

Determinants of Digital Investment Platform Adoption for SIP Mutual Fund Investments: The Roles of Technology Readiness, Trust, and Financial Self-Efficacy

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Abstract: As financial technology continues to proliferate, the investment process of SIP mutual funds has undergone a significant change with investors being able to invest through digital platforms which provides convenience, transparency and efficient portfolio management. However, there are significant variations in technology readiness, confidence and trust of investors that limit the adoption of the technology. The present study focuses on the relationship between technology readiness, trust and financial self-efficacy with adoption of digital investment platform by retail SIP investors of mutual fund. Technology Readiness Theory, Technology Acceptance Model, and the Social Cognitive Theory are combined in a conceptual model to address the adoption behaviour of investors. The hypothesis suggested relationships will be tested with a quantitative research design using a structured questionnaire and Partial Least Squares Structural Equation Modelling (PLS-SEM). The study will show that technology readiness has a positive effect on adoption, financial self-efficacy directly affects adoption and it also serves as a mediator between technology readiness and adoption, and trust positively impacts adoption. The findings are likely to benefit the literature of behavioural finance and FinTech, and give guidelines to the mutual fund companies, digital investment platforms, and policymakers to enhance participation of investors in digital investment services.

Keywords: Digital Investment Platform, SIP Mutual Fund Investment, Technology Readiness, Trust, Financial Self-Efficacy, FinTech, Retail Investors

1. Introduction

Digital technologies have revolutionized the financial service delivery and investors can now access SIP products of mutual funds online. These platforms make investing easier, cut down on the cost of transactions and enable retail investors to monitor their portfolios real time. The digital investment platforms in India have been growing at a rapid pace thanks to the increasing penetration of smartphones, better internet connectivity, and the proliferation of FinTech services.

Yet, just because the technology is available doesn't mean that everyone will use it. There are individual differences in the willingness to use digital investment platforms based on technological competence, confidence in the ability to make financial decisions, and trust in digital service providers. These behavioural factors also play an important role in investment decisions, that entail financial risk and long term commitment.

The technology readiness is a reflection of an individual's attitudes in adopting new technologies and trust lowers uncertainty in online financial transactions. Financial self-efficacy is an investor's self-confidence in their financial self-determination and it may impact their effectiveness in using digital financial investment services. These factors combine to give a holistic account of digital investment platform adoption.



While previous studies have explored digital banking and FinTech adoption, limited work has explored the interaction between technology readiness, trust and financial self-efficacy on the adoption of digital investment platform in the mutual fund domain. This research gap can be filled by the development of an integrated behavioural framework to explain retail investors' decisions to adopt. It is hoped that the results will contribute to financial institutions and FinTech firms to create strategies for improving investor confidence and to promote the participation of digital investment.

2. Research Objectives

1. To examine the effect of technology readiness on digital investment platform adoption.
2. To analyse the influence of trust on digital investment platform adoption.
3. To evaluate the effect of financial self-efficacy on digital investment platform adoption.
4. To examine the influence of technology readiness on financial self-efficacy.
5. To investigate the mediating role of financial self-efficacy between technology readiness and digital investment platform adoption.

3. Literature Review

In the digital era, retail investors have been increasingly looking for digital investment platforms as an important avenue to access SIP mutual fund investment products. This is because they are becoming more popular as a result of technological advancements, greater accessibility, and rising financial awareness. But technological and behavioural aspects affect adoption. The study is based on three major determinants: technology readiness, trust, and financial self-efficacy.

Technology readiness is defined as a person's tendency to adopt and apply new technology to achieve his or her goals. Knowledge of technology is a key factor that influences the extent to which investors are willing to try and use digital financial services and try and use innovative financial services. Several studies have consistently found that attitude towards technology optimism and innovativeness has a positive impact on the acceptance of Digital Financial Applications.

Another important factor behind digital financial service uptake is trust. Investing online requires the investor to provide data and personal details, and use online platforms to complete investment transactions. Trust in platform security, privacy, transparency, and service reliability, which minimizes perceived uncertainty, fosters adoption. On the other hand, cyber threats, fraud, and data breaches can deter investors from using online investment services.

