

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
ВНЗ «УКРАЇНСЬКИЙ КАТОЛИЦЬКИЙ УНІВЕРСИТЕТ»

Факультет суспільних наук
Кафедра управління та організаційного розвитку

Магістерська робота
на тему : **Finappe - next-level personal finance platform**

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Львів 2020

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INTRODUCTION

I remember how I earned my first money in my hometown - a small city near the coast of Azov sea. That time our family was struggling financially, as, probably, most people in Ukraine in the middle of 90th.

Those money were enough for buying a big box of bubble gum - what could be better? And I did - I bought and became the happiest child in the world! I had a pleasure to give some of them to my friends, so it lasted very fast, in one day, and the next one returned me back to normal life. With other days passed, I started to feel very uncomfortable with that decision. I felt that I could definitely spend my money better. This is an example of emotional buying that every human being in the world once done.

I started to learn personal finance when I found my first job. I was earning small money that was not enough even for everyday needs, like food and clothes. In addition, I'd got a bank loan which I wanted to pay off as fast as possible. There was no room for emotional and foolish spending so I started to save money. It taught me to plan my budget, control cash flow and think ahead of the consequences of every purchase I did.

Now I could say that time was very beneficial. I learned a lot about my spending habits and ways to save money. Till the next big financial decision in my life - buying a house. I thought that I could afford it and had no doubts that it was the right decision. Now I do not think so...

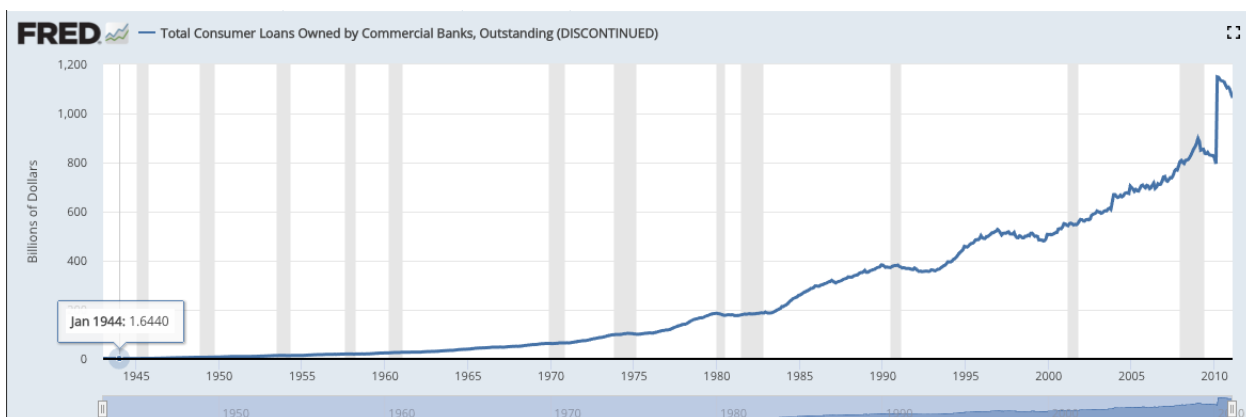
That was another emotional purchase. If someone showed me my personal balance sheet before and after the buying, I wouldn't have done it. Why did that happen? I relaxed and stopped planning my financial life. I've got a feeling that

with all that saved money I can now not to think about budgeting and just enjoy life. And the problem is that life always finds the way to trip us up.

That all led me to the idea that we all need something or someone who can tell you how you are doing financially. Who could you ask for advice or just ask simple questions: “Can I afford buying a house now?”, “How well am I prepared for future uncertainty?”, “Can I afford travelling next month to Thailand?”. It is not enough just to look at your balance sheet. In order to make good financial decisions, you need to see the big picture.

Role of personal finance

There are plenty of books written about personal finance and its importance for everyone. We all know bestsellers like “Rich Dad Poor Dad”, “The richest man in Babylon” and others. Nevertheless we are still living in a world full of poverty. Total consumer loan is growing each year (Chart 1). Crisis is knocking down many people who do not even have enough money to live one month without any income.



Picture 1. Growth of consumer debt

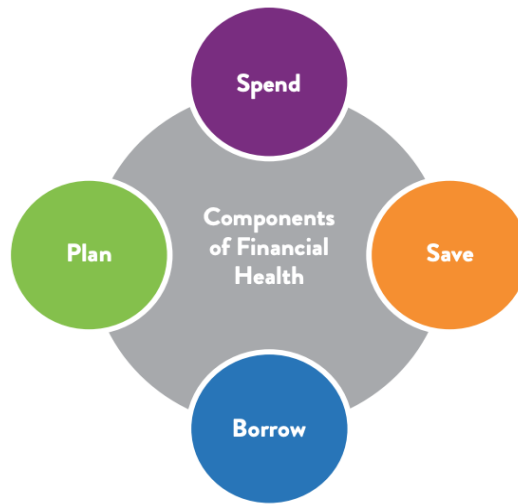
Arkad from the well-known book once said: “If you have not acquired more than a bare existence in the years since we were young, it is because you either have failed to learn the laws that govern the building of wealth, or else you do not observe them”. Now, when we live in the open information era, it is easy to find out the laws. What is becoming harder is to follow them.

The situation became explicit when the coronavirus crisis appeared in the world scene. There are many reports saying that most people in Ukraine and the world are not prepared for losing their income even for 1-2 months(Appendix 1). These statistics show how inefficient the current personal finance market is. And it is clear that the situation in countries such as the USA, Canada, European Union is much better than in Ukraine and other developing countries. It is likely that it correlates to the financial awareness of the population. Developed countries have much better tools for managing money, investments and overall financial education. Therefore, growth of financial awareness will impact the economic situation of developing countries in a positive way. And people in these countries will require more advanced and sophisticated tools for managing their money and understanding financial health.

Financial health

When you've been working out financially and putting good money habits into practice, it's normal to want to measure how well you're doing. Just like you'd track your progress at work or at the gym, you'll also want to see that you're making improvements financially. So it is essential to have some indication of the progress in a simple and understandable form.

Financial health is a complex topic (Picture 2). It is not easy to understand and evaluate without special knowledge or a good toolkit.



Picture 2. Financial Health components

Four components of financial health:

1. *Spend*

- Difference between income and expense
- Percent of bills that are paid on time and in full

2. *Save*

- Number of months of living expenses in liquid account balances
- Amount of one's long-term savings, assets, and investments

3. *Borrow*

- Debt-to-Income ratio
- Credit score or credit quality tier

4. *Plan*

- Type and extent of insurance coverage
- Behaviors that demonstrate future financial orientation

Similarly important are subjective attitudes and perceptions about one's financial health. Levels of stress, confidence, and satisfaction are critical inputs into the overall picture of one's financial well-being. As with other aspects of a person's life, finances can have a deeply emotional component, so capturing these subjective measures is important.

To truly understand an individual's financial health, we should account for the unique factors of an individual's life, such as their age, employment status, income level and income volatility, geography, and household composition as well as goals and aspirations. The variable factors will impact how indicators and benchmarks are weighed in the creation of a score.



People are all different so a subjective approach is needed for a proper algorithm.

