

Research Debrief

Components

- Secondary Research
- Competitive Analysis
- User Interviews
- User Surveys

Secondary Research

Personal Financial habits

- 59% of adults in the U.S. admitted to living paycheck to paycheck in 2019. [Schwab](#)
- Only 38% of adults in the U.S. have an emergency fund. [Schwab](#)
- On average, Americans spend almost \$500 a month on “non-essential items.” [Schwab](#)
- 29.2% of Americans don't save any of their income. [Credit Donkey](#)

Why do people budget?

The most common things people are saving their money for:

- For a House
- Retirement
- Vacations
- College Tuition

What are budgets?

- Budget: a financial plan for a defined period, often one year.
- According to Element FCU, There are three building blocks to a successful budget:
 1. **Prioritize your goals.** (To raise a family, to travel the world, etc)
 2. **Track your expenses.** This helps you identify your spending patterns and course-correct when necessary. It also reminds us of our efforts.
 3. **Reward yourself.** By celebrating your progress and treating yourself you are highlighting your achievements and renewing your commitment.
- **50/30/20 budget:** 50% of your available funds should go to essentials: rent or mortgage, utilities, insurance premiums, and the like. 20% goes to savings, and 30% goes towards discretionary spending.

- **Zero-end budget:** a method that has you allocate all of your money to expenses, savings, and debt payments. The goal is that your income minus your expenditures equals zero by the end of the month.
- According to Bank of America the steps to creating a budget:
 1. Set realistic goals
 2. Calculate your net income
 3. Track your spending
 4. Make a budget plan (50/30/20 budget, zero-end budget, etc)
 5. Adjust your spending to stay on budget
 6. Review your budget regularly

Spreadsheets

- A recent survey by Tiller found that 24 million Americans use spreadsheets as their primary personal finance tool.
- Inc. surveyed 100 people who use spreadsheets as their primary method of budgeting and they found:
 - 89% say spreadsheets give them more control over how they track their finances.
 - 83% think spreadsheets are easier and simpler to use than the app they tried.
 - 81% say spreadsheets have better reporting options than apps they've tried.
- With spreadsheets, you can customize everything from transaction categories to budget periods, to templates and workflows, to charts and graphs, and even your fonts and colors.
- Spreadsheets also make collaboration easier. This is an advantage for couples.
- The downside of using spreadsheets is they require more time from the user.

Budgeting apps

- Budgeting apps benefit users by having real-time information all in one place.
- Budgeting apps also allow users to set up automatic alerts that will inform them of important events even if they don't open the app.
- Budgeting apps allow users to connect their bank accounts which means transactions are automatically put into the app. This means the user doesn't have to input any transactions. This makes for a streamlined app that lets the user track their purchases more easily.
- According to Tear Sheet, only 3.4% of budgeting apps are still being used 90 days after they were originally downloaded.

- Personal finance apps are limited by design. They tend to force users to use irrelevant transaction categories and limit how they see their data.

"Schwab Modern Wealth Index Survey 2019." Schwab Brokerage, 2019, www.aboutschwab.com/modernwealth2019.

Gershon, Livia. "Budgeting Statistics: By the Numbers." CreditDonkey, CreditDonkey, 20 June 2014, www.creditdonkey.com/budgeting-statistics.html.

"The Best Personal Finance App Isn't an App." <https://www.tillerhq.com/>, 28 Apr. 2021, www.tillerhq.com/the-best-personal-finance-app-isnt-an-app/. Accessed 26 May 2022.

Dholakia Ph.D., Utpal. "Can Budgeting Help Us Improve Our Personal Finances?" Psychology Today, 27 Jan. 2020, www.psychologytoday.com/us/blog/the-science-behind-behavior/202001/can-budgeting-help-us-improve-our-personal-finances.

Competitor Analysis



STRENGTHS

- The user can check a checkbox when setting up a new budget that will automatically roll any unspent or overspent funds into the next month's budget.
- The “Monthly Momentum” feature includes a monthly activity ring, trackable points system, and a leaderboard to show how you're doing in comparison to your peers.
- There is a specific guide with advice depending on the type of goal the user set.
- Users can set reminders to pay their bills and get warnings when their account balances are too low to pay them.

WEAKNESSES

- There can only be one user per Mint account.
- One account can only have one goal assigned at a time or until that goal is complete.
- Depending on your bank there is some lag between when you make a transaction and when it shows up in app.
- The transaction history chart is a too minimal and does not allow user to search by a specific date.



