

User Research

Participant Summary:

For the *Financial Budget Worksheet App* user research, 10 participants from diverse age groups (18-54 years old) and professional backgrounds (finance, business, construction, engineering, and medicine) were interviewed. This diverse group of participants provided valuable insight and representation when considering design features for the future application. Regardless of financial literacy, 9/10 participants felt that a general resource page that defines key finance terms would be useful to all potential users. Likewise, 9/10 participants were against the implementation of ads in the design and all participants who answered disagreed with the selling of private data. In terms of user interface (UI) and experience of our mockup application, 9/10 participants reported liking the current layout and navigation with 3 participants desiring different color alternatives. The participants in this study were chosen largely out of convenience, given the short recruitment period provided. Fortunately, the participants chosen were relatively diverse in both their age demographics and careers allowing for the illusion of random sampling. However, the majority of our participants seemed to be in great financial health relative to the majority of Canadians with only 2 participants reported to be currently in debt. The relatively open-ended questions of our structured interviews provided great insight into what key features should be of focus in the future application. Data parsed from participant interviews suggest the most commonly preferred key features include the ability to modify routine income/expenses, reminders, multi-user design, and exporting to spreadsheets.

Research Methods:

User data collected for the determination of our required design elements utilized two primary methodologies: Primary user research via structured interview and secondary research via reporting of user reviews for comparable applications.

User Research

Participants of varying ages and backgrounds were asked 12 questions in a structured interview-style format. Questions 8-12 were asked following the participants observations of a mockup of the proposed financial management application (Figure 1). This structured Interview-style format was chosen to provide researchers with a broad overview of participant views of not only the need for financial management applications, but the preferences and reservations of a potential user base. Participant inclusion criteria required only that the participant be over the age of 18. There was no exclusion criteria. These loose requirements allowed researchers to increase the diversity of participants. Key data points and requested features were parsed from the interviews and summarized below.

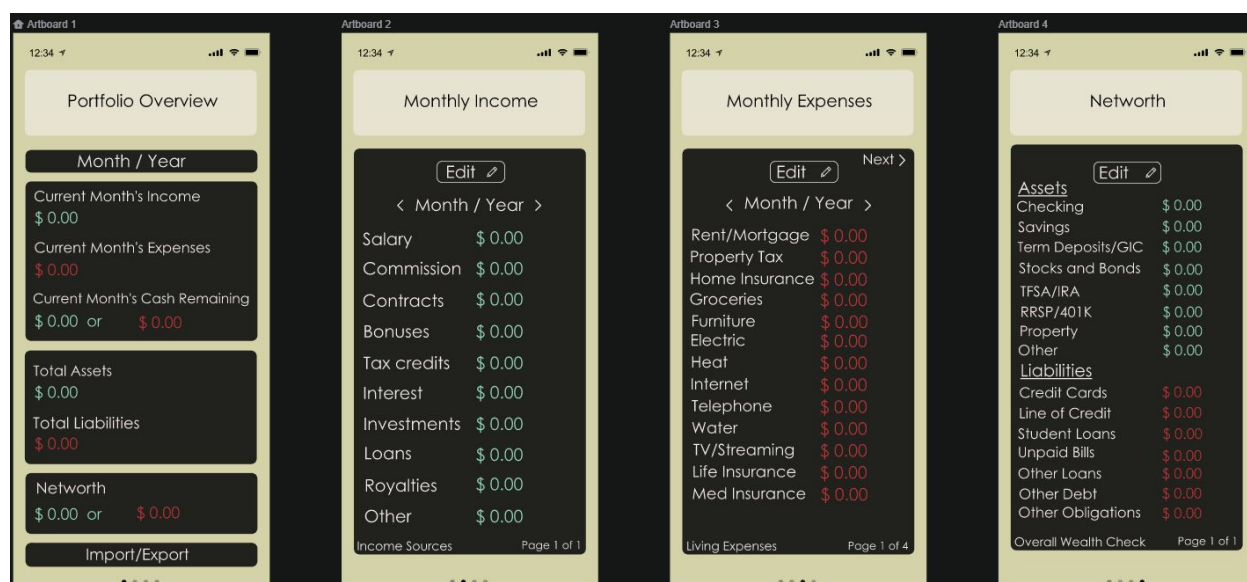


Figure 1. Initial Mock-up of our Financial Management Application

Financial Management and Literacy

When observing financial management and literacy of participants, 9/10 reported the inclusion of financial definitions and terms to be a useful feature in a financial management application. Most (7/9, 1 preferred not to disclose) reported regularly monitoring their finances with the most popular frequency of once a month (3/7), followed by twice a month (2/7), and greater than twice a month (2/7). Only one participant reported using a financial management application in the past, but did not continue using it. Only 2 participants reported being in debt outside of car payments or mortgages. Age appeared to be a factor when observing investments, as participants greater than 25 years old (6/10) had more investments (5/6) relative to younger participants (1/4). However, the majority of participants felt that our application would better help themselves or others with their finances (8/10).

