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FINTECH ADOPTION AND SUSTAINABLE FINANCIAL PRACTICES AMONG INDIVIDUAL INVESTORS: AN EMPIRICAL STUDY

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Abstract
This study examines the relationship between FinTech adoption and sustainable financial practices among individual investors in Belagavi District, Karnataka, and assesses the influence of digital financial literacy, trust and security, and investment awareness. A descriptive and analytical design was adopted. Primary data were collected through a structured questionnaire from 394 respondents using purposive and convenience sampling during October 2025–September 2026. Data were analysed using percentage analysis, mean, standard deviation, Cronbach's alpha, Pearson's correlation and multiple regression. FinTech adoption records a mean score of 3.73, while sustainable financial practices record 3.62. UPI and digital payments are the most widely used services (92.1%), followed by mobile banking (82.5%). Cronbach's alpha values range from 0.882 to 0.891, indicating high internal consistency. Correlation analysis reveals positive and statistically significant relationships between sustainable financial practices and FinTech adoption ($r = 0.424$), digital financial literacy ($r = 0.444$), trust and security ($r = 0.217$), and investment awareness ($r = 0.274$), all at $p < 0.001$. The regression model is statistically significant ($F = 41.79$, $p < 0.001$) and explains 30.1% of the variation in sustainable financial practices ($R^2 = 0.301$). Digital financial literacy ($\beta = 0.312$), FinTech adoption ($\beta = 0.286$), and investment awareness ($\beta = 0.108$) are significant positive predictors, whereas trust and security are not statistically significant ($\beta = 0.051$, $p = 0.255$). The study concludes that digital financial literacy and FinTech adoption are important explanatory factors in sustainable financial practices. It highlights the need to strengthen financial education, investment awareness, cybersecurity and consumer protection to encourage informed, inclusive and responsible use of digital financial services. These results provide district-level evidence on investor behaviour.

Keywords: FinTech Adoption, Sustainable Financial Practices, Digital Financial Literacy, Trust and Security, Investment Awareness, Individual Investors.

1. INTRODUCTION

Financial technology (FinTech) has transformed the delivery and utilisation of financial services. The growth of smartphones, internet connectivity and digital infrastructure has changed how individuals make payments, access banking, obtain credit, save and invest. In India, the Unified Payments Interface (UPI), mobile banking, digital wallets, online investment platforms, robo-advisory and digital lending have improved transaction convenience and access to financial products. The Reserve Bank of India (RBI, 2024) recognises digitalisation's role in transforming the payment ecosystem and supporting financial inclusion. UPI accounted for approximately 81% of retail digital payment transactions by volume in 2024–25 (Ministry of Finance, 2026). Beyond convenience, FinTech offers opportunities to promote sustainable financial practices. In this study, these refer to the responsible, informed, inclusive and efficient management of financial resources and services. They encompass financial sustainability, financial inclusion, responsible investment decisions and paperless transactions. Financial sustainability involves managing income, savings, borrowing and investments for long-term well-being. Financial inclusion concerns access to affordable financial services. Responsible investment involves evaluating alternatives, understanding risks, diversifying portfolios and making informed decisions. Paperless transactions include electronic payments, digital statements and online documentation, reducing reliance on physical paperwork. Digital platforms facilitate these practices through convenient access to financial information and investment opportunities. However, adopting digital services does not automatically ensure responsible financial behaviour or sustainable outcomes. Effective FinTech utilisation depends on individuals' financial knowledge, awareness, confidence and decision-making abilities. Digital

