Contribution of AI in Budgeting and Expense Tracking

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ABSTRACT

The progress of Artificial Intelligence (AI) and usage of digital financial tools has significantly transformed personal budgeting and expense tracking. With the rising increase in the adoption of Online Financial Tools like net banking, digital wallets, and UPI-based platforms like Google Pay (GPay), PhonePe, and Paytm, individuals now are user friendly and have greater access to real-time financial data. The growing accessibility of digital payment systems has boosted user adaptability to AI-driven financial platforms, enabling seamless expense tracking, cash flow management, and goal setting. A survey was conducted among the general public to assess the method of budgeting and expenses tracking, adoption of AI based applications, usage patterns and the level of confidence from AI generated insights. The study is to observe the methods used by public for budgeting & expenses tracking to analyse the adoption of AI based applications and usage patterns.

Keywords: Artificial Intelligence (AI), Budgeting Automation, Expense Tracking

Introduction

In today's rapidly changing digital environment, AI and Financial Technology have redefined personal financial management. The growing acceptance of the public towards usage of online financial tools such as netbanking, UPI apps and digital wallets reflects a significant change in the behavioural pattern. AI's ability to analyze spending patterns, detect trends, and address behavioral biases is crucial in improving financial decision-making and investment planning. These technologies not only simplify financial management but also encourage better financial discipline and long-term wealth optimization. This study aims to assess the method of budgeting and the level of confidence from AI generated insights. A survey was conducted among the general public to evaluate their acceptance on financial apps and confidence in AI generated financial insights.

Objectives
- To examine the methods used by respondents for tracking expenses and budgeting
- To analyze the adoption and usage patterns of AI-based applications

Research Methodology
Data Source Used: Primary Data

Sampling Method: Simple Random Sampling
Sample Size: 70 respondents were used as sample size for investigation. A structured questionnaire was used to collect data on the subject matter.

Review of Literature

Agarwal & Chua (2021) highlights that AI-powered financial tools improves financial literacy by automating expense classification, offering analytics, and improvising financial planning accuracy. These applications analyze spending behavior and cash flow patterns.

Ramesh & Gupta (2020) examined how platforms like Google Pay, PhonePe, and Paytm have supported in real-time financial platform, leading to improved digital payment adoption and evolvement of cashless economies**.** The study found that AI-driven financial platforms provide automated financial insights to manage money.

Smith & Brown (2019) emphasizes that ease of use, real-time financial tracking, and personalized recommendations are important factors towards the adoption of AI-based budgeting tools. It was analyzed that the public who use AI-powered budgeting apps experience greater financial discipline.

Digital Defynd (2025) outlines evolving trends in AI-driven financial management, including enhanced automation, predictive budgeting, and AI-powered financial wellness coaching**.** The study also highlights the role of machine learning algorithms in fraud detection and financial security**.**

Data Analysis and Interpretation

The study aims to analyse the role of AI in automating budgeting and expense tracking systems. It will also facilitate to understand the impact of AI in enhancing Financial Literacy and Awareness.

Demographic Details of Respondents

The below table shows the details of the respondents

Table 1: Demographic Details of Respondents

S. No	Particulars	Category	Count and Percentage
1	Age	Below 18 years	02 (3 %)
		18 years - 25 years	37 (53 %)
		26 years – 35 years	19 (27 %)
		36 years – 45 years	08 (11 %)
		Above 45 years	04 (6 %)
2	Gender	Male	13 (19 %)
		Female	57 (81 %)
3	Occupation	Student	32 (46 %)
		Salaried Employee	23 (33 %)
		Business Owner	05 (7 %)
		Homemaker	07 (10 %)
		Retired	03 (04 %)

Source of Data: Primary Data

Expenses Tracking and Budgeting

The below table represents the respondents engaged in expenses tracking & budgeting

Table 2: Respondents engaged in expenses tracking & budgeting

Category	No. of respondents	Percentage of Respondents (%)
Yes	48	69 %
No	08	11 %
Maybe	14	20 %
Total	70	100 %

Source of Data: Primary Data

Methods used for Expenses Tracking & Budgeting

The below table depicts the methods used by the respondents for expenses tracking & budgeting

Table 3: Methods used for Expenses Tracking & Budgeting

Category	No. of respondents	Percentage of Respondents (%)
Manually	42	68 %
Applications	20	32 %
Total	62	100 %

Source of Data: Primary Data

Frequency of Usage of Applications for Expenses Tracking & Budgeting

The below table shows the frequency of Usage of Applications for Expenses Tracking & Budgeting

Table 4: Frequency of Usage of Applications for Expenses Tracking & Budgeting

Category	No. of respondents	Percentage of Respondents (%)
Daily	3	15 %
Weekly	3	15 %
Monthly	5	25 %
Rarely	9	45 %
Total	20	100 %

Source of Data: Primary Data

Confidence Levels in AI-Generated Financial Insights

Table 5: Confidence Levels in AI-Generated Financial Insights

Category	No. of respondents	Percentage of Respondents (%)
Very Confident	5	25 %
Somewhat Confident	9	45 %
Neutral	6	30 %
Not Confident	0	0 %
Total	20	100 %

Source of Data: Primary Data

Findings of the Study

- It is analysed that 68% of respondents prefer budgeting and tracking of expenses manually while only 32% of the respondents use AI based budgeting methods.
- The study shows that 15% of the respondents use AI based applications daily while 45% of the respondents use the AI based applications rarely.
- It is evaluated that 45% of the respondents are somewhat confident with the Insights generated by AI.

Conclusion

The study focuses the evolving role of Artificial Intelligence in personal budgeting and expense tracking, showing both opportunities and challenges in adoption. While AI-powered financial tools offer automation, predictive analytics, and enhanced financial literacy, a significant portion of users still prefer tracking the expenses manually. The findings suggest that trust and confidence in AI-generated insights play a fundamental role in determining adoption rates, with only 32% of respondents actively using AI-based budgeting tools and 45% expressing only partial confidence in their insights.

Despite all these challenges, AI-driven financial applications have the capability to improve financial decision-making, encourage disciplined spending, and optimize investment planning. As digital financial literacy grows and AI technologies advance, there is an opportunity for greater integration of AI into mainstream financial management. Future research could explore more strategies to enhance user trust, improve AI transparency, and assess the long-term impact of AI on financial well-being.

Reference

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