Features

When asked to describe the most disliked features participants have encountered in comparable applications only two complaints were addressed when disclosed: Advertising (3/5) and complex UIs (2/5). These sentiments were shared when asked about their opinions of implementing advertising in our application (9/10 reported no) and the selling of personal data (8/10 reported no, 2 had no strong feelings on the subject). Our minimalistic UI was favored among participants (9/10) with the caveat that alternative color options be available (3/9). When asked whether a feature should be included, users often reported it should. Our proposal of the inclusion of an investment feature, multi-user abilities, reminders, and spreadsheet exportation were all chosen for inclusion when disclosed (8/8, 9/10, 10/10, and 10/10, respectively). Other recommended features include specifying dates for recurring expenses/incomes, budgeting

advice and features, future projections and spending reports, as well as mortgage and down-payment calculators.

To improve the quality of our research certain steps can be taken. These include: increasing the number of participants recruited and interviewed, making our questions more concise, and ensuring the additional participants recruited continue the current trend of unique and diverse backgrounds.

Secondary Research

Secondary research was conducted via searching through the Apple iOS store for comparable financial applications and reading user reviews. Through the observation of the current mobile financial application market, improvements to the proposed application can be made to not only compensate where other popular applications are lacking, but focus on simple features that a wide range of users can enjoy. Users of other financial management applications had many complaints related to the inability to set up repeat expenses/income (weekly / bi-weekly / monthly / yearly), no option for monitoring expenses against a specific budget or setting up goals, account creation requirement, and a lack of categories and calendars. Users enjoyed having an overview of their financial health, cloud service capabilities, integration with bank institutions and tax services, ease of use, and clean UIs. Unfortunately, many of these exceptional features come at a cost, resulting in many complaints from users only utilizing the free services of the financial application. Future secondary research will utilize searching the Android App store with comparable methodologies. This would provide further insight into the current financial management application market.

Task Descriptions:

Task 1: Able to modify routine expenditures and income

1. Select Account (single user automatically logs in)
2. Select 'Income' from the bottom navigation menu
3. Select 'Edit' button
4. Add and modify appropriate fields
5. Select if income is recurring and its frequency
6. Select 'Submit'
7. Select 'Expenses' from the bottom navigation menu
8. Add and modify appropriate fields
9. Select if expense is recurring and its frequency
10. Select 'Submit'

Task 2: Add and Manage Multiple Accounts

1. Select Account (single user automatically logs in)
2. Choose 'Add Account'
3. Fill in appropriate fields

4. Select 'Add New Account'
5. Select 'Settings' from the bottom navigation menu
6. Select 'Switch Accounts'
7. Select Account of interest from 'User List'

Task 3: Export monthly expenditures and income


1. Select Account (single user automatically logs in)
2. Select 'Settings' from the bottom navigation menu
3. Select 'Export' from settings screen
4. Select 'Confirm'
5. View spreadsheet

Task 4: Checking definitions of financial terms


1. Select Account (single user automatically logs in)
2. Takes user to the home/main screen
3. Click on a term (a box will pop up that says 'Define?')
4. Select 'Define'
5. A box will pop up with a simple definition of the term
6. Click outside the box to dismiss the definition

Journey Maps:


- Task 1

PERSONA Law on time, experienced with  Bob, 26, Builder, Single, BC		SCENARIO Modifying routine expenditures/income		USER EXPECTATIONS • Easy to use • Smooth process	
PHASE 1 <u>Select ^{income} expense & edit it</u>	PHASE 2 (Income) <u>Select if recurring and frequency</u>	PHASE 3 (expenses) <u>Select if recurring and frequency</u>	PHASE 4 <u>Outcome</u>		
DOING Select income or expenses	Finding out which incomes are recurring	Finding out which expenses are recurring	Looking @ overview of expenses/income		
THINKING what income or expenses to add?	How often? How much? Did I secure a side contract this month	Should I spend less? Do I need to budget for tools?	Am I missing something?		
FEEL AND SAYING Just as I expected, things are easy to locate	I hope this is reliable	I hope I didn't forget anything	I need to take more side contracts		
INSIGHTS <u>Easy to navigate and modify things</u>		INTERNAL OWNERSHIP <u>Must manually be entered, which can be time consuming</u>			