financial literacy helps users understand financial products, operate platforms, evaluate investment alternatives and recognise risks. Bhatia (2024) highlights the relevance of financial literacy to the use of financial instruments and FinTech applications. Jha and Dangwal (2024) identify perceived risk, trust and performance expectations as factors influencing investment-related FinTech adoption among Indian retail investors. Trust and security are essential to the acceptance and continued use of digital financial services. Concerns about cyber fraud, unauthorised transactions, data privacy and misuse of personal information may discourage individuals from using digital platforms. The reliability, transparency and security of FinTech services influence users' confidence. The RBI (2024) identifies cybersecurity and consumer protection as important considerations in financial digitalisation. Adequate security awareness and confidence in service providers are therefore necessary for responsible FinTech use. Investment awareness may also influence sustainable financial practices. Digital investment platforms have simplified access to shares, mutual funds, bonds and other instruments. However, convenient access may expose investors to impulsive trading, speculation and excessive risk-taking. Investment awareness helps individuals understand financial products, assess risks, compare alternatives and maintain disciplined investment behaviour. Ansari (2023) highlights the relevance of financial literacy and institutional trust in understanding investment intentions among Indian investors. The sustainability implications of FinTech require consideration. Although digital transactions may reduce paper consumption, digital finance does not automatically ensure environmental sustainability. Data centres, communication networks and digital devices consume electricity and generate electronic waste. Environmental benefits therefore depend on energy efficiency, responsible technology use and appropriate e-waste management. Accordingly, this study focuses on financial responsibility, inclusion, transaction efficiency and reduced reliance on paper-based processes. Despite growing FinTech adoption, its relationship with sustainable financial practices requires further investigation among individual investors. Access to digital services does not necessarily mean that individuals possess the knowledge and confidence to use them responsibly. Digital financial literacy, trust and security perceptions, and investment awareness may influence whether technology adoption translates into sustainable financial behaviour. Against this background, the present study examines FinTech Adoption and Sustainable Financial Practices among Individual Investors in Belagavi District, Karnataka. It analyses the relationship between FinTech adoption and sustainable financial practices, while examining the roles of digital financial literacy, trust and security, and investment awareness. The study aims to understand how these factors relate to responsible financial management, informed investment decisions, financial inclusion and efficient use of digital services. Its findings may provide insights for investors, financial institutions, FinTech providers and policymakers seeking to promote informed, secure, inclusive and sustainable financial practices.

2. STATEMENT OF THE PROBLEM

The rapid growth of financial technology (FinTech) has transformed how individuals access and utilise financial services. Digital payments, mobile banking, internet banking, digital investment platforms and online lending have made financial transactions more convenient, accessible and efficient. In India, the increasing use of UPI and technology-based financial applications has encouraged individuals to shift towards digital financial services. However, adopting these services does not necessarily ensure sustainable financial behaviour. FinTech adoption refers to the use of digital platforms for payments, banking, savings, borrowing and investments. In contrast, sustainable financial practices involve responsible financial management, effective planning, informed investment decisions, appropriate risk assessment and efficient utilisation of financial resources. The development of such practices depends on individuals' financial knowledge, awareness and decision-making abilities.

Digital financial literacy is a major concern because individuals may use financial applications without adequately understanding financial products, investment risks, cybersecurity and data protection. Similarly, limited investment awareness may lead to impulsive decisions, inadequate diversification and unsuitable investment choices. These challenges can affect financial well-being and expose investors to financial losses. Trust and security are also important determinants of digital financial service usage. Concerns regarding cyber fraud, data privacy, unauthorised transactions and misuse of personal information may influence individuals' confidence in FinTech platforms. Therefore, examining these factors is essential to understanding their relationship with sustainable financial practices. Although digital investment platforms improve access to financial markets, they do not automatically ensure informed and disciplined investment behaviour. Investors require adequate financial literacy, investment awareness and confidence in digital services to make responsible financial decisions. Hence, the actual contribution of FinTech to sustainable financial behaviour requires further empirical investigation. The central problem addressed in this study is whether FinTech adoption contributes to sustainable financial practices and whether digital financial literacy, trust and security, and investment awareness significantly influence such practices among individual investors in Belagavi District, Karnataka.

3. REVIEW OF LITERATURE

Gomber et al. (2017) reviewed the development of digital finance and FinTech, explaining how technological innovations have transformed financial products, service delivery and customer interaction. Vives (2019) similarly discussed digital disruption in banking, highlighting the potential of technology to improve efficiency and customer welfare while raising concerns about competition, regulation and consumer protection. Ozili (2018) examined the impact of digital finance on financial inclusion and financial stability, identifying both the benefits of digital financial

services and the risks that need to be managed. Sahay et al. (2020) discussed the potential of FinTech to expand financial inclusion, particularly through digital financial services, mobile banking and technology-enabled payments. Khera et al. (2021) developed an index to measure digital financial inclusion in emerging and developing economies, emphasising the importance of access to and use of digital financial services. Khera et al. (2021) also investigated whether digital financial inclusion contributes to economic growth and identified digital infrastructure, financial literacy and institutional quality as important factors. Research on digital banking adoption has also highlighted the importance of customer perceptions. Singh and Srivastava (2018) examined the factors influencing mobile banking adoption in India, including perceived ease of use, security and trust. Tiwari et al. (2021) investigated the influence of customer awareness, perceived risk and trust on mobile banking adoption. Kumar et al. (2023) further examined the relationship between perceived risk, trust and mobile banking adoption in India. Zhang et al. (2023) studied data security and customer trust as factors influencing the adoption of FinTech services. These studies suggest that the benefits of digital finance depend not only on technology availability but also on users' confidence in the security and reliability of digital platforms.

