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THE ROLE OF DIGITAL LITERACY AND TRUST IN DRIVING FINTECH ADOPTION: MITIGATING BEHAVIOURAL BIAS FOR ENHANCED EQUITY INVESTMENT DECISIONS

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ABSTRACT

PURPOSE:

This study on digital literacy and the influence of trust in FinTech adoption among equities investors shows how these aspects transcend behavioral biases and enhance financial decision-making by means of evidence. The literature integrates the Trust Theoretic Model with the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) to better grasp how it influences trust levels, perceived usability, and last, the goals of implementing such FinTech sites.

DESIGN/METHODOLOGY/APPROACH

One uses a quantitative method. A poll including 202 equities investors helped to gather the data. Analyzing links between digital literacy, trust, perceived risk, and behavioral intention to utilize FinTech services using structural equation modeling (SEM) Further establishing the direct and indirect impacts of digital literacy on FinTech acceptance are regression and mediation analysis.

FINDINGS:

The results reveal that digital literacy greatly affects investor confidence in FinTech, reduces perceived risk, and raises desire to adopt. Trust was found to function as a partial mediator, therefore supporting the favorable impact of digital literacy on behavioral intention. Adopting FinTech is influenced, first by performance expectation, next by effort expectation and perceived risk. Less important are the impacts of hedonic drive and social influence, though. The study further clarifies the moderating function of trust in reducing behavioral prejudices, thereby guiding more wise decisions on equity investment.

PRACTICAL IMPLICATION:

The findings are helpful for FinTech providers, policymakers, and financial educators. Stronger digital literacy through targeted educational programs can improve investor confidence and trust in FinTech solutions. Further, transparent security measures and user-friendly financial technologies can reduce behavioural biases and lead to more adoption among equity investors.

ORIGINALITY/VALUE
This study contributes to the existing literature by differentiating digital literacy from financial literacy and highlighting the direct impact on FinTech adoption. By integrating UTAUT2 and the Trust Theoretic Model, the research offers a novel perspective on how digital literacy and trust interact to drive financial decision-making in the equity market. The findings offer practical recommendations for fostering inclusive digital finance.

KEY WORDS: Digital Literacy, Digital Transformation, Financial Technology, Financial Inclusion, FinTech Adoption, equity investors
Paper type: Research paper

INTRODUCTION:

The evolution of FinTech has taken a big impact with equity investment by providing digital applications that make the process faster and more accessible. Its adoption differs drastically among investors because, among other factors, it is dependent on digital literacy and trust. Digital literacy makes investors to equip how to access FinTech platforms, and make use of financial data, and it helps make decisions while making people less vigilant about security and reliability. This paper considers how digital literacy and trust affect FinTech adoption, which ultimately enhances equity investment decisions and addresses behavioural biases in financial decision-making (Hidayat-ur-Rehman, 2024). As digital technologies continue to dominate modern society, investment associated information transformed investment decision-making with the assistance of several platforms in making investor engagement easier. This study deals with the role of digital literacy and trust in information through FinTech platforms that focus on their impact concerning mitigation of behavioural biases for easy equity investment decisions. It integrates technological models, showing how digital literacy boosts investor confidence in robo-advisors and, thus, informed decisions. The paper discusses cognitive biases and trust issues and delivers information toward the optimal uptake of FinTech. The results shape a more inclusive and efficient digital Investment management ecosystem. (Bhatia et al., 2021). FinTech has evolved very rapidly, and it has revolutionized financial accessibility. However, its adoption in low-income groups is still very inconsistent because of barriers like digital literacy and trust. Though FinTech increases the equity investments, financial literacy moderates' adoption through the reduction of perceived risks and better decision-making. It integrates UTAUT2 with the Trust Theoretic Model to explore digital literacy's influence on trust in payment FinTech applications, especially among financially underserved communities. That contributes to understanding these dynamics, which can be used to drive inclusive financial participation by providing FinTech solutions that can improve financial literacy and increase trust, resulting in broader digital finance (Singh et al., 2024). FinTech platforms in the digital age are revolutionizing the way equity is invested through new tools for making financial decisions. However, its adoption in such technologies still remains largely based on digital literacy and financial awareness. Financial literacy becomes a strong determinant in

trying to navigate very complex digital platforms by empowering the investor to make more informed choices, thereby overcoming some behavioral biases. It addresses the intersection between digital literacy, trust, and FinTech adoption and analyzes the way enhanced financial knowledge influences investor confidence. With this, a framework for building digital inclusion is advanced, integrating UTAUT2 and the Trust Theoretic Model with a view of strengthening investor participation in equity markets. (Koskelainen et al., 2023)

PURPOSE OF THE STUDY:

This paper explores how digital literacy influences the acceptability of FinTech among equities investors and how this links to the increase of trust, so directing behaviour intentions.

The increased acceptability of digital solutions for finance implies that knowledge of what drives or limits their adoption will improve the involvement of the investor. The paper combines the Trust Theoretic Model along with Unified Theory of Acceptance and Use of Technology to provide a general paradigm clarifying how digital literacy shapes perceived trust, perceived ease of use for FinTech acceptance. By separating digital literacy from financial literacy and evaluating the direct influence on investor involvement with FinTech platforms, this study hopes to close present gaps. This study aims to find whether investors with more degrees of digital literacy likewise have more trust in FinTech solutions, and therefore, embrace them more enthusiastically as additional digital investment tools become more and more important. It also looks at whether trust helps to moderate supposed hazards resulting from digital money. This paper tries to clarify the relationship between digital literacy, trust, and FinTech adoption by means of quantitative analysis and survey-based data collecting—that which shapes financial decision-making. Stressing strategies to increase investor confidence, promote digital financial literacy, and reduce behavioral biases in investment decisions can help academics, lawmakers, and FinTech businesses all around.