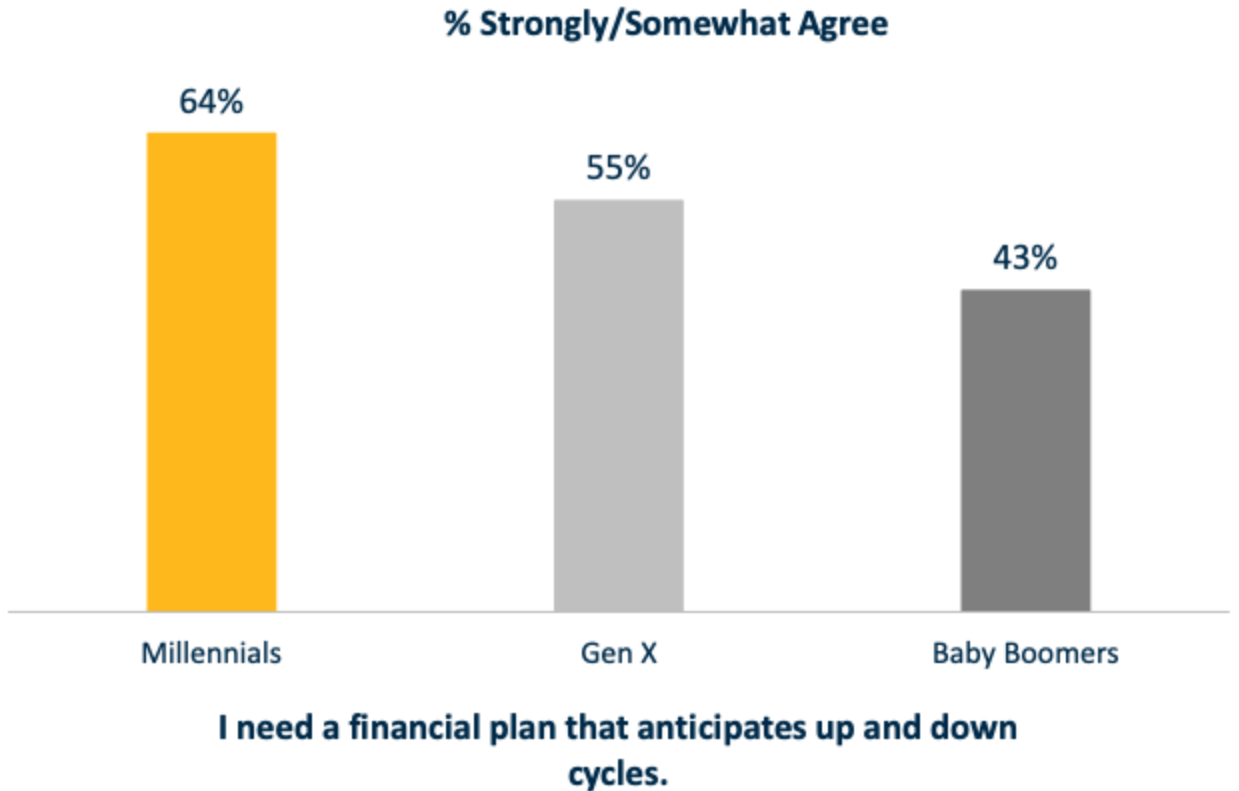
Otherwise, incorrect indicators will distract customers.

For better financial health calculation, it is appropriate to use the Financial Health Toolkit, developed by CFSI(Reference 1). It is a result of more than one year of dedicated research and analysis. Also, very importantly, a weighting algorithm should be developed that will enable flexible customization of methodology to particular countries or individual situations. So users will not have distraction caused by wrong interpretation of their current circumstances.

Financial advisors and coaching

Personal financial advisors market is very big and challenging in the developed countries. And, according to investopedia.com(Reference 2), it is very dependent on the current financial situation. Value proposition was challenged a lot after 2008. Modern clients want more control at lower costs, which leads to a lot of disruption in the industry. New services and younger advisors present a very different value proposition than their older contemporaries.

According to the research of 2017 year (Reference 3), millennials demand for financial advice is growing and higher than for previous generations.



Picture 3. Demand for financial advice

It is clear that with the development of new technologies, Open Banking era is close and a boom is expected in the FinTech market.

Ukrainian financial advisors market is very young and there are only a handful of active financial advisors, like [iplan.ua](#). They reported 80 customers in the end of 2018 year and now gathering hundreds of people in their meetups about investments and financial planning. These are small numbers but they are growing every year.

Financial coaching is slightly different. Here we have some very interested products in the USA market, like [Albert.com](#)(Appendix 2) and [Mvelopes.com](#) (Appendix 3). They propose financial coaching on demand and it gains more and more popularity among their customers. They have more than 6 million customers in total and growing rapidly.

Ukrainian market of financial coaching is young and still undeveloped. There are no tools on the market but financial trainings and coaching sessions. Unfortunately, it is nearly impossible to get any statistics about the market, so I can only suggest that here could be hidden demand in Ukraine and post-soviet countries. This hypothesis should be verified.

1. PROBLEM STATEMENT

In order to properly identify and formulate the problem I've done a design thinking session. There were 15 people diversified by age, family and financial status.

We decided to choose the following persona: *ambitious young couple (30 - 40 years old), middle class*. Below you can find a filled empathy map as a result of the session.



Picture 1.1 Empathy Map

One of the main problems that we found out is that most people want to control their finances but find it difficult and time-consuming. Also they want it to

be flexible and personalized, reflect their current situation and provide an overall analysis of their finances.

Analyzing tons of applications in the market and reading their forums, I identified that there is a lack of holistic approach to personal finances. The USA market proposes several good solutions that satisfy most customers. At the same time, users of post-soviet countries have to deal with imperfect existing solutions.

1.1 Current situation in Ukraine

Most people in Ukraine are struggling financially. And this trend will grow with economic crises. This has a real impact on people's lives especially when they didn't expect that. The latest black swan, coronavirus, happened very fast and didn't let people have any chance to prepare. We believe it is tightly related to the fact that we are at the bottom of the rating index of financial literacy in the world(Reference 4).

But what is financial literacy? According to investopedia.com, *financial literacy is the ability to understand and effectively apply various financial skills, including personal financial management, budgeting, and investing. Financial literacy helps individuals become self-sufficient so that they can achieve financial stability.* So it is not just the ability to save some money every month, but a holistic approach to managing finances, like financial risks mitigation, retirement plan, financial planning, investments. Also it requires appropriate tools and educational efforts that are not available in the Ukrainian market as for now.

1.2 World tendencies

World FinTech market is very active and among the most growing industries. The Open Banking era is coming and enabling a great competition start (Appendix 4). Several banks in the UK and EU have already launched initiatives of developing aggregating mobile apps that will be working with different banks and aggregate customer data in one place. It is going to shift customer behaviour to tech-based solutions opposed to traditional banking. Main value that customers are seeking in such solutions is the ability to manage their money efficiently and effortlessly.

Summarizing, we can say that the main problem is lack of sophisticated, holistic view on personal finances, ability to follow the financial plan and get coaching or financial advice on-demand using new progressive technologies. Solution to the problem can bring confidence and calm to their financial life.

2. SOLUTION

Considering the problem statement, there is a proposal to create a financial platform with support of the most popular user interfaces (mobile, web applications). It will provide a Financial Health Toolkit automatically based on the transactional data and additional information provided by the user. Finappe will have several pricing plans that will support every customer's needs according to their level of financial awareness(Appendix 5).

There is a *free Financial Awareness* plan for basic usage that will satisfy the needs of those users who have intention or already started to save money. It will help them to make up their own financial strategy and follow it effortlessly. Financial health indications will help them to understand how they are doing on their way to financial success.

Conscious spending plan is designed for users who want to optimize their spendings, implement their own budgets according to the current situation and their lifestyle. These features are for more advanced users who prefer flexible budgets, advanced analytics and professional approach. Also it has some fancy features that will create a WoW effect on customers. In order to monetize it better I included family accounts to this plan that will bring families to the paid account.

Accessible coaching plans are for customers who want to get professional help and are committed to follow their financial strategy. Coach will help not to incline from the chosen trajectory and can give support in making financial decisions or answering financial questions. It will help people who are not very disciplined and it will be easier for them to get a supervisor. As an analog from real

life we can take a coach in a fitness club. It is clear that with coach support you will feel much more determined in making next steps.

And the last plan is *Smart investment*. This plan is for people who have saved enough and want to start investing in available financial instruments like deposits, mutual funds, government bonds, etc. It will require professional help, so a financial advisor is available for you. It is a flexible plan and price depends on options that customers will prefer. In order to implement this plan we will need to build many advanced features like an investment portfolio. So this is a long-term goal and will depend on product success on the market and investors interest.

