DMPedia Lecture Notes in Computer Science & Engineering
Volume 1, Issue 2, pp.489-497 2026

FinAI: Bridging the Gap Between Financial Awareness and Practical Budgeting Through Artificial Intelligence

Nikhil v Jain[1], Romil N Shah[2], Pratiek Vyas[3], Sara Mishra[4], Nandini Mittal[5], Neha Singh[6]

[1,4,6] School of Computer Science & IT, JAIN (Deemed-to-be University), Bengaluru, Karnataka, India

[2,3,5]School of Commerce, JAIN (Deemed-to-be University), Bengaluru, Karnataka, India

juug24bcait44187@jainuniversity.ac.in, juug24bcait23816@ jainuiversity.ac.in, juug24bcomh15207@jainuniversity.ac.in, juugi202412095@jainuniversity.ac.in, juug24bcomh33312@jainuniversity.ac.in, neha.singh@jainuniversity.ac.in

ABSTRACT

Let's be honest: being a college student usually means dealing with some pretty messy money situations. We're all trying to watch our spending and stick to a budget, but those last-minute splurges always seem to find us. This paper dives into those everyday struggles and suggests FinAI as a simple solution. The idea is to use AI and machine learning to automatically log expenses and give us financial tips that actually make sense for our lives. Basically, if we pair basic money smarts with this kind of tech, we can stop stressing about our bank accounts and start making choices that set us up for the future.

1. INTRODUCTION

Even though we live in a world full of apps, managing money is still a massive headache for most college students. Everything is getting more expensive, cash is harder to keep track of, and let's face it, nobody is teaching us how to budget in our actual classes. This leads to shaky budgets and a lot of "why did I buy that?" moments. In this paper, we examine how AI and machine learning can step in to help, specifically through FinAI. It's built to handle the boring stuff, like logging expenses and breaking down where your money went so that you can get advice tailored just for you. We're exploring how our current habits might change if we actually had tools that helped us stay disciplined and financially healthy.

2. REVIEW OF LITERATURE

- Trinh and Pham (2025) found that younger people actually want to use finance apps for their daily costs, but only if they're simple, feel personal, and are popular among friends. We don't want "expert" software; we want something that feels made for us.
- The AstroWealth app (2024) is a good example of where things are failing; it misses the mark on solid reporting and oversight, which shows there's a real demand for tools that give us better data and deeper breakdowns.
- Jeevitha and Kanya Priya (2019) pointed out a classic student move: we talk a big game about saving, but we end up spending most of our cash on things. like Uber rides and school supplies, leaving whatever is left in basic bank accounts.
- Kumar and Darshini Sundra (2022) highlighted that what our parents earn and the pressure we feel from our friends sway our spending way more than anything we read in a textbook. Knowledge alone isn't enough to change habits.
- L. Bhavani and Vipanchi (2024) found that many of us rely on family for cash, struggle to stick to a budget, and buy things on a whim, yet, surprisingly, a lot of students are looking for side hustles to make extra money.

Proceedings of ICICCS-2026 (Poster Papers), DMPedia Lecture Notes in Computer Science & Engineering.
ISBN: 978-81-993813-1-5

- Agarwal and the team (2024) argued that AI can actually help us make better choices by giving us personalised insights and keeping our data safe while we build better habits.
- Falahati and Laily Hj Paim (2011) noticed slight differences in how guys and girls handle money, suggesting that financial training needs to be more targeted to be effective.
- Snow, Stephen, and Vyas (2015) warned that most budgeting apps fail because they don't fit into how we actually live. Their advice? Keep it basic and make it fun.
- A 2024 survey from Cagayan found that while AI definitely helps us stay on top of our budgets, it also sparks some big questions about privacy and whether we're becoming too dependent on tech.
- Finally, Nawal and Kasim (2017) saw that while students have "okay" saving habits, they almost never invest their money, mostly because of how they were raised or what they saw at home.

3. RESEARCH GAP

Most of the research out there focuses on old-school ways of looking at money and literacy, totally ignoring how tech-savvy we are now. There isn't much data on whether AI helpers actually make a difference in our daily choices, especially in high-tech hubs like Bangalore. We don't really know if students here are even ready to trust an AI with their money. This study examines the usefulness and relevance of AI-led money management for college students in the Bangalore context.

