-the- go/id811574685?mt=8 | Login View transaction/ account history Transfer funds | View account offers View TAPCO promos Remember account for login View accounts View previous checks Pay bills Schedule automatics bill pay Pay another person's account Deposit a check Sign out View TAPCO's routing number |
| Umpqua Bank Mobile Banking | https://itunes.apple.co m/us/app/umpqua-bank -mobile-banking/id9536 68739?mt=8 | Login View transaction/ account history Transfer Funds | Contact the bank Find an ATM Find a bank location Make new external account Setup auto pay for bills Pick which bills to pay and on which dates View loan history Deposit checks Email deposit receipt Apply for new accounts Apply for loans/ credit Sign out Pay down credit card |

| | | | Pay down loan |
|---|---------------------------------------|--|--|
| US Bank Mobile Banking | https://www.usbank.co m/index.html | Login View transaction/ account history Transfer funds | View other offers View previous checks Pay bills Schedule automatics bill pay Pay another person's account Deposit a check Apply for Loans Apply for credit cards |
| Bank of America Mobile Banking | https://www.bankofame rica.com/ | Login View transaction / account history Transfer Funds | Contact the bank View loan history Deposit checks View other offers View previous checks Pay bills Schedule automatics bill pay Pay another person's account Deposit a check Apply for credit cards |
| Wells Fargo Bank Website | https://www.wellsfargo.com/ | View balance View transactions Bill pay Transfer View messages | Find ATMs and locations Customer Service Enroll into online banking Learn about reward program Learn about the bank Educate yourself in financial matters Find social media links Apply for loans and credit Learn about investing and retirement Learn about banking with Wells Fargo Learn about wealth management Open Savings Account |
| Credit Union 1 Alaska Bank Website | https://www.cu1.org/ | View account balances Quick Transfer (multiples of \$20) Classic Transfer | Find branch or ATM Log in to account Make loan payments Apply for a loan Deposit checks |

| | | (not multiples of \$20) View transaction history | See job openings Get contact information Sign up for newsletter Learn more about the bank Apply for credit card Apply for mortgage Subscribe to a blog Learn about rates Sign up for free classes Use financial calculators Find social media links |
|--|------------------------------------|---|---|
| Bank of America Desktop Website | https://www.bankofame rica.com/ | Viewing AccountsPaying BillsTransfers MoneySee previous transactions | Account Special Offers Tools for Investing Opening a new Account Support (chat with banker) Find location service Schedule an Appointment in the bank |
| BECU Desktop Website | https://www.becu.org/ | Money Management tool Viewing Accounts Transferring Money Depositing Money Paying Bills | Account services details Alerts related to accounts Business banking links Opening a new Account Interest Summary from accounts Finding bank locations Support from a banker Message notifications |

Workflows

Tara Knutsen

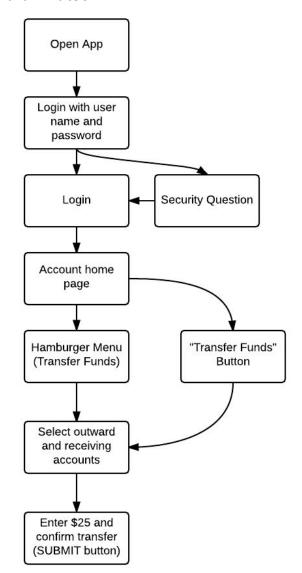


Figure 1 - TAPCO Credit Union,

Scenario: Transfer \$25

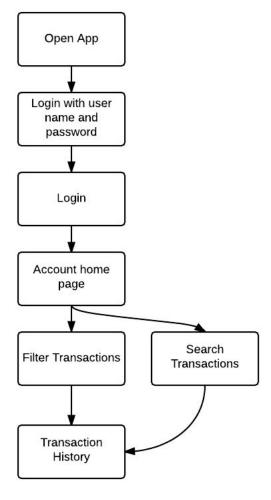
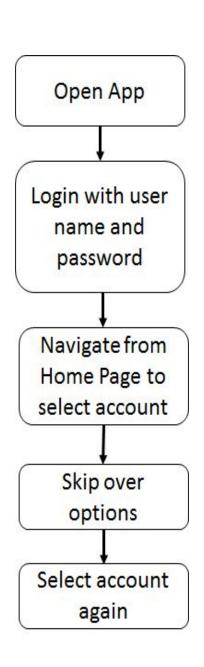
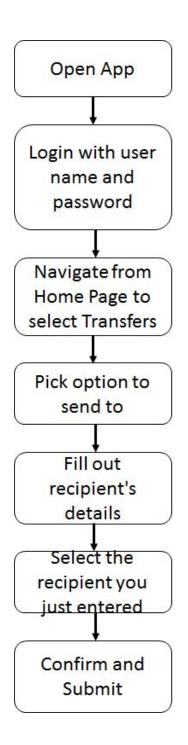