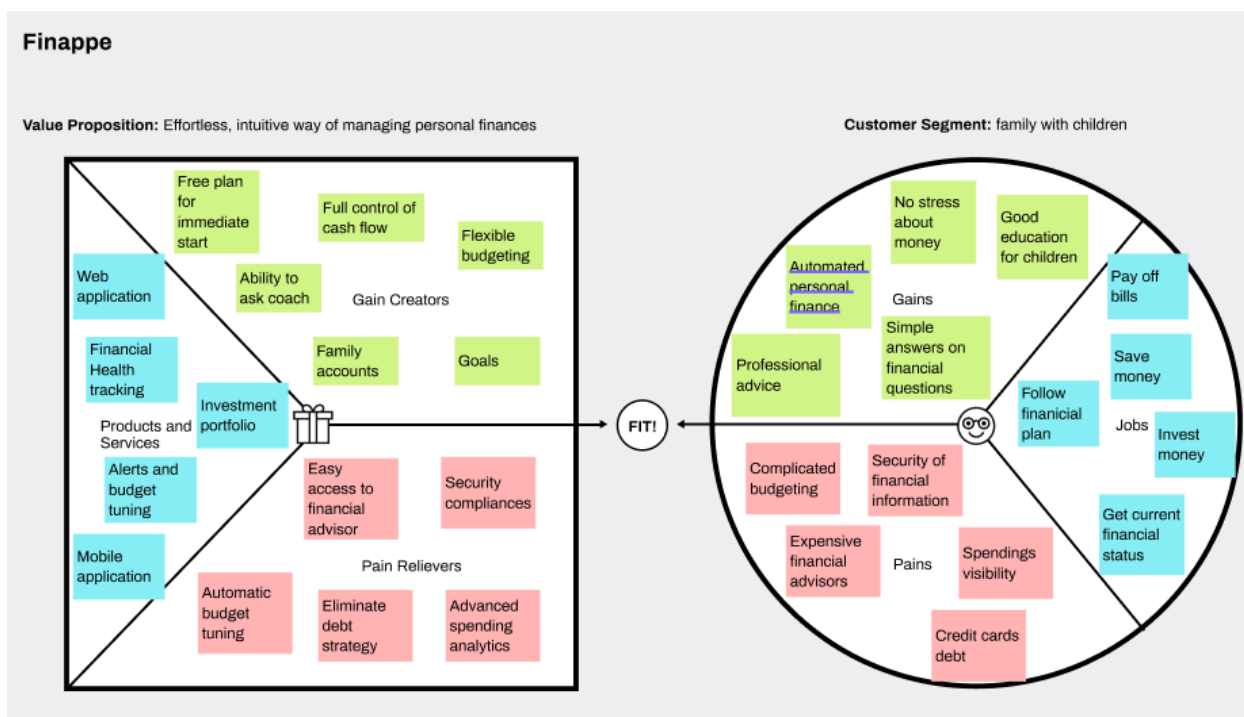
2.1 What is the main value for customers?

Financial *calm* is considered as a main value for the customer. All decisions that were made, roadmap, and pricing plans are designed in such a way that will improve people's comfort in dealing with money. As it was already stated, people are different so the platform should be very attentive to what makes people calm in different financial situations. So different financial strategies appear in the roadmap.

Finally, Finappe provides tooling for evaluating a current financial situation. When this is done, the platform will give instruments for improving it the most efficient way.

2.2 How can Finappe help?

In order to show how Finappe can provide the value and fit our customer segment the *Value Proposition Canvas* was prepared.



Picture 2.2.1 Value Proposition Canvas

Families of millennials are considered as main customers of the platform so we decided to use them as a customer segment. Here we can clearly state that Finappe satisfies customer needs and creates value.

In order to validate my assumptions several customer interviews were conducted.

Family with one child. Millennials. Live in Kyiv.

Question 1. What is your current situation?

Answer: We have some debt that we want to eliminate first. After that we are going to buy a new car and send our son to private school. Generally speaking we are ok.

Question 2. How do you manage your money?

Answer: We are using ZenMoney. It gives us an ability to integrate with bank accounts and automatically collect transaction data. Also it provides a cool budgeting feature 50/30/20 that gives us a general idea of how we should manage our money.

Question 3. If you would be a product manager of ZenMoney what would you improve?

Answer: I would simplify the interface and make it more friendly. Also I would add support for managing loans.

Single man with average income who lives in Uzhgorod. Millennial.

Question 1. What is your current situation?

Answer: I have no car and rent an apartment. I am travelling a lot. My current goal is to buy a flat.

Question 2. How do you manage your money?

Answer: I am a fan of meticulous budgeting. It gives me a lot of control over my money so I know every detail of my cash flow. I tried to find some apps for this but with no success. So I am using Excel.

Question 3. How do you track your spending?

Answer: I am spending 5 minutes of my time every evening inputting my spending. It is not hard and I've already got a habit.

There were more people interviewed and it seems that they all are tracking money in a different way but with the same purpose - have control and calm over their finances. It gave the main idea that there is a need for a product that will be very flexible and customizable for most people and still provide the main value.

3. COMPETITORS

Personal finance is a crowded market with many strong players: Mint, YNAB, Mvelopes, Albert, Coinkeeper, Wally and many more. We can divide them to the following groups:

1. Very simple, free but limited tools
2. Common budgeting software
3. Advanced tools with AI capabilities

First group is the largest one. It provides basic capabilities like budgeting, transaction history and basic reporting. Usually they are created by 1-2 persons as side projects. They have bad customer support and cumbersome user interface with many complaints on the forums.

Second group is mainstream. All of them are utilizing the freemium or subscription model. They connect to banks, make auto-categorization, provide more advanced analytics, alerts, family accounts and more. The prices for premium usually are from 2\$ to 10\$. They have the largest user base and there is a tendency to switch between the tools in search of better product performance or customer support. Mint, YNAB, Wally, Mvelopes, Coinkeeper, Zenmoney are among them.

Third group is the smallest. These are new innovative tools with automatic savings, AI bots, coaching, etc. Albert is the most famous one.

There are only a handful of solutions in the Ukrainian market available: Zenmoney, Coinkeeper, Costs, Finkee and some others. The initial analysis was made using a Competitive Matrix approach. It was very well explained in the Product Development module by Scott Sehlhorst. Matrix for Ukraine can also be applied to the post-soviet countries' markets because they all are very similar.

3.1 Competitive matrix analysis

Competitive matrix is a great tool for evaluating strengths, weaknesses and potential threats to the business. It provides an easy-to-read portrait of your competitive landscape and your position in the marketplace.

For the Ukrainian competitive matrix the most popular solutions were chosen: Zenmoney (Russia), Coinkeeper (Russia), Costs(Ukraine). They are all from the second group and have similar functionality. Zenmoney is probably the most comprehensive between them. Free version of my app will cover most of the features they have but with less bank integrations and no family accounts. Consciousness spending plan will offer paid features and provide extra functionality that is unique in the post-soviet market.

Competitive Matrix Template													
How good each competitor is overall, from each customer's point of view	100	105	115							Us (near term)		Us (long term)	
	70	71	78										
	64	70	75							Coinkeeper.me			
	57	60	66							zenmoney.ru			
	72	69	79							costs.app			
Importance of each problem to each customer	Families with children, couples	Active people, travellers	Ambitious people, growing wealth, investing	Problems	Us (right now)	Now	Future	Now	Future	Now	Future		
	4	5	5	Too generic functionality, no flexibility/personalization		2	3	3	3	2	3	4	5
	5	2	4	Full multi-user accounts support with roles		3	4	2	2	2	2	4	5
	4	4	5	Bad banks integration		4	4	3	4	3	4	2	5
	5	5	5	Bad UX design		3	4	3	3	3	4	4	5
	2	5	4	Multi-currency support		2	2	1	2	2	3	3	5
Importance of customer to our strategy	5	2	4										
814	360	138	316	costs.app	(future)								
669	285	120	264	zenmoney.ru	(future)								
760	320	140	300	coinkeeper.me	(future)								
804	350	142	312	Us	(near term)								
1170	500	210	460	Us	(long term)								
Overall relative strengths													

Picture 3.1.1 Competitive matrix

3.2 How do we differentiate?

Finappe is not just another tool in the market. It utilizes a holistic approach for managing money and customer's wealth. It has a unique customer lifetime design. While other products propose solutions neglecting personal situations, Finappe is designed to serve for customer needs depending on their current situation.