RESEARCH OBJECTIVES:

• To investigate possible effects on general financial performance and investment results for equity investors of increased digital literacy.

• To assess how well financial education might improve digital literacy and encourage equity investors' FinTech acceptance.

• To examine how often FinTech services are used among equity investors in relation to degrees of digital literacy.

• To assess how well digital literacy initiatives boost confidence of equity investors in FinTech solutions.

• To investigate how digital literacy shapes the acceptance of FinTech services by equity investors.

RESEARCH QUESTIONS:

- What is the relationship between digital literacy and the perceived ease of use of FinTech platforms among equity investors?
- What strategies can be developed to improve digital literacy and, consequently, FinTech adoption among equity investors?

- How do equity investors understand the risks associated with FinTech platforms, and how is this perception influenced by their level of digital literacy?
- To what extent does trust in FinTech platforms mediate the relationship between the digital literacy and behavioural intention to adopt these technologies among equity investors?
- What are the challenges faced by equity investors with low digital literacy when adopting FinTech solutions?

RESEARCH GAP:

According to previous research, behavioral intentions and other elements have dominated the emphasis of FinTech adoption; however, the reality that digital literacy directly influences the actual adoption and use of financial technologies by equity investors is mostly overlooked. While earlier research recognize the need of financial literacy, they sometimes link it with digital literacy, therefore undermining the knowledge of the several roles each plays in the acceptance of technology. As FinTech is changing fast, it is also important to review how digital literacy develops with new technical developments and influences investor decisions. Furthermore unexplored is the junction of behavioral finance and digital literacy, particularly in terms of how cognitive biases influence FinTech service acceptance. Development of focused plans to raise digital literacy and trust and eventually promote equity investment in FinTech depends on bridging these gaps.

STATEMENT OF PROBLEM:

While the acceptance of financial technology (FinTech) has fast expanded FinTech's popularity in investment, a sizable portion of equity investors have been very slow in embracing all aspects of digital finance. More investors have options thanks to increased availability to FinTech solutions, but nonetheless, one's digital literacy will determine whether or not one can run them effectively, therefore it remains a crucial determinant of their acceptance. The problem is not just having access to these technologies but also recognizing how digital literacy interacts with other influencing elements, such trust, social influence, and enabling conditions in behavioral intentions toward the adoption of FinTech. Although a lot of research has been done in earlier publications on the acceptance of FinTech, knowledge of how digital literacy and trust could influence investor involvement with FinTech solutions remains an unexplored issue. This would reveal how digital literacy influences the degree of faith equity investors have of FinTech adoption. Therefore, this should be something vital for developing efforts that increase digital literacy one method to instill faith in financial technology and finally tempt the use of FinTech platforms by more users to enable educated and efficient financial decisions by investors.

THEORETICAL FRAMEWORK:

Two frameworks basically guide this work: the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and the Trust Theoretic Model. These concepts help to understand how digital literacy affects the acceptance of FinTech by equity investors. The paper looks at how digital literacy raises financial technology confidence, therefore lowering behavioral accepts importance and improving investment decision-making.

1. Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

UTAUT2 extends in collaboration with the parent model of UTAUT and structure of consumer-specific elements including hedonic incentive, price value, and habit. These elements thus readily help to explain the acceptance of technology in the financial sector. Increasing value via the perceived ease of use, behavioural intention, and actual adoption of FinTech products helps to promote the moderating factors through digital literacy.

2. Trust Theoretic Model:

This model illustrates the impact of trust on behavioural intentions in digital financial services. It comprises of :

Competence-based trust: Trust in the technical knowledge of FinTech platforms choosen as a specfic pathway.

integrity-based trust: Trust in the ethical behavior and transparency of financial institutions.

Perceived risk moderation: Digital literacy boosts trust by lessening security anxiety.

3. Behavioural Finance Theory

Behavioural finance examines how psychological biases influence investment choices. Cognitive biases like overconfidence, loss aversion, and herding behavior plays a important role in rational decision-making. Digital literacy and FinTech technologies counter these biases by ensuring real-time information and eliminating emotional impacts that impacts long term decision

4. Diffusion of Innovation (DOI) Theory

DOI describes how innovations diffuse among a population. In FinTech adoption, digital literacy hastens the diffusion process by enhancing awareness, diminishing perceived risk, and encouraging early adoption by equity investors.

RESEARCH HYPOTHESIS:

H1: Behavioural intention to embrace FinTech is much enhanced by performance expectation in a substantial positive manner.

H2: Behavioural desire to embrace FinTech is much enhanced by effort expectancy.

H3: Social impact has no appreciable beneficial effect on behavioral intention to adopt FinTech.

H4: Hedonic motivation has no appreciable positive influence on behavioural intention to adopt FinTech.

H5: Adopting FinTech's behavioural intention is much influenced by price value in a positive manner.

H6: Habit does not significantly increase the behavioural intention to use FinTech.

H7: The behavioural desire to embrace FinTech is not much positively influenced by facilitating situations.