4. RESEARCH PROBLEM

Students are hitting a wall when it comes to saving and budgeting because of limited funds and a lack of a real plan. We might understand the concept of a budget, but sticking to it without help is another story. No one has really figured out if we're ready to let an app like FinAI take the wheel. This research probes our actual money moves and whether we're open to using AI to get a grip on our finances finally.

5. RESEARCH OBJECTIVES

- Break down how students actually spend their money and handle their budgets.
- Look at the real hurdles we face when trying to save.
- Figure out what tools students are using right now (and if they actually like them).
- Decide if AI is a "must-have" or just a "nice-to-have" for personal finance.
- See whether students actually trust AI as a reliable partner in managing their money.

6. SCOPE OF THE STUDY

Our study seeks to understand whether students are willing to use AI-based tools like FinAI to manage their money more effectively, rather than only learning about financial literacy in theory. We looked at how technologies such as Artificial Intelligence and Machine Learning can simplify expense tracking and provide more practical budgeting suggestions. The study mainly focuses on college students in Bangalore. We examined their income sources, common spending areas, financial challenges, and their views on using technology to manage money. Since this is a conceptual study, we did not build or test a real application. Instead, we aimed to show why AI-based financial tools may be useful and how they could help students develop better, more responsible money-management habits.

7. METHODOLOGICAL APPROACH

- **FinAI – A Conceptual AI-Powered Personal Finance Assistant:** FinAI is a conceptual idea that explains how technology can help students build better saving habits, control overspending, and improve their overall financial awareness. In this study, we also examined students' awareness of such AI-based tools and their readiness to use them. The FinAI concept focuses on features like expense analysis, automatic categorisation, and personalised budgeting suggestions to make personal finance management easier for college students.

- **Methodological Approach**: For this study, we used a survey method that included both quantitative and qualitative questions to understand better students' financial behaviour and their openness toward AI-powered finance tools.

- **Sample Size and Area**: The Research survey was done among college students in Bangalore, which is a tech city known for its strong technological environment. A total of 71 responses were collected.

- **Data Collection Tool**: The Data was gathered using a structured questionnaire through Google Forms, covering income sources, spending habits, budgeting methods, awareness of AI tools, and willingness to use FinAI-like systems.

- **Data Analysis**: The responses were analysed using descriptive statistics and basic analysis methods to identify financial trends, budgeting practices, and how students respond to AI-driven solutions.

- **Scope of the FinAI Concept:** he conceptual model includes automatic expense categorisation, personalised insights, overspending alerts, budget optimisation, and AI-based expense predictions, helping assess students' readiness to adopt AI in personal finance.

8. FACTORS IMPACTING SPENDING ACTIONS INCLUDE:

Based on survey analysis, college students' spending and budgeting habits are influenced by personal, social, and technological factors.

- **Income Availability**
  Most students rely on parental allowances (83%) and pocket money, which limits their spending capacity. Students with lower incomes often struggle to budget and run out of money before the end of the month.
- **Cost of Living**
  Due to High living expenses in Bangalore, such as accommodation, food, and transport, a large share of students' budgets is spent on these essentials, causing financial stress.
- **Expense Tracking and Budget Planning**
  Many students do not plan their expenses, and tracking is often irregular or manual, leading to poor budgeting and frequent cash shortages. This shows the need for automated tools.
- **Financial Literacy and Awareness**
  Students understand the importance of budgeting but lack consistent knowledge and discipline, often forgetting to record expenses.
- **Technological Awareness and AI Openness**
  A majority (69%) are interested in AI-based finance apps, indicating strong potential for digital tools to improve budgeting, savings, and financial discipline.

9. INTERPRETATION

This study shows that most college students in Bangalore rely on parental allowances and struggle to manage expenses, often leading to impulsive spending and mid-month shortages. Although they understand the importance of budgeting, their expense-tracking methods are inconsistent and ineffective. We found that most students expressed interest in AI-powered tools to automate tracking and provide personalised budgeting support. This shows that conceptual models like **FinAI** can bridge the gap between awareness and practice, improving financial discipline and long-term well-being.

10. FINDINGS

- **Financial Awareness & Budgeting**: Students know budgeting is important, but lack planning and discipline, which leads to running out of money before the month's end.
- **Income & Dependence**: Most of the college students depend on parental allowances, which shows low financial independence among students and a desire for extra income.
- **Expense Tracking**: Tracking methods are irregular and not effective, mainly because students forget and exert effort, indicating a need for automation.
- **Spending Patterns**: Due to Essential and overspending. It leads to frequent financial shortages.
- **AI Tool Awareness**: Many students are interested in AI finance apps, especially for automatic tracking and budget alerts.
- **Role of AI:** Students believe AI can improve discipline through smart insights and real-time monitoring.
- **Overall**: Students aren't that good at structured financial management, but show a strong willingness for AI-based solutions like FinAI.