- Task 2

<div>  <div> PERSONA Phoenix, 24, Lawyer, Married </div> <div> SCENARIO Able to modify routine expenditures and income </div> <div> USER EXPECTATIONS Ease of Access between switching accounts Same usability across both accounts </div> </div>			
PHASE 1 Add Account	PHASE 2 Fill in Appropriate Fields	PHASE 3 Select Switch Accounts	PHASE 4 Select User Account
DOING Navigate the user account options and click add account	Fill out user information and financial info	Click on settings and switch users	Click on personal account
THINKING I need to add my client's account info	I wish they kept better financial records	I need to manage my own finances	I take good care of my finances
SAYING Great, more paperwork	I should be adding dates to the expenses	Wow this is easy I can do this with all my clients	I should take a vacation
INSIGHTS Likes that you can have multiple accounts Things are stored locally so they are secure		INTERNAL OWNERSHIP No ability to add dates to expenditures Can't share account info with client	

- Task 3

<div>  <div> PERSONA Walter White, 40, Arizona, Original Albertan, Married, 2 Kids, Chemist/Teacher </div> <div> SCENARIO Export Monthly Expenditures/Income </div> <div> USER EXPECTATIONS • Secure • Local Machine Only </div> </div>			
PHASE 1 Select Account	PHASE 2 Navigation to Settings	PHASE 3 Export	PHASE 4 View Spreadsheet
DOING Selecting his account instead of his wife's	Choosing Settings button	Select Export (Locally CSV by default)	Viewing itemized expenses and income
THINKING Maybe I should remove my wife's account	Maybe this should be on each page @ the top right instead	Should be an option to export to another device like android	How do I hide this money
SAYING Great, no need to give away my email for login	I wasn't expecting the button to be bottom right	That was easy	Looks great, but I want more
INSIGHTS • Secure and local • Itemization • No data gathered by developer		INTERNAL OWNERSHIP • Need android option • Settings navigation	

- Task 4

	PERSONA	SCENARIO	USER EXPECTATIONS	
	Luke, Jedi, Tatooine	checking financial term definition	Find a definition for a financial term they do not understand	
PHASE 1		PHASE 2	PHASE 3	PHASE 4
Sign in		Select term	Select 'Define?'	close definition box
(DOING) Selecting desired Profile.		clicks on 'RRSP/401K'	clicks on the 'Define?' pop-up box.	clicks somewhere on the screen outside the pop-up.
(THINKING) I want to log-in to this profile		what dose this meen again?	let me see what this definition is.	Ok, all done.
(SAYING) I'll log in as Obi-wan		I wonder what this meens.	yes, Define the term.	At!, that was helpful!
INSIGHTS			INTERNAL OWNERSHIP	
Intuitive, Simple, and informative.			The 'Define?' box pops up if I accidentally click a term.	

Design Requirements:

Absolutely Must Include:

- The ability to look up financial definitions:
Financial literacy is an important part of financial management. By providing a way for users to learn the definitions, it will help them develop a better understanding of the platform and terminology.
- An option to set reminders for recurring tasks/incomes/expenses:
Reminders would help users establish and maintain a routine of financial management. Some users may find the reminders bothersome, therefore they are optional.
- The ability to export financial data as a spreadsheet:
Allows the user to send their financial information to others and to better track their finances.

Should Include:

- Multiuser support:
Allows the user to manage separate accounts on the same device which is an added convenience. Given this is a mobile app, users will likely have their own devices.
- UI colour customization:

UI favouritism is important but has little relevance to the app's purpose.

Could Include:

1. The ability to invest through app:

A popular option, but participant response suggests it to be a 'nice to have' and its actual use by users is questionable. Adding this feature would greatly increase the cost and complexity of the application and, as investment apps have not researched directly, we're unsure of nuanced features required by users.

2. The ability to follow stock changes:

Not all users would have stocks to manage. Greatly increases the cost and complexity of the app.

Exclude:

1. Advertisements:

Users are uninterested in the inclusion of advertisements. Most find their inclusion aversive.