STRENGTHS

- Users have the ability to sync & share household budgets with other people in their household.
- If the user gets the same paycheck amount each month then they can check a box to have their income automatically imputed as the same amount each month.
- The user can view their “Spending by Envelope” (Pie chart) and “Income vs Spending” (Bar chart) in a visual graphic in the Reports section.
- Users can filter their previous spending transaction history by “This month, Last month, Last 30 days, Last 90 days, This year, Last year, or a Custom range”.

WEAKNESSES

- Overall the UI is outdated.
- The app itself is not intuitive.
- The process to add a transaction is confusing and also takes too many steps to complete.
- There is no dedicated button to fill an envelope on the Envelopes screen.
- There are no options to set up notifications.



STRENGTHS

- The walkthrough after the app is first downloaded is very helpful.
- User can easily change currencies.
- Users have the ability to customize their dashboard to fit their specific needs. For an example users can toggle the following on or off: Show running balance, Show date column, Swipe to delete, All budgets balance, passcode lock, Face ID login, and Theme.
- There is an option to automatically backup your budget to Dropbox just in case you switch devices.

WEAKNESSES

- The minimal structure of the app limits the ability for users to look back at their spending history from specific points in time.
- The gesture controls within the app were a little confusing at first.
- There is no visual charts for the transactions.
- There is no way to turn a transaction into a recurring expense.
- Users cannot add credit cards to the app.



STRENGTHS

- Copilot automatically creates realistic budgets for you based on your actual spending habits and expenses.
- Each spending category is color coded which helps users determine each category from one another.
- There is an option to add CoPilot widgets to the users phone's homescreen.
- Users can customize the colors for each spending category.
- Users can easily re-categorize a transaction that didn't automatically fall into its specific category.
- The dashboard chart shows a dotted line for the ideal spending rate per day in order to stay on track with your budget. The solid line represents the amount of money spent.

WEAKNESSES

- There is no way for users to enter transactions manually before they clear their bank accounts.
- The subscription based app is quite expensive.
- Some bank accounts and credit cards are not able to connect to the app.
- Setting your own budgets is complicated and confusing.

User Interviews & Surveys

Key Findings

- Most people:
 - Are motivated to budget in order to fulfill their future goals.
 - Use spreadsheets and budgeting apps to manage their budgets.
 - Believe the act of manually inputting every transaction into an app would help them budget more effectively.
 - Check their banking app at least once a week.
 - Struggle with staying active with their budget.
 - Prefer setting monthly budgets.
 - Like to see visualizations of their monthly spending vs budget.

Motivations

- People budget in order to meet their financial goals.
- 2/5 of participants are motivated to budget because their parents struggled with money.
- Most people are motivated to be mindful of their spending when they input their transactions into a spreadsheet or database.

Frustrations

- Staying active with their budgets.
- Losing hope when they don't see noticeable financial progress.
- Spreadsheets take too much effort to set up.
- Budgeting apps occasionally miscategorize transactions.
- Some bank accounts and credit cards are harder to link up than others in budgeting apps.
- Being given too much information to look at all at once.

Needs

- Effortlessly input transactions into the budgeting app.
- See monthly spending in relation to their budget in the form of a chart or graph.
- Create their own categories for each type of transaction.
- Ability to look back at their past transactions.
- Able to customize the app's UI.
- Helpful tips and advice tailored to their specific budget.

Goals

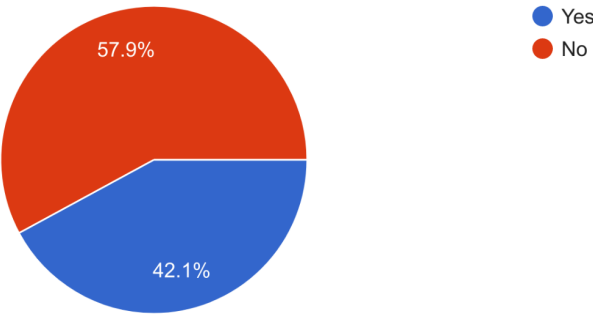
- Keeping track of their financial goals.
- Can customize their budgeting app to fit their own needs.
- The accuracy they can get with using spreadsheets combined with the ease of use found in budgeting apps.
- Input their transaction quickly, and effortlessly.
- See their overall financial progress.
- See how much they've spent within specific categories in relation to their budget.