Figure 2 - Umpqua Bank, Scenario: View checking account transaction

Audrey Chavarria Calderon





Lola Howell

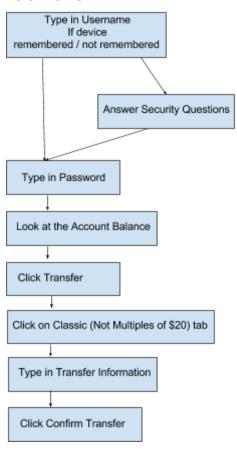


Figure 1. Credit Union 1, Scenario: Transfer \$25

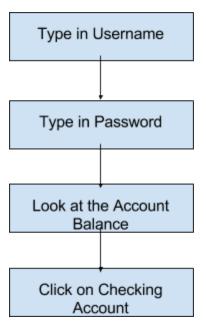


Figure 2. Wells Fargo, Scenario: View Checking Account Transactions

Chris Kubec

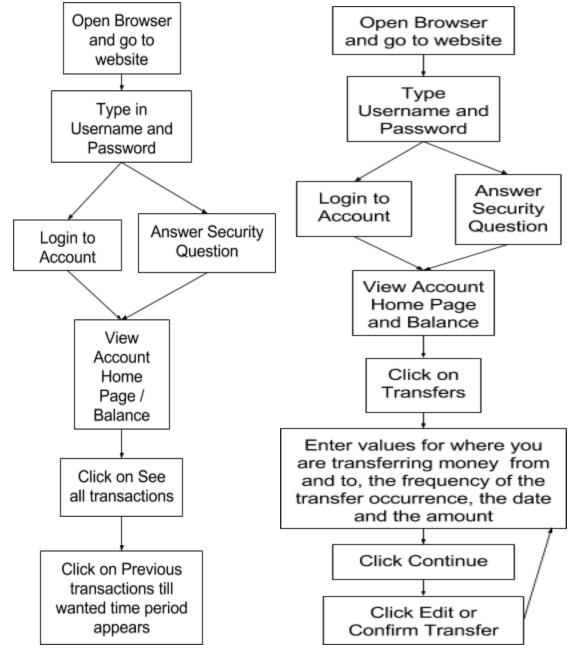


Image 1: Bank of America, Scenario: Checking Transaction History

Image 2: BECU, Transferring Money

Screenshots

Tara Knutsen



Figure 1 Figure 2

Figure 1 - TAPCO Credit Union's mobile banking account homepage

Figure 2 - TAPCO Credit Union's mobile banking account transfer

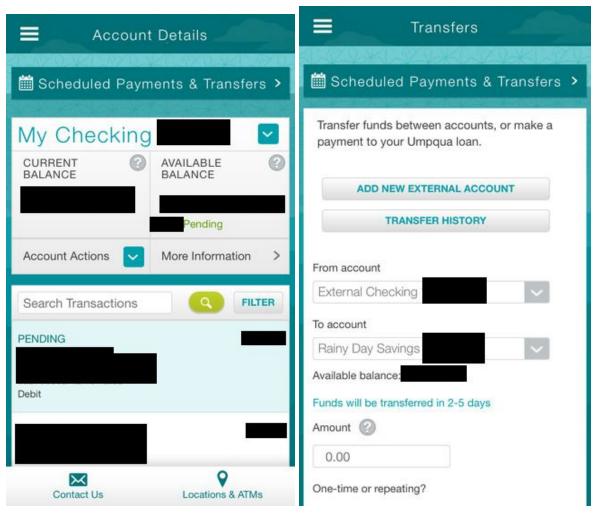


Figure 3 Figure 4

(Figure 3) - Umpqua Bank's Mobile Banking account home page

(Figure 4) - Umpqua Bank's Mobile Banking account transfer

Audrey Chavarria Calderon

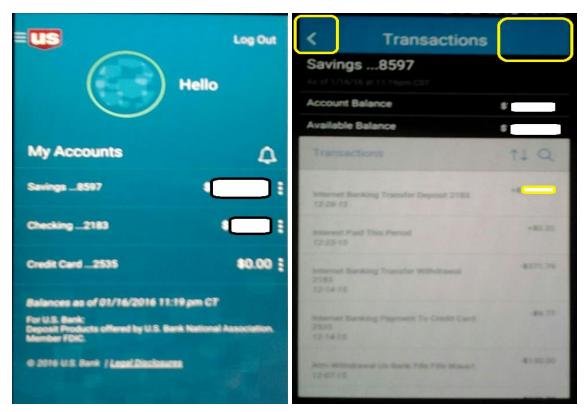
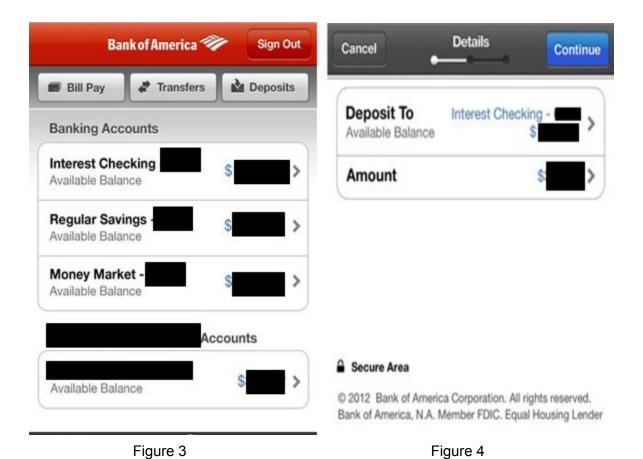


