

AI Powered Personal Finance Management Assistant

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Abstract.

This report explores the business opportunity for an AI-based personal finance management app. It highlights the growing demand for automated financial tools and personalized financial guidance. The report outlines the key problems faced by consumers in managing their finances, such as lack of time, financial knowledge, and inefficient budgeting tools. It details how an AI-powered app can address these issues by automating tasks, providing personalized insights, and simplifying financial management. The report also explores a prototype product that addresses the before mentioned targets. It concludes that a well-designed AI-powered app can empower users, disrupt the personal finance management market, and capture a significant market share.

1 Problem Statement

Millions of people struggle to manage their finances effectively due to a lack of time, knowledge, and personalized guidance. Existing budgeting and tracking tools are often cumbersome and lack the ability to analyze financial data and provide actionable insights. As a result, many people fall short of their financial goals and experience stress and anxiety around money. The aim is to create an AI Powered Personal Finance Management Assistant in application form.

The key pain points that the AI-based app aims to solve:

- **Lack of Time and Knowledge:** People are busy and may not have the time or financial expertise to effectively manage their money.
- **Inefficient Tools:** Current budgeting and tracking tools can be tedious and lack the ability to analyze spending habits and offer personalized recommendations.
- **Unreached Financial Goals:** Without proper guidance and tools, people struggle to achieve their financial goals, leading to frustration and a sense of powerlessness.
- **By addressing these issues,** the AI-based app can empower users to take control of their finances and achieve financial security.

2 Market/Customer/Business Need Assessment

There is a growing demand for financial guidance, many people struggle with managing their finances, and there's a growing desire for automated tools and personalized advice. AI can analyze individual spending patterns, financial goals, and suggest personalized strategies for saving, investing, and budgeting. AI can automate routine financial tasks like bill payments, expense categorization, and savings transfers, saving users time and effort. By analyzing large amounts of financial data, AI can provide valuable insights into spending habits, trends, and opportunities for optimization. AI can be used for features like AI-powered financial health checkups, debt reduction plans, and automated savings/investment based on financial goals.

3 Target Specification and Characterization

- **Empower users to take control of their finances:** The app will provide users with the tools and insights they need to make informed financial decisions and achieve their financial goals. This could include creating and sticking to budgets, managing debt effectively, saving for retirement or a down payment on a house, and building wealth over time.
- **Simplify financial management:** By automating tasks like expense tracking and categorization, and offering personalized recommendations, the app will make managing finances less time-consuming and stressful.
- **Improve financial literacy:** The app can provide educational resources and explain financial concepts in a clear and easy-to-understand way, helping users make better financial choices.
- **Increase financial security:** The app can help users identify areas where they can save money, pay down debt, and build an emergency fund, all of which contribute to greater financial security.

4 External Search

- Gartner Report: "Gartner Report: The Future of Personal Finance" (Focuses on AI in wealth management, but highlights the trend)
- Forbes Article: "Forbes: How AI Is Revolutionizing Personal Finance"
- McKinsey & Company's "Global Banking Annual Review": Offers analysis of trends in digital banking, including the rise of AI and personalized financial services.
- Mint: A popular personal finance management app that utilizes AI algorithms for budgeting, expense tracking, and financial insights. Mint's success story demonstrates the demand for AI-driven financial tools among consumers.
- Acorns: An app that combines automated investing with personal finance management features, showcasing the potential for AI-powered apps to attract users interested in both saving and budgeting.
- J.D. Power's "U.S. Retail Banking Satisfaction Study": Includes insights into consumer satisfaction with digital banking and personal finance management apps, highlighting areas for improvement and innovation.
- TechCrunch, Forbes, and CNBC often feature articles and opinion pieces on fintech trends, including the role of AI in personal finance management.

5 Benchmarking Alternate Products

Eva Money

Created by Fintel labs, Eva Money is a personalized financial assistant mobile app available for iOS and Android. The app uses artificial intelligence and is also Voice/Chat-enabled. It answers questions related to your personal finances using conversational intelligence and improves overall financial wellness. Further, you can also link all your bank accounts with the Eva Money app and get a complete snapshot of your current financial standing (At present, Eva only supports US banks). That is not all, it can even recommend the best ways to maximize cashback, how to save money, how to improve credit score, and so on.