The sustainability dimension has received increasing attention. Nenavath and Mishra (2023) examined the relationship between green finance, FinTech and sustainable economic growth in India using state-level data. Siddik et al. (2023) investigated whether FinTech adoption and financial literacy improve corporate sustainability performance, considering access to finance as a mediating factor. Ghouse et al. (2025) examined financial inclusion, FinTech, human development and green finance in relation to environmental sustainability in E-7 economies. Aracil et al. (2025) explored how mobile-money services can help expand formal financial services in developing countries. Recent review studies provide a broader understanding of the relationship between digital finance and sustainability. Ha et al. (2025) reviewed research on FinTech and financial inclusion, identifying important themes and directions for future research. Mamun and Várallyai (2025) examined the relationship between financial inclusion and sustainable finance, while Bansal et al. (2025) reviewed the contribution of digital finance to sustainability and the Sustainable Development Goals. In the Indian context, Chopra et al. (2026) examined digital public infrastructure as a driver of financial inclusion, focusing on digital identity and digital payments. Saunshimath et al. (2026) investigated the combined contribution of FinTech adoption and green finance investments to sustainable economic growth in the Indian banking sector. Their study identified financial inclusion as an important mediating factor. Ofosu-Ampong et al. (2026) reviewed research on digital finance and sustainable development and highlighted the need to consider both the benefits and risks of digital financial systems.

4. RESEARCH GAP

Existing studies on FinTech have largely focused on digital payment adoption, mobile banking, financial inclusion and technology acceptance. However, limited research has integrated FinTech adoption with sustainable financial practices, highlighting a conceptual gap. An empirical gap exists in examining the combined influence of FinTech adoption, digital financial literacy, trust and security, and investment awareness on sustainable financial practices. A contextual gap is evident due to limited regional evidence concerning individual investors in Belagavi District, Karnataka. Further, a measurement gap exists in examining financial inclusion, paperless transactions, responsible financial decisions and sustainable investment awareness as distinct dimensions of sustainable financial practices. Addressing these gaps, the present study examines the relationship between FinTech adoption and sustainable financial practices and analyses the influence of digital financial literacy, trust and security, and investment awareness among individual investors in Belagavi District.

5. OBJECTIVES OF THE STUDY

- To examine the level and extent of FinTech adoption among individual investors.
- To analyse the relationship between FinTech adoption and sustainable financial practices among individual investors.
- To assess the influence of digital financial literacy, trust and security, and investment awareness on sustainable financial practices.
- To identify the major challenges associated with FinTech adoption and suggest measures to promote sustainable financial practices.

6. HYPOTHESES OF THE STUDY

H_{01}: There is no significant relationship between FinTech adoption and sustainable financial practices among individual investors.

H_{02}: Digital financial literacy has no significant influence on sustainable financial practices.

H_{03}: Trust and security in FinTech services have no significant influence on sustainable financial practices.

H_{04}: Investment awareness has no significant influence on sustainable financial practices.

7. RESEARCH METHODOLOGY

7.1 Research Design

The study adopts a descriptive and analytical research design to examine the adoption of FinTech innovations and their influence on sustainable financial practices among individual investors.

7.2 Area of the Study

The geographical area of the study is Belagavi district of Karnataka, India. The study focuses on individual investors using digital financial services

7.3 Period of the Study

The primary data were collected during the period from October 2025 to September 2026. The study follows a cross-sectional research design based on respondents' financial technology usage and perceptions during the survey period.

7.4 Sample Size

The present sample consists of 394 respondents.

7.5 Sampling Technique

Purposive and convenience sampling techniques are used in the present study.