Key Quotes

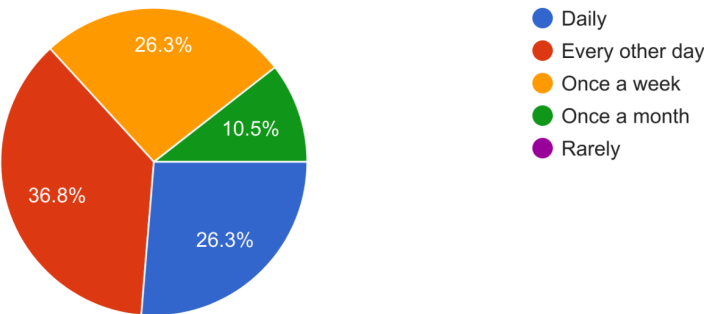
- “Yes, I definitely believe in the process of manually inputting to help me stay on budget. It definitely forces me to become more aware of my spending and motivates me to spend less.”
- “I like to look back at the previous month's transactions and see exactly where I spent more on this month so I of course correct my spending in a particular category.”

Survey Results

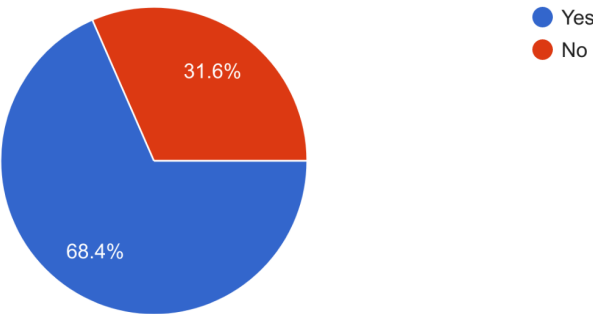
Do you struggle with managing your money?
19 responses



How often do you check your bank account balance?
19 responses

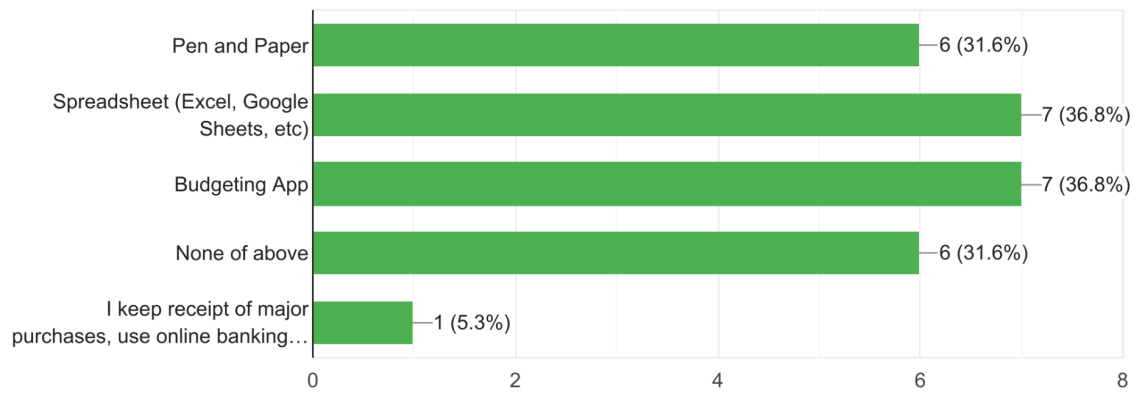


Have you ever made a budget?
19 responses



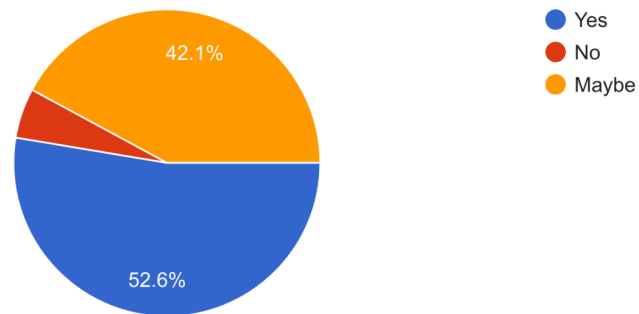
Have you used any of the following to make a budget?

19 responses



Do you believe that physically writing down each transaction into a notepad would help you become more money conscious?

