

Using the Unified Theory of Acceptance and Use of Technology (UTAUT) Model to Study Investors' Buying Behaviour Towards Mutual Funds

Pushpa Raj K.1*, Dr. Shyamaladevi Balakrishnan

ABSTRACT

Manuscript type: Research paper

Research aims: In recent years, we have witnessed tremendous growth in mutual funds in India. There are many reasons behind this growth trajectory, including diversification, compounding, and a lesser involvement of investors in tracking the performances of individual stocks. Technology has allowed investors to choose their funds based on their risk appetite and tenure when they need their investments to mature. The current advancement in digital technology created a more accessible platform for investors to choose different investment vehicles quickly. Mutual funds are among the most well-liked investment choices, for small-scale investors, as they offer steady income over a more extended period with lesser risk. Digitalisation has led more investors to move towards mutual funds as it involves less paperwork to start investing. Also, digital payments have eased investors' lives by allowing them to make payments safely and securely without needing to reach Asset Management Companies (AMCs). In this study, we have attempted to study the impact of different variables that affect mutual fund subscriptions.

* Pushpa Raj K. is a research scholar at the College of Management, SRM Institute of Science and Technology, Kattankulathur-603203, Tamil Nadu, India. Email: pk1077@srmist.edu.in. Correspondence: Tel.: +919940298194

Dr Shyamaladevi Balakrishnan is an Assistant Professor at the College of Management, SRM Institute of Science and Technology, Faculty of Management, Kattankulathur-603203, Tamil Nadu, India. Email: shyamalb@srmist.edu.in

<https://doi.org/10.22452/ajba.vol17no1.8>

Design/Methodology/Approach: To demonstrate the causal connection between the various variables, the Structural Equation Modelling (SEM) technique has been employed. We employed a variance-based technique using PLS in our study. With the aid of SmartPLS 3.0, the study model was verified. We follow the normal two-step process, with the first step being the assessment of the measurement model and the second stage is to evaluate models for measurements and structures.

Research findings: The two new additional variables introduced in this study were strongly significant in influencing investors' intention toward Mutual funds. When making decisions about their buying behaviour in the mutual fund industry, retail investors consider data security and additional charges to be key factors. The researcher performed reliability and validity tests, as well as assessed the structural model. The coefficients of determination R² and Q² supported the study model and provided evidence of a significant statistical relationship between the independent and dependent variables.

Theoretical contribution/Originality: The present study is important as we see more mutual fund folios are getting piled up every year. Also, with the advent of technology, more account holders are getting into digital space. Understanding the awareness and benefits of using digital platforms among retail investors' decision-making is essential to bringing in more retail participation in the mutual fund industry.

Practitioner/Policy implications: These findings can help investors to make investing decisions and are also helpful for regulators or fund managers to attract more investors.

Research limitation/Implications: The study can be extended to different regions in India or outside of India to study different perceptions of retail mutual fund investors.

Keywords: Mutual Fund Subscriptions, Digital Transactions, Risk-Return Ratio, Fund Performance, Brand Image
JEL Classification: G41

1. Introduction

Technology is growing at a faster pace and its impact has been seen in almost every sector. Technology has been creating a significant impact in the financial sector and mutual funds are no exception. Fintech in the area of mutual fund Know Your Customer (KYC), marketing, distribution, and payments are increasing over the recent years. The mutual fund business has experienced tremendous growth in the use of digital technology, and this growth is accelerating. Several folios under mutual funds and the total net worth of mutual funds are seeing a multi-fold increase in recent years. The development of robo-advisors is founded on the use of predefined programs which can check for the patterns and suggest trading or investment options to stock analysts based on

historical performances. We were interested in learning how the Unified Acceptance and Use of Technology (UTAUT) model affected investors' desire to participate in mutual funds, given the rise in mutual fund participants.

Technology has made the process much simpler and easier. Now investments in mutual funds are entirely paperless and much more efficient than previous processes. Fund houses are utilising these technologies to reach a wide variety of investors which they considered as difficult during earlier periods. With the introduction of e-commerce platforms, asset management companies (AMCs) find it easier to market mutual funds to larger audiences. Cloud computing, blockchain, robo-advisors, big data analytics, artificial intelligence, and fintech are redefining the way AMCs are operating.

Mutual funds are seen as an attractive choice for retail investors because of their diverse nature. Furthermore, fund managers who handle the security allocations for mutual funds at a lower cost run them professionally. But retail investors are unique, and they are from a diverse group (Sanesh and Greeshma, 2016). This leaves us to understand the buying behaviour of retail investors to make sure the participation increases in the future.