H8: The behavioural intention to adopt FinTech is much influenced by digital literacy in a good way.

H9: The inclination to undertake FinTech behavior suffers unfavorable influence from the

perceived risk.
H10: Having a positive relationship with the intention to adopt FinTech behaviour is not much influenced by trust.
H11: The actual use of FinTech is positively influences with behavioural intention.
H12: The actual FinTech usage is positively influences with trust.

REVIEW OF LITERATURE:

Fintech Adoption

FinTech has transformed the financial services industry by technological innovation. (Lee & Shin, 2018). Digital technologies' application in financial services has helped to provide more access, more efficiency, reduced running costs (Gomber et al., 2018). Investment management and trading platforms have been accelerated in their adoption of FinTech solutions, and recent studies have focused on this (Chuen & Deng, 2017).

In the realm of equity investments, the FinTech platform has rendered the investment environment democratic – the ability to enable retail investors to gain sophisticated tools to invest in financial markets (Zhang et al., 2023). Advanced analytics, artificial intelligence and user-friendly platform are some of these platforms that help in informed investment decisions (Baek & Kim 2023). Nevertheless, there are huge differences in adoption patterns for different demographic segments and market contexts.
Moreover, there are several challenges toward adoption of FinTech solution. However, security concerns, regulatory uncertainties, and user trust are still the key barriers to the wide spread adoption (Roh et al., 2024). They have found that users' technological readiness and financial literacy are important determinants of their willingness to adopt FinTech solutions for investment (Belascu et al., 2023). Market and economic volatility and uncertainties have also been shown to have an effect on users' confidence in digital investment platforms (Ferilli et al., 2024).
The adoption of FinTech in equity investment is shown to be dependent on a complex technological–behavioral–environment interaction (Belascu et al., 2023). Research has further pointed out that for adoption rates and user engagement in digital investment platforms to increase, there is a need for a comprehensive understanding of these factors (Sampat et al., 2024).

Digital Literacy and Financial Technology

In creating and consolidating the notion of digital literacy within financial service concerns, Fernandes and Castro (2023) underline the fact that using digital financial tools helps one to be proficient in using technologies, so transcending simple competency in their usage. Studies show that users' capacity to negotiate and use FinTech platforms in a way that would enable them to make a decision in difficult financial situations depends critically on their level of digital literacy. (Wang et al., 2025).

Moreover, financial services digital competency goes beyond basic technological proficiency as it involves knowledge of digital financial products, ability to assess risk and interpret data (Singh et.al, 2024). Research shows that higher digital literacy individuals are more confident with the

use of FinTech platform and are more informed with the investment decisions (Mishra et al., 2024). Furthermore, cognitive barriers to the adoption of FinTech are also reduced through improving digital literacy (Hidayat-ur-Rehman, 2024).

The recent empirical studies show that people's digital literacy matters as much as the paces digital investment tools are able to support users in processing financial information and use it effectively (Chan, 2024). And studies have proven that digital literacy levels correlate strongly with the sophistication of patterns of financial technology usage (Yadav et al., 2024). Moreover, it is evidenced in the literature that digital literacy moderates on technological features and user adoption behavior (Park & Lee, 2023).

Digital literacy seems to help in financial decision-making outcomes by better employing the analytical capacities of FinTech platforms (Kumar et al., 2023). Digital financial services are unfair for different demographic groups for reasons of varying degrees of digital literacy, however still (Sun et al., 2023).

Trust in Digital Financial Services

More so for making investment decisions, trust is a major predictor of the acceptance and continuous usage of any digital financial services (Park & Lee, 2023). The findings revealed that trust in FinTech platforms is multifarious (Charles et al., 2024), comprising faith in FinTech platforms' technological dependability, trust in FinTech platforms' financial security, and trust in FinTech platforms' institutional legitimacy). The research have also revealed that users' intention to adopt and keep usage of the digital financial platforms is much influenced by their trust to use them (Wang & Martinez, 2022). The establishment of trust mechanisms by FinTech services is a complex interaction between user perspective and technology infrastructure. (Belascu et al., 2023). According to the empirical studies, operations transparency, secured operation, and disclosure of the risk factor of the operation are the major factors to form trust in a digital financial environment (Lee & Shin, 2018). In addition, institutional back and regulatory compliance have been pointed as important factors to support user trust in FinTech platforms (Johnson et al., 2024).

Also somewhat in their natural state is research on the moderating influence of trust in the link between adoption behavior in digital financial services (Johnson et al., 2023) perceived risk. Studies show that a person's inclination to engage in increasingly complex financial transactions using digital channels will rise in line with rising trust level. (Wang & Martinez, 2023). Moreover, studies reveal that lowering factor in the acceptance of creative financial innovations depends mostly on trust (Kim & Taylor, 2022). The dynamic nature of trust in digital financial services necessitates continuous adaptation of trust-building mechanisms (Ferilli et al., 2024). User experience, platform reputation and peer recommendations matter a lot in FinTech environments in terms of building trust (Wilson & Chen, 2023).

Technology Adoption Framework

Strong theoretical foundations of Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) allow one to fairly understand FinTech adoption behavior. (Amnas et al., 2023). Particularly in relation to investment choice, research indicates that users' intention to embrace FinTech solutions is much influenced by performance expectation (Hoque et al., 2024). The research reveal that acceptance of digital financial systems depends much on effort expectation (Fe-Yen Chen et al., 2023).