19 responses



User Interview Notes

KEY:

Participant 1

Gender: Female
Age: 24
Occupation: Social Media Content Specialist

Participant 2

Gender: Male
Age: 32
Occupation: Freelance Artist

Participant 3

Gender: Female
Age: 24
Occupation: Designer

Participant 4

Gender: Male
Age: 39
Occupation: University Professor

Participant 5

Gender: Female
Age: 24
Occupation: Peace Corps

1) Is managing your money important to you? If so, why is it important to you?

Because money is important for my future.

Yes, my parents were not the best at managing their money when I was growing up. This motivated me to be better with money.

Yes, it is very important to me. I grew up in a low-income family so my parents never really told me much about financing. They were immigrants so they didn't know much about the American financial structure. I had to go out and learn about financial responsibility myself. I want to be the one to change my future.

Yes, we all need money to survive. I have to earn my money to get what I want in life so that's why it matters to me.

Yes, this is my first job out of college. It's important for me to pay my bills and afford to travel.

2) What's the most challenging part about budgeting money?

Unexpected expenses can put a dent in my budget. Groceries are also hard to keep on track with a budget. I try to buy cheaper groceries. It's hard to budget when the grocery prices go up like they are now. I have to keep adjusting my budget constantly it feels.

It is hard to stay active with budgeting. I mainly only budget when there is a big life change coming up. Like if I start a new job or if I am about to make a big purchase like a house or computer.

I would say that seeing my money grow slowly over time is a little hard to stay motivated. I have a lot of self-doubt about my finances. It's challenging for me not to spend money on things I want.

It's not the easiest thing for me. It's hard for me to be organized. I have automated a lot of my expenses like automated bills. It's difficult for me to stay on a budget. I am also not the best person for keeping receipts also.

It is the essential expenses like doctor bills that come up unexpectedly. I sometimes go over budget.

3) Can you explain your process of budgeting money after receiving your paycheck?

I get paid twice a month so one of my paychecks goes entirely towards rent, car insurance, and other expenses like groceries and my dog. My other paycheck I try to put towards my savings account. I put half of the paycheck into savings and use the other half towards expenses.

My current process is looking at my banking app to review that the paycheck has been properly deposited into my checking account. I then try to review what I spent money on between now and the previous paycheck. I then keep an eye on the transactions throughout the month. I then sort my budget expenses into particular categories like housing, groceries, and Auto.

I do a couple of things.

- I have an airtable database where I input the net pay amount from that paycheck into the document. I have that page sorted by month and year. I would then input a percentage from that paycheck into my Roth IRA and investments category. Then, I put a select amount into my savings category. Next, I input my monthly and annual subscriptions into a subscriptions category, so I know how much to budget for subscriptions.
- I also use a budgeting app called Co-Piolt as well. This app automatically updates my accounts and transactions. This is more of a backup to my manual input.
- I also have a spending tracker app where I can manually enter each transaction that I make. I input the dollar amount, category, date of transaction, and a notes section into the app. This helps me stay more conscious of my spending.

It's not the easiest thing for me. I have pretty fixed expenses. I know how much I will be spending each month so that helps. I am not the greatest at reviewing my expenses overall. I keep an eye on how much money I have in my bank account and that lets me know if I can buy something. I am not the greatest at setting financial goals. I really have no method of budgeting.

I get paid twice a month. I try to put 50% of my savings into my savings account. At the end of the month I look at the categories I spent money on that month. That way I can then gauge how much I should spend next month. I never buy anything full price and I try to stay in budget. I try to keep a short leash on my spending.

4) Do you prefer to set a weekly or monthly budget? Why?

I only have ever done a monthly budget. I think I prefer the monthly budget because each week is so different. I know over the course of a month I will be spending X amount of money each month but each week will vary in terms of unexpected expenses. One week I may spend very little and another week there may be an unexpected expense.

Monthly, because things do change and vary a lot within a given week.

Yeah, I do monthly budgets. I trust myself to stay on budget throughout the month. I set a low bar for my budget so I have the means to overspend but I chose not to because I am hyper-aware of my spending.

Monthly. That way I can see an overall picture of my spending. I feel like a week is too short of a time to get a good picture of my spending.

Monthly, because a lot of my expenses are once per month.

5) What types of tools do you use to help manage your money—Writing, Excel sheet, budgeting app, or no tool?

Currently, I am not using anything but in the past, I have used spreadsheets and I've also written it down on paper. Both tools worked well for me.