Venkatesh et. al. developed the UTAUT model in 2003. This model is used to identify the key elements using the user's feedback, assessing the adoption of the newest technology behaviour and usage intentions. We replicated this model to understand the technological impact on the investors buying behaviour toward mutual funds. Venkatesh et. al. proposed four main constructs to identify the level of acceptance for the behaviour and technological intentions, including those related to achievement standards, effort goals, impact on society, and enabling conditions. In this present study, we used the basic architecture explained by Venkatesh and expanded them by including data security and additional charges as two new variables to study the investors' buying behaviour towards mutual funds.

Data security is one of the key features that investors are interested to know before they start with their online transactions either for making a payment or to share their personal information. Mutual funds started adopting these technologies long back and they are directly under the regulations of the Securities and Exchange Board of India (SEBI) which tracks and issues guidelines periodically to make sure all the AMCs are adhering to their guidelines. To avail of these online technologies, mutual fund houses are charging nominal fees to make sure they were able to provide these services without any interruptions and, they didn't take any cut in their profit margins.

Thus, it becomes necessary to study these variables to make sure investors' intentions toward mutual funds buying behaviour is positively oriented. If these variables tend to show any negative impact, then it's the ideal time for fund houses to work towards these areas to make sure investors' data is secured throughout the year. And also, the charges are restructured to make investors feel confident about adopting these technologies with lesser fees.

The main reason for choosing this model is because of its inherent power over eight existing models, including TRA (Theory of Reasoned Action), TAM (Technology Acceptance Model), MM (Motivational Model), TPB (Theory of Planned Behaviour), C-TPB-TAM (Planned Behaviour / Technology Acceptance Model), MPCU (Model of PC Utilisation), IDT (Innovation Diffusion Theory) and SCT (Social Cognitive Theory). The predicted performance of the UTAUT model with all combinations of variables is around 70% (Gunda, 2014). This allows the researchers to build some quality research models for measuring technology adoption.

2. Literature Review

Financial services has been considered one of the sectors which have grown significantly in light of technological development. Individuals can perform either simple fund transfers or can devise a complex derivative strategy with the help of their mobile and internet from anywhere around the globe. The popularity of trading online has increased only because of the availability of historical information and the easier with which a trade can be executed for a low cost.

The adoption of mutual funds in Malaysia was the subject of a research by Abdullah et. al. (2008), examining both awareness and fintech usage using regression analysis. Their study concluded that there is no satisfactory connection between age and gender in terms of performance expectations, social influence, effort expectations, and facilitative conditions. Alexandra Andhov (2018) concluded in his research study that fintech at its nascent stage can adapt based on the knowledge of computer usage, its storage capacities, and intelligent algorithms to support the findings.

Blockchain could benefit its mutual fund stakeholders, according to Prasada Rao et al.'s (2018) study paper with transparency, accountability, tamper-resistance, decentralisation, and privacy. Transparency is required to increase the confidence level of investors and in turn to increase efficiency through digitising the paperwork. Another study conducted by Vijaya Kittu Manda in 2018 concluded

that blockchain could be used for net asset value (NAV) calculations and also to process real-time redemption of mutual fund units.

Daniel O'Keefe and colleagues polled about 1500 bank clients (2016), a member of the KPMG group, to better understand their familiarity with and interest in digital asset management. Their findings are surprising with 8-15 % of respondents who are already aware of robo-advisors and started building their portfolio with robo-advisory services.

Though we have newer technologies introduced regularly, the success of these technologies remains in the implementation of these in the financial services industry. Anna Omarini (2017) highlighted this in their research study, and they concluded with a strong statement that stated that the adoption of cutting-edge technologies in the finance industry is essential for disruption to occur.

There are some limitations due to the increased usage of technologies. Teo et. al. (2015) studied the key new fintech businesses' success is impacted by both internal and external factors in China. They found that Connectivity remains a major factor in today's conditions. With the advent of technology, the connectivity medium for fintech companies are mobile devices, the Internet, and social media. They concluded with a note that connectivity is required to become more sustainable in the business. On the other hand, regulations become a key challenge for these new fintech players. As correctly noted in a 2017 report by Santiago Carbo-Valverde titled "The impact of Digitalisation on Banking and Financial Stability," the expansion of financial technology services raises the possibility of laws governing these businesses.

