The Role of Artificial Intelligence in Personal Financial Management: A Study Among Individual Users

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ABSTRACT

Artificial Intelligence (AI) has become very useful thing for people to manage their personal money. This is done by using applications that are powered by AI applications. These applications help people make a budget plan, track their expenses, and save money. This study also wants to know how these applications affect people to plan and make decisions about their savings and personal money.

Quantitative research approach will be adopted to this particular study. Data will be collected from individual users with the help of structured questionnaire. The collected data will then be analyzed using appropriate statistical techniques been applied to achieve the objectives of the study and that also helps answer the research questions.

This study is expected to give us an understanding of how AI affects people, how they manage their money. It will also help us understand why people use AI applications to manage their money. The results of this study may also

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help banks, companies that make technology and people who make applications to make better AI applications, for their money and help people manage it better.

KEYWORDS: *Artificial Intelligence (AI), Personal Financial Management (PFM), Financial Decision-Making, Automated Budgeting, Financial Technology (FinTech)*

I. Introduction

By transforming the financial services, Artificial Intelligence (AI) has made personal financial management more efficient and accurate. AI enables computers to analyze large volumes of financial data, identify spending patterns, predict future trends, and then provide personalized financial recommendations. Today, individuals make informed financial decisions on platforms with the help of AI-powered technologies such as budgeting applications, robo-advisors, digital assistants, and automated investment. Many people are using smartphones, online banking and financial technology which has made AI based financial solutions very popular. Because of this, AI is changing the ways we keep plan on track and reach our goals.

AI is helping us make better and informed financial decisions. Nowadays AI based financial solutions are becoming more popular. AI is making financial management simpler and more accessible for individuals. It will have a very big impact, on the way we handle our money in the future.

Since the studies that focused on how AI is used in banks and investment companies, this research is about how individual users experience AI. The results of this study will give us an idea of how AI is changing the way people manage their finances in day-to-day life. This research will add to what we know about personal finance and AI.

Banks and fintech companies can use the results to make AI solutions they are more reliable and easier to use. This study is about individual users and some Artificial Intelligence enabled financial applications. It gives us valuable information about how Artificial Intelligence is used in budgeting and financial planning. Overall the research shows that Artificial Intelligence can help people make financial decisions and improve their financial well-being by using AI. It is a part of this research and it plays a big role, in personal financial management.

II. Literature Review

Artificial Intelligence has changed the financial services industry a lot. It helps with making decisions. It does financial tasks automatically and it gives financial solutions that fit each person. They focus on things, like budgeting, planning investments, managing savings predicting money needs and using robo-advisors. Old research shows that AI makes financial choices by giving quick information and advice that fits what a person does with their money and what they want to achieve.

1. (Qi, 2025) examines the application of AI-powered robo-advisory systems in personal wealth management, focusing on middle-class households in the United States. The study explores how robo-advisors support asset allocation, risk management, and goal-based financial planning through automated and data-driven investment strategies.
2. (Mohadkar2, 2024) examine how technology is transforming personal finance management through the adoption of fintech tools such as budgeting applications, robo-advisors, mobile banking, blockchain, and artificial intelligence.

3. (Warchlewska, 2020) examine public attitudes toward the use of Artificial Intelligence in personal financial management through robo-advisory services across 15 countries.

4. (Challoumis, 2024) explores the evolution of currency from traditional barter systems to modern digital currencies, emphasizing the transformative role of Artificial Intelligence (AI) in the global financial system.

5. (Kshetri, 2021) examines how Artificial Intelligence (AI) is promoting financial inclusion in developing countries by expanding access to affordable financial services for underserved populations.

6. (Xie, 2019) examines the growing impact of Artificial Intelligence (AI) on the financial system and discusses how AI technologies are transforming financial services through intelligent automation and data-driven decision-making. The paper highlights AI applications in financial risk management, investment analysis, credit evaluation, fraud detection, and customer service, emphasizing improvements in operational efficiency and decision accuracy.

Artificial Intelligence helps with budgeting, managing expenses, planning investments improving savings habits and making financial choices. Experts always say that people think AI is useful easy to use, trustworthy and that having knowledge is very important when deciding to use AI tools for money. There are still worries, about privacy, security how clear the AI's decisions are and whether the AI is used in a fair way.

III. Research Gap

People have studied how Artificial Intelligence works in banks and with money for a time. They looked at how Artificial Intelligence is used for advice on investments and managing money online. Most studies focus on what banks and other big companies think about Artificial Intelligence. They do not look at how regular people use Artificial Intelligence for things like making a budget or saving money.