I prefer using apps over any other tool but I like to begin by getting the basics down on paper then I move to an app or excel sheet. My favorite apps are Fortura and Mint.

I honestly prefer to use a combination of three tools: a spreadsheet, a budgeting app, and a money tracking app. By tracking my purchases with these three tools I feel like I am able to remain very conscious of my spending.

I started with a spreadsheet. I did that for about 6 months. But then I lost interest in doing it. I also use a budgeting app called Mint.

I use spreadsheets. I tried using apps but I lost interest and eventually deleted them.

Uses Spreadsheets:

a) Do you prefer using a spreadsheet over the other tools? Why is that?

I used to use a spreadsheet for budgeting. It was provided to me by my personal finance teacher in college. I liked using the spreadsheet because it added up my expenses and income automatically once I input them, which I found convenient. I could also use the spreadsheet on my phone, which meant that if I was out and about I could add an expense to the spreadsheet right when I paid for it.

I would say that the manual input is what makes me conscious of my own spending. Budgeting apps don't let you. I like to see how much money I have put into my account over a length of time.

I like how accurate it is. I can also use it on the go.

b) Are there any downsides to using a spreadsheet?

A spreadsheet can be less convenient than writing down my budget on paper. It takes time to pull up a spreadsheet on my computer, and it is faster to just write my budget/expenses down. Although I can use a spreadsheet on my phone, the formatting on the small screen makes it difficult. I switched from a spreadsheet budget to a paper budget because writing things down was just faster. I also didn't want to spend more time on my phone/computer. I also like being autonomous and not relying on a computer program.

They take a lot of work to set up. They also look ugly and since I am a perfectionist it takes time to set up. I like how accurate it is. I can also use it on the go.

It was a pain to set up. I ended up making my own so that was tuff.

c) How often each week do you typically spend inputting stuff into your spreadsheet?

It really depends. I probably spent 10 mins a week on average. Once a week I would input the transactions from the receipts I gathered that week.

Probably bi-weekly, basically right after I receive my paycheck. I am not tracking my long-term goals there.

Two or three times a month.

d) How do you organize your spreadsheet—types of categories, by month, by week?

I remember there was a column for income the other columns were different categories of expenses. Rent, Gas, Groceries, Pets, Entertainment (eating out, events, etc), and school expenses.

I have an income category, I organize it by month and year. I also have a saving and investment category, organized by account. I also have an insurance and auto payment category. I also have a category that has all of my credit card accounts and their statements. I have a traveling credit card and an entertainment credit card.

I like to see my Rent, Utilities, Gas, Car, Spotify, Groceries, Thrifting/Clothing, Food, Gifts, Hobbies, Other, Put In savings. Each is in its own row.

Uses budgeting apps:**a) Do you prefer using apps over other tools? Why is that?**

I like the functionality and ease of use of apps. I feel like an excel sheet takes too many steps to set up. For instance, I have to change the width of columns which is annoying. Also using Excell on my phone is not the most pleasant experience so I have to use my desktop to comfortably use a spreadsheet. This is why I love apps like mint where I can literally peek at my budget on the go. Basically, I prefer using apps because of their ease of setup and also ease of use.

I prefer using apps. I like to see everything all at once.

The app is faster and more efficient from my perspective. It does all of the inputting for me. I believe the spreadsheet is more accurate.

b) Are there any special features, and helpful, positive aspects to using apps?

I liked the report and pie graph feature in the apps. I would basically look at the graph at the end of each month and I was able to visually see how much money I spent in each category. I also liked the ability to see my finances progress from month to month. It allows me to easily know if I am doing better this month than the previous one. It made me feel like I was actually on track to reach my goals. I also like the ability for the app to auto categorize my transactions but it also let me create my own categories which I felt was important.

- Specifically, there is a chart that shows me how I am doing each month. It lets me know my recurring costs like subscriptions. It also lets me know

what I have left in my budget for the remainder of the month. This lets me know if I am on track with my budget.

- I also like how the co-piolt app uses emojis and Icons for each category.
- I also like how I can see everything about my investments on one screen. I don't need to go into my chase banking app or investment app.

I appreciate it when they have a weekly or monthly rundown. I also like when they send me notifications if I am going over budget.

c) Is there anything confusing/frustrating about using those apps?

