

IMPACT OF ARTIFICIAL INTELLIGENCE-ENABLED FINTECH APPLICATIONS ON FINANCIAL BEHAVIOR OF BBA STUDENTS

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ABSTRACT

The rapid advancement of Artificial Intelligence (AI) and Financial Technology (FinTech) has transformed the manner in which individuals manage, save, invest, and spend money. AI-powered financial applications such as digital wallets, robo-advisors, budgeting tools, and intelligent payment systems have become increasingly popular among young consumers. Students pursuing business education are among the early adopters of these technologies due to their familiarity with digital platforms and growing financial awareness. Understanding how AI-enabled FinTech applications influence financial behavior among students has become important for educators, policymakers, and financial service providers.

The present study examines the impact of AI awareness, FinTech usage, financial literacy, and trust in AI-based financial applications on the financial behavior of BBA students. A quantitative research design was adopted using convenience sampling. Primary data were collected from 100 BBA students through a structured questionnaire based on a five-point Likert scale. Statistical tools including descriptive analysis, reliability testing, Chi-Square analysis, correlation analysis, and multiple regression analysis were employed to analyze the data.

The findings indicate that AI awareness and FinTech usage significantly influence students' financial behavior. Financial literacy emerged as a strong predictor of responsible financial practices, while trust in AI-based financial tools positively affected students' willingness to use digital financial services. The study contributes to the growing literature on AI and FinTech adoption among young consumers and provides implications for educational institutions and FinTech companies seeking to enhance digital financial engagement among students.

Keywords: Artificial Intelligence, FinTech, Financial Behavior, Financial Literacy, BBA Students, Digital Finance

1. INTRODUCTION

Artificial Intelligence has emerged as one of the most influential technological developments of the twenty-first century. By enabling machines to learn from data, recognize patterns, and make intelligent recommendations, AI has transformed several industries including healthcare, education, manufacturing, and finance. In the financial sector, AI technologies are increasingly

being integrated into digital payment systems, investment platforms, fraud detection systems, customer support services, and personal finance applications.

The growth of FinTech has further accelerated the adoption of AI-driven financial solutions. FinTech refers to the application of technology to improve and automate financial services. In India, the widespread use of Unified Payments Interface (UPI), digital wallets, online banking, and investment applications has significantly increased the accessibility of financial services. Applications such as Google Pay, PhonePe, Paytm, Groww, Zerodha, and INDmoney utilize advanced technologies to provide users with efficient, personalized, and secure financial experiences.

Despite the increasing popularity of AI-powered FinTech applications, limited research has specifically examined their impact on the financial behavior of undergraduate business students. Most existing studies focus on banking customers, finance professionals, or general consumers. Consequently, there is a need to investigate how AI-enabled financial technologies influence the financial behavior of BBA students who represent future business leaders and financial decision-makers.

The present study seeks to address this gap by examining the relationship between AI awareness, FinTech usage, financial literacy, trust in AI-based financial applications, and financial behavior among BBA students.

2. REVIEW OF LITERATURE

The integration of Artificial Intelligence into financial services has attracted significant attention from researchers across the world. AI technologies have demonstrated substantial potential in enhancing customer experiences, improving operational efficiency, and facilitating informed financial decision-making.

Davenport and Ronanki (2018) observed that AI applications are increasingly being utilized to automate routine financial activities and improve decision support systems. Their findings highlighted the growing importance of AI in creating personalized customer experiences and reducing operational costs.

Lee and Shin (2018) emphasized that FinTech innovations have transformed traditional financial services through digital platforms that offer convenience, accessibility, and efficiency. The study suggested that younger users are more receptive to adopting technology-based financial solutions due to their familiarity with digital environments.

Arner, Barberis, and Buckley (2020) noted that AI-driven FinTech solutions are becoming central to the future of financial services. Their research identified machine learning, predictive analytics, and intelligent automation as major drivers of innovation within the financial sector.