11. SUGGESTIONS

- **Adding AI in financial education: Colleges should add AI-based** financial literacy programs and subjects to show how tools like FinAI can support budgeting, tracking, and saving habits.
- **Development of AI Financial Tools**: Future work should develop AI-powered apps that provide personalised insights, spending alerts, and automated budgeting support.
- **Encouraging Financial Independence**
  Institutions should promote part-time work and internships, combined with AI tools, to help students manage their income responsibly.
- **Comparative & Long-Term Research**: Further studies across cities can analyse and research financial behaviour differences and the long-term impact of AI tool adoption.
- **Tech–Finance Collaboration**: Partnerships between fintech companies, banks, and colleges can help make apps and tools that help students financially

12. FUTURE SCOPE OF THE STUDY

- **Practical AI Implementation**. In the future, building a working prototype of FinAI could enable its development and testing to assess its effectiveness and user-friendliness in real-world situations.

- **Comparative Studies.** It would also be useful to compare students from different cities, socioeconomic backgrounds, and College levels to understand how financial behaviour and willingness to use AI tools vary across groups.

- **Long-Term Impact** Another important area is analysing whether AI finance tools really improve students' financial stability and responsibility even after they graduate.

- **Curriculum Integration** Colleges could consider adding AI-based financial literacy tools into their curriculum to make financial education more practical and engaging for students.

- **Fintech–Academic Collaboration** Collaboration between fintech companies and educational institutions may help in designing simple, student-friendly AI finance tools that are easier to use and more practical.

13. LIMITATIONS

The study has some potential limitations that should be noted. The sample size may not fully represent all college students in Bangalore, limiting generalisation. Since we collected data only from college students in Bangalore, our findings may not generalise to students in other cities or regions. The research is conceptual and does not test a real AI tool, so practical effectiveness cannot be measured. Additionally, because students reported their own spending habits, they might have given answers that make them look more responsible than they actually are

14. DATA

Table 1. The Survey Data

Sl. No	Question	Yes	No
1	Do you plan your monthly expenses?	34	37
2	Do you currently use any method to track your expenses?	25	46
3	Does the spending plan?	30	41
4	Have you heard about AI-based personal finance tools?	29	42
5	Would you be interested in using an app that automatically tracks your expenses and offers AI- driven budgeting suggestions?	66	5
6	Do you think AI can help students become more financially disciplined?	64	6
7	Are you able to make savings?	35	36

Key Findings from Survey Data

- About 48% of students plan monthly expenses, while 52% do not, which shows inconsistent financial planning. As per Figure 1 and Table 1
- 35% track their daily expenses, which shows weak financial management habits.
- 42% people's spending plans work, while the rest struggle to plan effectively due to financial illiteracy and irrational spending.
- 41% are aware of AI-based tools, which still shows low awareness of digital financial solutions.
- More than 90% would use an AI budgeting tool and believe that it can improve financial habits.
- Saving habits are almost half of each other, which shows a struggle in building saving habits.

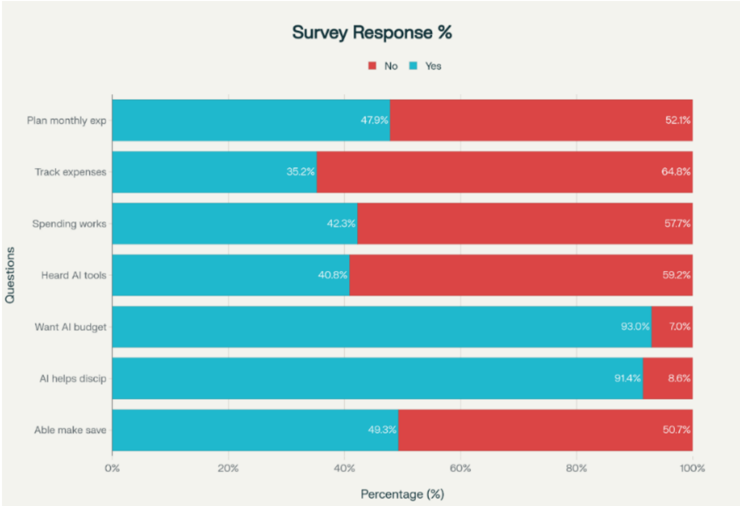

Fig 1. Analysis of the data

15. IMPLICATIONS

1. Students lack consistent training and budgeting skills, which shows gaps between financial knowledge and behaviour.
2. People are highly interested in AI finance tools, but awareness and their use are low, which shows a gap between intention and actions.
3. Financial literacy, education and promotion of these financial digital tools will help students improve financial habits.