Free plan is designed for people who want to start saving money and spend less than they earn. It is not restricted in some way but designed for particular needs.

Conscious spending plan proposes a more advanced level of money management. For that purpose the platform will support specific features like budget tuning, identifying behavioral patterns, advanced spendings tracking, personalization of the platform.

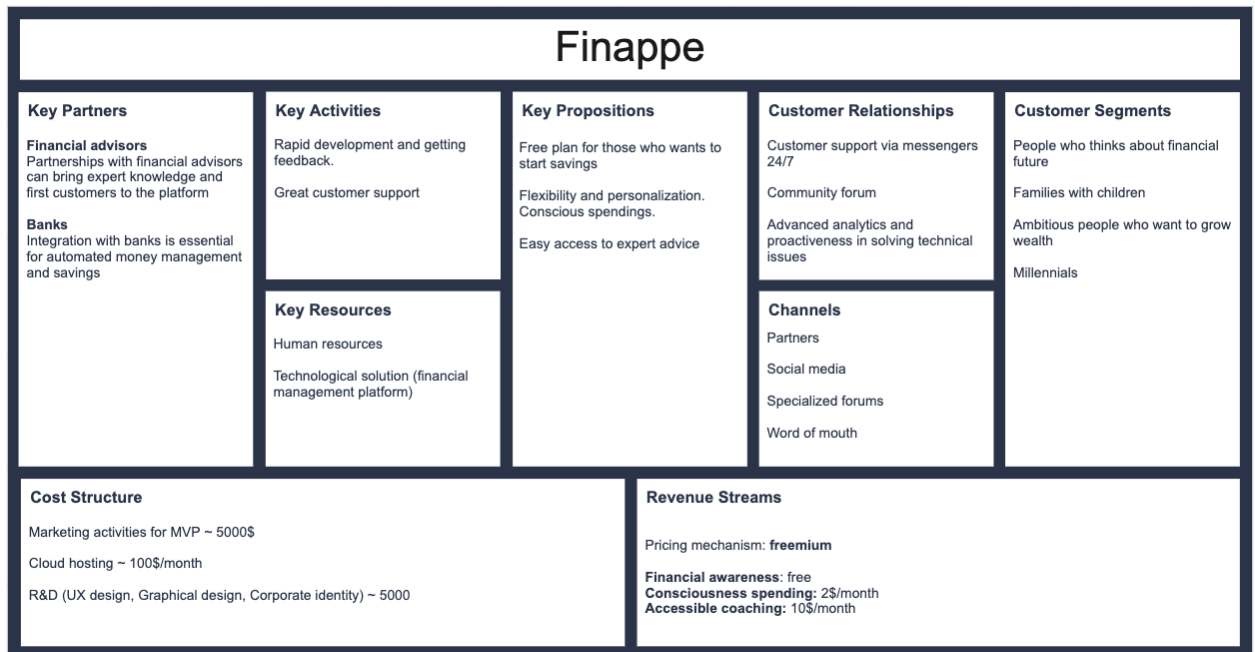
Accessible coaching plan implies that the customer is ready for building wealth and requires some coaching and spendings optimizations. So financial coaching is starting to be enabled for those users. Financial coach will help to optimize debt, reduce financial risks, identify ways to improve financial health.

Main differentiation points:

1. We do not try to impose our vision of how our clients should manage their money. We give all instruments for their own strategy.
2. We make a complex measurement of customer's financial health based on CFSI research
3. Quick connection to personal finance coach, regular or on-demand

4. Flexible plans that satisfy the needs of different customer groups.

4. BUSINESS MODEL CANVAS



4.1 Key partners

Financial advisors are considered as main partners. It is supposed to give them tools for acquiring new clients through the platform and publishing their content. A cabinet will be developed for them in order to have one place for managing relevant activities. Also they can be involved as coaches for the Accessible Coaching plan. It will generate additional revenue for them and give them a chance to build strong relationships with customers.

Banks are planned to be involved on later implementation stages as partners for automated savings features and integration with customers accounts. Privatbank and Monobank will be integrated in the scope of MVP because they have API for third-party financial services.

4.2 Key Activities

We will provide fast development iterations so customers will feel that the platform is constantly improving. Along with that we are going to provide best customer support in order to not allow any customer to be disregarded.

4.3 Key Propositions

First of all we aim to make people calm about their finances. The pricing plans are designed in such a way that every customer will find it helpful. For example, a free plan is targeted for people who have just started to manage personal finances and need simple basic tools that will allow them to save more money.

Conscious spending plan is designed for those who want more and are willing to optimize cash flow. Also more advanced tools will be implemented for that particular purpose.

Last but not least, coaching and investment plans are developed for the most advanced users who want to have maximum. Human help will be available in those plans.

4.4 Customer Relationships

Customer support is very important. “Obsess over the customer” is the company value number one. So it will be part of our brand recognition. We value every customer despite the pricing plan.

We are going to make quantitative analytics in order to better understand customers' behaviours and prevent any dissatisfaction.

4.5 Customer segments

Finappe is designed to serve every customer who wants to start improving their cash flow. There are four customers segments that we are focusing on:

1. Families with children, couples
2. Ambitious people who want to save and invest aggressively
3. People who want to build reliable financial plan
4. Financial geeks

Finappe cannot suit every customer's need but it has plans for all of them. After the MVP version release we will start a validated learning process and will focus on the main customer segments.

4.6 Key Resources

Company's main resources in this phase is the founders team. Founders will fund MVP development with their money, time and knowledge.

4.7 Channels

The main channels for customer acquisition will be an engaging website and different social media like blogs, social networks, Youtube. When we partner with financial advisors, they also will forward their clients to Finappe as an appropriate money management solution.

The main channel for customer retention will be customer support and mobile applications. We will use push notifications for customer engagement with elements from gamification and natural interest to financial insights.

4.8 Cost structure

Finappe will be primarily using a value-driven cost structure that will be detailed in the finance section. Here I'll put main cost sources:

1. UI/UX design
2. Marketing activities, including influencers
3. R&D
4. Hosting

4.9 Revenue streams

The company will utilize a freemium model with a basic but distinctive basic version and premium plans that are for more demanding and advanced customers. So the main revenue stream is recurring fees from subscriptions.

5. MARKETING STRATEGY

While being in the process of calculating market opportunity we did analysis of competitors' go-to-market strategy. There are two main strategies companies usually choose:

1. Orientation to the local(country) market with plans for expansion.
2. Making a product for the global market from the beginning.

The companies who chose the first strategy are more successful on their markets than others. They consider many local features that give more value to their customers compared to “global” competitors. They have better integration with the banking system, mentality, and specific national problems.

Mint provides USA citizens with a credit score based on their own analytics. YNAB is targeted to eliminate debt and improve spending habits. Albert is tightly integrated with financial services that enables them to give users the ability for automated savings, instant cash, etc.

Table 5.1

Existing solutions in the world

Solution	Market	Strategy	Users number
Mint.com	USA, Canada	Local	20 mln
YNAB	USA, Canada, Worldwide	Local	6 mln
Albert	USA	Local	4 mln
Spendee	Worldwide	Global	1 mln

They are leaders on the US market and it is unlikely that some other generic tool will compete with them successfully in their market.

Spendee is one of the most widespread global solutions and it is much less popular than local competitors, especially on their markets.

So we decided to learn more about the available solutions in Ukrainian and post-soviet markets.

Table 5.2

Existing solution in Ukraine

Solution	Market	Strategy	Users number
Coinkeeper	Mostly Russia, post-soviet countries	Local	500_000
Zenmoney	Mostly Russia, post-soviet countries	Local	100_000
Homemoney.ua	Ukraine, Russia, Worldwide	Mixed, more local	400_000
Costs.app	Worldwide	Global	<10_000
Lean	Ukraine	Local	<10_000

There are some global solutions available as long as some ukrainian companies like Lean and Homemoney. They all have basic functionality, some are outdated. So there is an opportunity to start in the Ukrainian market with a local strategy and expand to post-soviet countries afterwards.