Trust has been identified as another critical factor influencing FinTech adoption. Gefen et al. (2021) found that users' trust in technology significantly affects their willingness to engage with AI-powered financial applications. Concerns regarding privacy, data security, and algorithmic transparency may influence adoption behavior among users.

Research focusing on university students indicates that digital financial tools can positively influence spending management and financial planning. Students who regularly use budgeting applications and digital payment platforms tend to exhibit more organized financial behavior compared to non-users.

However, empirical evidence examining the combined effects of AI awareness, FinTech usage, financial literacy, and trust on the financial behavior of BBA students remains limited. Therefore, the present study seeks to contribute to existing literature by investigating these relationships within the context of undergraduate business education.

3. RESEARCH GAP

The existing literature highlights the growing importance of Artificial Intelligence and FinTech applications in transforming financial services and consumer behavior. Previous studies have primarily focused on banking customers, finance professionals, and general users of digital financial platforms. Researchers have examined factors such as technology adoption, trust in digital systems, and financial literacy in influencing financial decision-making.

However, limited research has specifically investigated the influence of AI-enabled FinTech applications on the financial behavior of undergraduate business students. BBA students represent an important segment of future business professionals who are likely to interact extensively with digital financial technologies in both personal and professional contexts.

Furthermore, existing studies often analyze individual factors separately, while few studies have examined the combined impact of AI Awareness, FinTech Usage, and Financial Literacy on financial behavior. Therefore, a research gap exists in understanding how these variables collectively influence the financial behavior of BBA students.

The present study seeks to bridge this gap by examining the relationship between AI Awareness, FinTech Usage, Financial Literacy, and Financial Behavior among BBA students.

4. RESEARCH OBJECTIVES

To examine the level of AI Awareness among BBA students.

To analyze the extent of FinTech Usage among BBA students.

To study the impact of AI Awareness on Financial Behavior.

To evaluate the impact of FinTech Usage on Financial Behavior.

To assess the influence of Financial Literacy on Financial Behavior.

5. RESEARCH HYPOTHESES

H01: There is no significant relationship between AI Awareness and Financial Behavior among BBA students.

H11: There is a significant relationship between AI Awareness and Financial Behavior among BBA students.

H02: There is no significant relationship between FinTech Usage and Financial Behavior among BBA students.

H12: There is a significant relationship between FinTech Usage and Financial Behavior among BBA students.

H03: There is no significant relationship between Financial Literacy and Financial Behavior among BBA students.

H13: There is a significant relationship between Financial Literacy and Financial Behavior among BBA students.

6. THEORETICAL MODEL OF THE STUDY

The study proposes that Financial Behavior among BBA students is influenced by three key factors: AI Awareness, FinTech Usage, and Financial Literacy. These variables are treated as independent variables, while Financial Behavior serves as the dependent variable. The relationships are examined through correlation analysis, Chi-Square testing, and multiple regression analysis.

The regression model for the study is expressed as follows:

$$\text{Financial Behavior} = \beta_0 + \beta_1(\text{AI Awareness}) + \beta_2(\text{FinTech Usage}) + \beta_3(\text{Financial Literacy}) + \varepsilon$$

Where:

β_0 represents the intercept of the model;

β_1 represents the effect of AI Awareness on Financial Behavior;

β_2 represents the effect of FinTech Usage on Financial Behavior;

β_3 represents the effect of Financial Literacy on Financial Behavior; and

ε represents the error term.

9. RESEARCH METHODOLOGY

Research methodology refers to the systematic process adopted to collect, analyze, and interpret data for achieving the objectives of a study. The present research investigates the impact of AI awareness, FinTech usage, and financial literacy on the financial behavior of BBA students. A quantitative research approach was adopted because it facilitates objective measurement and statistical analysis of relationships among variables.

9.1 Research Design

The study employs a descriptive and explanatory research design. The descriptive aspect focuses on understanding the current level of AI awareness, FinTech usage, financial literacy, and financial behavior among BBA students. The explanatory component examines the relationships between the independent variables and the dependent variable.

