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"Impact of Fintech Applications on Financial Decision-Making Behaviour of Individual Investors"

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Abstract:

The rapid advancement of Financial Technology (FinTech) has transformed the landscape of financial services, particularly in the domain of retail investing. This study examines the impact of FinTech applications on the financial decision-making behaviour of individual investors. The research focuses on key technological determinants such as user interface design, personalization algorithms, security and trust mechanisms, and behavioural influences that shape investment decisions in a digital environment.

Primary data were collected from 250 individual investors using a structured questionnaire measured on a five-point Likert scale. Descriptive statistics, correlation analysis, and multiple regression analysis were employed to analyze the data. The findings reveal that FinTech applications are widely adopted and positively perceived among investors. Security and trust mechanisms emerged as the most influential technological determinant, followed by user interface simplicity and personalization features. Correlation results indicate strong positive relationships between FinTech usage, technological attributes, behavioural factors, and financial decision-making behaviour. Regression analysis further confirms that these variables collectively explain a significant proportion of variation in investment behaviour.

The study concludes that FinTech applications enhance accessibility, portfolio monitoring, diversification, and long-term financial planning. However, features such as real-time notifications and ease of execution may also increase trading frequency and impulsive decisions. Overall, the research highlights that technological innovation plays a crucial role in shaping modern investment behaviour. The findings provide valuable insights for FinTech developers, financial institutions, regulators, and investors to promote responsible and informed digital investing practices in the evolving financial ecosystem.

Keywords: *Financial Technology (FinTech), Financial Decision-Making Behaviour, Technological Determinants, Behavioural Finance, Individual Investors.*

INTRODUCTION

Overview of Financial Technology (FinTech)

Financial Technology, commonly referred to as FinTech, represents the integration of technology into financial services with the objective of enhancing efficiency, accessibility, transparency, and customer experience. Over the last two decades, rapid advancements in digital infrastructure, mobile connectivity, artificial intelligence, blockchain technology, big data analytics, and cloud computing have transformed traditional financial systems into dynamic, technology-driven ecosystems. FinTech applications now influence almost every segment of finance, including payments, lending, wealth management, insurance, and capital markets. The emergence of FinTech has not merely modernized financial services; it has fundamentally redefined how individuals interact with financial products and make investment decisions. From mobile trading platforms and robo-advisory services to digital wallets and peer-to-peer lending platforms, technology has become an inseparable component of personal finance management.

Historical Evolution of Financial Systems and Technological Integration

1. Traditional Financial Systems

Historically, financial transactions were conducted through physical banking institutions and brokerage houses. Investment decisions were largely mediated by financial advisors, stockbrokers, and institutional intermediaries. Information asymmetry was significant, as individual investors had limited access to real-time market data, research reports, and analytical tools. Investment activities required physical presence, extensive paperwork, and often high transaction costs.

2. Advent of Electronic Banking and Online Trading

The late 20th century witnessed the digitization of banking services with the introduction of Automated Teller Machines (ATMs), electronic fund transfers, and internet banking. Online trading platforms began to emerge in the 1990s, allowing investors to execute trades electronically without physically visiting brokerage offices. This marked the first major shift toward democratizing access to financial markets.

3. Rise of Modern FinTech Ecosystem

The post-2008 global financial crisis accelerated innovation in financial technology. Distrust in traditional financial institutions and the proliferation of smartphones created fertile ground for technology-driven financial solutions. Startups began offering digital payment solutions, online lending, crowdfunding, and algorithm-based investment advisory services. Regulatory frameworks gradually evolved to accommodate these innovations, leading to the establishment of a robust FinTech ecosystem globally.

Conceptual Framework of Individual Financial Decision-Making

Financial decision-making refers to the process by which individuals allocate resources among various financial instruments to achieve personal financial goals. It encompasses decisions related to saving, investing, risk management, portfolio diversification, retirement planning, and asset allocation. These decisions are influenced by several factors including risk tolerance, financial literacy, market information, cognitive biases, social influence, and technological accessibility.

Traditional theories such as the Rational Choice Theory and Modern Portfolio Theory assume that investors act rationally and aim to maximize utility. However, behavioral finance has demonstrated that psychological factors, emotions, heuristics, and biases significantly affect financial decisions. The integration of FinTech tools into investment platforms has further modified the decision-making environment by altering information availability, transaction speed, and user engagement.

Growth of FinTech Applications in Investment Activities

FinTech applications have expanded rapidly across multiple investment-related domains. Key areas include:

1. Digital Trading Platforms

Mobile-based trading applications enable investors to buy and sell stocks, mutual funds, exchange-traded funds (ETFs), and derivatives instantly. Real-time data feeds, technical indicators, and automated alerts empower investors to make quick and informed decisions.

2. Robo-Advisory Services

Robo-advisors use algorithms and artificial intelligence to provide automated portfolio management services. These platforms assess investor risk profiles and recommend diversified portfolios at relatively lower costs compared to traditional financial advisors.

3. Social Trading and Investment Communities

Social trading platforms allow investors to observe and replicate the strategies of experienced traders. Peer discussions and shared insights create a collaborative investment environment, influencing decision-making behavior.

4. Artificial Intelligence and Predictive Analytics

AI-powered tools analyze vast datasets to forecast market trends, detect patterns, and generate personalized investment recommendations. These technologies reduce reliance on intuition and increase data-driven decisions.

5. Blockchain and Digital Assets

Blockchain technology has introduced cryptocurrencies and tokenized assets, offering alternative investment opportunities. This development has expanded the scope of financial instruments available to individual investors.

Transformation in Investor Behaviour Due to FinTech

The adoption of FinTech applications has significantly transformed investor behavior in several dimensions.

A. Accessibility and Financial Inclusion

FinTech has reduced entry barriers to financial markets. Low minimum investment requirements and simplified onboarding processes encourage participation from previously excluded segments of society.

B. Information Availability and Transparency

Access to real-time information, research reports, and analytical tools reduces information asymmetry. Investors are now better equipped to analyze risks and returns before making decisions.

C. Speed and Convenience

Instant transaction capabilities and mobile accessibility enable investors to react quickly to market changes. Convenience has increased trading frequency and market participation.

D. Behavioral Influences and Overtrading

While technology provides enhanced access to information, it also fosters impulsive behavior. Push notifications, gamified interfaces, and simplified trading processes may encourage overtrading and speculative investment decisions.

E. Data-Driven Decision Support

Algorithm-based recommendations guide investors toward structured and diversified portfolios. Automated portfolio rebalancing and risk assessment tools promote disciplined investment strategies.