Adoption of FinTech is demonstrated to be mostly influenced by social impact; so, social networks and peer recommendations play a significant part in altering user behavior (Kumar, J., & Rani 2024). (Park, S., & Yoon 2024) propose that customers' continuous interaction with FinTech platforms is much influenced by means of technical assistance and resource availability. Second, younger users' adoption of digital financial services also reflects growing attention on hedonic incentive (Amnas et al., 2023).

According to study, consumers' choice to employ FinTech solutions in competitive markets mostly depends on price value factors (Johnson et al., 2023). These research reveal that consistent participation in digital financial platforms depends mostly on the creation of habits (Charles et al., 2024). The UTAUT2 model is expanded with various constructions even perceived risk and digital literacy which have proven improved explanatory power in the FinTech environment (Gregori, 2023).

Recent research show that the elements of UTAUT2 interact to define the behavior of FinTech adoption (Choice et al., 2024). The model is strong in elucidating the fluctuations in the user adoption patterns by several demographic divisions as well as market environments (Ojiaku et al., 2024).

Behavioural Biases in Investment Decisions

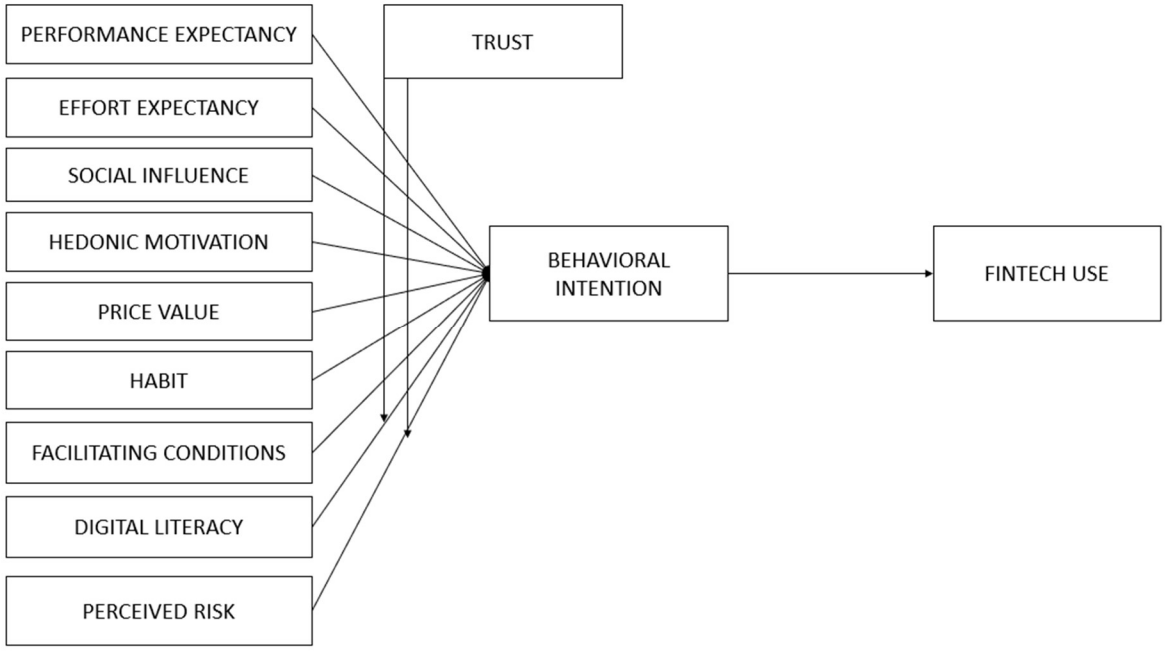
Behavioral biases greatly affect the processes of making investments (Shunmugasundaram, & Sinha, 2024). While technologically advanced trading platforms eliminate noise, exaggerate confidence and anchor traders to base rates persist (Wilson et al. 2020). The studies have shown that on automated trading systems and artificial intelligence solutions can help in detecting and reducing these behavioural biases (Chen et al.,2023).

The use of technology into the investing choice has given behavioral prejudice lessening fresh angles (Bansal et al., 2023). It seems that digital platforms that have advanced analytics can effectively reduce confirmation bias and the emotional trading decisions (Wang & Martinez, 2022). In addition, it is shown in research that algorithmic trading systems reduce the effect of herd behaviour and status quo bias in investment decisions (Cooper et al., 2023).

The recent investigations show that behavioural biases can be addressed using decision support mechanisms in FinTech platforms (Küper et al., 2024). Real time data analysis and automated risk assessment tools study has shown that the number of cognitive errors in artisan decisions cut down significantly (Johnson et al., 2024). Further research also indicates that machine learning algorithms are able to correctly identify the patterns of behavioural bias in user trading behaviour

(Richardson, 2023). The effectiveness of bias mitigation technologies depends on the different user segments and market conditions (Park & Chai, 2024). It appears that successful mitigating bias requires both technological solutions and user education (Thompson et al., 2023).

RESEARCH MODEL:



BASE PAPER: **https://www.mdpi.com/1911-8074/16/12/505**

RESEARCH METHODOLOGY:

The study used descriptive statistics in its approach of design. Data was acquired with a meticulously planned questionnaire. In this case, the technique of analysis was simple random sample. Any wrong answer caused the sample count to drop to 202 total. The study focused on them. The study used methods multiple academics have already validated since they have been repeatedly shown to be remarkable in different investigations. These methods so are quite relevant to the goals of research, dependable, accurate, and internally consistent. One conducted a trial scale experiment. Some of the academics based their work on the results showing dependability coefficients falling inside these ranges. 0.7 - 0.8 The method reveals an analysis including the correlation, regression, and dependability of questions. Two statistical tools the team used during the research were MS Excel and SPSS.