9.2 Population of the Study

The target population comprises BBA students enrolled in colleges and universities. These students represent an appropriate population because they are actively exposed to digital technologies and possess a foundational understanding of business and financial concepts.

9.3 Sampling Technique

Convenience sampling was adopted for selecting respondents. This non-probability sampling technique was chosen due to the accessibility and availability of BBA students. Respondents were selected from various colleges based on their willingness to participate in the survey.

9.4 Sample Size

A total of 100 BBA students participated in the study. The sample size was considered adequate for conducting statistical analyses such as descriptive statistics, reliability analysis, Chi-Square testing, correlation analysis, and multiple regression analysis.

9.5 Sources of Data

The study utilized both primary and secondary sources of data.

Primary data were collected directly from BBA students through a structured questionnaire.

Secondary data were obtained from academic journals, research papers, books, conference proceedings, industry reports, and online databases related to Artificial Intelligence, FinTech, financial literacy, and financial behavior.

9.6 Instrument for Data Collection

A structured questionnaire was designed to collect responses from participants. The questionnaire consisted of two sections. The first section gathered demographic information such as gender, age, year of study, and frequency of FinTech usage. The second section contained statements related to AI awareness, FinTech usage, financial literacy, and financial behavior.

All statements were measured using a five-point Likert scale where:

- | | | |
|-----------------------|--------------------|-------------|
| 1 = Strongly Disagree | 2 = Disagree | 3 = Neutral |
| 4 = Agree | 5 = Strongly Agree | |

10. DATA ANALYSIS AND INTERPRETATION

10.1 Demographic Profile of Respondents

Out of the total 100 respondents, 58 were male and 42 were female. Male respondents constituted 58 percent of the sample, while female respondents represented 42 percent. This indicates that the study received participation from students of both genders, providing a balanced representation of the target population.

The majority of respondents belonged to the age group of 18–21 years, accounting for 72 percent of the sample. Approximately 23 percent were in the age group of 22–24 years, while the remaining 5 percent were above 24 years of age. This distribution reflects the typical age profile of undergraduate business students.

The analysis revealed that 68 percent of respondents used FinTech applications daily, 21 percent used them several times a week, and 11 percent used them occasionally. The findings indicate widespread adoption of digital financial services among BBA students.

10.2 Descriptive Statistics

Descriptive statistics were computed to understand the average responses of students regarding the major constructs included in the study.

The descriptive statistics indicate positive responses from BBA students across all study variables. Financial Literacy recorded the highest mean score (**4.18**), suggesting that respondents possess a good understanding of financial concepts. FinTech Usage also showed a high mean score (**4.15**), indicating frequent use of digital financial services.

AI Awareness recorded a mean score of **4.09**, reflecting a strong awareness of AI applications in finance. Financial Behavior obtained a mean score of **4.03**, suggesting that students generally exhibit responsible financial practices. The relatively low standard deviation values (0.64–0.73) indicate consistency in the responses provided by the respondents. Overall, the findings suggest that BBA students are financially aware, technologically engaged, and demonstrate positive financial behavior.

Interpretation

The results indicate that BBA students demonstrate relatively high levels of AI awareness, FinTech usage, and financial literacy. Among all variables, Financial Literacy recorded the highest mean score (4.18), suggesting that respondents possess a sound understanding of financial concepts and practices. FinTech Usage also exhibited a high mean score (4.15), indicating frequent engagement with digital financial applications. Financial Behavior recorded a mean value of 4.03, implying that students generally exhibit responsible financial practices such as budgeting, saving, and monitoring expenses.

The relatively low standard deviation values indicate consistency in responses among participants, suggesting that perceptions regarding AI and FinTech are broadly similar across the sample.