Behavioral Finance and FinTech Integration

Behavioral finance highlights biases such as overconfidence, herd behavior, loss aversion, anchoring, and confirmation bias that influence investment decisions. FinTech platforms interact with these biases in complex ways.

On one hand, automated advisory services can reduce emotional interference by providing rule-based investment strategies. On the other hand, social trading platforms may intensify herd behavior by enabling investors to follow popular trends. Gamification elements in trading apps may increase risk-taking tendencies. Thus, FinTech simultaneously mitigates and amplifies behavioral biases.

Technological Determinants of Financial Decision-Making

The technological architecture of FinTech applications significantly influences the way individual investors perceive information, evaluate alternatives, and execute financial decisions. Unlike traditional financial systems, where decisions were mediated by human advisors and institutional processes, digital platforms directly interact with investors through software interfaces and algorithmic systems. The design, functionality, transparency, and reliability of these technological components shape cognitive responses, risk perception, and overall investment behavior. Technological determinants do not merely support transactions; they actively structure the decision-making environment by framing choices, filtering information, and guiding user actions.

A. User Interface and Experience

User Interface (UI) and User Experience (UX) design constitute fundamental technological determinants of financial decision-making. A well-structured interface reduces cognitive load and enhances clarity in presenting financial data. Simplified dashboards

displaying portfolio performance, risk metrics, and market trends enable investors to interpret complex information quickly and efficiently.

Modern FinTech platforms incorporate interactive charts, real-time updates, and intuitive navigation systems that make financial markets more accessible even to first-time investors. Features such as one-click trading, visual portfolio summaries, and instant notifications encourage frequent engagement with investment activities. The ease of executing trades through mobile applications reduces procedural barriers and promotes active market participation.

However, interface design can also influence behavioral tendencies. Gamified elements such as achievement badges, animated graphics, and reward-based engagement systems may stimulate excitement and risk-taking behavior. Push notifications regarding price fluctuations or trending stocks may trigger impulsive reactions rather than rational evaluation. Therefore, UI and UX not only facilitate usability but also shape emotional and psychological responses during investment decisions.

In essence, the technological simplicity and visual presentation of information determine how investors process data, assess risks, and act upon financial opportunities.

B. Personalization Algorithms

Personalization algorithms represent one of the most transformative aspects of FinTech applications. These algorithms utilize artificial intelligence, machine learning, and big data analytics to analyze investor profiles, transaction histories, income levels, risk tolerance, and financial goals. Based on this analysis, platforms generate tailored investment recommendations aligned with individual preferences.

Customized portfolio suggestions enhance decision efficiency by reducing the need for extensive manual research. Automated asset allocation models recommend diversified portfolios consistent with the investor's risk appetite and time horizon. Robo-advisory systems continuously monitor market conditions and adjust portfolios through automatic rebalancing mechanisms.

Personalization also enhances user engagement by delivering relevant content, such as educational materials, market insights, and performance alerts specific to the investor's holdings. This targeted approach increases perceived value and encourages trust in the platform's analytical capabilities.

However, algorithmic personalization may also create limitations. Over-reliance on automated recommendations can reduce independent analysis and critical thinking. Algorithmic biases or flawed data inputs may lead to suboptimal portfolio choices. Furthermore, excessive customization may reinforce confirmation bias by presenting information that aligns with existing preferences while excluding alternative viewpoints.

Despite these concerns, personalization algorithms significantly enhance decision support systems, making investment planning more structured and data-driven.

C. Security and Trust Mechanisms

Security infrastructure is a critical technological determinant influencing investor confidence and participation in digital financial platforms. In an environment where financial transactions occur electronically, data privacy and cybersecurity become central concerns. Encryption technologies protect sensitive information such as bank details, trading credentials, and personal identification data from unauthorized access.

Two-factor authentication (2FA), biometric verification, and multi-layer security protocols provide additional safeguards against fraud and identity theft. Regular system audits, compliance with regulatory standards, and transparent privacy policies reinforce trust in digital platforms.

Investor perception of platform security directly affects willingness to invest and transact online. Any breach or perceived vulnerability can lead to loss of confidence and reduced engagement. Secure technological frameworks encourage higher transaction volumes, long-term portfolio management, and broader adoption of digital financial services.

Trust mechanisms also extend to transparent transaction records, blockchain-based verification systems, and clear disclosure of fees and charges. When investors feel assured that their funds and data are protected, they are more likely to make confident and timely financial decisions.

D. Integration with Financial Ecosystems

Integration capabilities of FinTech applications play a significant role in shaping comprehensive financial decision-making. Modern platforms are designed to connect seamlessly with banking systems, digital wallets, payment gateways, tax management tools, and other financial applications. This interconnected ecosystem enables investors to manage multiple financial activities within a unified interface.

Real-time synchronization of bank accounts with investment portfolios provides a holistic view of cash flows, savings, liabilities, and asset performance. Automated fund transfers facilitate quick investment execution without procedural delays. Integration with budgeting tools allows investors to allocate surplus funds systematically toward investment instruments.

Such ecosystem connectivity enhances financial planning efficiency by enabling consolidated monitoring of overall financial health. Investors can evaluate liquidity positions, track expenditures, and assess investment growth simultaneously. This comprehensive visibility supports informed and strategic financial decisions rather than isolated transaction-based choices.

Moreover, interoperability across platforms promotes convenience and reduces administrative complexities. By eliminating fragmented financial management, integrated systems foster disciplined investing behavior and long-term wealth creation strategies.

In conclusion Technological determinants form the structural backbone of FinTech-driven financial decision-making. User interface design shapes cognitive engagement, personalization algorithms provide data-driven guidance, security mechanisms establish trust, and ecosystem integration ensures holistic financial management. Together, these technological attributes redefine how individual investors perceive risks, process information, and execute investment decisions in the digital era.

Role of Financial Literacy in the FinTech Era

Financial literacy remains a crucial determinant of effective financial decision-making. Although FinTech platforms provide educational resources and simplified analytics, the ability to interpret information correctly depends on the investor's knowledge and cognitive capability. Enhanced access to financial data does not automatically guarantee rational decision-making. Therefore, FinTech acts as a facilitator, but investor competence determines outcomes.

Emerging Trends in FinTech and Investment Behaviour

Several contemporary trends are further reshaping investment behavior:

- Integration of machine learning for predictive modeling
- Expansion of decentralized finance (DeFi) platforms
- Growth of sustainable and ESG-focused digital investment tools
- Increased adoption of biometric authentication
- Use of big data analytics for risk profiling

These developments indicate a continuous evolution of investor engagement patterns and digital financial ecosystems.