MintZip

MintZip is an AI-powered fintech app that delivers end-to-end financial solutions. The MintZip app is also equipped with its flagship product 'Misa' which is an AI-based financial companion and is powered by Conversational AI. According to the company, Misa is the world's most powerful financial chatbot. Talking about how this AI financial chatbot works, it takes in account things like behavioral sciences and financial sciences, and it is continuously training on financial knowledge to deliver the tailored response based on the users specific financial situation.

Olivia.ai

Created in 2015 by two Silicon Valley entrepreneur, Cristiano Oliveira and former professional motocross pilot Lucas de Moraes, Olivia is a free financial assistant app that uses artificial intelligence and behavioral economics. Basically, this app finds patterns in how someone typically spends its money. And then uses those patterns to create strategies that help users spend less on the same things, freeing up money. Further, Olivia also comes up with challenges for its users based on where they need the most help. And these challenges are created in such a way that it helps the user change its habits and take better control of its finances over time. At present, Olivia is only available on iOS and only in the US and Brazil.

Wizely

Wizely is another AI-powered money-saving app that allows its users to save little by little, offering the choice of Flexi and Savings Plan. It also claims to be India's first digital piggybank app.

Some of the benefits of Wizely:

- unlimited referral
- pre-booking of desired purchases
- up to 15% additional earnings on Wizely savings on redemption
- the choice to withdraw money savings anytime and anywhere without deductions

AI and ML are at the core of Wizely. Its AI and ML algorithms help the platform to deliver an adaptive learning approach to make it much more convenient for users to save.

6 Applicable Regulations

- Patents on ML algorithms developed
- Laws related to privacy for collecting data from users
- Protection/ownership regulations
- Creating an e-mail service to mail the report to the customers
- Laws related to bank account linking and data collection
- Laws on providing financial advices