Financial self-efficacy is the confidence that people have in dealing with their own financial issues and making investment decisions. Higher levels of financial confidence are linked to greater investment assessment of investment alternatives, investment knowledge of financial products and self-regulated use of digital investment platforms. Financial self-efficacy has also been correlated with increased investment involvement and financial decision making.

While the FinTech adoption, mobile banking and digital payment systems have been studied, not much research has explored digital investment systems in the mutual fund context. Furthermore, there is a lack of empirical evidence on the joint effect of technology readiness, trust and financial self-efficacy. The lack of such a study is bridged in the present study by combining these constructs into a single behavior.

4. Hypotheses Development

The technology-ready investors are more open to digital innovations, making them more inclined to opt for digital investment platforms. Similarly, a higher security and reliability of the platform can lead to improved investor confidence in conducting online investments. Technology readiness is also anticipated to promote financial self-efficacy, which refers to the confidence in handling digital financial transactions by investors. Digital investment platforms are more likely to be adopted by investors who have greater financial self-efficacy. Thus, financial self-efficacy is supposed to mediate the relationship between technology readiness and adoption of digital investment platform.

H1: Technology readiness positively influences digital investment platform adoption.

H2: Trust positively influences digital investment platform adoption.

H3: Technology readiness positively influences financial self-efficacy.

H4: Financial self-efficacy positively influences digital investment platform adoption.

H5: Financial self-efficacy mediates the relationship between technology readiness and digital investment platform adoption.

5. Conceptual Framework

Independent Variables

- Technology Readiness
- Trust

Mediator

- Financial Self-Efficacy

Dependent Variable

- Digital Investment Platform Adoption

6. Research Methodology

In this study, a quantitative, cross-sectional research design was used to explore the factors influencing the adoption of digital investment platforms for SIP mutual fund investments. Primary data was collected through a structured questionnaire from retail investors who had knowledge or were actively using digital investment platforms. Investors in Bengaluru, Karnataka, were targeted for the study, as the city has a high level of digital financial adoption and has seen an increase in the number of people investing in mutual funds.

To select the respondents who had experience and knowledge of digital investment platforms, the purposive sampling method was used. According to the minimum sample size recommendations of the Partial Least Squares Structural Equation Modelling (PLS-SEM), a total of 320 valid responses were considered for empirical analysis.

The questionnaire had 2 parts. The first section collected the respondents' demographic details such as gender, age, education, occupation, income and investment experience. The second section measured four latent constructs: Technology Readiness (TR), Trust (TRU), Financial Self-Efficacy (FSE), and Digital Investment Platform Adoption (DIPA). The 5-point Likert scale (Strongly Disagree = 1, Disagree = 2, Undecided = 3, Agree = 4, Strongly Agree = 5) was employed to evaluate all measurement items.

The data collected were then analysed by using SmartPLS 4. The respondents' profile was summarised using descriptive statistics and the measurement model was assessed using indicator reliability, internal consistency reliability, convergent validity and discriminant validity. Bootstrapping procedures were used to evaluate the structural model in terms of path coefficients, coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and mediation effects.

7. Measurement of Constructs

Construct	Code	Number of Items	Source
Technology Readiness	TR	5	Adapted from Parasuraman (2000)
Trust	TRU	5	Adapted from McKnight et al. (2002)
Financial Self-Efficacy	FSE	5	Adapted from Lown (2011)
Digital Investment Platform Adoption	DIPA	5	Adapted from Technology Acceptance literature

Total Measurement Items: 20

8. Demographic Profile of Respondents (N = 320)

Table 1. Demographic Characteristics

Variable	Category	Frequency	Percentage
Gender	Male	196	61.3
	Female	124	38.7
Age	21–30 Years	102	31.9
	31–40 Years	126	39.4
	41–50 Years	61	19.1
	Above 50 Years	31	9.6
Education	Graduate	108	33.8
	Postgraduate	173	54.1
	Others	39	12.1
Investment Experience	Below 2 Years	78	24.4
	2–5 Years	132	41.3
	Above 5 Years	110	34.3

As revealed by the demographic profile, most of the respondents were in the age group of 31 to 40 and had postgraduation qualification and more than two years' experience in investment, indicating that they were familiar with investment in digital platforms.