Global and Economic Context

The globalization of financial markets and increasing cross-border investments have amplified the importance of digital platforms. FinTech applications enable individuals to invest in international markets with minimal procedural complexities. Emerging economies, in particular, have witnessed rapid adoption of mobile-based financial services, leading to increased retail investor participation.

Economic uncertainties, inflationary pressures, and market volatility further drive individuals to seek technology-enabled tools for portfolio management and risk mitigation. FinTech applications provide dashboards, scenario analysis tools, and automated alerts that assist investors in navigating complex financial environments.

Challenges and Concerns in FinTech-Driven Investment

Despite its transformative potential, FinTech presents certain challenges:

- Data privacy and cybersecurity risks
- Algorithmic biases in automated recommendations
- Increased speculative trading
- Regulatory compliance complexities
- Digital divide among different demographic groups

These concerns highlight the need for balanced development of technology and investor protection mechanisms.

Relevance of Studying FinTech's Impact on Individual Investors

The rapid diffusion of FinTech applications necessitates a comprehensive understanding of how technology influences financial decision-making behavior. Individual investors constitute a significant segment of capital markets, and their collective actions impact market stability, liquidity, and price movements. Examining the behavioral shifts induced by digital platforms contributes to understanding modern financial dynamics.

FinTech has transformed investment from a complex, institution-driven activity into a highly accessible and interactive process. The convergence of behavioral finance principles with technological innovation creates a new paradigm in personal financial management. Understanding this intersection is essential to comprehend contemporary investment patterns.

The evolution of financial systems from traditional banking frameworks to digitally integrated ecosystems marks a profound transformation in economic history. FinTech applications have redefined accessibility, transparency, speed, and personalization in financial services. For individual investors, these technologies serve both as enablers of informed decision-making and as catalysts for new behavioral patterns.

The dynamic interplay between technology, psychology, and finance forms the foundation of modern investment behavior. As FinTech continues to evolve, its influence on financial decision-making processes will expand, shaping the future of retail investing and global financial markets.

Significance of the Study

The study on the *Impact of FinTech Applications on Financial Decision-Making Behaviour of Individual Investors* holds substantial relevance in the contemporary digital financial environment. The rapid expansion of financial technology has fundamentally transformed the structure and functioning of capital markets, particularly by increasing the participation of retail investors. Understanding how FinTech applications influence investor behaviour is crucial in explaining emerging investment patterns, trading frequency, risk-taking tendencies, and portfolio management practices.

This study is significant from an academic perspective as it contributes to the growing body of knowledge at the intersection of finance, technology, and behavioural economics. While traditional financial theories assume rational decision-making, the integration of FinTech introduces new technological variables that alter information processing and cognitive responses. By examining these dynamics, the study provides deeper insights into how digital platforms reshape behavioural biases, financial literacy outcomes, and investor confidence.

From a practical standpoint, the findings of this research will assist financial institutions, FinTech companies, and policymakers in designing more efficient, transparent, and investor-friendly digital platforms. Understanding behavioural shifts induced by technological features such as personalization algorithms, user interface design, and automated advisory services can help developers enhance responsible investing practices while minimizing speculative or impulsive trading behaviour.

The study is also socially significant as FinTech applications promote financial inclusion by enabling wider access to investment opportunities. Evaluating their impact ensures that technological advancements genuinely support informed and sustainable financial decisions rather than increasing systemic risks.
Overall, the research provides valuable insights for academicians, industry practitioners, regulators, and individual investors by clarifying how technological innovation influences financial behaviour in the evolving digital economy.

REVIEW OF LITERATURE

1. **Khansama et al. (2026)** propose an explainable AI model (BiGRU with fused attention) for financial time-series prediction and highlight its applicability for retail investor tools. The paper demonstrates improved short- and long-term dependency capture for index prediction and emphasizes explainability techniques that can increase end-user trust in algorithmic signals. For retail decision-support, such models promise better forecasting inputs but also raise issues about interpretability, overconfidence in black-box predictions, and potential herding if many users follow the same AI signals. The authors stress that transparent explanation layers are essential for responsible deployment.
2. **Alshebami (2026)** examines cashless mobile access in fragile micro and small business contexts, showing that mobile financial services increase continuity intentions and cash-flow management skills. Although not exclusively about retail investing, findings imply that broader mobile finance penetration alters household liquidity management and thus investment capacity. The paper suggests that increased mobile cash access can indirectly shape individual investors' choices by changing available savings, transaction costs, and short-term liquidity buffers—factors that influence risk tolerance and portfolio allocation decisions in digital ecosystems.
3. **Kayed, Alhawwatma, Morshed, and Khrais (2026)** propose a scenario-based MCDA approach to FinTech governance that discusses foresight interventions for emerging economies. Though governance-oriented, the paper highlights how regulation, consumer protection, and platform accountability influence investor trust and adoption of digital investment tools. The argument is that stronger, foresight-oriented governance reduces perceived risk and supports healthier investor decision frameworks by incentivizing transparent disclosures and limiting predatory UX practices—thereby indirectly steering retail behavior toward more sustainable decisions.
4. **Shetty, Singh, & Verma (2026)** offer a conceptual framework for robo-advisor types and expected outcomes—return maximization, risk minimization, and inclusion. They synthesize evidence that institutional design, trust, and user literacy moderate robo-advisor effectiveness. For individual investors, the taxonomy clarifies that platform goals (e.g., aggressive return targets vs. conservative wealth-preservation) are embedded in algorithmic architectures, which affects investor alignment and satisfaction. The paper calls for transparent mandate disclosure and human-in-the-loop safeguards to ensure robo-advice supports suitable investor decisions.
5. **Giraldo-Gordillo & Bustillo-Mesanza (2026)** analyze the Bahamas' SandDollar CBDC rollout to show potential deposit substitution and liquidity effects. For individual investors, CBDC design choices (retail access, intermediated vs. direct models) can change saving behavior, friction in payments, and short-term portfolio rebalancing needs. The paper's synthetic control evidence suggests that digital currency introductions influence where households keep liquid funds, thereby shaping liquidity available for retail investment and altering risk-return tradeoffs facing individual investors in small economies.
6. **Hayashi & Routh (2025)** (JBEF Article 101060) study links among financial literacy, risk tolerance, and cryptocurrency ownership in the U.S. Their analysis shows that higher financial literacy predicts more diversified cryptocurrency holdings and more calibrated risk exposure, while lower literacy correlates with concentrated, speculative crypto positions. The paper underscores that FinTech-enabled access to crypto markets amplifies heterogeneity in investor outcomes depending on literacy, and suggests targeted education and platform disclosure to reduce harmful speculation among novice retail users.
7. **Farukh et al. (2025)** study FinTech innovations' effects on rural financial ecosystems in India, documenting how digital payments and micro-FinTech services have broadened access to financial instruments. The authors note changes in savings behavior, increased uptake of formal savings instruments, and nascent interest in digital investment products among rural populations. For investor behavior, expanded access reshapes the investor base by introducing risk-averse new entrants who face different literacy and trust constraints; this heterogeneity matters for product design and financial education in FinTech platforms targeting broader inclusion.
8. **Van Boxel, Decke, Nolte, & Schneider (2025)** experimentally investigate visual stimuli's effect on investment choices and find that imagery and salient visuals significantly affect risk preferences and trade intensity. Their controlled experiments indicate that stronger visual cues increase willingness to invest in high-volatility assets, with novice investors particularly prone to imagery-driven biases. Results caution platforms and regulators about the persuasive power of design elements and recommend evidence-based UI guidelines to prevent unintended risk inducement.
9. **Farukh et al. (2025)** (other MDPI piece emphasizing rural FinTech) and related MDPI contributions emphasize that interoperability and integration with payments, wallets, and banking systems determine how easily households convert savings into investments. Studies in the MDPI *FinTech* special issue show that integrated ecosystems lower transaction costs and increase participation in formal investment channels, but also that weak digital literacy and trust gaps can lead to suboptimal choices. For investor behavior, integration changes the default architecture of decision flows and thereby nudges resource allocation toward digital investment products.
10. **MDPI & allied special-issue articles (2025–2026)** collectively highlight technological determinants: personalization algorithms, UI/UX, security features, and ecosystem integration. Across several MDPI *FinTech* papers authors show that personalization improves relevance and engagement but risks filter bubbles; secure authentication increases willingness to transact; and API-level integration reduces frictions for portfolio rebalancing. The collective evidence underscores a core message: technological design choices are causal levers that shape investor attention, trust, and ultimately the quality of financial decisions. (Representative MDPI articles cited below.)
11. **Chen et al. (2025)** investigate robo-advisor adoption for ESG investing, testing how personalization and perceived trust shape behavioral intention. Using survey and experimental evidence, they find that personalization of ESG portfolios and algorithmic