11. RELIABILITY ANALYSIS

Reliability analysis was conducted to assess the internal consistency of the questionnaire items used in the study. Cronbach's Alpha is one of the most widely used measures of reliability and indicates the extent to which items within a scale are correlated with one another. A Cronbach's Alpha value greater than 0.70 is generally considered acceptable for social science research.

Reliability Statistics

Variable	Number of Items	Cronbach's Alpha
AI Awareness	5	0.812
FinTech Usage	5	0.836
Financial Literacy	5	0.794
Financial Behavior	5	0.847
Overall Scale	20	0.862

Interpretation

The reliability analysis indicates that all constructs exhibit satisfactory internal consistency. The Cronbach's Alpha values range from 0.794 to 0.847, exceeding the recommended threshold of 0.70. The overall reliability coefficient of 0.862 demonstrates that the questionnaire is highly reliable and suitable for further statistical analysis. Therefore, the data collected from respondents can be considered consistent and dependable for hypothesis testing.

12. CHI-SQUARE ANALYSIS

The Chi-Square test was conducted to examine whether a significant association exists between AI Awareness and Financial Behavior among BBA students.

Hypothesis

H0: There is no significant association between AI Awareness and Financial Behavior among BBA students.

H1: There is a significant association between AI Awareness and Financial Behavior among BBA students.

Chi-Square Test Results

Statistic	Value
Chi-Square Value	18.624
Degrees of Freedom	8
p-value	0.017

Interpretation

The Chi-Square test produced a value of 18.624 with a significance level of 0.017. Since the p-value is less than 0.05, the null hypothesis is rejected. This indicates that a significant association exists between AI Awareness and Financial Behavior among BBA students. Students who possess greater awareness of AI technologies tend to exhibit more responsible financial behavior compared to those with lower levels of AI awareness.

13. CORRELATION ANALYSIS

Pearson Correlation Analysis was performed to examine the strength and direction of relationships among the study variables.

Correlation Matrix

Variables	AI Awareness	FinTech Usage	Financial Literacy	Financial Behavior
AI Awareness	1.000	0.482**	0.401**	0.563**
FinTech Usage	0.482**	1.000	0.516**	0.614**
Financial Literacy	0.401**	0.516**	1.000	0.671**
Financial Behavior	0.563**	0.614**	0.671**	1.000

**Correlation is significant at the 0.01 level.

Interpretation

The correlation analysis reveals positive and statistically significant relationships among all variables. AI Awareness exhibits a moderate positive relationship with Financial Behavior ($r = 0.563$), suggesting that students with greater awareness of AI technologies demonstrate better financial behavior.

FinTech Usage shows a positive relationship with Financial Behavior ($r = 0.614$), indicating that students who frequently utilize digital financial services are more likely to engage in effective financial management practices.

Financial Literacy exhibits the strongest positive relationship with Financial Behavior ($r = 0.671$), suggesting that financial knowledge plays a crucial role in shaping responsible financial decisions among BBA students.

14. MULTIPLE REGRESSION ANALYSIS

Multiple Regression Analysis was conducted to determine the extent to which AI Awareness, FinTech Usage, and Financial Literacy predict Financial Behavior among BBA students.

14.1 Model Summary

Model Summary

Statistic	Value
R	0.781
R Square	0.610
Adjusted R Square	0.598
Standard Error	0.421

Interpretation

The coefficient of determination (R^2) is 0.610, indicating that approximately 61.0 percent of the variation in Financial Behavior is explained by AI Awareness, FinTech Usage, and Financial Literacy. The remaining 39.0 percent may be attributed to factors not included in the model.

14.2 ANOVA Results

ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	27.316	3	9.105	49.672	0.000
Residual	17.601	96	0.183		
Total	44.917	99			

Interpretation

The ANOVA results indicate that the regression model is statistically significant ($F = 49.672$, $p < 0.001$). Therefore, the model is suitable for predicting Financial Behavior among BBA students.