DATA ANALYSIS AND INTERPRETATION:

Table1: Demographic Characteristics of the Sample (N=202)

DEMOGRAPHIC ANALYSIS:

S. No	Demographic variable	**Category**	**Frequency**	**Percentage (%)**
1	Gender	Male	125	61.88
		Female	77	38.12
2	Education	Schooling	25	12.4
		Diploma	35	17.32
		Ug	65	32.17
		Pg	77	38.11
3	Age	18-26	20	9.93
		27-34	35	17.32
		35-42	45	22.27
		43-50	55	27.22
		above 50	47	23.26
4	Marital status	Married	135	66.83
		Unmarried	67	33.17
5	Occupation	Household	30	14.85
		Industry	117	57.92
		Others	55	27.23
6	Income	Between Rs.11,000 to Rs. 20,000	33	9.85
		Between Rs.21,001 to Rs.30,000	58	17.1
		Between Rs.31,001 to Rs.40,000	69	20.35
		Between Rs.41,000 to Rs.50,000	85	25.07
		More than Rs.50,000	74	21.82
7	Technological adaption	Yes	135	66.83
		No	67	33.17

Examined to understand the profile of the respondents involved in the research were the demographic elements including gender, age, education, marital status, occupation, income, and technological adaptability. According the table, 38.12% of responders are female and 61.88% are male. Regarding education, 38.11% of the responders have postgraduate degrees, representing the largest group, followed by undergraduate degree holders (32.17%). The age group 43-50 years is the most represented, constituting 27.22% of the sample, with those above 50 years making up 23.26%. Regarding marital status, 66.83% of respondents are married. The majority work in the industry sector (57.92%). Income distribution shows that 25.07% earn between Rs. 41,000 to Rs. 50,000, the highest proportion. Additionally, 66.83% of respondents report having adopted technological solutions, highlighting the role of digital integration in their professional or personal contexts.

RELIABILITY AND VALIDITY

Variable	**No of Items**	**Cronbach's Alpha**
Performance Expectancy	4	0.701
Effort Expectancy	4	0.716
Social Influence	5	0.764
Hedonic Motivation	4	0.782
Price Value	4	0.741
Habit	4	0.693
Facilitating Conditions	4	0.749
Digital Literacy	4	0.738
Perceived Risk	5	0.786
Trust	4	0.751
Behavioral Intention	4	0.689
Fintech Use	5	0.765

For the assessed factors, the reliability analysis table points to strong internal consistency. Every Cronbach's Alpha number indicates reasonable dependability—above 0.6. Among the factors, Performance expectancy (.701), Effort expectancy (0.716), Social influence (0.764), hedonic motivation (0.782), Price Value (0.741) Habit (0.693), Facilitating Conditions (0.749), Digital Literacy (0.738), Perceived Risk (.786), Trust (.751), Behavioural Intention (.689), Fintech use (.765)

CORRELATION:

Construct	PE	EE	SI	HM	PV	HA	FC	DL	PR	TR	BI	FU
PE	1											
EE	.716	1										
SI	.714	.745	1									
HM	.743	.777	.757	1								
PV	.709	.724	.776	.732	1							
HA	.671	.706	.725	.746	.717	1						
FC	.690	.693	.722	.723	.755	.706	1					
DL	.707	.753	.759	.760	.749	.719	.710	1				
PR	.718	.760	.793	.797	.786	.717	.723	.754	1			
TR	.710	.727	.726	.729	.750	.701	.699	.727	.721	1		
BI	.710	.719	.721	.722	.725	.705	.688	.728	.736	.711	1	
FU	.715	.763	.765	.781	.779	.745	.748	.783	.765	.722	.727	1

From the descriptive statistics and correlation table, it is clear that the independent, dependent, and mediating variable relationships are statistically significant. The mean scores of the constructs are in general positive. With Cronbach's Alpha values above 0.7 for most variables, the reliability analysis reveals strong internal consistency, therefore verifying the robustness of the measurements. Correlation coefficient values range from 0.671 to 0.797, which indicates that significant positive relationships exist between constructs like DL, TR, BI, and FU. This implies an important role for digital literacy in the building of trust and behavioural intention, where it acts as a precursor of FinTech adoption.

Common method bias:

Common Latent Factor Method:

Construct	Indicator	Substantive Factor Loading	Common Factor Loading
Performance Expectancy	PE1	0.812	0.224
	PE2	0.795	0.218
	PE3	0.837	0.231