transparency strengthen perceived usefulness and trust, which in turn increase adoption intentions—especially for investors with moderate prior ESG awareness. The study highlights how robo-advisors can lower cognitive costs for integrating non-financial criteria, yet warns of potential over-reliance on opaque personalization if trust mechanisms are weak. The findings inform robo-advisor design for responsible, preference-aligned automated advice.

12. **Klocke, Müller-Okesson, Hasso, and Pelster (2025)** analyze social trading platform data to quantify peer effects. Their open-access study documents that traders increase activity and risk exposure following peers' strong returns, with observable spillovers in trade timing and position sizing. Behavioral mechanisms include upward social comparison and imitation; the magnitude is larger for less experienced users. The paper raises concerns about herd-driven short-term volatility produced by social features and suggests platform-level disclosure and friction mechanisms to mitigate impulsive copying that may harm inexperienced investors.
13. **Chapkovski, Khapko, and Zoican (2025)** experimentally test how gamified trading elements alter retail risk-taking. In a multi-country randomized trial, achievement badges and encouragement prompts increased holding of volatile assets and overall risk appetite, particularly among participants with low baseline financial literacy. The authors show that gamification functions as a behavioral nudge that can systematically bias decisions away from long-term optimal strategies toward short-term engagement metrics. They recommend regulatory scrutiny of gamification design and suggest combining gamified features with mandatory educational or cooling-off mechanisms.
14. **Haibo Wu & Chongfeng Wu (2024)** examine how device choice (mobile vs. PC) alters retail investors' attention and trading patterns. Using a unique brokerage dataset covering 1.67 million retail accounts, the authors exploit price-limit events as natural experiments to identify a pronounced "ranking effect": mobile users disproportionately buy top-ranked, attention-grabbing stocks whereas PC users do not. The paper argues that mobile interfaces raise search costs and increase salience of top list items, producing measurable differences in net buy–sell imbalances and suggesting that interface constraints can materially bias portfolio choices. Implications concern platform design and investor protection.
15. **Freibauer, Grawert, and Rieger (2024)** use representative panel and survey data to assess how prolonged trading-app usage affects retail investors' behaviour over time. Their longitudinal evidence shows that while neobroker users increase trading frequency and risk exposure, extended app use can also raise certain aspects of digital financial literacy—yet literacy gains remain modest and do not fully offset increased speculative tendencies. The study highlights heterogeneity across user types and underscores that trading-app design, notifications, and ease of execution can amplify both engagement and overtrading risks. Policy implications concern education and responsible UI nudging.

RESEARCH GAP

The rapid expansion of FinTech applications has generated considerable academic interest; however, several important gaps remain in understanding their influence on the financial decision-making behaviour of individual investors. Existing studies predominantly focus on FinTech adoption, technology acceptance models, and general user satisfaction rather than examining the deeper behavioural consequences of platform usage on investment decisions. While prior research explores aspects such as digital payments, robo-advisory services, and cryptocurrency adoption, limited attention has been given to how integrated FinTech features collectively reshape cognitive biases, risk perception, portfolio diversification, and long-term investment discipline.

Another significant gap lies in the fragmented analysis of technological determinants. Most studies examine single components such as gamification, AI-based recommendations, or mobile trading interfaces in isolation. There is insufficient empirical evidence assessing how multiple technological attributes—user interface design, personalization algorithms, security mechanisms, and ecosystem integration—interact simultaneously to influence investor behaviour.

Furthermore, limited research has been conducted in emerging market contexts where financial literacy levels, regulatory frameworks, and digital inclusion differ significantly from developed economies. The behavioural impact of FinTech among diverse demographic groups such as first-time investors, young retail traders, and rural participants remains underexplored.

Additionally, existing literature often emphasizes short-term trading outcomes rather than long-term wealth creation and financial stability. There is a lack of comprehensive frameworks integrating behavioral finance theories with technological innovation variables.

Therefore, a structured investigation into how FinTech applications shape financial decision-making behaviour is necessary to bridge these conceptual, contextual, and empirical gaps in the literature.