5.1 Market analysis

The Ukrainian market is relatively small. It is very hard to find any marketing information so it was decided to make some calculations based on open data.

We decided to integrate with two banks for the moment: Monobank and Privatbank.

Table 5.1.1

Potential market share

Bank	Cards holders	Potential clients (Cards holders / 2 / 2)	Finappe market share (30%)
Monobank	2 million	500_000	150_000
Privatbank	6 million	1_500_000	500_000

Potentially we can bring about 650_000 potential customers to the platform. Also there is an expectation that the number of users of mobile banking will grow every year.

It is much more difficult to calculate market size for *post-soviet* countries. I'll make calculations based on the following assumptions:

1. We will integrate with major banks in those countries
2. Same ratio is applicable in those countries.

There are about 250 mln of population.

Ratio: Percentage of potential customers to number of bank cards holders:

$$650_000 / 42_000_000 = 0,015476$$

Potential customers in post-soviet countries:

$$250_000_000 * 0,015476 = 3_869_047$$

This number is an orientation of how many customers we can get in the post-soviet market based on our assumptions.

5.2 MVP promotion

So now when we have some numbers describing market size and our opportunity we need to develop a go-to-market strategy. Advertising company is planned to be started on targeted web resources and blogs. Cooperating with financial advisors will also be beneficial if they agree to publish their content on the Finappe blogs.

Social media accounts will be created with relevant content. First we will find the best articles about personal finance and translate them to Ukrainian language. In parallel, I will learn more about personal finance and develop my writing skills.

After MVP release it is important to understand that, when a user installs the application, you have only a few minutes to demonstrate how great your application is. Tons of applications were tested and we noticed that there is approximately 5 minutes enough before making a decision to continue or delete it. Other words, there is a 5 min chance to convert potential users to an active one.

Customer support is crucial for getting first traction so founders will do it first. It will be the only forum in the beginning with TTA as 24 hours.

5.3 Distribution channels

For the launch of MVP we want to start building buzz around the Finappe brand. There is an aim to secure free placements, backlinks and other low-cost tactics. We will start building a community around the brand and cultivate trust. Here are some tactics:

- Start a blog
- Build relationships with other companies, influencers and publications
- Start posting valuable content on social platforms and cross-promoting to build partnerships
- Build out a website to have a press kit, impactful copy and a story behind the brand.

The most important metric is Customer Retention Rate. It is generally calculated for a specific day and aggregated by 1, 3, 7 and day 14 retention metrics which communicate percent of users returning to the platform one, three, seven and fourteen days after the first time.

6. FINANCE

There will be a free plan that is aimed to get traction and grow the user base up to 10000 people. The plan is to make partnerships with finance advisors and banks. Finance advisors will be interested because Finappe gives them great tooling and lead generation via the platform. It will simplify their life a lot so it should not be very hard.

Monobank and Privatbank are harder to get because they are big. Only after some traction will we start negotiating with them about automatic savings API possibilities.

6.1 Cost structure

There is no plan to raise money for MVP stage so all the costs below are founders costs.

Table 6.1.1

MVP cost structure

MVP cost structure		Result
UI/UX	2000\$	Simple and intuitive UX, well-thought customer journey
R&D	5000\$	Mobile applications for iOS and Android.
Marketing	5000\$	Website, blogs, social media, 10000 users reached
Hosting	1000\$	GCP hosting, Firebase, other services
Total	13000\$	MVP released

UI/UX is a crucial component for MVP success, so we will hire a designer

for this. The main goal for the designer will be to develop a magnetic product with scalability in mind. It will have a great impact on user retention which is the main measure of MVP success.

R&D consists of coding mobile and web applications, writing a backend application and hosting development environment. As the founders team has a lot of experience in software development there is no need for hiring software developers.

Marketing activities are described in the MVP Promotion section. My assumption is that with a budget of five thousand US dollars it is feasible to reach 10000 potential customers.

Hosting includes GCP hosting for a development environment and subscriptions to development tools.

6.2 Revenue model

Subscription revenue model on a monthly/quarterly/yearly basis will be used. As personal finance apps usually have long customer time value (customers would better change their bank than the app), it is important to focus on customer retention as much as possible in order to get constantly growing revenue. Number of users can grow organically but after some scale level it would also be appropriate to start an advertising company.

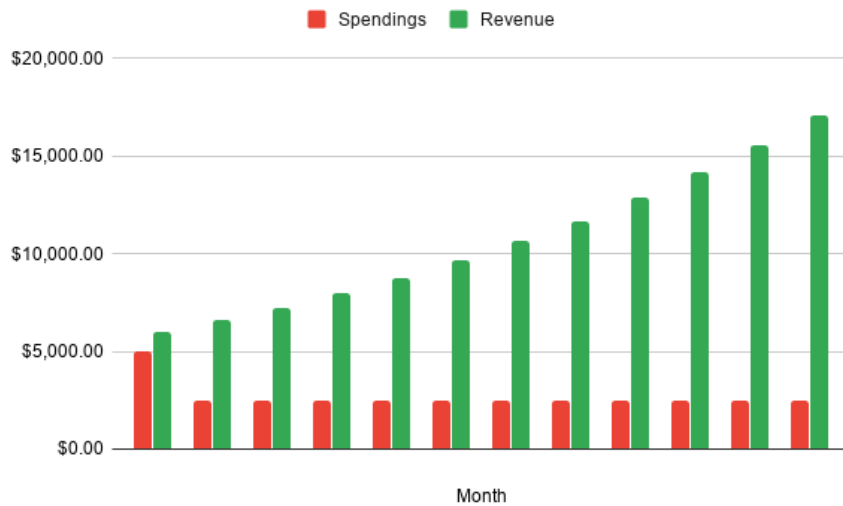
The most important metrics are CAC(customer acquisition cost) and CRR(customer retention rate).

Table 6.2.1

Customer acquisition cost calculations

CAC calculation	
Total number of users	10000
Conversion to trial	40%
Conversion to paid customer	50%
Cost of marketing activities	5000\$
Flow	Qty
Total number of users	10000
Trials	4000
Customers	2000
Cost of customer acquisition	2.5\$

Customer retention rate is very important for the subscription model. The chart below shows how revenue is increasing if LTV of the customer will be around one year. It assumes that the customer base will grow by 10 percent every month.



Picture 6.2.1 Revenue growth by month

6.3 Financial projections

In order to make financial projections (Table 6.3.1) I had to make assumptions about the market size and growth level that seemed feasible for personal finance application:

1. LTV is not less than 1 year. This prediction is based on the fact that most people eventually subscribe to the yearly plan. Even if they are not doing this, we need to find the stimulus for them to do this. It could be additional benefits or a big discount.
2. User base growth level is not less than 10 percent per month on average. This assumption is based on the intention to make the best personal finance application for the Ukrainian market. It should prevail over other applications and also make importing from other applications effortless and fast.
3. Team will be growing slowly and diversified by skills. Development co-founders are already here so we will need to find marketing and customer support people.
4. Financial projections are based on the marketing strategy and assumptions that were made. The biggest assumption here is the conversion rate that is pretty optimistic. We will correct the metrics with the MVP start.

We understand that these numbers are somewhat made up and could be changed dramatically but they help to understand when the company will become profitable.

Table 6.3.1

Financial projections for next 2 years(in thousands USD)

	2020(MVP)	2021	2022
Revenue	0	144	570
Expenses	13	148	440
Net Income	(13)	(4)	130
Driving metrics:			
New users	10000	50000	150000
Conversion rate	-	20%	25%
Avg monthly subscription fee(net)	-	2\$	2\$
Head count	2	3	6

In order to calculate Revenue forecast I used the following formula:

$$Revenue = \sum_{n=1}^{12} (Users_n * Conversion Rate * Subscription fee),$$

where n is a month in a year.