9. Measurement Model Assessment

Table 2. Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE
Technology Readiness	0.889	0.918	0.692
Trust	0.901	0.926	0.714
Financial Self-Efficacy	0.887	0.917	0.688
Digital Investment Platform Adoption	0.913	0.935	0.743

Internal consistency of the instruments was good, as reflected in all Cronbach's Alpha and Composite Reliability (CR) values that were above 0.70. Likewise, the Average Variance Extracted (AVE) values were more than 0.50 which is a threshold of acceptable convergent validity.

Table 3. Discriminant Validity (HTMT)

Constructs	TR	TRU	FSE	DIPA
Technology Readiness	—			
Trust	0.548	—		
Financial Self-Efficacy	0.611	0.527	—	
Digital Investment Platform Adoption	0.684	0.642	0.713	—

The all the HTMT values were below the recommended value of 0.85, thus establishing the satisfactory discriminant validity among the constructs.

Table 4. Fornell–Larcker Criterion

Construct	TR	TRU	FSE	DIPA
Technology Readiness	0.832			
Trust	0.481	0.845		
Financial Self-Efficacy	0.556	0.493	0.829	
Digital Investment Platform Adoption	0.642	0.598	0.681	0.86

Each construct's AVE square root was higher than the inter-construct correlation, confirming the discriminant validity of each construct based on the Fornell–Larcker criterion.

10. Common Method Bias

The full collinearity variance inflation factor (VIF) was used to check for common method bias. Common method bias did not pose a problem because all the VIF values were below the recommended value (3.3).

11. Summary of Measurement Model

The reliability and validity analysis revealed that the measurement model met all the recommended thresholds for analysis using PLS-SEM. All the constructs had satisfactory internal consistency, convergent validity, and discriminant validity, and the measurement model was appropriate for testing the structural relationships between the study variables.

12. Discussion

The current study aimed to examine the factors influencing digital investment platform adoption for mutual funds through SIPs using technology readiness, trust, and financial self-efficacy in a behavioural finance context. The proposed model indicates that technological readiness and psychological readiness of the investors affect their decisions to adopt. By having higher technology readiness, investors are likely to be more willing to use digital investment platforms as they are more comfortable with new technology and adapting to digital financial services. Likewise, confidence in the security, transparency, and reliability of digital investment platforms will be expected to boost investors' confidence and uptake of investment platforms.

Financial self-efficacy is a key factor contributing to investors' digital investment behaviours. When investors are more confident in their financial decision-making skills, they are more likely to assess investment options on their own and use digital tools effectively. Moreover, technological self-efficacy is also anticipated to mediate the link between technology readiness and use of digital investments platforms, meaning that technological competency will be transformed into investment competency.

Drawing on previous research on FinTech adoption, the proposed framework incorporates both technological and behavioural determinants in one model. The research in this paper is different from the previous ones in that it targets a particular category of apps, as in this case, it is Digital Investment Platforms in the Mutual Fund Sector.

13. Theoretical Implications

This study is a contribution to the literature in a number of ways. Firstly, it expands the Technology Readiness Theory (TRT) by showing its relevance for the adoption of digital investment platforms. Secondly, it brings together the Technology Acceptance Model (TAM) and Social Cognitive Theory that together account for the impact of technological readiness and financial self-efficacy on investment decisions. Third, the study uses financial self-efficacy as a mediated variable and thus, provides a wider behavioural lens to FinTech adoption in the context of a mutual fund investment. The integrated framework adds to the behavioural finance literature by melding technological, cognitive, and psychological determinants of investor behaviour.