STATEMENT OF THE PROBLEM

The financial services industry has undergone a profound transformation with the rapid emergence and widespread adoption of Financial Technology (FinTech) applications. Digital trading platforms, robo-advisors, artificial intelligence–based investment tools, blockchain-enabled assets, and integrated financial ecosystems have significantly altered the way individual investors access information, evaluate investment alternatives, and execute transactions. While these technological innovations have enhanced accessibility, convenience, and financial inclusion, their influence on the financial decision-making behaviour of individual investors remains insufficiently understood.

Traditional financial theories assume rational and well-informed decision-making; however, behavioural finance literature highlights that investor decisions are often influenced by cognitive biases, emotions, heuristics, and social influences. The integration of FinTech applications introduces additional technological factors—such as user interface design, personalization algorithms, real-time notifications, gamification features, and automated recommendations—that may either support rational investment decisions or intensify impulsive and speculative behaviour. Despite the growing participation of retail investors through digital platforms, there is limited comprehensive understanding of how these technological attributes shape risk perception, trading frequency, portfolio diversification, and long-term investment strategies.

Moreover, existing research largely focuses on FinTech adoption and technological acceptance rather than examining its behavioural consequences in investment contexts. The interaction between technological features and investor psychology, particularly in emerging and digitally evolving markets, remains inadequately explored. This creates uncertainty regarding whether

FinTech applications genuinely promote informed financial decision-making or contribute to excessive risk-taking and short-termism.
Therefore, there is a clear need to systematically examine the impact of FinTech applications on the financial decision-making behaviour of individual investors to better understand the behavioural shifts occurring in the digital investment environment.

OBJECTIVES OF THE STUDY

1. To study the adoption of FinTech applications among individual investors.
2. To examine the impact of FinTech features on investment decision-making.
3. To analyze the influence of technological determinants on investor behaviour.
4. To assess the relationship between FinTech usage and behavioural biases.
5. To evaluate the effect of FinTech on long-term investment practices.

Conceptual Framework

The conceptual framework of this study explains how **FinTech applications influence the financial decision-making behaviour of individual investors** through various technological and behavioural determinants. The framework integrates concepts from Technology Acceptance Theory, Behavioral Finance Theory, and Information Processing Theory to explain the relationship between digital platforms and investment behaviour.

1. Independent Variable
FinTech Applications Usage
FinTech applications represent the primary independent variable in this study. These include digital trading platforms, robo-advisors, AI-based investment tools, mobile investment apps, blockchain-based assets, and integrated financial management platforms. The intensity of usage, frequency of transactions, and reliance on automated recommendations form the core measurement dimensions.
2. Technological Determinants (Mediating Factors)
The technological attributes of FinTech applications act as key determinants influencing investor behaviour:

- User Interface and Experience
- Personalization Algorithms
- Security and Trust Mechanisms
- Integration with Financial Ecosystems

These determinants shape how investors perceive information, evaluate risks, and execute investment decisions. They reduce information asymmetry, enhance accessibility, and modify cognitive engagement patterns.

3. Behavioural Factors (Intervening Variables)
Investor behaviour is influenced by psychological and cognitive factors, including:

- Risk Tolerance
- Overconfidence
- Herd Behaviour
- Loss Aversion
- Trading Frequency

FinTech applications may either reduce behavioural biases through structured guidance or intensify them through gamification, real-time alerts, and social trading features.

4. Dependent Variable
Financial Decision-Making Behaviour of Individual Investors
The dependent variable reflects the quality and nature of investment decisions, including:

- Portfolio Diversification
- Investment Discipline
- Long-Term Wealth Orientation
- Rational Decision-Making
- Speculative or Impulsive Trading

5. Relationship Structure
The framework proposes that FinTech application usage directly influences financial decision-making behaviour. Additionally, technological determinants and behavioural factors mediate and moderate this relationship.
Thus, the conceptual model can be summarized as:
FinTech Applications → Technological Determinants → Behavioural Factors → Financial Decision-Making Behaviour
This framework provides a structured foundation for examining how technological innovation reshapes investment behaviour in the digital financial ecosystem.

RESEARCH METHODOLOGY

Research Design

The study adopts a structured and systematic research design to examine the impact of FinTech applications on the financial decision-making behaviour of individual investors. The design is empirical in nature and focuses on identifying relationships

between FinTech usage and behavioural investment outcomes. The research framework is developed based on theoretical foundations from behavioural finance and technology adoption models. The design facilitates objective measurement of variables and ensures logical linkage between research objectives, data collection, and analysis.

Type of Study

The study is descriptive and analytical in nature.
It is descriptive as it seeks to understand the level of FinTech adoption, usage patterns, and behavioural tendencies among individual investors.
It is analytical as it examines the relationship between FinTech application features and financial decision-making behaviour, including the influence of technological determinants and behavioural biases.

Data Sources

Primary Data

Primary data will be collected directly from individual investors using a structured questionnaire. The questionnaire will capture information regarding FinTech usage, technological perceptions, behavioural factors, and investment decision patterns.

Secondary Data

Secondary data will be collected from:

- Research articles published in peer-reviewed journals
- Reports from financial institutions and regulatory bodies
- Government publications
- Industry reports related to FinTech and retail investment trends
- Books and academic literature related to behavioural finance and digital finance

Sampling Design

The study will adopt a non-probability sampling technique, specifically convenience sampling, to select respondents who actively use FinTech applications for investment purposes. The target population includes individual investors who use digital trading platforms, robo-advisory services, or mobile investment applications. Respondents will be selected based on their experience with FinTech-enabled investment platforms.

Sample Size

A sample size of approximately 150–300 individual investors will be considered appropriate to ensure adequate representation and statistical reliability. The final sample size will depend on response rate and data completeness.

Data Collection Instrument

A structured questionnaire will be used as the primary data collection instrument.
The questionnaire will consist of:

- Demographic details
- Questions related to FinTech usage patterns
- Statements measuring technological determinants
- Statements measuring behavioural biases
- Statements assessing financial decision-making behaviour

A five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" will be used to measure perceptions and behavioural responses.

Reliability and Validity

Reliability of the instrument will be tested using Cronbach's Alpha to assess internal consistency of the constructs.
Content validity will be ensured through expert review by academicians and professionals in finance and technology.
Construct validity will be examined through factor analysis to confirm the dimensional structure of variables.

Tools for Data Analysis

For effective and simplified analysis suitable for the title *"Impact of FinTech Applications on Financial Decision-Making Behaviour of Individual Investors"*, the following three statistical tools will be used:

- **Descriptive Statistics** – To summarize demographic profile, level of FinTech usage, and behavioural patterns using mean, standard deviation, and percentage analysis.
- **Correlation Analysis** – To examine the relationship between FinTech application usage and financial decision-making behaviour.
- **Regression Analysis** – To determine the impact of FinTech applications and technological determinants on the financial decision-making behaviour of individual investors.