In order to calculate expenses the following formula was used:

$$Expenses = Marketing expenses + Operational expenses + Infrastructure cost$$

As we can see from the projected financials, operating breakeven will happen in 2022 or after 2 years of launch of the product.

7. RISKS OVERVIEW

1. Possible lack of product-market fit.

The Ukrainian market is relatively small and not mature enough. Nevertheless, it demonstrates positive dynamics in the number of internet and smartphone users. There are more than 6 millions users of Privat24 and more than 2 millions of Monobank users. My plan is to target this audience.

2. Technological complexity.

In order to create a flexible, customizable product we will need to make very well thought architectural decisions. Any mistake can have big implications on deliverables dates and customer experience.

Main implementation challenge will be related to engagement features and analytical intelligence that the product will have. Probably, third-party services should be integrated in order to make it happen.

3. Integration with banks will be a tough task that we will need to think thoroughly about. Only two banks opened their API for service providers: Monobank and Privatbank. It is not a secret that these two banks are providing the best consumer services on the market. Probably these two facts are correlated.

Open banking mass adoption is close in the UK market and will spread across the EU soon, so my suggestion is that Ukrainian banks are moving in this direction as well. I looked at the vacancies in Raiffeisen Aval and BNP Paribas UkrSibBank and found out that they are working on implementation of Open Banking and PSD2 compliance right now.

8. TECHNICAL DESIGN

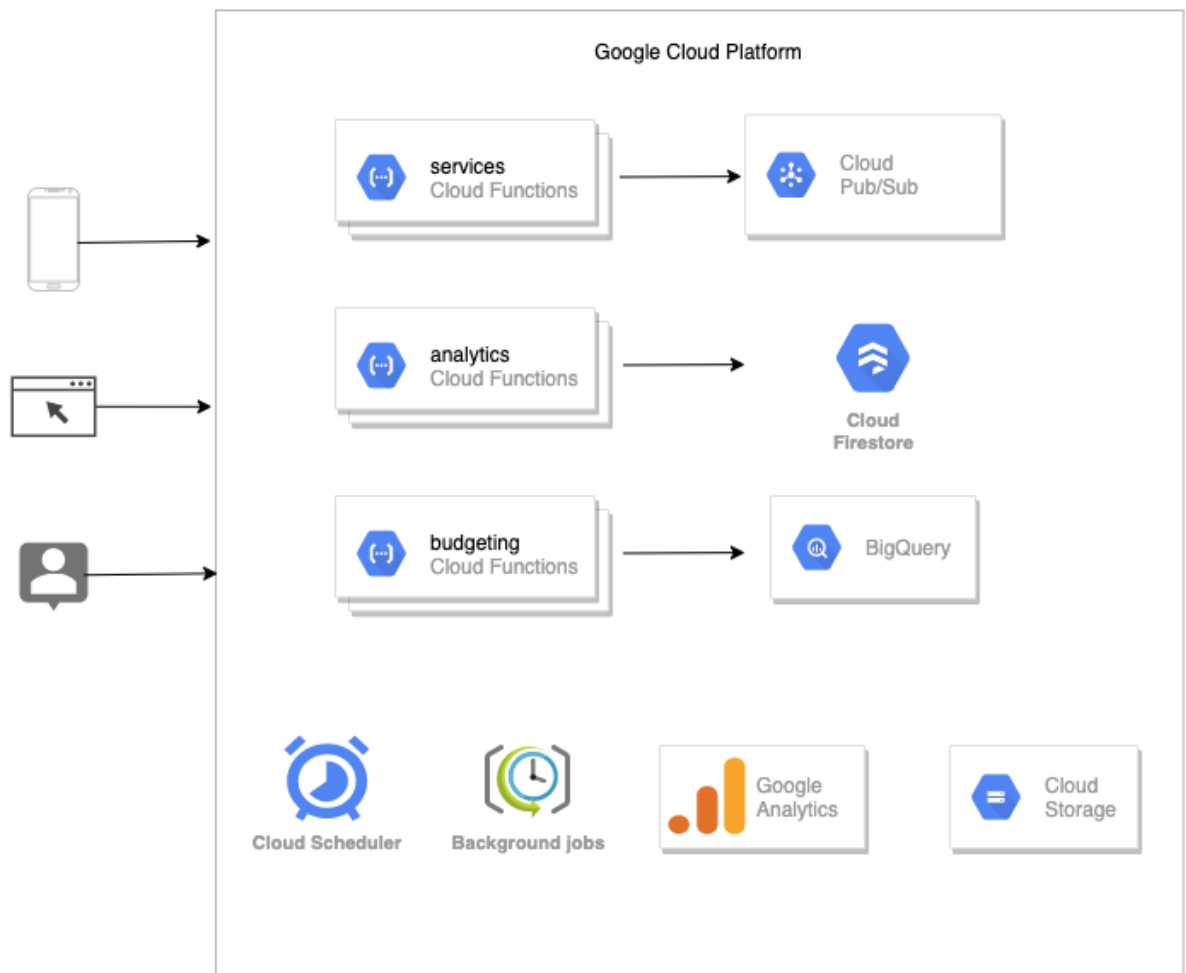
Finappe is a complex product. It'll have mobile and web applications, many different customer-facing services, analytical engine, chat-bots, etc. So I decided to build it using microservice architecture and utilize serverless technology for reducing infrastructure cost.

As founders have vast experience with building complex applications using Google Cloud Platform, we propose to use the following technical stack:

1. **Firestore** for serverless backend. Provides many capabilities out of the box with minimum configuration: database, cloud functions, user analytics, ML capabilities, crashlytics, etc. Some limitations exist and we will need to evaluate them carefully. Pricing model is very appealing and scales with users' numbers. <https://firebase.google.com/>
2. **Google BigQuery** for platform intelligence. It will allow us to build analytical pipelines for providing insights to our customers about their finances.

3. **Flutter** for frontend(mobile and web). It supports one codebase for all platforms written in one language. It will allow us not to hire a team of frontend developers. But we still need to find a great **UI/UX designer**.
4. Hosting is on **GCP** accordingly.

You can find high-level architecture below in Picture 8.1.



Picture 8.1 Finappe high-level architecture

It will highly utilize Google managed services and avoid creating self-managed containers. Usually managed services cost is dependent on real utilization so it will save us money a lot in the beginning because we won't overuse computation resources while having little userbase.

9. ROADMAP

	Q3 2020	Q4 2020
R&D	Basic architecture	
	Financial Health methodology	Basic analytics
	Budgeting feature	Banks integration
		Security compliances
		Auto-categorization
Marketing/Customer support	Prepare marketing content	Financial Health
		Social networks
	Create marketing website	
		Partnership with banks
	Launch community forum	
UI/UX	Design for website	MVP completion
	Financial health	
	Basic features	

	Q1 2021	Q2 2021
R&D	Splitting/merging transactions	Alerts and notifications
	Goals	Labels/tags support
	Open Banking API	
	Intelligent budget tuning	
	Family accounts with RBAC	
	Continuous improvements based on customer feedback	
Marketing/Customer support	Partnership with financial advisors	
		Alerts and notifications
	Family accounts	
		Labels and tags
	Early adopters	Unique budgeting features
	Goals	
UI/UX	Unique budgeting features	Labels and tags
	Family accounts	Alerts and notifications
	Continuous improvements based on customer feedback	

10. CONCLUSIONS

Personal finance market is one of the most contradictory and difficult to understand. It is flooded with many low-quality solutions that make a lot of noise without delivering any unique value. I used a lot of them, more or less suiting my needs. And I didn't find an ideal application that could give me real value in eliminating anxiety from my financial life. That time I started to think that something was wrong in the industry.

My initial idea of making a personal finance application that will integrate many different functionality into one solution was very wrong. When I started to talk to people about their experience of using PFM, I quickly understood that no one really wants this. There was no demand. So I organized and conducted a Design Thinking session and found out many interesting insights about existing solutions and real value that people expect from such applications.

First conclusion that I made is: *people are managing finances in a very different way*. It explains why there are so many solutions in the market. It gave me an idea that the next level solution should provide a very clear way of managing finances. It should be customizable and flexible, configurable to many life scenarios. People want to personalize it as it was developed for them.