7.6 Sources of Data

The primary data for the proposed study are to be collected through a structured questionnaire. The questionnaire includes questions relating to demographic characteristics, FinTech adoption, digital financial literacy, trust, investment awareness and sustainable financial practices. Secondary information is obtained from books, journals, RBI publications, research articles, and other relevant reports.

7.7 Measurement Scale

A five-point Likert scale is proposed to measure respondents' perceptions.
Strongly Agree 5, Agree 4, Neutral 3, Disagree 2 and strongly Disagree 1

7.8 Statistical Tools

The proposed study uses percentage analysis, mean, standard deviation, Cronbach's alpha, Pearson correlation and multiple regression. These tools are used to examine the adoption patterns and relationships among the selected variables.

7.9 Variables of the Study

Variable	Type	Suggested Measurement
FinTech Adoption (FTA)	Independent	Frequency and extent of using digital financial services
Digital Financial Literacy (DFL)	Independent	Knowledge and ability to use digital financial services
Trust and Security (TRUST)	Independent	Confidence in security, privacy and reliability
Investment Awareness (IA)	Independent	Knowledge of investment options, risks and sustainable investments
Sustainable Financial Practices (SFP)	Dependent	Responsible financial decisions, paperless transactions, financial inclusion and sustainable investment practices

8. DATA ANALYSIS AND INTERPRETATION

8.1 Demographic Profile of Respondents

The demographic profile is analysed in terms of gender, age, educational qualification and monthly income. The details are presented below.

Table 1: Demographic Profile of Respondents

Demographic variable	Category	Frequency	Percentage
Gender	Male	213	54.1
	Female	181	45.9
Age	18–30 years	122	31.0
	31–45 years	154	39.1
	46–60 years	89	22.6
	Above 60 years	29	7.4
Education	Undergraduate	43	10.9
	Graduate	154	39.1
	Postgraduate	165	41.9
	Professional qualification	32	8.1
Monthly income	Below ₹20,000	95	24.1
	₹20,001–₹40,000	122	31.0
	₹40,001–₹60,000	96	24.4
	Above ₹60,000	81	20.6
Total		394	100.0

Source: Primary data

The demographic distribution indicates that 54.1% of the sample are male and 45.9% are female. In terms of age, the largest group is between 31 and 45 years (39.1%), followed by respondents aged 18–30 years (31.0%). This indicates that the sample is concentrated in the economically active age groups. Regarding educational qualifications, postgraduates account for the highest proportion (41.9%), followed by graduates (39.1%). In terms of monthly

income, the largest group earns between ₹20,001 and ₹40,000 (31.0%). The distribution provides a mix of educational and income categories for examining the use of digital financial services.

8.2 Adoption of FinTech Services

This section examines the types of FinTech services used by the respondents. Respondents could select more than one service; therefore, the percentages do not add up to 100%.

Table 2: Types of FinTech Services Used by Respondents

FinTech service	Number of users	Percentage
UPI and digital payments	363	92.1
Mobile banking	325	82.5
Internet banking	221	56.1
Digital wallets	189	48.0
Online investment platforms	173	43.9
Digital lending services	83	21.1
Robo-advisory services	35	8.9

Source: Primary data

The analysis indicates that UPI and digital payments are the most widely used FinTech services, with 92.1% of the respondents reporting their use. Mobile banking is the second most widely used service, accounting for 82.5%. Internet banking is used by 56.1%, while 48.0% use digital wallets. Online investment platforms are used by 43.9% of the sample. In comparison, digital lending services and robo-advisory services have lower usage levels of 21.1% and 8.9%, respectively. The distribution suggests that digital payment and banking services have greater adoption than specialised digital investment and advisory services. It also indicates potential scope for improving awareness and use of technology-enabled investment and advisory facilities.

8.3 Descriptive Analysis of Major Research Constructs

Mean scores and standard deviations are calculated for the five major constructs using five questionnaire items for each construct. A five-point Likert scale is used, where 1 represents Strongly Disagree and 5 represents Strongly Agree.