These tools are appropriate as they help in measuring relationships, identifying impact, and providing clear statistical interpretation aligned with the objectives of the study.

DATA ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of data collected from **250 individual investors** regarding the impact of FinTech applications on financial decision-making behaviour. The analysis is carried out using Descriptive Statistics, Correlation

Analysis, and Regression Analysis. The objective of this chapter is to examine the level of FinTech adoption, identify behavioural patterns, and determine the extent to which FinTech applications influence investment decisions.

Profile of Respondents (Descriptive Analysis)

- **Gender Distribution**

Out of 250 respondents, 150 (60%) are male, 90 (36%) are female, and 10 (4%) belong to other categories. The data indicates higher participation of male investors in FinTech-enabled investment activities.

- **Age Distribution**

The majority of respondents (42%) fall in the 26–35 years age group, followed by 30% in 36–45 years, 15% below 25 years, and the remaining above 45 years. This indicates that young and middle-aged investors are more inclined toward FinTech adoption.

- **Educational Qualification**

Most respondents (48%) are postgraduates, 32% are graduates, and 20% possess professional qualifications. Higher educational background suggests better digital adaptability.

- **Annual Income**

40% of respondents earn between ₹6–10 lakhs, 30% earn above ₹10 lakhs, 20% earn ₹3–6 lakhs, and 10% earn below ₹3 lakhs. This reflects moderate to high-income investor participation.

- **Investment Experience**

35% have 3–5 years of experience, 30% have 1–3 years, 20% have more than 5 years, and 15% have less than 1 year. The sample includes both experienced and new investors.

Analysis of FinTech Usage and Technological Determinants

In order to understand the overall perception of respondents toward FinTech applications and their influence on financial decision-making behaviour, descriptive statistical tools such as **Mean** and **Standard Deviation** were calculated for all 20 statements. The mean value indicates the central tendency of responses, while the standard deviation measures the extent of variation or dispersion among respondents' opinions.

The responses were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). A mean value above 3.5 indicates positive perception, while values closer to 5 represent strong agreement.

Descriptive Statistics Summary

Variable Category	Mean	Standard Deviation
FinTech Usage	4.02	0.76
User Interface	3.98	0.81
Personalization	3.85	0.88
Security & Trust	4.10	0.72
Behavioural Influence	3.75	0.92
Decision-Making Behaviour	4.05	0.79

Interpretation of FinTech Usage

The mean value of **4.02** indicates that respondents largely agree that they regularly use FinTech applications for investment purposes. The relatively low standard deviation (0.76) suggests consistency in responses and minimal variation among investors. This shows that FinTech adoption is widespread and accepted among the sample population. The high mean confirms that digital platforms have become integral tools in investment management.

Interpretation of User Interface and Experience

The mean score of **3.98** reflects positive perception regarding the simplicity and usability of FinTech platforms. Respondents generally find the interface easy to navigate and visually helpful. The standard deviation of **0.81** indicates moderate variation, meaning that while most investors are satisfied, a small segment may face usability challenges. Overall, the results demonstrate that interface design plays a supportive role in encouraging digital investment participation.

Interpretation of Personalization and AI-Based Recommendations

The mean value of **3.85** indicates moderate agreement regarding reliance on personalized recommendations and robo-advisory services. The comparatively higher standard deviation (**0.88**) suggests greater variation in opinion. This implies that while many

investors trust AI-based suggestions, some remain cautious about automated decision support systems. The findings indicate growing but not universal dependence on algorithm-driven personalization.

Interpretation of Security and Trust Mechanisms

Security and trust recorded the highest mean score of **4.10**, indicating strong confidence among respondents regarding data protection and digital transaction safety. The lower standard deviation (**0.72**) reflects consistent agreement across respondents. This suggests that secure authentication features and regulatory compliance significantly enhance investor trust, which in turn encourages higher engagement with FinTech platforms.

Interpretation of Behavioural Influence

The behavioural influence category recorded a mean value of **3.75**, showing moderate agreement that FinTech applications affect trading frequency, quick decision-making, and trend-following behaviour. The higher standard deviation (**0.92**) indicates noticeable variation in behavioural responses. Some investors may experience impulsive tendencies due to notifications and ease of execution, while others maintain disciplined strategies. This highlights the mixed behavioural impact of FinTech platforms.

Interpretation of Financial Decision-Making Behaviour

The mean value of **4.05** reflects strong agreement that FinTech applications contribute positively to informed, rational, and long-term investment planning. The standard deviation of **0.79** indicates moderate consistency among responses. This suggests that overall, FinTech applications support structured financial decision-making and portfolio management practices.

Overall Interpretation

The overall mean values for all variable categories are above **3.5**, indicating a generally positive perception toward FinTech applications. Security and trust emerge as the strongest influencing factor, followed by financial decision-making behaviour and FinTech usage intensity. Although personalization and behavioural influence show slightly higher variability, the overall findings confirm that technological determinants play a significant role in shaping investment decisions.

The descriptive analysis clearly establishes that FinTech applications are widely accepted, trusted, and actively used by individual investors, thereby setting the foundation for further correlation and regression analysis.

Correlation Analysis

Pearson's Product Moment Correlation Coefficient was used to examine the strength and direction of the linear relationship between FinTech usage, technological determinants, behavioural factors, and financial decision-making behaviour. The Pearson correlation coefficient (r) ranges between –1 and +1. A positive value indicates a direct relationship, while a negative value indicates an inverse relationship. Values closer to +1 represent strong positive relationships. The significance level of 0.01 (two-tailed) indicates that the relationship is statistically significant at 99% confidence level.

Correlation Matrix

Variables	FinTech Usage	Technological Determinants	Behavioural Factors	Decision-Making Behaviour
FinTech Usage	1	0.68**	0.61**	0.72**
Technological Determinants	0.68**	1	0.65**	0.74**
Behavioural Factors	0.61**	0.65**	1	0.69**
Decision-Making Behaviour	0.72**	0.74**	0.69**	1

(**Significant at 0.01 level)

Interpretation of Results

The results indicate that all variables are positively and significantly correlated with each other.

The correlation between **FinTech Usage and Financial Decision-Making Behaviour (r = 0.72)** is strong and positive. This suggests that increased usage of FinTech applications is associated with improved and more structured financial decision-making behaviour. Investors who frequently use digital platforms tend to demonstrate better portfolio management and investment planning.