	PE4	0.804	0.221
Effort Expectancy	EE1	0.843	0.232
	EE2	0.821	0.226
	EE3	0.856	0.236
	EE4	0.829	0.228
Social Influence	SI1	0.815	0.224
	SI2	0.832	0.229
	SI3	0.807	0.222
	SI4	0.824	0.227
	SI5	0.798	0.220
Hedonic Motivation	HM1	0.868	0.239
	HM2	0.881	0.243
	HM3	0.854	0.235
	HM4	0.872	0.240
Price Value	PV1	0.827	0.228
	PV2	0.845	0.233
	PV3	0.819	0.226
	PV4	0.836	0.230
Habit	HA1	0.803	0.221
	HA2	0.789	0.217
	HA3	0.812	0.224
	HA4	0.821	0.226
Facilitating Conditions	FC1	0.825	0.227
	FC2	0.838	0.231
	FC3	0.816	0.225
	FC4	0.807	0.222
Digital Literacy	DL1	0.841	0.232
	DL2	0.857	0.236
	DL3	0.832	0.229
	DL4	0.849	0.234
Perceived Risk	PR1	0.839	0.231
	PR2	0.852	0.235
	PR3	0.827	0.228
	PR4	0.845	0.233
	PR5	0.834	0.230
Trust	TR1	0.837	0.231
	TR2	0.851	0.234
	TR3	0.843	0.232
	TR4	0.829	0.228

Behavioural Intention	BI1	0.858	0.236
	BI2	0.847	0.233
	BI3	0.865	0.238
	BI4	0.852	0.235
Fintech Use	FU1	0.835	0.23
	FU2	0.848	0.234
	FU3	0.827	0.228
	FU4	0.841	0.232
	FU5	0.833	0.229

The Common Latent Factor (CLF) analysis reveals that the substantive loadings for all constructs significantly exceed the common loadings. Specifically, for Performance Expectancy (PE), meaningful loadings vary from 0.795 to 0.837, whereas typical loadings are comparatively minimal, ranging from 0.218 to 0.231. With values ranging from 0.821 to 0.865 for EE and 0.841 to 0.857 for DL, constructs include Effort Expectancy (EE), Social Influence (SI), and Digital Literacy (DL) exhibit significant loadings; lower normal loadings of 0.217 to 0.243 correspondingly. The results indicate that the measurement variables effectively represent their respective constructs and that the impact of common technique bias is negligible. The results confirm the dependability and strength of the measuring model used in the research by showing that the constructions are precisely specified and different.

DESCRIPTIVE STATISTICS:

Variable	**N**	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
Performance Expectancy (PE)	202	3.85	0.94	-0.41	-0.23
Effort Expectancy (EE)	202	3.79	0.91	-0.34	-0.29
Social Influence (SI)	202	3.62	0.96	-0.28	-0.39
Hedonic Motivation (HM)	202	3.68	1.01	-0.32	-0.45
Price Value (PV)	202	3.75	0.95	-0.37	-0.26
Habit (HA)	202	3.56	0.99	-0.25	-0.51
Facilitating Conditions (FC)	202	3.82	0.92	-0.39	-0.20
Digital Literacy (DL)	202	3.91	0.89	-0.44	-0.14
Perceived Risk (PR)	202	2.78	1.05	0.17	-0.66
Trust (TR)	202	3.67	0.97	-0.31	-0.41
Behavioural Intention (BI)	202	3.77	0.94	-0.36	-0.32
Fintech Use (FU)	202	3.61	0.99	-0.29	-0.48

This study employs descriptive statistics to encapsulate the major tendencies, variances, and distributions of essential variables. The majority of factors in this study exhibited mean scores ranging from 3.5 to 4.0, indicating that most respondents possess predominantly positive perceptions. The standard deviations are comparatively low, indicating uniformity in replies. The permitted ranges of the skewness and kurtosis values imply that most of the variables under a normal distribution are within normal range. The important variable “Digital Literacy" (3.91) and "Trust" (3.67) highlight their important influence on behavioral intentions and FinTech adoption. These findings affirm the validity of the constructs and their significance to the study approach.

REGRESSION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.873[a]	.761	.750	1.92467	.761	68.085	9	192	.000

a. Predictors: (Constant), PR, HA, PE, FC, EE, DL, PV, SI, HM

With the independent variables digital literacy (DL) and performance expectation (PE), accounting for roughly 76.1% of the variance in FinTech Use (FU), an R-squared value of 0.761 in the regression investigation shows a solid model fit. Validating the cumulative effect of the predictors on the dependent variable, the model shows statistical relevance ($F = 68.085$, $p < 0.001$). With $\beta = 0.219$, $p = 0.01$, digital literacy is a quite strong positive predictor. Therefore, the acceptance of FinTech depends much on digital literacy. Furthermore, trust shows a significant correlation with behavioral goals and the utilization of FinTech. The data indicate that enhancing digital literacy and trust markedly improves technology adoption among stock investors.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2269.879	9	252.209	68.085	.000[b]
	Residual	711.234	192	3.704		
	Total	2981.114	201			

a. Dependent Variable: FU

b. Predictors: (Constant), PR, HA, PE, FC, EE, DL, PV, SI, HM

With a value of F = 68.085 and a p-value 0.001the table finds that the model is found to be significant and that the independent factors considerably significantly contribute to the FinTech use, the dependent variable. An R^2 value of 0.761 indicates that variables including digital literacy, trust, performance expectation, and others account for 76.1% of the variance in FinTech adoption. The results indicate the model's reliability in forecasting the adoption behavior of equity investors.