3. Research Gap and Objective

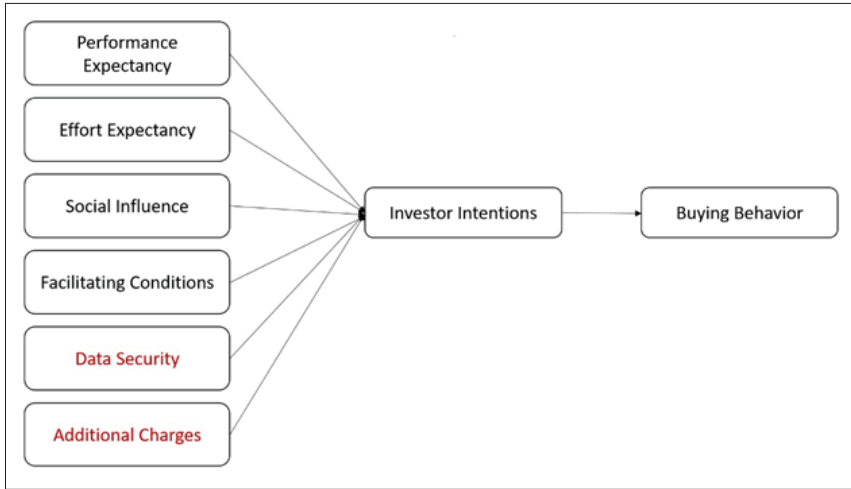
We have several studies wherein researchers have analysed the performance of mutual funds under different categories. Few studies identify the fund manager's skills in timing the market and their stock selections. Numerous studies compare the fund houses and suggest a few funds that are the best performers during the past years. However, the technological impact on the mutual funds sector hasn't been explored yet, and this study aims to do so with the UTAUT model's application, which is becoming more significant in the industry to predict the users' intentions.

We wanted to utilise the UTAUT model and introduce two new variables to study the investor's intentions as well their buying behaviour in mutual funds. We adopted this theoretical framework

for the purpose of our investigation.

To investigate a comparison of the effects of performance standards, effort expectations, and social influence, facilitating conditions, data security, and additional fees on investors' intention to purchase mutual funds. Figure 1 shows the Proposed Research Model.

Figure 1: Proposed Research Model



Source: Author's proposal

3.1. *Sampling Method and Data Collection*

The researchers used convenience sampling for this research study. The data collection process which includes populations that are close at hand and can be easily accessible for researchers is called Convenience sampling (Rahi, 2017). It was also explained that researchers can swiftly and affordably obtain the results using convenience sampling (Hair, 2003). Around six hundred mutual fund investors have been approached to get their observations on mutual fund buying behaviour. Researchers ensured the voluntary participation of the respondents and the survey period spreads from February 2022 to March 2022. Respondents were given give two months to submit the survey results. We received around 365 valid responses after performing data cleansing to remove the outliers.

3.2. *Tools Used*

Once all the information from interviewees has been gathered, data analysis can be done, or, as Sugiyono suggests, other secondary sources of data (2017). Model analysis of the primary data has been performed with the use of SmartPLS version 3.3.9 and using structural equation theory (SEM). To evaluate models and hypotheses, SmartPLS has been used.

3.3. *Limitations of this Study*

Social influence, facilitating circumstances, performance expectancy, effort expectancy, and only six constructs included in this research, Data Security, and Additional Charges. This study is confined only to Tamil Nadu state and future studies can include different states to study the investor behaviour in those states and come up with additional suggestions that would benefit Fund houses to concentrate upon in bringing more retail investors participation.

3.4. *Research Methodology*

The questionnaire has been prepared based on the support from prior literature studies. The researcher has categorized the questionnaire into two sections. The participants' demographic data, which includes age, gender, income level, and education level, is covered in the first portion of the questionnaire. In order to represent each variable that we predetermined from prior literature the second portion of the questionnaire asks participants about their behavioural characteristics. Performance expectations, social impact, effort expectations, and facilitating conditions are among the variables and two novel additional variables, data security and additional charges, were taken from Venkatesh et. al. (2012). Seven-point Likert scales, ranging from 1 to 7, have been used to assess each variable. In this section, we'll examine how investors' purchasing habits with regard to mutual funds have an effect on technology.