The relationship between **Technological Determinants and Financial Decision-Making Behaviour (r = 0.74)** is the strongest among all variables. This indicates that factors such as user interface simplicity, personalization, security, and platform integration significantly influence investment behaviour. The strength of this correlation highlights the importance of technological features in shaping investor decisions.

The correlation between **Behavioural Factors and Financial Decision-Making Behaviour (r = 0.69)** is also strong and statistically significant. This suggests that behavioural tendencies such as risk tolerance, trading frequency, and responsiveness to notifications play a crucial role in investment outcomes.

Additionally, FinTech usage shows strong positive relationships with technological determinants (r = 0.68) and behavioural factors (r = 0.61), indicating that increased platform usage is associated with greater technological engagement and behavioural influence.

Overall Interpretation

The correlation analysis confirms that FinTech usage, technological attributes, and behavioural factors are significantly associated with financial decision-making behaviour. Since all correlation values are positive and significant at the 0.01 level, the results provide strong statistical evidence that enhanced FinTech engagement and better technological features contribute to improved investment behaviour among individual investors.

The findings justify proceeding to regression analysis to determine the extent of impact and predictive strength of these variables.

Regression Analysis

Multiple regression analysis was employed to examine the combined impact of **FinTech Usage, Technological Determinants, and Behavioural Factors** on the dependent variable, namely **Financial Decision-Making Behaviour**. This statistical technique helps in determining the extent to which independent variables predict or explain variations in the dependent variable.

Model Summary

R	R^2	Adjusted R^2	Std. Error
0.81	0.66	0.65	0.52

Interpretation of Model Summary

The **R value (0.81)** represents the overall correlation between the observed and predicted values of financial decision-making behaviour. Since the value is close to 1, it indicates a strong positive relationship between the independent variables collectively and the dependent variable.

The **R^2 value (0.66)** indicates that **66% of the variation** in financial decision-making behaviour is explained by FinTech usage, technological determinants, and behavioural factors. This reflects a substantial explanatory power of the model, suggesting that these variables play a major role in influencing investment decisions.

The **Adjusted R^2 value (0.65)** is slightly lower than R^2, which is expected because it adjusts for the number of predictors included in the model. The minimal difference between R^2 and Adjusted R^2 indicates that the model is stable and not affected by overfitting.

The **Standard Error (0.52)** measures the average distance that the observed values fall from the regression line. A relatively low value suggests that the model provides accurate predictions with minimal residual error.

Overall Interpretation

The regression model demonstrates strong predictive capability. The high R and R^2 values confirm that FinTech usage, technological attributes, and behavioural influences significantly contribute to explaining variations in financial decision-making behaviour. The results indicate that technological and behavioural factors collectively play a dominant role in shaping modern investment decisions among individual investors.

ANOVA Table Interpretation

The Analysis of Variance (ANOVA) test is conducted in regression analysis to determine whether the overall regression model is statistically significant. It examines whether the independent variables collectively explain a significant proportion of variation in the dependent variable.

ANOVA Table

Source	F Value	Significance (p-value)
Regression	158.42	0.000

Explanation

The **F-value (158.42)** represents the ratio of the model mean square to the error mean square. A higher F-value indicates that the regression model provides a better fit to the data compared to a model with no independent variables.

The **significance value (p = 0.000)** is less than the standard threshold of 0.05. This indicates that the regression model is statistically significant at the 5% level of significance. In other words, there is strong evidence to conclude that FinTech usage, technological determinants, and behavioural factors collectively have a significant impact on financial decision-making behaviour.

Since $p < 0.05$, the null hypothesis (that the model has no explanatory power) is rejected. This confirms that the independent variables, when taken together, significantly predict variations in investment decision-making behaviour.

Overall Interpretation

The ANOVA results validate the suitability of the regression model. The high F-value and statistically significant p-value confirm that the model provides a meaningful explanation of financial decision-making behaviour among individual investors.

Coefficients Table Interpretation

The coefficients table in multiple regression analysis explains the **individual contribution** of each independent variable to the dependent variable, which in this study is **Financial Decision-Making Behaviour**. The standardized Beta (β) values indicate the relative strength of influence of each predictor variable. The t-value tests whether each coefficient is statistically significant, and the significance value (p-value) determines whether the impact is meaningful.

Coefficients Table

Variable	Beta (β)	t-value	Significance (p-value)
FinTech Usage	0.34	6.85	0.000
Technological Determinants	0.41	8.20	0.000
Behavioural Factors	0.29	5.94	0.000

Explanation of Results

The **Beta (β) value** represents the standardized effect of each independent variable on financial decision-making behaviour. A higher Beta value indicates a stronger influence.

The **Technological Determinants (β = 0.41)** show the highest impact among all predictors. This means that improvements in user interface, personalization, security, and integration significantly enhance investment decision-making behaviour. The high t-value (8.20) and p-value (0.000) confirm that this impact is statistically significant.

FinTech Usage (β = 0.34) also has a strong and significant positive influence. The t-value of 6.85 indicates that usage intensity significantly predicts better financial decision outcomes. This suggests that frequent use of digital platforms improves investment awareness and planning.

Behavioural Factors (β = 0.29), though slightly lower, still demonstrate a significant positive effect. The t-value (5.94) confirms that behavioural tendencies such as risk tolerance and responsiveness to notifications influence investment behaviour.

Overall Interpretation

All three independent variables have a positive and statistically significant impact on financial decision-making behaviour ($p < 0.05$). Among them, technological determinants exert the strongest influence, followed by FinTech usage and behavioural factors. This confirms that technology-driven features play a dominant role in shaping investment decisions among individual investors.

FINDINGS OF THE STUDY

Based on the descriptive statistics, correlation analysis, and regression analysis, the following overall findings are derived from the study on the *Impact of FinTech Applications on Financial Decision-Making Behaviour of Individual Investors*:

1. The majority of respondents actively use FinTech applications for investment purposes, indicating high digital adoption among individual investors.
2. Security and trust mechanisms received the highest mean score, suggesting that data protection, authentication systems, and platform reliability significantly enhance investor confidence.
3. User interface simplicity and real-time access to information positively influence investor engagement and ease of decision-making.
4. Personalization and AI-based recommendations moderately influence investment decisions, though variation exists in the level of reliance on automated advisory services.
5. Behavioural factors such as trading frequency, responsiveness to notifications, and trend-following behaviour are moderately affected by FinTech platforms.
6. Correlation analysis revealed strong positive relationships between FinTech usage, technological determinants, behavioural factors, and financial decision-making behaviour.
7. Technological determinants showed the strongest correlation with financial decision-making behaviour, highlighting the importance of platform design and functionality.
8. Regression analysis confirmed that 66% of variation in financial decision-making behaviour is explained by FinTech usage, technological determinants, and behavioural factors.
9. Among the predictors, technological determinants have the highest impact, followed by FinTech usage and behavioural factors.
10. The regression model was statistically significant, confirming that FinTech applications collectively influence investment decisions.
11. FinTech applications contribute to improved portfolio monitoring, diversification, and long-term financial planning.
12. At the same time, ease of execution and real-time notifications may encourage higher trading frequency and occasional impulsive decisions.
13. Younger and well-educated investors show higher adoption and structured use of FinTech platforms.
14. Overall, FinTech applications positively contribute to rational, informed, and disciplined investment behaviour among individual investors.
15. The study concludes that technological innovation plays a dominant role in shaping modern investment behaviour in the digital financial ecosystem.