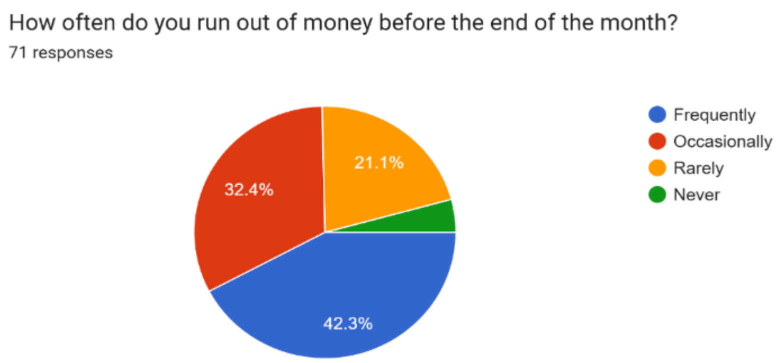

Fig 2. Response for Money Running out before the month's end

Of the 71 people who responded, 42.3% frequently run out of money before the month's end, 32.4% experience it every once in a while, 21.1% rarely, and very few never face shortages. This shows that many participants experience recurring financial setbacks, indicating financial instability within the group. The findings indicate the need for financial education and support to improve money management and savings, as shown in Fig. 2.

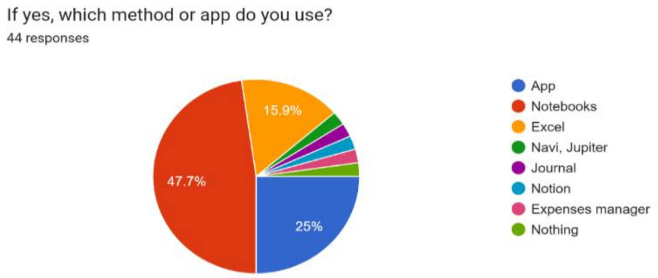

Fig 3. Response for the Method or App used by Students

Among 44 respondents, 47.7% use notebooks to track their finances, 25% use apps, 15.9% use Excel, and only some use other tools or no method at all. This shows a clear choice for traditional methods over digital financial tools. People also treat digital financial tools like an option. The findings help identify users' habits and provide better recommendations for daily expense management, as per Fig. 3.

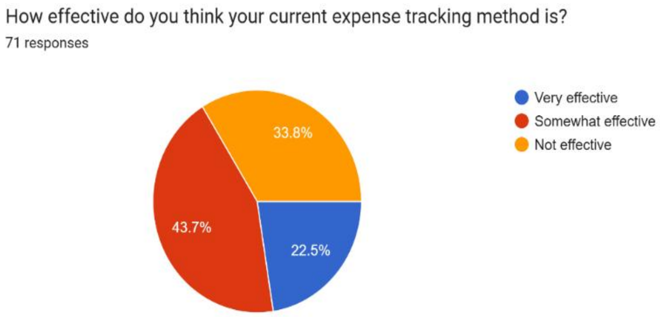

Fig 4. Response to the Effectiveness of the Current Expense Tracking Method

Of the 71 respondents, 22.5% consider their expense-tracking method very effective, 43.7% somewhat effective, and 33.8% not effective, indicating mixed confidence in their current practices. These results suggest that many participants could benefit from improved financial tools and better financial education to manage money more effectively, as shown in Fig. 4.

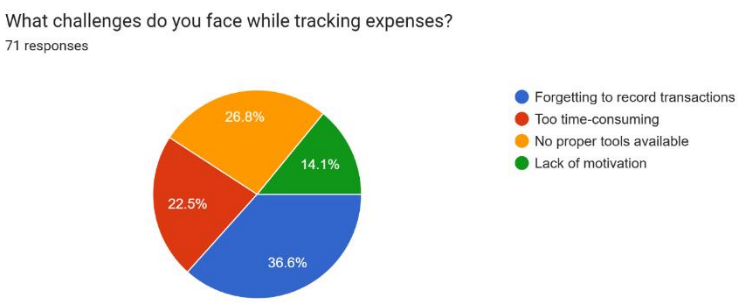

Fig 5. Response for Money Running out before the month's end

Among the 71 respondents, 36.6% of them forget to record transactions, 26.8% find tracking time-consuming, 22.5% lack proper tools, and 14.1% struggle with motivation. These results reveal common barriers that hinder consistent expense tracking. The findings suggest the need for simpler tools, reminders, and motivational support to improve money management habits, as shown in Fig. 5.