Below are the null hypotheses for our study:

- H1: Performance Expectancy influences investors' intentions in a favourable way.
- H2: Effort Expectancy has a positive impact on investors' intention.
- H3: Social Influence has a positive impact on investors' intention.
- H4: Facilitating Conditions have a positive impact on investors' intention.
- H5: Data Security has a positive impact on investors' intention.
- H6: Additional Charges have an effect on investors' intentions in a positive way.

H7: Investors' Intention has a positive influence on mutual fund buying behaviour.

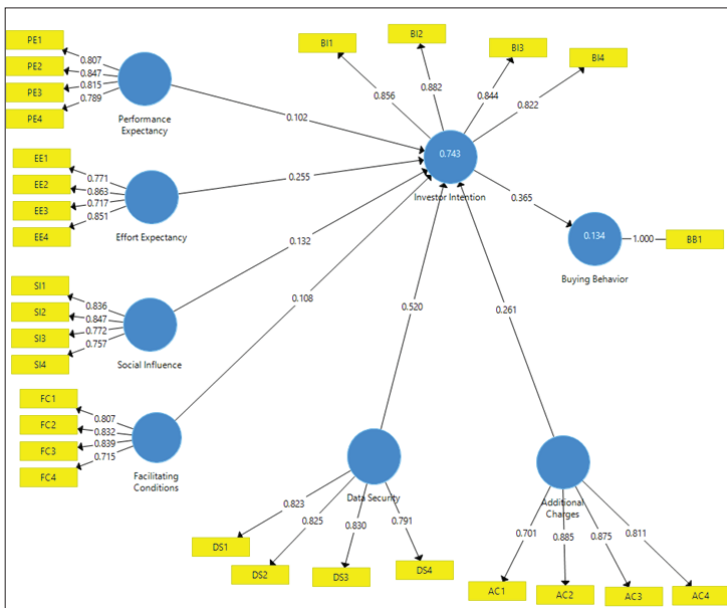
3.5. Data Interpretations

In order to demonstrate the causal connection between the various variables, the Structural Equation Modelling (SEM) technique has been employed. We used two types of techniques: SEM Variance based and Covariance based. We employed a variance-based technique using partial least squares (PLS) in our study. With the aid of SmartPLS 3.0, the study model had been verified. (Ringle et al, 2015). We followed the normal two-step process, with the first step being the assessment of the measurement model and the second stage is to evaluate models for measurements and structures.

3.6. Measurement Model

We can assess the relationships between various indicators and constructs, as well as relationships within constructs, with the aid of model estimation. When measuring models, we checked the constructs' validity and dependability. The SEM model is shown below in Figure 2.

Figure 2: SEM Model



Source: Author's research work

3.7. Composite Reliability / Cronbach's Alpha / Average Variance Extracted (AVE)

When estimating dependability, the internal consistency is assessed using Cronbach's alpha based on the intercorrelations of the factors. In order to verify the reliability based on the factors' outer loadings, we also verified the Composite Reliability as a different measure. Higher reliability is generally regarded as having a composite reliability number between 0.7 and 0.9. Table 1 shows the AVE for Composite Reliability.

Table 1: AVE for Composite Reliability

| | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------|-------------------------|--------------|------------------------------|---|
| Additional Charges | 0.835 | 0.837 | 0.892 | 0.675 |
| Data Security | 0.834 | 0.838 | 0.889 | 0.668 |
| Effort Expectancy | 0.848 | 0.723 | 0.878 | 0.645 |
| Facilitating Conditions | 0.816 | 0.842 | 0.876 | 0.64 |
| Performance Expectancy | 0.831 | 0.834 | 0.887 | 0.664 |
| Social Influence | 0.818 | 0.83 | 0.879 | 0.646 |
| Investor Intention | 0.873 | 0.88 | 0.913 | 0.724 |
| Buying Behaviour | 1 | 1 | 1 | 1 |

Source: Author's research work

3.8. Convergent Validity

A measure that favorably correlates with other measures of the same construct is known as convergent validity. Higher outer loading of value greater than 0.7 marks that the associated indicators have more in common. The commonality of the constructs can be assessed by utilising the Summary of Average Variance (AVE). If the AVE number is greater than 0.5, then each construct accounts for more than 50% of the variance in the indicators. Our data indicate that AVE values greater than 0.5 are considered acceptable for convergent validity based on the aforementioned Table 2.