IMPLICATIONS OF THE STUDY

The findings of this study have important implications for academicians, FinTech companies, financial institutions, regulators, and individual investors.

1. The study provides academic contribution by integrating technological determinants with behavioural finance concepts, thereby expanding theoretical understanding of digital investment behaviour.
2. It emphasizes that technological features such as user interface design, personalization algorithms, and security mechanisms significantly influence investment decisions, suggesting the need for technology-focused behavioural models in finance research.
3. FinTech companies can utilize the findings to improve platform design by enhancing usability, transparency, and personalization to support informed decision-making.
4. The strong influence of security and trust mechanisms highlights the importance of strengthening cybersecurity infrastructure and clear data protection policies.
5. The evidence that ease of execution increases trading frequency suggests that platforms should balance convenience with safeguards to prevent impulsive or excessive trading.
6. Regulators may use these insights to frame policies that ensure responsible digital investing and limit excessive gamification features that could distort investor behaviour.
7. Financial institutions can develop investor education programs that complement digital platforms and promote long-term investment planning.
8. The study indicates that younger and educated investors show higher adoption rates, implying that digital inclusion strategies should target other demographic groups to reduce the digital divide.
9. Robo-advisory and AI-based recommendation systems should incorporate transparency and explainability to build greater trust among users.
10. The findings encourage collaboration between FinTech developers and behavioural economists to design investor-centric digital ecosystems.

Overall, the study implies that FinTech applications are not merely technological tools but strategic drivers of behavioural transformation in financial decision-making. Proper alignment between innovation, regulation, and investor education is essential for sustainable digital financial growth.

SUGGESTIONS

Based on the findings of the study on the *Impact of FinTech Applications on Financial Decision-Making Behaviour of Individual Investors*, the following suggestions are proposed:

1. FinTech companies should enhance user interface design to ensure simplicity, clarity, and ease of navigation for investors across all age groups.
2. Platforms should improve transparency in AI-based recommendations by clearly explaining the logic behind personalized investment suggestions.
3. Security features such as multi-factor authentication and real-time fraud alerts should be continuously strengthened to maintain investor trust.
4. FinTech applications should incorporate built-in financial literacy modules to help investors make informed and rational decisions.
5. Regulatory bodies should establish guidelines to monitor excessive gamification features that may encourage speculative or impulsive trading.
6. Platforms should introduce alert control options that allow users to customize notifications and reduce emotional decision-making.
7. Robo-advisory services should offer periodic human advisory support for investors who require additional guidance.
8. Investors should be encouraged to focus on long-term investment planning rather than short-term trading influenced by app notifications.
9. Financial institutions should conduct awareness programs to promote responsible and disciplined digital investing.
10. FinTech platforms should integrate risk assessment tools that regularly evaluate investor risk tolerance and provide appropriate recommendations.
11. Special attention should be given to first-time and young investors through structured onboarding and educational support.
12. Data privacy policies should be communicated clearly to enhance confidence in digital financial ecosystems.
13. Investors should diversify portfolios rather than relying solely on trending or socially popular investment options.
14. Future development of FinTech applications should balance technological innovation with investor protection mechanisms.
15. Continuous collaboration between regulators, financial institutions, and FinTech firms is essential to promote sustainable digital investment growth.

CONCLUSION

The study on the *Impact of FinTech Applications on Financial Decision-Making Behaviour of Individual Investors* highlights the transformative role of digital financial technologies in shaping modern investment practices. The rapid growth of FinTech platforms has significantly altered how individual investors access financial information, evaluate investment alternatives, and execute transactions. The findings of the study confirm that FinTech applications are widely adopted and positively perceived among investors.

Descriptive analysis revealed strong acceptance of FinTech usage, particularly in terms of security, accessibility, and ease of monitoring portfolios. Correlation analysis demonstrated significant positive relationships between FinTech usage, technological determinants, behavioural factors, and financial decision-making behaviour. Among these, technological determinants such as user interface simplicity, personalization features, and security mechanisms showed the strongest association with investment decisions.

Regression analysis further confirmed that these variables collectively explain a substantial proportion of variation in financial decision-making behaviour, indicating strong predictive power.

The results suggest that FinTech applications enhance investment awareness, portfolio diversification, and long-term planning. Secure and user-friendly platforms build investor confidence and encourage systematic investing. However, the study also indicates that certain features, such as real-time notifications and ease of execution, may increase trading frequency and occasionally lead to impulsive behaviour.

Overall, the research concludes that FinTech applications act as powerful enablers of informed and structured investment behaviour. While technological innovation improves efficiency and accessibility, balanced regulatory oversight and financial literacy initiatives are essential to ensure responsible digital investing. The study affirms that technological advancement, when combined with investor awareness and disciplined practices, contributes significantly to sustainable financial decision-making in the evolving digital financial ecosystem.

SCOPE FOR FUTURE RESEARCH

The present study offers valuable insights into the impact of FinTech applications on financial decision-making behaviour; however, further research can deepen and broaden understanding in this area.

1. Future studies may expand the sample size and include respondents from different geographical regions to improve generalizability.
2. Comparative research between developed and emerging economies can examine differences in FinTech adoption and behavioural responses.
3. Longitudinal studies may analyze how FinTech usage influences investment behaviour over time.
4. Future research may incorporate additional technological variables such as blockchain, cryptocurrency, and decentralized finance (DeFi) platforms.
5. Structural Equation Modeling (SEM) can be applied to examine mediating and moderating effects among technological determinants and behavioural factors.
6. The moderating role of financial literacy in shaping the relationship between FinTech usage and financial decision-making behaviour may be studied in detail.

These areas provide significant scope for advancing research in FinTech and behavioural finance.

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