Second conclusion is that *it should be local and reflect the economic reality of a specific market*. Generic solutions are all gaining just a little interest in specific markets. They are alive only because they cover many countries. And if there is a good solution for the Ukrainian market, any global one will lose this competition.

Third conclusion is that *UX is king in this market*. Bad UX can destroy even the smartest and the most intelligent application. Users want it to be very simple

and intuitive. They do not want to spend much time trying to adapt an application to their needs. It doesn't mean that it should have very simple functionality, but it means that it should hide complexity.

Final conclusion that I want to point out is that *every entrepreneur should not blindly trust intuition but always validate all ideas*. It is very well described in the Lean Startup book but very often neglected. Seems like only a handful of existing solutions validate their ideas well.

LVBS gave me everything that I needed in order to start thinking about it as a business project. I used every chance to present my vision and get feedback from business experts, our lecturers. Every feedback was very valuable and gave me many insights of what I should think of next.

I joined the program with a little business and team managerial experience. So all modules of the MSTM program were very beneficial for me. I am sure that most of the knowledge I've got is still waiting for the right moment to turn into valuable skills that will help me to build a successful company.

Here is the list of the most valuable concepts for me:

1. Competitive matrix analysis
2. Doblin framework of innovation
3. Asymmetric competition model
4. Marketing strategy by Joe Pons
5. Design Thinking session
6. Value proposition canvas

I've got many insights from courses like Digital Disruption, Strategic Marketing, IT Strategy, Product Management.

GLOSSARY

PFM - personal finance management

YNAB - You Need A Budget

CFSI - Center for Financial Services Innovation

TTA - Time to answer

MVP - Minimum viable product

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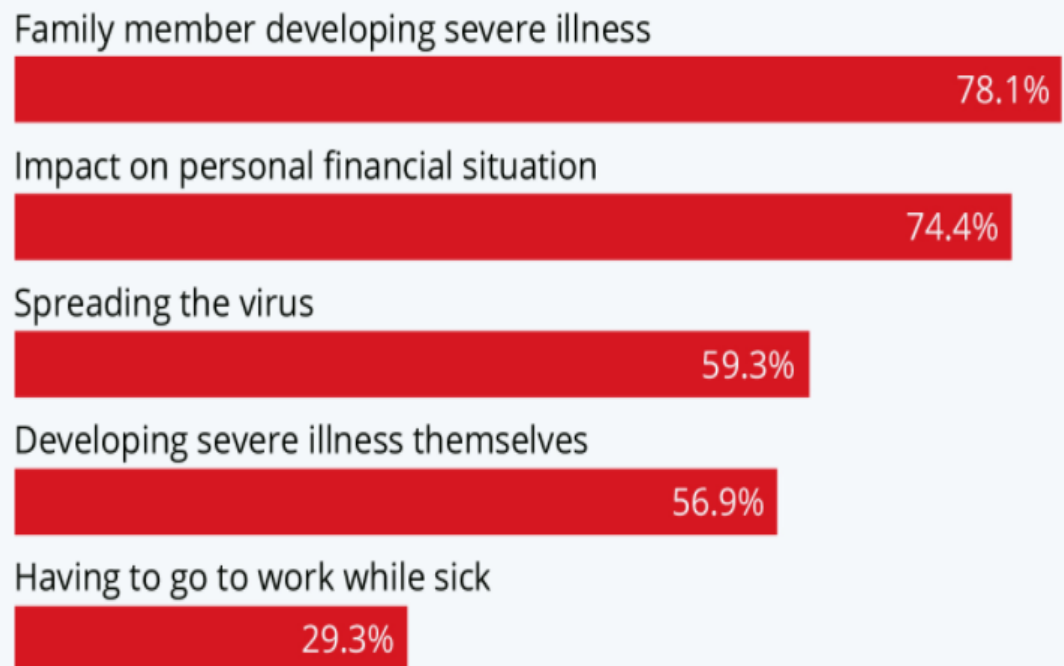
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APPENDIXES

Appendix 1. Financial situation around coronavirus crisis.

America's Biggest COVID-19 Worries

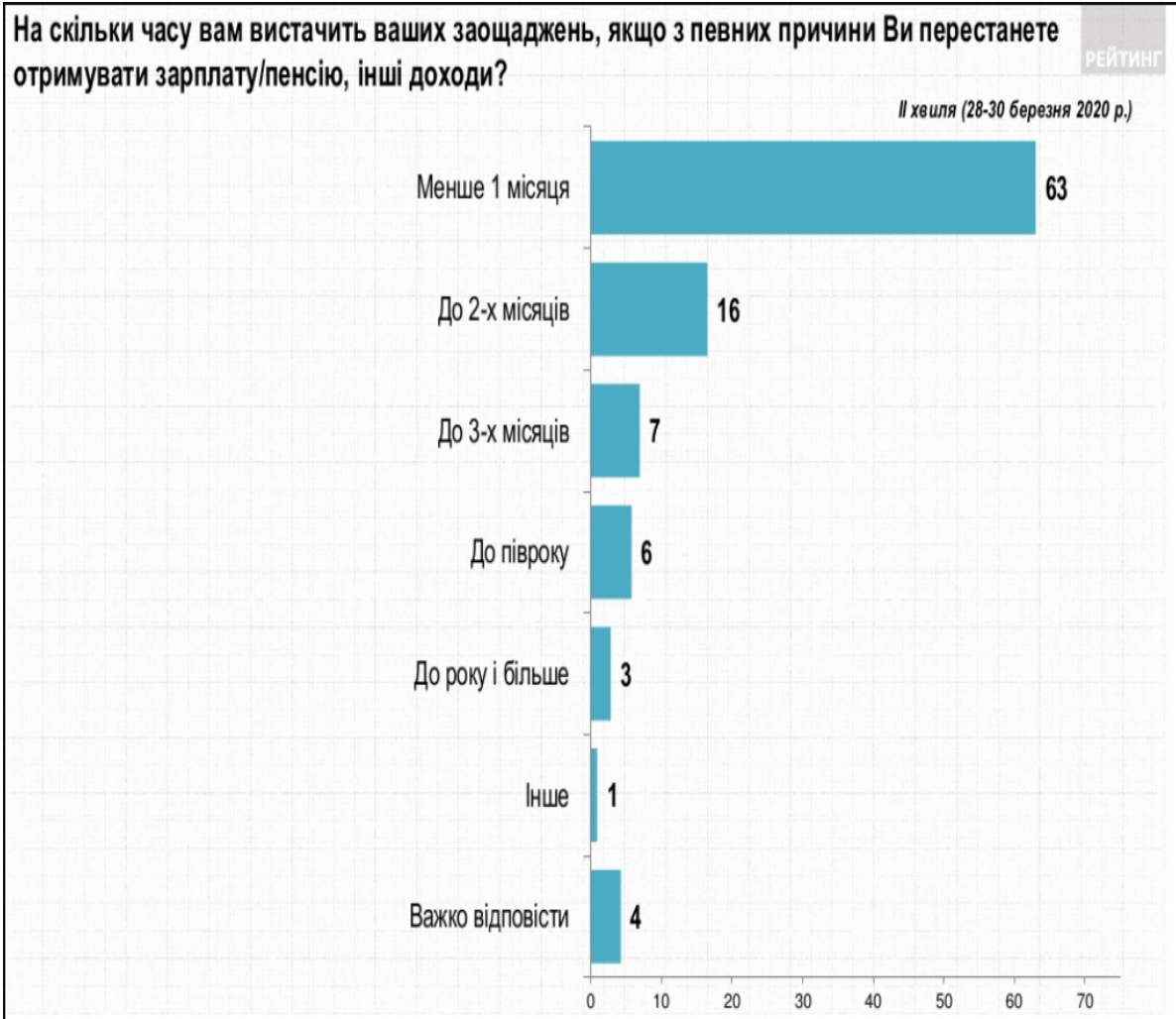
Share of respondents who said they worried about the following during the coronavirus pandemic