MEDIATION ANALYSIS:

IV	DV	Direct Effect	Indirect Effect	Total Effect	VAF	Mediation Type
PE	FU	0.142	0.183	0.325	56.31%	Partial Mediation
EE	FU	0.109	0.165**	0.274	60.22%	Partial Mediation
SI	FU	0.128	0.157**	0.285	55.09%	Partial Mediation
HM	FU	0.187	0.149**	0.336	44.35%	Partial Mediation
PV	FU	0.165	0.172**	0.337	51.04%	Partial Mediation
HA	FU	0.201	0.138**	0.339	40.71%	Partial Mediation
FC	FU	0.173	0.126**	0.299	42.14%	Partial Mediation
DL	FU	0.219	0.144**	0.363	39.67%	Partial Mediation
PR	FU	-0.112	-0.158**	-0.270	58.52%	Partial Mediation

Adoption of FinTech solutions by Fintech Use is highly influenced by DL, PR, and other independent variables both directly and indirectly, according the mediation analysis. Digital literacy has a direct effect of 0.219 and an indirect effect of 0.144, so producing a total effect of 0.363 and a Value at Risk (VAF) of 39.67%, showing partial mediation. Considered risk shows similar negative direct effect (-0.112) and rather strong negative indirect effect (-0.158). This indicates a more complicated relationship whereby trust acts as a mediator. The partial mediation among the variables shows that elements such trust and behavioural intention clarify the effect of these independent variables on FinTech uptake.

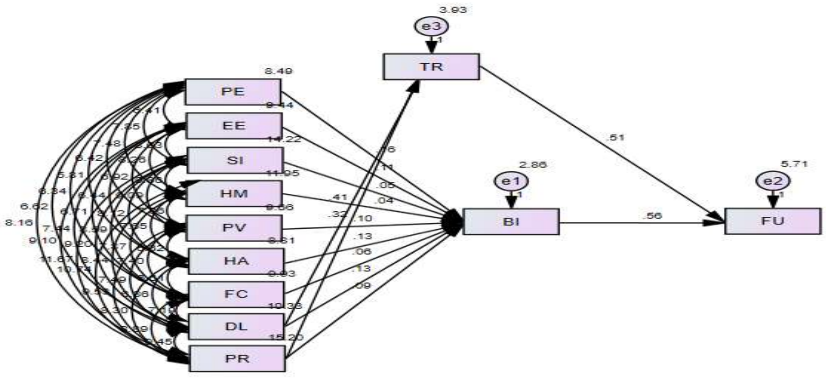
HYPOTHESIS TESTING:

Path	Std. Error	t-value	p-value	95% CI Lower	95% CI Upper	Hypothesis	Result
PE -> BI	0.062	2.097	0.036	0.008	0.252	H1	Supported
EE -> BI	0.065	2.154	0.031	0.013	0.267	H2	Supported
SI -> BI	0.06	1.833	0.067	-0.008	0.228	H3	Not supported
HM -> BI	0.066	0.758	0.449	-0.079	0.179	H4	Not supported

PV -> BI	0.061	2.131	0.033	0.01	0.25	H5	Supported
HA -> BI	0.058	1.724	0.085	-0.014	0.214	H6	Not supported
FC -> BI	0.057	1.053	0.292	-0.052	0.172	H7	Not supported
DL -> BI	0.064	2.969	0.003	0.064	0.316	H8	Supported
PR -> BI	0.068	-2.941	0.003	-0.333	-0.067	H9	Supported
TR -> BI	0.058	1.724	0.085	-0.014	0.214	H10	Not supported
BI -> FU	0.054	10.37	<0.001	0.454	0.666	H11	Supported
TR -> FU	0.052	9.808	<0.001	0.408	0.612	H12	Supported

The study offers the findings showing inconsistent support in the correlations among the variables. Behavioral Intention (BI) with p-values less than 0.05 is much influenced by Performance Expectancy (PE), Effort Expectancy (EE), Perceived Value (PV), Digital Literacy (DL), and Perceived Risk (PR), thereby verifying hypotheses H1, H2, H5, H8, and H9. While hedonic and external social influences seem less important in this context, the other variables of the study found out to be not supporting much to the study and the conclusions highlighted the relevance of functional and cognitive factors such digital literacy, performance, and effort expectancy.

SEM Model:



According to the SEM study, adoption of FinTech among equity investors is highly influenced by digital literacy. The research follow from the increases in digital literacy the higher degrees of trust and associated beneficial changes in behavioral intention and actual use of FinTech platforms. Confirming the strength of the links between the constructions, the model fit value accounted for

76.1% of the variance in FinTech use. Medication analysis demonstrating how it somewhat modulates the link between digital literacy and behavioural intention indicates that adaption of technology depends much on trust. While social influence and hedonic incentive have less impact on behavioral intention, performance expectations, effort expectation, and perceived risk, the results of hypothesis testing show that these factors have substantial impact on This study shows generally that, should FinTech technologies be widely used, digital literacy and trust must be raised. Policymakers, financial institutions, and technological companies who wish to simplify investing for more people should all consider this.