Table 2: Convergent Validity

| | Additional Charges | Data Security | Effort Expectancy | Facilitating Conditions | Performance Expectancy | Social Influence | Investor Intention | Buying Behaviour |
|-----|---------------------------|----------------------|--------------------------|--------------------------------|-------------------------------|-------------------------|---------------------------|-------------------------|
| AC1 | 0.701 | | | | | | | |
| AC2 | 0.885 | | | | | | | |
| AC3 | 0.875 | | | | | | | |
| AC4 | 0.811 | | | | | | | |
| DS1 | | 0.823 | | | | | | |
| DS2 | | 0.825 | | | | | | |
| DS3 | | 0.83 | | | | | | |
| DS4 | | 0.791 | | | | | | |
| EE1 | | | 0.771 | | | | | |
| EE2 | | | 0.863 | | | | | |
| EE3 | | | 0.717 | | | | | |
| EE4 | | | 0.851 | | | | | |
| FC1 | | | | 0.807 | | | | |
| FC2 | | | | 0.832 | | | | |
| FC3 | | | | 0.839 | | | | |
| FC4 | | | | 0.715 | | | | |
| PE1 | | | | | 0.807 | | | |
| PE2 | | | | | 0.847 | | | |
| PE3 | | | | | 0.815 | | | |
| PE4 | | | | | 0.789 | | | |
| SI1 | | | | | | 0.836 | | |
| SI2 | | | | | | 0.847 | | |
| SI3 | | | | | | 0.772 | | |
| SI4 | | | | | | 0.757 | | |
| BI1 | | | | | | | 0.856 | |
| BI2 | | | | | | | 0.882 | |
| BI3 | | | | | | | 0.844 | |
| BI4 | | | | | | | 0.822 | |
| BB1 | | | | | | | | 1 |

Source: Author's research work

3.9. Discriminant Validity

AVE scores are compared to the correlations of latent variables based on their square roots variables using the Fornell-Larcker criterion for discriminant validity and ensured that AVE values are highest among the other constructs. This confirms that constructs share the highest variance with their associated indicators than any other constructs. Table 3 shows the Discriminant Validity.

Table 3: Discriminant Validity

| | Additional Charges | Buying Behaviour | Data Security | Effort Expectancy | Facilitating Conditions | Investor Intention | Performance Expectancy | Social Influence |
|-------------------------|--------------------|------------------|---------------|-------------------|-------------------------|--------------------|------------------------|------------------|
| Additional Charges | 0.821 | | | | | | | |
| Buying Behaviour | 0.401 | 1 | | | | | | |
| Data Security | 0.683 | 0.354 | 0.817 | | | | | |
| Effort Expectancy | 0.195 | 0.059 | 0.161 | 0.803 | | | | |
| Facilitating Conditions | 0.381 | 0.108 | 0.437 | 0.539 | 0.8 | | | |
| Investor Intention | 0.707 | 0.365 | 0.811 | 0.078 | 0.448 | 0.851 | | |
| Performance Expectancy | 0.369 | 0.119 | 0.364 | 0.62 | 0.573 | 0.381 | 0.815 | |
| Social Influence | 0.463 | 0.174 | 0.524 | 0.577 | 0.697 | 0.522 | 0.669 | 0.804 |

Source: Author’s research work

3.10. Analysis of Structural Model

Assessment of Structure Model includes the model’s ability to forecast outcomes and the relationship between the constructs. To avoid any kind of biases we need to assess the collinearity between the predictor constructs.

3.11. Collinearity

Collinearity can be calculated based on Tolerance. Tolerance indicates a variable’s variance that cannot be described by another indicator within the same area. The term “variance inflation factor” refers to tolerance’s opposite. (VIF). There may be a collinearity issue when the VIF number exceeds 3.3 (Diamantopoulos and Sigauw, 2006). As per our below table for Outer and Inner Collinearity, all the values

are below 5 or 3.3 and our data is free from any collinearity issues (Hair et al, 2014).

3.12. Outer Collinearity: (VIF)

Table 4 Shows the Outer Collinearity (VIF).

Table 4: Outer Collinearity (VIF)

| | VIF |
|-----|-------|
| AC1 | 1.337 |
| AC2 | 3.191 |
| AC3 | 3.105 |
| AC4 | 1.758 |
| BB1 | 1 |
| BI1 | 2.132 |
| BI2 | 2.389 |
| BI3 | 2.114 |
| BI4 | 1.973 |
| DS1 | 1.783 |
| DS2 | 1.789 |
| DS3 | 1.857 |
| DS4 | 1.738 |
| EE1 | 1.738 |
| EE2 | 2.084 |
| EE3 | 2.289 |
| EE4 | 1.719 |
| FC1 | 1.726 |
| FC2 | 1.727 |
| FC3 | 1.741 |
| FC4 | 1.558 |
| PE1 | 1.752 |
| PE2 | 2.051 |
| PE3 | 1.709 |
| PE4 | 1.691 |
| SI1 | 1.949 |
| SI2 | 1.871 |
| SI3 | 1.507 |
| SI4 | 1.626 |

Source: Author's research work

3.13. Inner Collinearity (VIF)

Table 5 Shows the Inner Collinearity (VIF).

