

IMPACT OF TECHNOLOGY-BASED INVESTMENT PLATFORMS ON MUTUAL FUND PERFORMANCE**Mithra T, Vishali S, Palavesh Raja K R, SatheeshkumarS**

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ABSTRACT:

The FinTech revolution has changed the way people who invest in funds deal with financial services. Now we have technology based platforms, like apps, online platforms and robo-advisory services that make investing easier and faster. These FinTech platforms help mutual fund investors get the information they need spread their money across investments manage risk and change their investments when they need to. The FinTech revolution and these platforms are really helping mutual fund investors. This study looks at how technology-based investment platforms affect mutual fund investors. It checks if these platforms really help investors spread out their investments reduce risk and get returns. The people who did this study used an approach. They looked at information that already existed. They also got new information from mutual fund investors. They asked 120 mutual fund investors who use technology-based platforms for their thoughts. What they found out is that technology-based platforms are really good at helping mutual fund investors spread out their investments manage risk and get returns. Technology-based investment platforms are helpful to mutual fund investors in ways. They help mutual fund investors make choices and avoid big losses. Mutual fund investors who use technology-based platforms can invest in different things, which reduces their risk. This means that technology-based investment platforms are a tool, for mutual fund investors.

Keywords: Technology-based investment platforms, Mutual funds, Portfolio diversification, Risk reduction, Return stability, Financial technology.

1. Introduction

The idea of Modern Portfolio Theory was created by Markowitz in 1952. Modern Portfolio Theory is about spreading your investments around to reduce risk that is not related to the whole market. Markowitz thought that Modern Portfolio Theory was a way to do this. On Sharpe came up with the Capital Asset Pricing Model in 1964. The Capital Asset Pricing Model shows how risk and return are connected. Now we have computers and the internet so online investment tools and robo-advisors are available. These online investment tools and robo-advisors use computers to manage investment portfolios and give people advice on what to do, with their investments. They use Modern Portfolio Theory to help people make investment decisions. Online investment tools assist investors in overcoming the home bias problem, diversification, and optimizing risk-adjusted returns.

2. Review of Literature:

Investing in things is really important when it comes to managing your money. This is because it helps reduce risk. Some big names like Markowitz and Sharpe have theories about this. Markowitz's Modern Portfolio Theory and Sharpe's CAPM are about reducing risk by investing in different assets.

Nowadays we have computers and technology that can help us make investment decisions. These algorithm-driven models and robo-advisors can give us a portfolio without costing too much. Some studies have looked into this. They found that using technology to help with investments can really reduce the mistakes people make when investing. Technology-based advisory services can also help people make investment choices and get better returns for the amount of risk they take. Portfolio diversification is still key, to all of this.

2.1. Research Gap

FinTech is really changing the way people invest. We already know a lot, about how people use FinTech and about robo- services. What we do not know is how digital investment platforms, technology-based risk tools and real-time information affect mutual fund investments. Specifically FinTech and digital investment platforms and technology-based risk tools and real-time information can impact three things: how diverse our portfolios are, how much risk we take and how stable our returns are. This report looks at how FinTech and digital investment platforms and technology-based risk tools and real-time information affect these three things.

3. Objectives of the Study

- To examine the usage patterns of technology-based investment platforms among mutual fund investors.
- To analyze the impact of digital platforms on portfolio diversification.
- To assess the role of technology-based risk assessment tools in reducing investment risk.
- To study the influence of real-time market information on return stability.

4. Research Methodology

This study looked at how people invest in funds. It used information from two sources: people who actually invest in mutual funds and things that other people have written about it. The people who invest in funds were asked questions in a very structured way. There were 120 of these investors. They all use digital platforms to invest. The other information came from things like journals and books. The people who were asked questions were picked because they were easy to reach. They were people with jobs, professionals and people who work for themselves. They all invest in mutual funds using digital platforms. The information that was collected was then looked at in a different ways. It was looked at to see what percentage of people did things and to see how people ranked certain things on average. It was also looked at to see if there were any connections between things, like how one thing affects another. Mutual funds were a part of this study and the way people invest in mutual funds was very important

5. Variables of the Study**Independent Variables**

- Use of Digital Investment Platforms
- Technology-Based Risk Assessment Tools
- Access to Real-Time Market and Fund Information

Dependent Variables

- Portfolio Diversification
- Risk Reduction
- Stability of Returns

6. Conceptual Framework: -

The way technology based investment works is that it explains how technology and investments are connected. Technology based investment factors, like platforms, technology based tools that figure out risk and getting market information right away are things that affect how mutual

fund investments are spread out how risky they are and how steady the returns are. Technology based investment factors are important because they help with portfolio diversification, risk reduction and return stability in mutual fund investments.

7. Data Analysis and Interpretation

People like using applications and online platforms to invest in mutual funds. Most people think that online platforms are a way to spread out their investments because they can choose from many different types of mutual funds. When people use technology to help them invest they are usually better at reducing risk. The use of applications and online platforms for mutual fund investments is a popular choice. Mobile applications and online platforms, for mutual fund investments make it easier for people to manage their money.

Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Skewness Error	Std. Kurtosis	Kurtosis Error	Std.
Portfolio Diversification Score	120	1	5	3.11	.828	-.025	.221	-.258	.438	
Risk Reduction Score	120	2	5	3.05	.646	.143	.221	-.019	.438	
Stability of Returns Score	120	1	5	3.06	.823	-.017	.221	.076	.438	

Valid N (listwise): 120

Correlations

Correlation is significant at the 0.01 level (2-tailed).

	Use of Digital Platforms	Use of Risk Assessment Tools	Access to Real-Time Info	Risk Reduction Score	Stability of Returns Score	Portfolio Diversification Score
Use of Digital Platforms	1	.028	-.049	.379	.372	.579
Use of Risk Assessment Tools	.028	1	-.130	.488	-.076	.386
Access to Real-Time Info	-.049	-.130	1	-.062	.603	-.076
Risk Reduction Score	.379	.488	-.062	1	.073	.367
Stability of Returns Score	.372**	-.076	.603**	.073	1	.163
Portfolio Diversification Score	.579**	.386**	-.076	.367**	.163	1

Descriptives: Use of Digital Platforms

Category	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Salaried	46	3.93	.879	.130	3.67	4.20	3	5
Self-Employed	38	4.00	.805	.131	3.74	4.26	3	5
Professional	36	4.14	.762	.127	3.88	4.40	3	5
Total	120	4.02	.820	.075	3.87	4.16	3	5

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.556	2	117	.215

ANOVA: Use of Digital Platforms

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.857	2	.428	.634	.533
Within Groups	79.110	117	.676		
Total	79.967	119			

8. Findings of the Study

Technology-based investment platforms play a significant role in diversifying investment portfolios by offering investors various mutual fund schemes. Technology-based risk analysis systems also assist investors in managing investment risk efficiently. Technology-based investment platforms enhance investment decision-making and improve the stability of investment returns.

9. Suggestions

- Mutual fund companies should enhance personalization features in digital platforms.
- Investor education modules should be integrated into investment applications.
- Platforms should provide simplified risk analytics dashboards for retail investors.

10. Conclusion

The study concludes that technology-based investment platforms play a crucial role in modern mutual fund investing. These platforms simplify portfolio management, improve diversification, reduce risk, and support stable long-term returns. As FinTech adoption increases, digital investment tools will continue to reshape mutual fund investment behavior.

References:

- FinTech platforms and mutual fund markets. *Journal of International Financial Markets, Institutions and Money*. (2023). DOI: 10.1016/j.intfin.2022.101652.
- Digital Investment Platforms and Mutual Fund Choice: Empirical Evidence from Retail Investors. *International Journal of Research in Management Fields (IJRMF)*, 2026. DOI: 10.5281/zenodo.18219178.
- Digital Transformation in Mutual Fund Distribution: Assessing the Role of Robo-Advisory Platforms. *Journal of Informatics Education and Research* (2024).
- A Conceptual Study of Technology Adoption of Online Mutual Fund Investment Platforms. *European Journal of Business and Management Research* (2020).
- Impact Analysis of Digital Mutual Fund Platforms on Investment Growth. *Atlantis Press Proceedings* (2022).
- Digital Payment Systems and Their Influence on Mutual Fund Growth. *Journal of Global Economics, Management and Business Research* (2025).
- Automation and Digitalization of Mutual Fund Operations. *IARJSET*.
- N Meher T. & Jha B. (2024). *Robo-Advisors in Investment Management*. (Finding superior risk-adjusted performance vs. traditional equity, fixed income and hybrid funds.) o. 26576.
- Hong, C. Y., Lu, X. & Pan, J. (2019). *FinTech Platforms and Mutual Fund Distribution* (NBER Working Paper No. 26576).
- "FinTech platforms and mutual fund markets" (2023). *Journal of International Financial Markets, Institutions and Money*.
- **Digital Investment Platforms and Mutual Fund Choice: Empirical Evidence from Retail Investors (2026)** –
- Research on robo-advisors and algorithmic investment (2021). *Technological Forecasting and Social Change*.
- The Effect of Product Recommendations on Online Investor Behaviors (2023). arXiv.
- Studies on SIP growth via digital platforms in India..
- Sravan Kumar, K. (2026). *Digital investment platforms and mutual fund choice: Empirical evidence*. International Journal of Research in Management Fields.
- Gupta, S. (2025). *Robo-advisors and investor behavior: An empirical examination*. Journal of Informatics Education and Research.
- Babar, Z. & Shukla, R. P. (2024). *Digital transformation in mutual fund distribution*. Journal of Informatics Education and Research.
- Srinivas, K. R. et al. (2025). *Digital payment systems and their influence on mutual fund growth*. Journal of Global Economics, Management and Business Research.
- Madhav, L. & Madhumita, G. (2025). *Impact of automation on mutual fund operations*. IARJSET.