CONCLUSION

The study looked at the financial behaviour and budgeting habits of college students in Bangalore. We found that students understand the importance of budgeting but engage in inconsistent budgeting and saving due to limited income, poor tracking, and a lack of structured financial education. Despite these challenges, we found that students are strongly willing to adopt AI-powered financial tools. The FinAI concept we proposed focuses on automatic tracking, spending analysis, and custom budgeting suggestions to help students. Overall, combining financial literacy with AI-driven tools can help students become more disciplined, informed, and financially independent. This would make a drastic change in the youth.

REFERENCES

1. Agarwal, V., Ray, R., & Varghese, N. (2024). *An AI-powered personal finance assistant: Enhancing financial literacy and management.* FOSS-CIL T24.
2. Chattoe, E., & Gilbert, N. (1999). Talking about budgets: Time and uncertainty in household decision making. *Sociology, 33*(1), 85–103.
3. Cude, B., Lawrence, F., Lyons, A., Metzger, K., LeJeune, E., Marks, L., & Machtmes, K. (2006). College students and financial literacy: What they know and what we need to learn. *Proceedings of the Eastern Family Economics and Resource Management Association, 102*(9), 106–109.
4. Falahati, L., & Paim, L. H. (2011). Gender differences in financial literacy among college students. *Journal of American Science, 7*(6), 1180–1183.
5. Garugu, S. S., Belide, G., Bandari, R., & Bejjenki, K. (2025). *Spend Analyser AI: A comprehensive expense tracker with predictive modelling for financial management.*
6. Guyer, J. I. (1980). *Household budgets and women's incomes.*
7. Jasmin, P. (2024). AstroWealth: Personal finance management web application. *Applied Information Technology and Computer Science, 5*(2), 1180–1199.
8. Jeevitha, P., & Priya, R. K. (2019). A study on the saving and spending habits of college students with reference to Coimbatore city. *International Journal of Research and Analytical Reviews, 6*(1), 463–466.
9. Kumar, D. S., Sudin, H., Othman, J., & Salehuddin, S. (2022). The influence of spending behaviour among university students in Malaysia. *Asian Journal of Accounting and Finance, 4*(3), 30–43.
10. Masrunik, E., Suprianto, S., Indariyanti, H., & Wahyudi, A. (2024). Household financial planning for achieving a balanced budget. *JASF: Journal of Accounting and Strategic Finance, 7*(1), 82–95.
11. Nagadeepa, C., & Pushpa, A. (2015). Apparel attributes: A reinforcer on impulse buying behaviour of college students in Bangalore city. *Adarsh Journal of Management Research, 8*(1), 55–63.
12. Nawal, K., Sakinah, N., Nasir, A., & Abidin, A. Z. (2017). Transformation in university students' financial planning: Environmental influences on purchasing behaviour. *International Business Management Conference (IBMC 2017).*
13. Patel, S., & Mehra, T. (2022). Digital wallet usage and financial discipline among students. *International Journal of E-Finance, 4*(2), 55–65.
14. Ramalingam, G. K. (2025). *AI-driven financial advice: Its impact on household financial decision-making.* SSRN.

15. Saini, M. S., Suri, P., Panwar, D., Sharma, M., Bagga, S., & Ahmad, V. (2025). AI-powered personal finance management applications. In the *World Skills Conference on Universal Data Analytics and Sciences (WorldSUAS).* IEEE.
16. Snow, S., & Vyas, D. (2015). Fixing the alignment: An exploration of budgeting practices in the home. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 2271–2276).
17. Sruthi, T. S., Bhavani, L., & Vipanchi, V. (2024). Understanding spending behaviour and money management among college students in Bangalore: An empirical analysis.
18. Talasila, S. D. (2024). AI-driven personal finance management: Revolutionising budgeting and financial planning. *International Research Journal of Engineering and Technology, 11*(7), 397–407.
19. Trinh, P. D. T. K., & Pham, P. Q. A. (2025). The trend of using personal finance management apps among young people.