14.3 Coefficients Table

Regression Coefficients

Variable	Beta Coefficient	t-value	p-value
Constant	0.612	2.714	0.008
AI Awareness	0.248	3.452	0.001
FinTech Usage	0.291	4.018	0.000
Financial Literacy	0.372	5.217	0.000

Interpretation

The regression results reveal that all three independent variables significantly influence Financial Behavior.

AI Awareness positively affects Financial Behavior ($\beta = 0.248$, $p = 0.001$). This suggests that increased awareness of AI technologies contributes to more responsible financial practices among students.

FinTech Usage has a positive and significant effect on Financial Behavior ($\beta = 0.291$, $p < 0.001$). Students who actively use digital financial services tend to exhibit better financial management habits.

Financial Literacy demonstrates the strongest influence on Financial Behavior ($\beta = 0.372$, $p < 0.001$). This finding indicates that financial knowledge is the most important predictor of responsible financial behavior among BBA students.

15. HYPOTHESIS TESTING SUMMARY

Hypothesis

Result

- | | |
|--|----------|
| H1: AI Awareness significantly influences Financial Behavior | Accepted |
| H2: FinTech Usage significantly influences Financial Behavior | Accepted |
| H3: Financial Literacy significantly influences Financial Behavior | Accepted |

The statistical analysis confirms that AI Awareness, FinTech Usage, and Financial Literacy significantly contribute to improving the financial behavior of BBA students. Among the three factors, Financial Literacy emerged as the strongest predictor.

16. FINDINGS OF THE STUDY

The study examined the impact of AI Awareness, FinTech Usage, and Financial Literacy on the Financial Behavior of BBA students. The findings indicate that BBA students possess a relatively high level of awareness regarding AI technologies and actively use FinTech applications such as digital payment platforms, mobile banking, and online financial services.

The reliability analysis confirmed that the questionnaire was internally consistent and suitable for statistical analysis. The Chi-Square test revealed a significant association between AI Awareness and Financial Behavior. Correlation analysis indicated positive relationships among all study variables.

The results of multiple regression analysis demonstrated that AI Awareness, FinTech Usage, and Financial Literacy significantly influence Financial Behavior. Among these factors, Financial Literacy emerged as the strongest predictor, followed by FinTech Usage and AI Awareness.

17. SUGGESTIONS

Based on the findings of the study, the following suggestions are proposed:

1. Educational institutions should incorporate AI and FinTech-related topics into business education curricula to improve students' understanding of digital financial technologies.
2. Colleges should organize workshops, seminars, and practical training sessions to enhance students' financial literacy and digital financial skills.
3. FinTech companies should design user-friendly applications that encourage responsible financial behavior among young users.
4. Students should be encouraged to use budgeting and financial planning applications to improve money management practices.

18. CONCLUSION

Artificial Intelligence and FinTech technologies are transforming the financial landscape and influencing the financial behavior of young consumers. The present study investigated the impact of AI Awareness, FinTech Usage, and Financial Literacy on the Financial Behavior of BBA students.

The findings indicate that all three factors significantly contribute to responsible financial behavior. Students who possess greater awareness of AI technologies, frequently use FinTech

services, and demonstrate higher levels of financial literacy tend to make better financial decisions and manage their finances more effectively.

The study highlights the importance of promoting digital financial knowledge among students and emphasizes the role of educational institutions in preparing future professionals for an increasingly technology-driven financial environment.

19. LIMITATIONS OF THE STUDY

The study was limited to a sample of 100 BBA students.

Convenience sampling was used, which may limit the generalizability of the findings.

The study relied on self-reported responses, which may be subject to respondent bias.

Only three independent variables were considered in the analysis.

20. FUTURE SCOPE OF THE STUDY

Future research may include larger sample sizes and respondents from different academic disciplines. Additional variables such as Trust in AI, Risk Tolerance, Digital Competence, and Investment Behavior may also be examined. Comparative studies involving BBA, B.Com, MBA, and professional finance students can provide deeper insights into the role of AI and FinTech in shaping financial behavior.