Table 5: Inner Collinearity (VIF)

| | Investor Intention | Buying Behaviour |
|-------------------------|--------------------|------------------|
| Additional Charges | 1.946 | |
| Data Security | 2.193 | |
| Effort Expectancy | 1.941 | |
| Facilitating Conditions | 2.144 | |
| Performance Expectancy | 2.198 | |
| Social Influence | 2.885 | |
| Investor Intention | | 1 |
| Buying Behaviour | | |

Source: Author's research work

3.14. Hypothesis Testing

Path Coefficients were used to analyse the proposed connection between the constructs. Usually, path coefficients range from -1 to +1 in worth. Values closed to +1 are considered to be exhibiting a positive relationship and in turn, confirm mathematical significance, which they possess. The chart below indicates this, our data suggest that all our hypotheses are statistically significant as the p values are lesser than 0.05. We performed bootstrapping around 5000 times and calculated T Statistics for the 0.05 significance threshold for a one-tailed test. T-Table (one-tailed) value for 0.05 significance level is around 1.65. We compared this against the results based on our data to analyse the strengths of exogenous variables on the endogenous variables without any moderating indicators. Table 6 shows the T-Statistics results.

Table 6: T-Statistics results

| | Original Sample (O) | T Statistics | P Values | Results |
|--|---------------------|--------------|--------------|-----------|
| Performance Expectancy -> Investor Intention (H1) | 0.102 | 1.887 | 0.030 | Supported |
| Effort Expectancy -> Investor Intention (H2) | 0.255 | 3.019 | 0.001 | Supported |
| Social Influence -> Investor Intention (H3) | 0.132 | 2.547 | 0.006 | Supported |

| | Original Sample (O) | T Statistics | P Values | Results |
|--|---------------------|--------------|----------|-----------|
| Facilitating Conditions -> Investor Intention (H4) | 0.108 | 2.449 | 0.007 | Supported |
| Data Security -> Investor Intention (H5) | 0.520 | 11.239 | 0.000 | Supported |
| Additional Charges -> Investor Intention (H6) | 0.261 | 5.660 | 0.000 | Supported |
| Investor Intention -> Buying Behaviour (H7) | 0.365 | 7.566 | 0.000 | Supported |

Note: Significance level where $p < 0.05$
Source: Researcher processed data

Source: Author's research work

Results of the structural model reveal that all our hypothesis exhibits a statistically positive relationship with their corresponding endogenous variables.

3.15. Determiner Coefficient (R^2)

The predictive accuracy of our algorithm is assessed using the Coefficient of Motivation (R^2). R^2 has a number between 0 and 1; values closer to 1 denote prediction accuracy that is higher. R^2 values of 0.75, 0.50, and 0.25 Researchers can classify these results as significant, mediocre, and weak, accordingly, for latent endogenous variables (Hair et al, 2011 and Henseler et al, 2009). The statistics are acceptable, as indicated by our data's R^2 value of 0.743 (Cohen 1988). Table 7 shows the Coefficient of Determinations (R^2).

Table 7: Coefficient of Determinations R^2

| | R Square | R Square Adjusted |
|--------------------|----------|-------------------|
| Buying Behaviour | 0.134 | 0.131 |
| Investor Intention | 0.743 | 0.739 |

Source: Author's research work

3.16. Effect Size (f^2)

The term "Effect Size" pertains to the change in R^2 value that happens when a certain exogenous construct is removed from the model and the effect that removal has on the endogenous construct (f^2). Table 8

shows the Effect Size (f^2).