7 Applicable Constraints

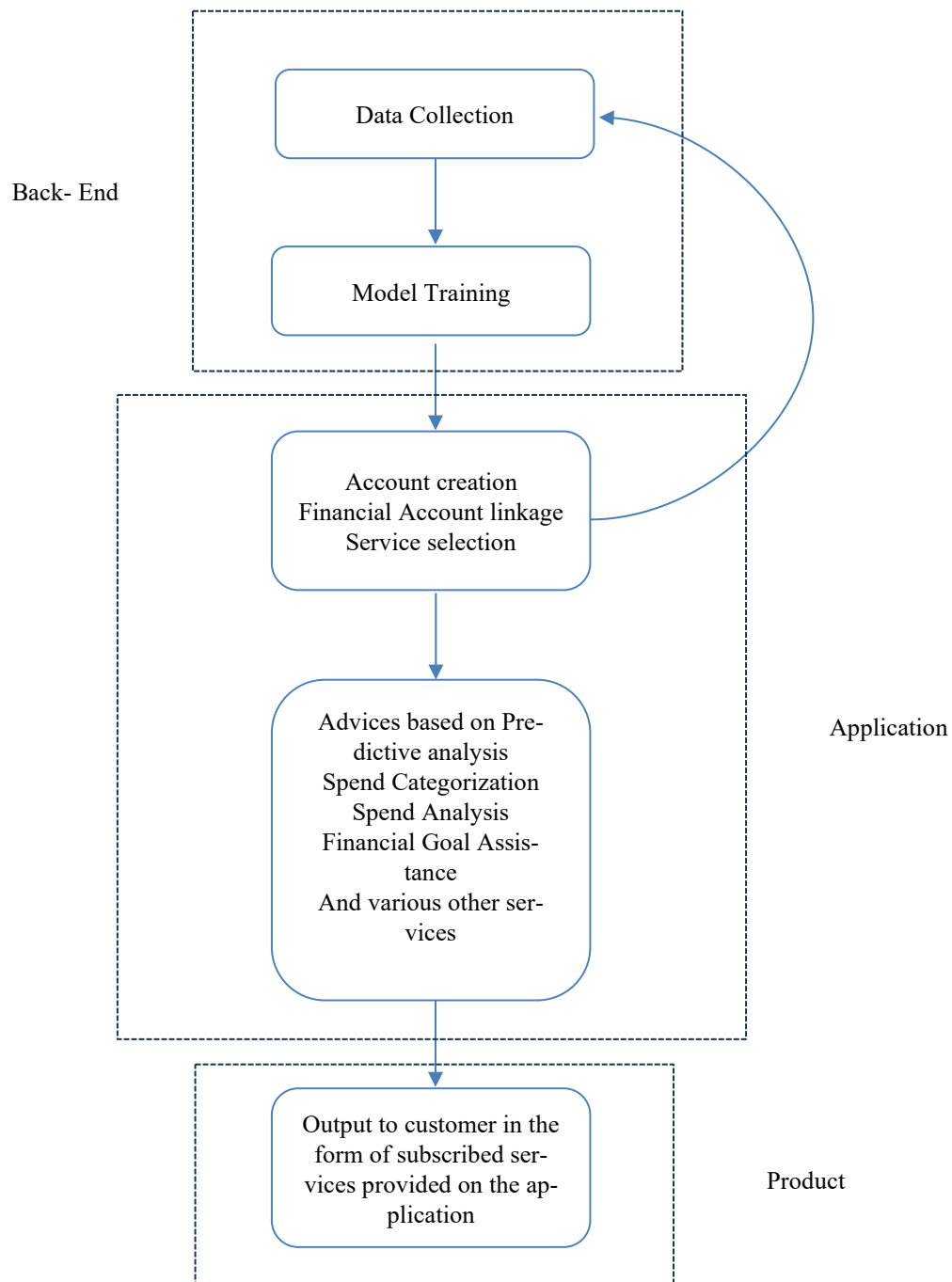
- Requires large amounts of data on financial habits for different customer bases
- Requires a fine-tuned algorithm/model for accurate predictive analysis
- Requires development of a tailored, well optimized application to provide the services
- Requires finance expertise/ domain knowledge to oversee and validate product output as well as during product development phase
- Requires cloud storage for collecting and storing user data
- Requires proper backend services
- Requires adequate security measures as personal financial data is being collected

8 Business Model

Monetization opportunities:

- Offering the app as a subscription service
- Partnerships with financial institutions
- Affiliate marketing for financial products
- Premium features

9 Final Product Prototype



10 Product Details

The product comprises of an AI powered personal financial assistant in the form of an application that collects user data by linking their financial accounts, credit cards, debit card etc. and uses a fine-tuned ML model to provide predictive analysis that will be used for providing customers with services like:

- personalized financial advices
- finance management assistance
- spend analysis reports
- financial health checkups
- debt reduction plans
- automated savings/investment based on financial goals

The product development and maintenance require a team of financial experts, data scientists, software developers, app developers for initial stages and promotion, marketing experts for later stages.

11 Conclusion

In conclusion, the development of an AI-based personal finance management app presents a compelling business opportunity. The market for financial management tools is vast and growing, with a growing demand for personalized guidance and automated solutions.

This app has the potential to address key pain points faced by consumers, including a lack of time, financial knowledge, and ineffective budgeting tools. By leveraging AI technology, the app can automate tasks, provide personalized insights, and simplify financial management, ultimately empowering users to achieve their financial goals.

Market research suggests a strong potential for AI-powered financial tools, with industry publications highlighting the rise of AI in fintech and venture capital firms actively investing in this space. Analysing user reviews of existing apps can further refine the features and functionalities to address unmet needs in the market.

By focusing on user needs and building a robust and user-friendly AI-powered platform, this app can disrupt the personal finance management landscape and capture a significant share of the market. Further research and development are crucial to refine the app's functionalities and ensure a successful launch.

11.1 Future Scope/Idea Expansion

The product can be scaled for:

- A product tailored for students
- A product tailored to address needs of business and Enterprises