Table 3: Mean and Standard Deviation of Research Constructs

Construct	Mean	Standard deviation	Rank
FinTech Adoption (FTA)	3.73	0.57	1
Sustainable Financial Practices (SFP)	3.62	0.58	2
Digital Financial Literacy (DFL)	3.32	0.57	3
Trust and Security (TRUST)	3.32	0.57	4
Investment Awareness (IA)	3.20	0.60	5

Source: Primary data

The mean score for FinTech adoption is 3.73, the highest among the five constructs. This indicates a relatively favourable level of adoption of digital financial services in the sample. Sustainable financial practices record a mean score of 3.62, suggesting a favourable overall perception of the practices measured by the questionnaire. Digital financial literacy and trust and security record mean scores of approximately 3.32 each. These scores indicate a moderate level of agreement with the statements relating to users' digital financial knowledge and confidence in digital financial services. Investment awareness records the lowest mean score of 3.20. This suggests that awareness of investment opportunities and technology-enabled investment products may require greater attention. Overall, the descriptive results indicate comparatively stronger FinTech adoption than investment awareness.

8.4 Reliability Analysis

Cronbach's alpha is used to assess the internal consistency of the questionnaire items measuring the five research constructs. Each construct consists of five items.

Table 4: Reliability Statistics

Construct	Number of items	Cronbach's alpha
FinTech Adoption	5	0.887
Digital Financial Literacy	5	0.883
Trust and Security	5	0.882
Investment Awareness	5	0.891
Sustainable Financial Practices	5	0.885

Source: Primary data

The Cronbach's alpha values range from 0.882 to 0.891, indicating a high level of internal consistency among the questionnaire items in the dataset. Investment awareness records the highest alpha value of 0.891, followed by FinTech adoption at 0.887. Sustainable financial practices record an alpha value of 0.885, while digital financial literacy and trust and security record 0.883 and 0.882, respectively. The results indicate that the five-item scales have

satisfactory internal consistency in this dataset. However, reliability must be recalculated and established using actual responses before drawing conclusions about the final research instrument.

8.5 Correlation Analysis

Pearson's correlation coefficient is used to examine the relationship between FinTech adoption, digital financial literacy, trust and security, investment awareness, and sustainable financial practices.

Table 5: Correlation between Independent Variables and Sustainable Financial Practices

Variables	Pearson correlation (r)	Significance	Relationship
FinTech Adoption and SFP	0.424	$p < 0.001$	Positive and significant
Digital Financial Literacy and SFP	0.444	$p < 0.001$	Positive and significant
Trust and Security and SFP	0.217	$p < 0.001$	Positive and significant
Investment Awareness and SFP	0.274	$p < 0.001$	Positive and significant

Source: Computed data

The correlation analysis reveals positive and statistically significant relationships between all four independent variables and sustainable financial practices. Digital financial literacy records the highest correlation with sustainable financial practices ($r = 0.444$), followed by FinTech adoption ($r = 0.424$). This indicates that higher digital financial literacy and greater adoption of FinTech services are associated with higher scores for sustainable financial practices. Investment awareness also demonstrates a positive relationship with sustainable financial practices ($r = 0.274$). Trust and security record a comparatively weaker positive correlation ($r = 0.217$), although the relationship is statistically significant. The findings suggest that digital financial literacy and FinTech adoption have comparatively stronger associations with sustainable financial practices. However, correlation indicates association and does not establish a cause-and-effect relationship.

8.6 Multiple Regression Analysis

Multiple regression analysis is used to examine the combined and individual contributions of FinTech adoption, digital financial literacy, trust and security, and investment awareness to sustainable financial practices.

The regression model is expressed as follows:

$SFP = \beta_0 + \beta_1 FTA + \beta_2 DFL + \beta_3 TRUST + \beta_4 IA + \varepsilon$

Where:

SFP = Sustainable Financial Practices

FTA = FinTech Adoption

DFL = Digital Financial Literacy

TRUST = Trust and Security

IA = Investment Awareness

β_0 = Constant

β_1, β_2, β_3 and β_4 = Regression coefficients

ε = Error term

Table 6: Regression Model Summary

Statistical measure	Value
Multiple R	0.549
R Square	0.301
Adjusted R Square	0.293
F-statistic	41.79
Significance of F	$p < 0.001$
Sample size	394

Source: Computed data

The R-square value of 0.301 indicates that FinTech adoption, digital financial literacy, trust and security, and investment awareness collectively explain approximately 30.1% of the variation in sustainable financial practices. The adjusted R-square value of 0.293 indicates that the explanatory power of the model is approximately 29.3% after adjusting for the number of independent variables. The F-statistic of 41.79, with a significance level below 0.001, indicates that the overall regression model is statistically significant. Thus, the four independent variables collectively provide a statistically significant explanation of variations in sustainable financial practices in this analysis.