Table 8: Effect Size (f^2)

| | Investor Intention | Buying Behaviour | Significance |
|-------------------------|--------------------|------------------|---------------|
| Additional Charges | 0.137 | | Small |
| Data Security | 0.481 | | Large |
| Effort Expectancy | 0.13 | | Small |
| Facilitating Conditions | 0.021 | | Small |
| Performance Expectancy | 0.019 | | Small |
| Social Influence | 0.023 | | Small |
| Investor Intention | | 0.154 | Medium |
| Buying Behaviour | | | |

Note: f^2 : 0.02 - small; 0.15 - medium; 0.35 - large
 Source: Author's research work

To calculate the value for Q^2 , we used the formula below by Hair et. al., 2012:

$$Q^2 = 1 - (1 - R1^2) (1 - R2^2) \dots (1 - Rp^2)$$

$$Q^2 = 1 - (1 - 0.743) \times (1 - 0.134)$$

$$Q^2 = 1 - (0.257 \times 0.866)$$

$$Q^2 = 1 - 0.22$$

$$Q^2 = 0.78$$

The data used in this study is more diversified and the amount of diversity as explained by this model is around 78%. Hence, we can consider that this structural model has good fitness for use.

4. Conclusion

Based on the data analysis and interpretations we found that this study's research model has a greater degree of accuracy in predicting investors' purchasing behaviour. Variables from the underlying model; i.e. expectations for performance, effort, social influence, and enabling circumstances are supported well with the research model without any contradictions. Also, the two new additional variables introduced in this study were strongly significant in influencing investors' intention toward Mutual funds. When making decisions

about their buying behaviour in the mutual fund industry, retail investors consider data security and additional charges to be key factors. The researcher performed reliability and validity tests, as well as assessed the structural model. The coefficients of determination R^2 and Q^2 supported the study model and provided evidence of a significant statistical relationship between the independent and dependent variables.

5. Scope for Future Work

Future researchers can extend this study by including additional variables like risk return, technology awareness, internet awareness, etc. More number of indicators like age, gender, income, etc. can be added to ascertain the impact of these additional indicators on the intentions of investors over mutual funds buying behaviour. Moderating variables such as age, gender, and voluntariness are included in the fundamental UTAUT paradigm, but are not included in this study. This study can be enhanced by including these moderators to study the fintech impact on the investor buying behaviour towards mutual funds in the upcoming research studies.

6. Data Availability Statement

All the data is collected from the simulation reports of the software and tools used by the authors.

References

- Abdullah, E.M.E., Rahman, A. A., Rahim, R.A. (2008). Adoption of financial technology (fintech) in mutual fund/unit trust investment among Malaysians: Unified Theory of Acceptance and Use of Technology (UTAUT). *International Journal of Engineering and Technology*. 7(2), 29 110-118. <http://dx.doi.org/10.14419/ijet.v7i2.29.13140>
- Accenture Consulting. (2017). Robotics is transforming Operations in Asset Management. *Accenture*. Available at: https://www.accenture.com/t20170213t031324z_w_/us-en/_acnmedia/pdf-43/accenture-insideops-asset-management-robotics.pdf
- Andhov, A. (2018). Fintech as a Facilitator for the Capital Market Union? Nordic & European Company Law Working Paper No. 18-15; University of Copenhagen Faculty of Law Research Paper No. 2018-63. <http://dx.doi.org/10.2139/ssrn.3232710>

- Bima Setyo Wicaksono, Jubaedah Jubaedah, Siti Hidayati. "Understanding Investment Behaviour Intention to Adopt Online Mutual funds Based on Unified Theory of Acceptance and Use of Technology Model" (2020). *International Journal of Multicultural and Multireligious Understanding (IJMMU) ISSN 2364-5369*, 7(10), pp. 94-107 DOI: <http://dx.doi.org/10.18415/ijmmu.v7i10.2054>
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*. Hillsdale, NJ: Lawrence Earlbaum Associates.
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282.
- Deloitte. (2015). Robo Advisors Capitalising on a growth Opportunity. *Deloitte*. Available at: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/strategy/us-cons-robot-advisors.pdf>
- Deloitte. (2016). Mutual fund Industry in India: Deloitte Perspective. Kolkata: Deloitte. Available at: <https://www2.deloitte.com/in/en/pages/financial-services/articles/mutual-fund-industry-in-india.html#>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 382-388.
- Gunda, S. (2014). Evaluating The Acceptance of Internet Banking as Perceived by Indian SMES: A Quantitative Study Based on Unified Theory of Acceptance and Use of Technology. ProQuest LLC.
- Hair, J. F. (2003). *Essentials of Business Research Methods*: Wiley.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20(1), 277-319.
- Kuo C., Lee, D. and Teo, E. G. S., (2015). Emergence of Fintech and the Lasic Principles. *Journal of Financial Perspectives*. 1-26. <http://dx.doi.org/10.2139/ssrn.2668049>