Survey of 3,270 U.S. adults, March 16 -17, 2020

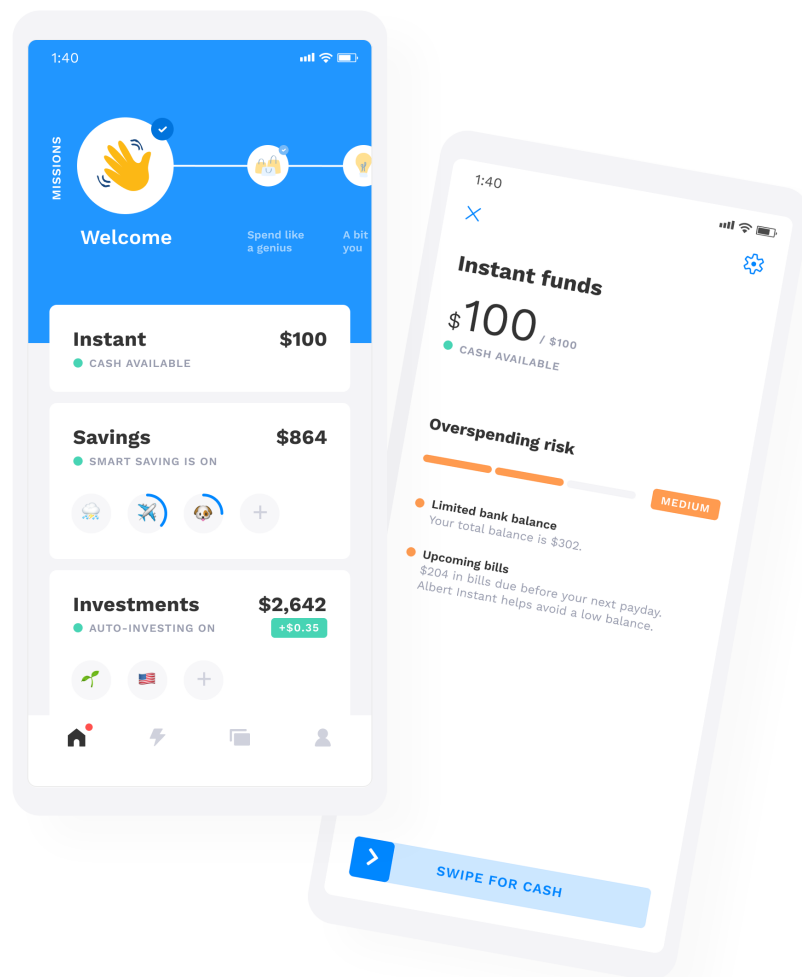
Source: Elon University





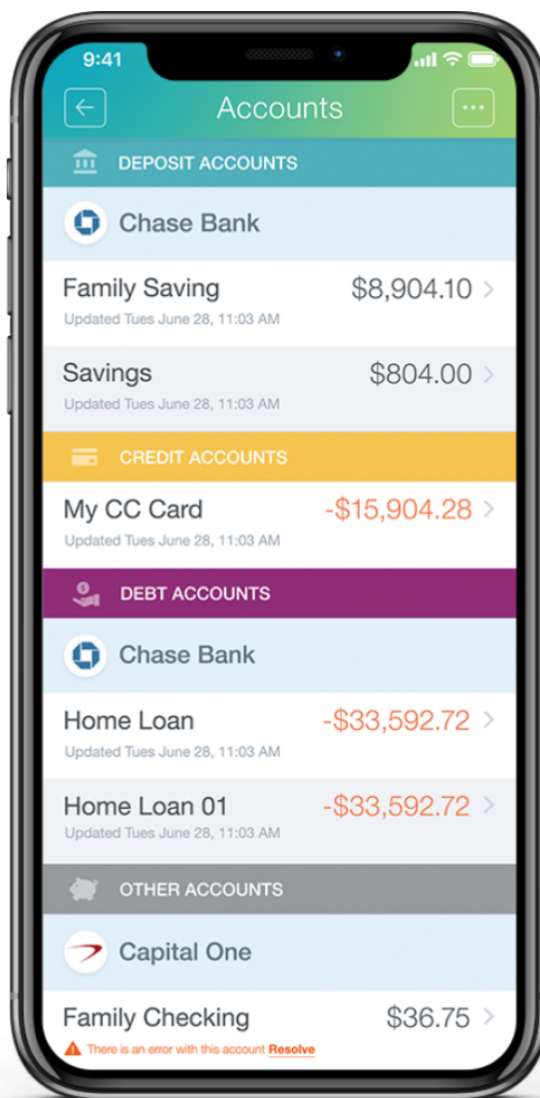
Appendix 2. Albert.com

Albert is a financial tool made for the USA market that measures customers' financial health, provides services for smart automatic savings, guided investments with financial advisors help and others. In the first 3 years they were able to reach a 3 million customer base.



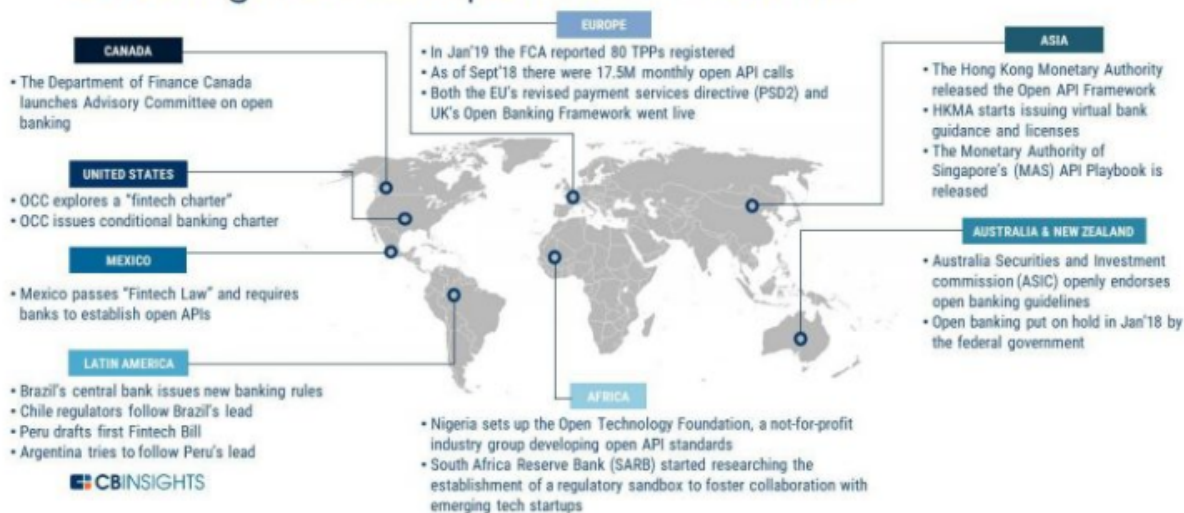
Appendix 3. Mvelopes.com

Mvelopes provides a simple, affordable, envelope budgeting program that helps you to get from where you are to where you want to be financially. It provides you with several plans, including financial advisors help.



Appendix 4. Open Banking is spreading

Open banking is spreading beyond Europe and creating new competition for banks



Appendix 5. Available plans

Financial awareness	Conscious spending	Accessible coaching	Smart investment
Free	3\$/month, 24\$/year	10\$/month, 100\$/year	Flexible plan
Financial health measuring	Everything from Free	Everything from Conscious spending	Everything from Accessible coaching
Basic budgeting (up to 3 budgets)	Unlimited budgets, Intelligent budget tuning	Coaching support (human and bot)	Financial Plan
Auto-categorization	Alerts and notifications	Learning center	Investments tracking
Integration with Monobank and Privatbank	Integration with major Ukrainian banks	Analytical insights, recommendation system	Personal financial advisor
Basic analytics	Advanced analytics	Gamification	
Multi-currency support	Family accounts with roles		
Goals	Travelling features		
Splitting and merging transactions	Labels, tags support		
Security compliances	Live chat support		
Community forum			