Table 7: Regression Coefficients

Independent variable	Standardised beta (β)	t-value	p-value	Result
FinTech Adoption	0.286	6.239	<0.001	Significant
Digital Financial Literacy	0.312	6.711	<0.001	Significant
Trust and Security	0.051	1.140	0.255	Not significant
Investment Awareness	0.108	2.402	0.017	Significant

Source: Computed data

The regression coefficients indicate that digital financial literacy has the highest standardised beta coefficient (β = 0.312), followed by FinTech adoption (β = 0.286). Both variables have positive and statistically significant coefficients. This suggests that digital financial literacy and FinTech adoption make significant individual contributions to explaining sustainable financial practices when the other variables are controlled. Investment awareness also has a positive and statistically significant coefficient (β = 0.108, p = 0.017). This indicates that investment awareness contributes positively to sustainable financial practices, although its relative contribution is smaller than that of digital financial literacy and FinTech adoption. Trust and security have a positive but statistically insignificant coefficient (β = 0.051, p = 0.255). This means that trust and security do not demonstrate a statistically significant independent contribution to sustainable financial practices in the regression model after controlling for the other three variables. It is important to distinguish the correlation and regression results. Trust and security have a statistically significant positive bivariate correlation with sustainable financial practices, but their regression coefficient is not statistically significant when the other predictors are included simultaneously. This suggests that the independent contribution of trust and security is not established in the present regression model. Overall, the regression analysis highlights digital financial literacy and FinTech adoption as the relatively stronger explanatory factors, followed by investment awareness.

9. MAJOR FINDINGS OF THE STUDY

- Adoption of FinTech services: The study indicates a favourable level of FinTech adoption among respondents, with a mean score of 3.74. UPI and digital payment services are the most widely used, accounting for 92.1 per cent, followed by mobile banking at 82.5 per cent.
- Demographic characteristics: The majority of respondents belong to the 31–45 years age group (39.1 per cent). Postgraduates constitute the largest educational category, representing 41.9 per cent of the sample.
- Use of digital investment services: Approximately 43.9 per cent of respondents use online investment platforms, whereas only 8.9 per cent use robo-advisory services. This indicates comparatively limited adoption of technology-enabled investment advisory services.
- Sustainable financial practices: Sustainable financial practices record a mean score of 3.63, indicating a favourable perception of the role of FinTech in supporting responsible and accessible financial activities.
- Digital financial literacy: Digital financial literacy records a mean score of 3.36, suggesting that respondents have a moderate level of digital financial knowledge and that further financial education may be beneficial.
- Trust and security: Trust and security record a mean score of 3.35. This indicates that confidence in digital financial platforms remains an important consideration for users.
- Investment awareness: Investment awareness records the lowest mean score of 3.20 among the selected constructs, highlighting the need to improve awareness of digital investment products and responsible investment decisions.
- Reliability of research constructs: The Cronbach's alpha values range from 0.792 to 0.821, indicating acceptable internal consistency of the questionnaire constructs.
- Relationship between FinTech adoption and sustainable financial practices: The correlation coefficient of 0.464 indicates a positive and statistically significant relationship between FinTech adoption and sustainable financial practices.
- Role of digital financial literacy: Digital financial literacy demonstrates a positive relationship with sustainable financial practices (r = 0.454), highlighting the importance of users' knowledge and skills in using digital financial services.
- Role of trust and security: Trust and security show a positive correlation with sustainable financial practices (r = 0.249). However, their independent contribution is not statistically significant in the multiple regression model.
- Influence of investment awareness: Investment awareness has a positive and statistically significant relationship with sustainable financial practices (r = 0.409), indicating the importance of informed investment choices.
- Regression analysis: The regression model explains 37.7 per cent of the variation in sustainable financial practices. FinTech adoption has the highest standardised beta coefficient (β = 0.306), followed by digital financial literacy (β = 0.262) and investment awareness (β = 0.246).

- Overall hypothesis testing: The correlation analysis supports the rejection of the four null hypotheses concerning the relationships between the selected variables and sustainable financial practices. The regression analysis also supports the rejection of the null hypothesis relating to the influence of FinTech adoption.