- Manda, V. K., Rao, S.S.P. (2018). Blockchain Technology for the Mutual Fund Industry. *SSRN Electronic Journal*, 12-17. <http://dx.doi.org/10.2139/ssrn.3276492>
- Nunnally, J.C. and Bernstein, I.H. (1994) The Assessment of Reliability. *Psychometric Theory*, 3, 248-292.
- O’Keefe, D., Warmund, J., Lewis, B. (2016). Robo-Advising: Catching up and getting ahead. KPMG. Retrieved from: <https://assets.kpmg/content/dam/kpmg/pdf/2016/07/Robo-Advising-Catching-Up-And-Getting-Ahead.pdf>
- Omarini, A. (2017). The Digital Transformation in Banking and The Role of Fintechs in the New Financial Intermediation Scenario. *International Journal of Finance, Economics and Trade (IJFET)*. 1(1), 1-6. <http://dx.doi.org/10.19070/2643-038X-170001>
- PWC. (2017). Mutual funds 2.0 Expanding into new horizons. Mutual funds 2.0, 1-29. Available at: <https://www.pwc.in/publications/2017/mutual-funds-2-0-expanding-into-new-horizons.html>
- Rahi, S. (2017). Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*, 6(2).
- Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH.
- Sanesh, & Greeshma. (2016). A Study Mutual Fund Investors Behaviour in Kerala. *IRA-International Journal of Management & Social Sciences*.
- Santiago Carbó-Valverde, (2017). The Impact on Digitalization on Banking and Financial Stability. *Journal of Financial Management, Markets and Institutions*, 1, 133-140. <http://dx.doi.org/10.12831/87063:y:2017:i:1:p:133-140>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward A Unified View. *MIS Quarterly* Vol. 27. DOI: <https://doi.org/10.2307/30036540>

Appendix: Survey Instrument

| Variables | Items | Questions |
|------------------------|-------|--|
| Performance Expectancy | PE1 | Fintech enables me to accomplish my tasks quickly (Purchase / Redeem) Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | PE2 | Fintech allows me to make decisions appropriately and timely Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | PE3 | Fintech improves my knowledge about mutual fund investments Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | PE4 | Fintech provides me with historical performances of the funds instantly Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| Effort Expectancy | EE1 | Fintech makes it easier for me to manage my portfolio Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | EE2 | Fintech is much more easier than previous processes Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | EE3 | Fintech transactions are simple and easy to navigate Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | EE4 | Fintech learning is much easier Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| Social Influence | SI1 | Fintech is already adopted by friends who suggests me to use these technologies Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | SI2 | My Financial Advisor advised me to adopt these Fintech services Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | SI3 | Asset Management Companies promote these Fintech services widely to adopt Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |
| | SI4 | AMFI advices investors to adopt these Fintech services to ease our investment worries Strongly Disagree: 1_2_3_4_5_6_7_:Strongly Agree |

| Variables | Items | Questions |
|-------------------------|-------|--|
| Facilitating Conditions | FC1 | Mutual fund Distributors provides all the access information's to use the Fintech services Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | FC2 | I have sufficient knowledge to use these Fintech services Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | FC3 | Fintech services are similar to other technology which we use on daily basis Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | FC4 | Support services are offered timely to resolve any Fintech errors Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| Data Security | DS1 | I feel my Data is secured while using these Fintech services Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | DS2 | I don't have any fear of data compromise on these Fintech platforms Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | DS3 | I am not worried while making payments or redemption via these Fintech platforms Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | DS4 | SEBI is monitoring these Fintech platforms regularly and I am confident my data is not compromised Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| Additional Charges | AC1 | Fees charged by these Fintech services are fairly priced Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | AC2 | I don't have to feel like paying hugely for using these Fintech services Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | AC3 | Fintech platforms are charging nominal fares for using their platforms Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | AC4 | Our investments are safe and secured for which paying reasonable fees is acceptable Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |

| Variables | Items | Questions |
|--------------------|-------|--|
| Investor Intention | II1 | I intend to continue using these Fintech services in the future Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | II2 | I have adapted to these Fintech services as my daily routine Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | II3 | I started using these Fintech services regularly analysing my portfolio Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| | II4 | I intend to try any new Fintech services in the future Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |
| Buying Behaviour | BB1 | I am ready to buy Mutual funds' investments through these Fintech services Strongly Disagree:_1_2_3_4_5_6_7_:Strongly Agree |