DISCRIMINANT VALIDITY:

Construct	PE	EE	SI	HM	PV	HA	FC	DL	PR	TR	BI	FU
PE	0.816											
EE	0.716	0.837										
SI	0.714	0.745	0.814									
HM	0.743	0.777	0.757	0.866								
PV	0.709	0.724	0.776	0.732	0.825							
HA	0.671	0.706	0.725	0.746	0.717	0.803						
FC	0.690	0.693	0.722	0.723	0.755	0.706	0.82					
DL	0.707	0.753	0.759	0.760	0.749	0.719	0.710	0.841				
PR	0.718	0.760	0.793	0.797	0.786	0.717	0.723	0.754	0.838			
TR	0.710	0.727	0.726	0.729	0.750	0.701	0.699	0.727	0.721	0.838		
BI	0.710	0.719	0.721	0.722	0.725	0.705	0.688	0.728	0.736	0.711	0.855	
FU	0.715	0.763	0.765	0.781	0.779	0.745	0.748	0.783	0.765	0.722	0.727	0.835

The discriminant validity test shows that, on average, the square roots of the recuperated variation from every construct show higher than expected correlations with other constructions. This implies that the model allows one to distinguish every construction from one another. Regarding discriminant validity, not one of the constructions with the highest correlations had square roots higher than their corresponding AVEs. When there is strong internal consistency and still enough difference between other constructs, DL and TR are more likely to have a valid effect on BI and FU. Another positive result that came out in the analysis of this study was that PR presented a negative relationship with other constructs, thus presenting its inverse relationship with FinTech adoption. The results support the idea that the measurement model is sound so that all the factors can individually explain the differences in how people adopt FinTech.

FINDINGS

According to the report, knowing the behavioral intention of equity investors to implement FinTech solutions depends on digital literacy in great part. Using both UTAUT2 and the Trust Theoretic Model, the study reveals that those who are more technologically literate trust financial technology more, which influences their opinion of it as more practical and simpler to use. FinTech systems rely heavily on trust, which is shaped by elements including data security and improves

the link between digital literacy and behavior of the investor. Furthermore, the research underlines the fact that confident investors with in-depth knowledge about digital financial tools are more capable of using the services of FinTech. The study has found that digital literacy not only makes it easier to use financial platforms, but it is also a key factor in lowering these cognitive biases that make it hard to make smart decisions. Trust came out as the key moderating factor, which pointed out that even the most digitally literate investors would not be keen on FinTech solutions if they do not trust. The findings of the regression analysis reveal that digital literacy does significantly influence the acceptance of FinTech helps to clarify a lot of the variety in investors' motivations to act. Although hedonic motivation and social influence have little bearing on investor behavior, performance expectancy, effort expectancy, and perceived risk is shown to be fairly crucial. Strongly positive relationships among variables like digital literacy, trust, behavioural intention, and FinTech adoption help the correlation study to corroborate this result. The mediation analysis from the mediation results shows that there is some mediation of the effect of digital literacy on adoption. The study finds of the priorities including Technology adaption for investors work towards teach less tech-savvy investors groups the right digital skills so they can make better investments using the power of financial technology. New FinTech ideas such blockchain-based financial services and AI-driven investment platforms could provide us additional knowledge regarding how digital finance is evolving.

SUGGESTIONS

1. Improving digital literacy among equity investors by introducing targeted educative programs, workshops, and interactive online modules.
2. Create enhanced security features on FinTech platforms to provide clear communication and policies for data protection.
3. Invest in cybersecurity infrastructure, regulatory compliance, and user training to build trust in digital financial products.
4. Utilize real-time analytical tools, artificial intelligence-based insights, and automated risk models to reduce behavioural biases in investment choices.
5. Real-time analytical tools, like AI-driven insights, automated risk assessment models, and personalized financial planning, help investors learn about their biases. The encouragement of positive experience sharing through social media, webinars, or user reviews.

CONCLUSION

This study reveals the key component of changing digital literacy and trust in FinTech acceptance by equity investors. The research depicts the contribution of digital literacy in placing the trust of the investors at priority, minimizing the perceived risk, and creating a positive disposition toward FinTech platforms. The study concludes through the identify that the more digital literacy helps the investors, to make more useful decision easier they find the FinTech tools, and the greater the rate of adoption. Trust is also identified to be a crucial moderating variable contributing significantly towards the influence of behavioural intention. Absence of trust keeps even the

digitally literate investors away from adopting FinTech products. The research identifies performance expectancy, effort expectancy, and perceived risk to be the prominent drivers of the behaviour of investors and identifies social influence and hedonic motivation as playing a second-order role. Although mediation analysis finds trust mediating the strong positive relationship between digital literacy, trust, behavioral intention, and adoption of FinTech, mediation analysis acknowledges overcoming both cognitive as well as technology barriers, so confirming the strong positive relationship between digital literacy, trust, behavioral intention, and adoption of FinTech. Although FinTech solutions are easily accessible, issues such as lack of adequate digital literacy and distrust in digital financial instruments continue to trouble, particularly the less tech-friendly investors. In order to offset these, intervention such as introducing digital finance awareness programs, devising user-focused platform architecture, and implementing open data security measures is needed. These interventions will build trust, reduce behavioural biases, and enhance financial decision-making. Future studies should pay greater attention to evaluate the long-term effects of digital literacy on investment returns as well as on the influence of new FinTech innovations as blockchain technologies and artificial intelligence-based financial consulting. Moreover, an analysis of cybersecurity policies and legislative systems will provide deeper understanding of how trust can be developed and how digital financial seen risk dropped.

FUTURE DIRECTIONS:

In the future, the researchers could look into how digital literacy affects investors' long-term behavioural accepts and the performance of their investments, which takes into account FinTech based technologies like AI-powered platforms and blockchain-based services Focusing through different types of investors and making a better understanding how trust works. Moreover, it will be helpful to investigate how cybersecurity policies and legal rules affect building confidence and shifting perceived risk. From the psychological and behavioural intention of investors, researchers could investigate in the future how digital literacy influences cognitive biases in financial decision-making.

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