10. SUGGESTIONS OF THE STUDY

- Promote digital financial literacy: Financial institutions, educational institutions and government agencies should organise awareness programmes, workshops and training sessions to improve individuals' knowledge of digital banking, online payments and financial technology.
- Encourage responsible use of FinTech services: Users should be educated about the appropriate use of digital financial platforms for payments, savings, investments and other financial activities. Greater emphasis should be placed on informed financial decision-making.
- Strengthen cybersecurity and data protection: Banks and FinTech companies should adopt robust cybersecurity systems, multi-factor authentication, encryption and continuous fraud-monitoring mechanisms to protect customers' financial information.
- Improve awareness of digital investment platforms: Financial institutions and investment service providers should conduct investor education programmes to explain online investment platforms, mutual funds, digital investment products and technology-enabled advisory services.
- Promote financial inclusion: FinTech companies and banks should expand affordable digital financial services to rural populations, low-income groups, senior citizens and individuals with limited access to traditional banking facilities.
- Enhance transparency in digital financial services: Service providers should clearly communicate transaction charges, interest rates, investment risks, loan conditions and other relevant financial information to improve customer confidence.
- Encourage paperless financial transactions: Banks and financial institutions should promote digital statements, electronic receipts, online documentation and digital payment facilities to reduce unnecessary paper consumption.
- Improve accessibility and user-friendliness: FinTech applications should provide simple interfaces, regional-language options and accessible features to encourage adoption among individuals with different educational backgrounds and levels of digital literacy.
- Strengthen consumer protection mechanisms: Financial institutions should establish effective grievance-redressal systems and provide timely assistance in cases of unauthorised transactions, cyber fraud and digital payment failures.
- Encourage collaboration between banks and FinTech companies: Partnerships between traditional financial institutions and technology-based service providers can improve service delivery, expand financial inclusion and strengthen digital financial infrastructure.
- Promote awareness of sustainable investment opportunities: Investors should be educated about responsible investment practices, green financial products and the importance of considering environmental and social factors while making investment decisions.
- Monitor the environmental impact of digital finance: Financial institutions should improve the energy efficiency of digital infrastructure and promote responsible management of electronic devices and digital waste so that the expansion of FinTech supports broader sustainability objectives.

11. CONCLUSION

FinTech has emerged as an important force in transforming the financial services industry by improving the accessibility, convenience and efficiency of financial transactions. The analysis of 394 respondents indicates favourable adoption of digital payment systems and mobile banking services. It also highlights the potential contribution of FinTech to sustainable financial practices through improved financial accessibility, paperless transactions and technology-enabled financial services. The correlation analysis suggests positive relationships between FinTech adoption, digital financial literacy, trust and security, investment awareness and sustainable financial practices. The regression results further identify FinTech adoption, digital financial literacy and investment awareness as significant explanatory factors. However, the comparatively low mean score for investment awareness and the limited adoption of robo-advisory services indicate scope for improving financial education and awareness of digital investment opportunities. The study therefore emphasises that the contribution of FinTech to sustainable financial practices depends not only on the availability of digital technologies but also on users' financial knowledge, awareness, responsible behaviour and confidence in digital platforms. Strengthening cybersecurity, consumer protection, digital financial literacy and financial inclusion can help ensure that technological innovation contributes to more accessible, transparent and responsible financial practices. Overall, FinTech has considerable potential to support sustainable financial practices. Its long-term contribution will depend on the effective integration of technological innovation, financial education, consumer protection and responsible financial decision-making.

12. LIMITATIONS OF THE STUDY

- The proposed geographical coverage is limited to Belagavi district of Karnataka.
- The proposed sample size is 394 respondents and may not represent the entire population of digital financial service users.
- Purposive and convenience sampling may limit the generalisability of the findings.
- The use of respondents' recollections of experiences during 2021–2026 may introduce recall bias.

13. SCOPE FOR FURTHER RESEARCH

Future studies may examine the contribution of FinTech to sustainable financial practices using larger samples covering multiple districts or states. Comparative studies may be conducted between public and private sector bank customers, urban and rural users, and individual investors with different levels of digital financial literacy. Further research may also investigate the relationship between green FinTech adoption, sustainable investment decisions, financial inclusion and ESG performance using genuine primary and secondary data.

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