Figure 1 Figure 2

Figure 1 - US Bank's mobile banking account homepage

Figure 2 - US Bank's mobile banking account transfer



(Figure 3) - Bank of America Mobile Mobile Banking account home page

(Figure 4) - Bank of America Mobile Mobile Banking account transfer

Lola Howell

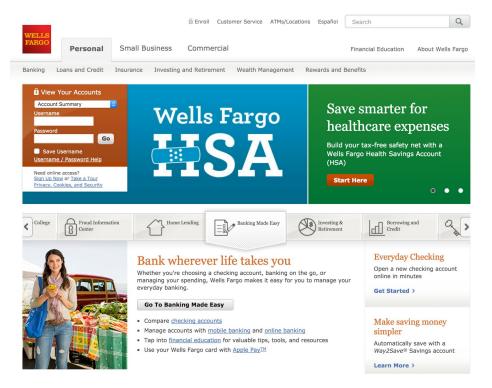


Figure 1. Wells Fargo Website Home Page

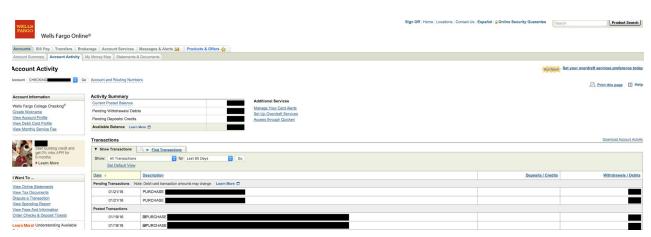


Figure 2. Wells Fargo View Checking Account Transactions



Figure 3. Credit Union 1 Website Home Page

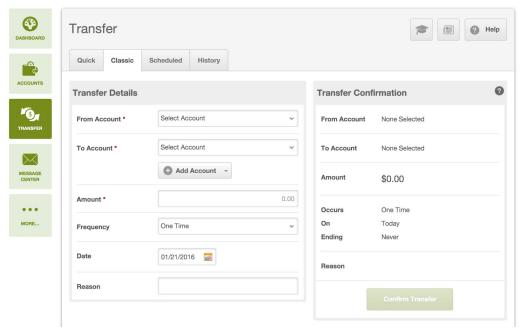


Figure 4. Credit Union 1 Transfer

Chris Kubec

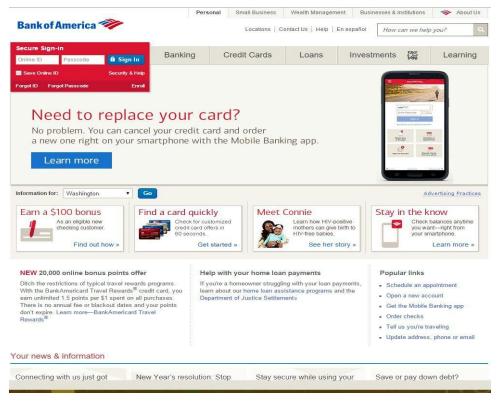


Figure 1: Bank of America Homepage

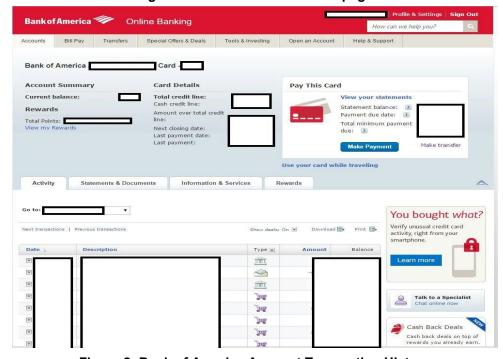


Figure 2: Bank of America Account Transaction History



BACK TO SCHOOL

 $\label{thm:continuous} Financial success starts with education! In support of financial education we closed our doors for one day, teaching high schoolers smart money management. Learn more *$

Figure 3: BECU Homepage

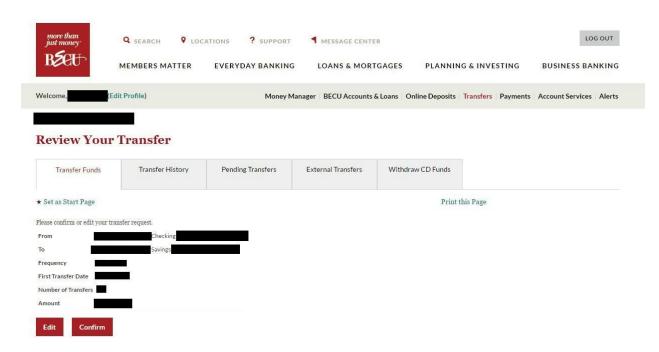


Figure 4: BECU Review Transfer