- The Mint app will every once and a while will miscategorize a transaction which is a little annoying.
- Some apps also lack the ability to connect particular credit cards which is a big issue that I dealt with when I was experimenting with various apps.
- One additional thing that is frustrating is that some accounts are easier to link up than others. For example, I had to go through so many hoops to connect my retirement account to my mint app.

I can't think of anything that is frustrating. One budgeting app called YNB was too content-heavy and was too complex for me personally. It was difficult to understand how to use that app.

Sometimes it gets things wrong. Like it says I will get a notification that I spent too much money on a shopping expense when in actuality the cost was for rent. Also sometimes my linked banking accounts get disconnected from the app and I have to keep logging back into them in the app. There is also no reminder to update my goals and income after a while. Like grocery prices have risen in the last month.

d) How long have you been using budgeting apps?

On and off for about 15 years.

Probably since High School so about 6 years.

2-3 Years.

e) How often each week do you typically spend on that app/s?

I may check it once a week. I mostly check it after I make a big purchase.

I check my budgeting app every day.

I typically check it every other week. I also check it if I get a notification from the app which is important.

6) A lot of budgeting apps are linked to your banking accounts which means they automatically record all of your transactions. Knowing this, do you believe that the act of manually inputting your transactions into an app would help you become more conscious of your spending?

I definitely believe that the act of writing the expenses down helps me stay conscious. Also if I bought something I shouldn't have and then I have to write it down then it makes me feel guilty about the purchase. This helps deter me from unnecessary spending.

Yes, when I bought my first house, I wanted to basically manually track all of my purchases because I knew property taxes do fluctuate every year which scared me. So I wanted manually input my transactions once or twice a month in order to prepare myself for these fluctuations. I felt it was the most accurate way to manage my money. I also do feel like there are some people out there that may lose interest after a while if they have to input every single transaction.

Yes, I definitely believe in the process of manually inputting to help me stay on budget. It definitely forces me to constantly become aware of my spending and motivates me to spend less.

Yes, I think it would. I also think that I would have trouble making it a habit of doing that though. I would need a strong incentive to make it a habit to continue inputting the transactions.

Yes, I believe that is true for sure.

7) What kinds of information do you like to view inside your budget—overall spending, total spending within a specific timeframe, net worth, credit card balances, loans, property, taxes, etc?

I want to see my overall income and spending per month. I also want to see spending in each category.

I liked to see a net worth category. It's cool to see how much all of your assets combined are worth. It makes me feel more positive about my financial status. I also like the ability to create your own categories for each type of transaction. It's nice to look back at the previous month and see exactly where I spent more on this month so I of course correct my spending in a particular category.

I like to see my income organized by month and year, how much I put into my savings organized by month and year, my investments sorted by the account names, My subscriptions organized by names, the Dates for each expense, etc.

I think the most important thing for me to see is to view my spending volume. Like I want to see how much I spend every month. For example, December is a big month for me for spending. I wish It was more clear to me how my expenses distribute over the course of a year in relation to my income. Definitely, I used to just look at my bank account. Now I know where my money is.

I like to see my Rent, Utilities, Gas, Car, Spotify, Groceries, Thrifting/Clothing, Food, Gifts, Hobbies, Other, Put In savings. Each is in its own row.

8) I will be using input from these interviews to create a user-friendly budgeting app. Are there any features that you would like to see implemented into this app?

I want to see a suggested budget. I wish apps could look at my income and tell me a baseline budget and let me know if I am going over my budget. That would let me know if I should adjust things.

I don't know if this is possible but if you have to manually input transactions, It would be interesting for there to be a way for me to input transactions by *scanning* statements or receipts. This would limit the need to type in every single transaction from scratch. Another feature that could be interesting is a way for users to check a box under transactions that tells the app that the transaction cleared in their bank account. So let's say I bought a TV at Best Buy today, but it would not show up on my credit card statement until 3 days from now. But I could still input the transaction in the app today (So I would not forget about the purchase) and still have the most accurate balances in the app.

I think a lot of people that struggle with budgeting are the people that ones that will download this app. So a way to integrate helpful tips into the app would benefit those people. I would also consider making the UI very simple. I also recommend using different colors to separate the different categories. That makes it easier for me to digest the information. I also like to see charts because they let me know how much I have improved.

I would like to see a better reporting structure. Maybe the app sends you a detailed analysis of your spending every quarter. Also, a warning if something goes over on the budget. I also like the app I use is not judging me. I don't want to.

If you could link a bank account into the app so it could have your account information on it.