Other studies mostly looked at what Artificial Intelligence can do people feel about using it for money. They did not look at if people think Artificial Intelligence is useful or if they trust it. They also did not look at how different types of people use Artificial Intelligence for money. So this study will try to learn more about how people in India think about Artificial Intelligence and how they use it to manage their money. It will look at how aware people are of Artificial Intelligence and if they use it to make decisions about money.

IV. Objectives of the Study

The study was undertaken with the following objectives:

- To evaluate the level of awareness and adoption of AI-powered financial management tools among individual users.
- To examine the influence of Artificial Intelligence on budgeting and expense management.
- To analyze the impact of AI on personal savings and investment decision-making.
- To assess users' perceptions regarding the usefulness, ease of use, and reliability of AI-based financial applications.
- To identify the challenges faced by individuals while using AI-powered financial management tools.

V. Research Methodology

This study looked at how Artificial Intelligence is used in personal financial management by individual users. The study used a research design to get a better understanding of Artificial Intelligence in personal financial management. A quantitative approach was chosen because it allows for measurement of what people think and it makes it easier to analyze the relationships between Artificial Intelligence adoption and personal financial management.

Data was collected through a questionnaire that people filled out using Google Forms. The questionnaire had two parts: the part asked for basic information like gender, age, education, job and monthly income. The second part had statements that people rated on a scale from Disagree to Strongly Agree.

122 people who use Artificial Intelligence for things filled out the questionnaire. These people were students, employees, business professionals, homemakers and government employees with educational backgrounds and income levels. This mix of people helped make the study more representative of groups.

The questionnaire was checked to make sure it was reliable. It was found to be consistent. The data was analyzed using Microsoft Excel and different statistical methods like statistics and correlation. This study was conducted at things like how aware people of AI financial tools are and how they use this for budgeting and expenses and how they make decisions about saving and investing with AI. The study considered Artificial Intelligence adoption and its impact on financial management. Artificial Intelligence was a part of the study and it was examined in relation, to personal financial management.

VI. Results and Discussions

The study examined the influence of Artificial Intelligence on personal financial management using three statistical techniques: Pearson Correlation, Multiple Linear Regression, and One-Way ANOVA.

The Pearson Correlation analysis revealed a positive correlation ($r = 0.202$) between awareness and adoption of AI-powered financial management tools and personal financial management. Although the relationship was weak, the positive coefficient indicates that individuals with higher awareness and greater adoption of AI applications tend to demonstrate better personal financial management practices. This finding suggests that increasing awareness through financial literacy initiatives may contribute to improved financial behavior among users.

The impact of AI on savings and investment decision-making was further examined using One-Way ANOVA across different age groups. The analysis produced a p-value of 0.107, which is greater than the significance level of 0.05. Therefore, the null hypothesis was accepted, indicating that there is no statistically significant difference among age groups regarding perceptions of AI-assisted savings and investment decision-making. This finding suggests that users across different age categories generally perceive AI-powered financial applications in a similar manner. To examine the influence of AI on budgeting and expense management, Multiple Linear Regression analysis was performed. The regression model produced an R^2 value of 0.190, indicating that approximately 19% of the variation in budgeting and expense management is explained by AI adoption. The regression coefficient ($\beta = 0.398$) was positive, demonstrating that increased utilization of AI-powered financial applications positively influences budgeting practices. Furthermore, the regression model was statistically significant (F = 28.085, p < 0.001), confirming that Artificial Intelligence significantly contributes to effective budgeting and expense management. These findings indicate that AI applications help users monitor expenditures, prepare budgets, receive financial alerts, and manage spending more efficiently.

Overall, the statistical findings indicate that Artificial Intelligence positively contributes to personal financial management by improving budgeting, expense monitoring, savings planning, and financial decision-making. Although awareness and adoption show only a moderate relationship with financial management, AI applications significantly support financial planning and decision-making processes irrespective of users' age.

These findings are consistent with previous research by Xie (2019), who reported that AI enhances financial efficiency through automation and intelligent analytics. Likewise, Świecka et al. (2020) concluded that awareness and trust significantly influence AI adoption in personal finance. The present study also supports Qi (2025), who observed that AI-powered financial applications improve budgeting, savings behaviour, and investment planning through personalized financial recommendations.

VII. Conclusion

Based on the findings, the following conclusions are drawn:

- Artificial Intelligence has become an effective tool for improving financial management of individual users.
- AI significantly enhances budgeting and expense management.
- Users generally perceive AI powered financial applications as useful, easy and reliable.

- Age does not significantly influence perceptions of AI-assisted savings and investment decisions.
- Trust, transparency, and data security remain important factors.
- AI has the potential to transform personal financial planning by providing personalized financial guidance for informed decision making.

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