14. Managerial Implications

The results have a number of practical implications for financial institutions, mutual fund companies, and FinTech service providers. Investment platforms should focus on improving user-friendly interfaces, strengthening cybersecurity measures, and enhancing transparency to build investor trust. Raising financial confidence and digital

financial literacy through educational programs can promote the adoption of digital investing platforms. To boost investors' confidence in managing their mutual fund investments digitally, asset management companies should also offer interactive learning experiences, tailored investment advice, and responsive customer support. Further measures to ensure digital financial inclusion can include creating awareness programmes to boost technological readiness and financial capability of retail investors, along with the promotion and facilitation of such programmes by the policy makers.

15. Conclusion

The purpose of the present study was to investigate the determinants of digital investment platform adoption for SIP investment in mutual funds by combining the concepts of technology readiness, trust and financial self-efficacy under behavioural finance perspective. The proposed model indicates that technological readiness and psychological confidence are two factors that affect the decision to adopt or not by investors. Investors who are more technologically ready are likely to show higher willingness to use digital investment platforms due to their comfort level in adopting innovative technologies and adjusting to digital financial services. Likewise, perceived security, transparency, and reliability of digital investment platforms are likely to boost the investors' confidence and make them more inclined to adopt the platform.

16. Limitations

There are the following limitations in the study:

The study was only conducted among the retail investors of Bengaluru and the results may not be generalized to other geographical areas.

2. The study adopted a cross-sectional research design, which means that it reflects the perceptions of investors at a particular time and is unable to explain shifts in adoption behaviour over time.

3. Only three determinants (technology readiness, trust, financial self-efficacy) were examined. Other factors like perceived risk, financial literacy, social influence, platform quality and facilitating conditions were not considered, yet they may play a role in the adoption of digital investment platforms.

4. Self-reported questionnaires were used in the study that is subject to response bias and social desirability bias.

5. The results apply only to the SIP mutual fund investment scenario and might not be applicable to other digital finance products like stocks, ETFs, cryptocurrencies or robo-advisory platforms.

17. Further Research

Future research could involve longitudinal research designs, which could explore the evolution of digital investment behaviour over time. Some limitations of the study are that the researchers may Second, it only captures the experiences of retail investors in Bengaluru, and the overall results might not apply to other parts of the country. Secondly, the study uses a cross-sectional research design which captures investor perceptions at one point in time, but not the extent to which investors' behaviour changes over time. Third, the study only focuses on technology readiness, trust, and financial self-efficacy as the factors that affect digital investment platform adoption; other behavioural and technological factors like perceived risk, financial literacy, advisory services with the help of artificial intelligence, investor experience, and platform quality can also be included in the proposed framework. Future research could be conducted on a comparative basis across geographical areas, or different countries, to further enhance the understanding of how digital investments are adopted in different economic and cultural contexts. Further studies could also examine investor behaviour in various digital financial products, such as exchange-traded funds, retirement investment platforms, and AI-driven wealth management apps.

References

1. Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman.
2. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
3. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage Publications.
4. Lown, J. M. (2011). Development and validation of a financial self-efficacy scale. *Journal of Financial Counseling and Planning*, 22(2), 54–63.

5. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. <https://doi.org/10.1257/jel.52.1.5>
6. McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and validating trust measures for e-commerce: An integrative typology. *Information Systems Research*, 13(3), 334–359. <https://doi.org/10.1287/isre.13.3.334.81>
7. Parasuraman, A. (2000). Technology readiness index (TRI): A multiple-item scale to measure readiness to embrace new technologies. *Journal of Service Research*, 2(4), 307–320. <https://doi.org/10.1177/109467050024001>
8. Parasuraman, A., & Colby, C. L. (2015). An updated and streamlined technology readiness index: TRI 2.0. *Journal of Service Research*, 18(1), 59–74. <https://doi.org/10.1177/1094670514539730>
9. Ringle, C. M., Wende, S., & Becker, J.-M. (2024). SmartPLS 4. SmartPLS GmbH. <https://www.smartpls.com>
10. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
11. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
12. Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.
13. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
14. Lin, C.-H., Shih, H.-Y., & Sher, P. J. (2007). Integrating technology readiness into technology acceptance: The TRAM model. *Psychology & Marketing*, 24(7), 641–657. <https://doi.org/10.1002/mar.20177>
15. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.