

Understanding Investment Behavior Intention to Adopt Online Mutual Funds based on Unified Theory of Acceptance and Use of Technology Model

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Abstract

This research builds up a calculatede model that consolidates unified theory of acceptance and use of technology (UTAUT), perceived risk and perceived return with age and gender as moderating effect to explain investors behaviour intention and usage behaviour of mutual funds investor in Indonesia. The sample was conducted by stratified random sampling method. Collecting data was conducted by a questionnaire and distributed online using type form to Indonesian online mutual funds investors as much 396 questionnaires. The statistical used was SPSS, PLS-SEM and PLS-MGA, with hypotheses testing of statistic t-tests and p-value. The consequence of this examination indicated that the connections of UTAUT, such as performance expectancy, effort expectancy, social influence, and also the role of perceived return as a stronger predictor of investment behavior intention. This UTAUT extension model was then tested using the original data and found to out perform the investor behaviour intention with determinant value of 74 percent and this research also found that the investor behaviour intention didn't significantly affect the actual investor usage behaviour.

Keywords: UTAUT; Intentions of Investor Behavior; Mutual Funds

Introduction

Investment has an important role in economic growth. It is one of the last components from a macroeconomic point of view as an indicator of internal balance in the product market equilibrium situation. In terms of capital formation in Neo-Classical theory of economic growth, source of capital originating from Domestic Investment (*Penanaman Modal Dalam Negeri*/PMDN)and Foreign Investment (*Penanaman Modal Asing*/PMA) can boost the economy of a developing country very well (Jufrida *et al.*, 2016). In this case, an increasing amount of investment will have an impact on economic growth. Considering the development of investment trends in Indonesia, in August 2019, investment in capital market in Indonesia is currently dominated by domestic investors (PMDN) 67% than foreign investors (PMA) 33% (Indonesia Stock Exchange, 2019).

After being officially marketed in the capital market for 23 years, online mutual funds are the first investment portals to receive a Decree of the Board of Commissioners of the Financial Services Authority (OJK) as Mutual Funds Selling Agent (APERD) on February 8, 2016 (Dewi, 2016). Besides, PT Bareksa

Portal Invests (Bareksa) announced that they have succeeded in getting 300,000 mutual funds investor as of December 12, 2018. A number of partnerships with several leading companies such as Tokopedia, Bukalapak, Mandiri E-Cash and Invoice have driven the achievement which was a 1.5-fold increase in 4 months. Previously, as of August 6 2018, the number of mutual funds investors at Bareksa reached 200,000 investors. In other words, the number of Bareksa customers is currently increasing by 372 percent or more than 4 times compared to the end of 2017, which only had 63,500 investors (Rahmayanti, 2018). Along with the increase in the number of investors, Bareksa also recorded an increase in the amount of funds invested by customers reaching IDR 1.7 trillion as of December 12, 2018, increasing drastically by 277 percent compared to funds invested by IDR 450 billion as of December 2017 (Rahmayanti, 2018).

Referring to information published by the Financial Services Authority in Capital Market Statistics, as of April 2019, the number of mutual funds investors based on the formation of Single Investor Identification (SID) was 1,131,750 investors. This is much higher than the number of stock investors based on the formation of SID of 913,101 investors in the same time period. The number of SID in 2019 has grown significantly compared to 2014 which was only 320,063 investors. It was when the Single Investor Identification was only implemented since PT. Danareksa was built by the government in 1976 to sell mutual funds (Setyowati, 2019) and since the establishment of the momentum of mutual funds birth through the issuance of Law no. 8 of 1995 on Capital Market which regulates mutual fund regulations (President of the Republic of Indonesia, 1995).

Furthermore, the Financial Services Authority also noted that online subscription transactions increased to IDR 5 trillion, over a period of 3 years (2016 to 2018). In 2016, total purchase transactions were only IDR 1 trillion, while currently total purchase transactions have reached IDR 5 trillion. The increase in the number of online mutual funds transactions directly increases capital market transactions in Indonesia (Yadika, 2019). The phenomenon of the presence of online APERD and the increasing number of mutual fund investors due to the presence of online APERD is one of the things that increases the number of SID and managed funds of mutual funds. It indicates that people in Indonesia are adapting to digital financial technology in the field of online mutual funds. Advances in financial technology, the development of capital market industry and the existence of online APERD have made it easier for potential investors to open securities accounts to buy mutual funds. The entire process is carried out online, does not require a wet signature, can be done without the use of paper at all (scripless), and shortens the time of each process (Arief, 2019).

Mutual funds are a great choice for retail investors since they provide the opportunity to invest in a diversified and professionally managed portfolio at a relatively low cost. However, at the retail level, these investors are a unique and very heterogeneous group (Sanesh & Greeshma, 2016). Thus, it is necessary to find out investors' behavior for the future, while the decision may depend on many factors. In the investment intention process, investors not only use an estimate of the prospect of an investment instrument but also psychological factors that have a role in determining the investment to be made.

In 2003, Venkatesh, Morris, Davis and Davis developed Unified Theory of Acceptance and Use of Technology (UTAUT). This theory can determine a vital element in the acceptance of the latest technology as measured by behavioral intention and usage behavior. UTAUT model will be replicated to identify factors influencing the acceptance of online mutual funds investors. A number of studies on modern technology have existed over the years. Although not specifically discussing online mutual funds, some of them have used UTAUT model as the main research model to test the acceptance of modern technology. In this model, there are four variables that have important contributions as significant influencing factors on user acceptance and usage behavior, which consist of performance expectancy, effort expectancy, social influence, and facilitating conditions.

In addition, UTAUT model has been selected and replicated for this study because of its similarities and advantages over other models. Some reasons for omitting other user acceptance models for this study are that the efficiency of TAM in anticipating successful technology adoption is only up to 30%, and TAM2 (extended TAM) can be estimated in the range of only 40%. However, UTAUT is a composite model that has compressed 32 variables from eight existing designs (TRA, TPB, TAM, MM, C-TPB-TAM, MPCU, IDT and SCT) into four main constructs and four moderating factors including Gender, age, experience and voluntariness of use. Various combinations of independent construction and moderating aspects have increased the predicted performance of UTAUT to 70% (Gunda, 2014; Venkatesh *et al.*, 2003). This is a significant improvement over the level of the previous TAM version, allowing researchers to build quality research models.

Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT is the newest model regarding technology adoption and acceptance which has been used in a lot of research recently. It is a theoretical model proposed by Viswanath Venkatesh et al., in 2003 related to technology acceptance model (Venkatesh *et al.*, 2003). UTAUT is able to explain 70 percent of the variance in behavioral intention in the use of technology and about 50 percent of the variance in the use of technology (Venkatesh et al., 2012). UTAUT's innovation lies primarily in the new and important changes made to existing adoption theories, including:

- **a.** UTAUT eliminates three constructs related to technology acceptance and use (computer anxiety, computer self-efficacy, and attitudes) from the final model.
- **b.** UTAUT adds a high level of moderating effect in the model and precisely defines the moderating effect.
- **c.** UTAUT defines theoretical boundaries, namely technology acceptance, which is used by individuals in organizations as a major phenomenon.



Figure 1. Empirical Research Model

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Research Methodology

Research method is a scientific rule in obtaining data through specific purposes and uses (Sugiyono, 2017). The type of research used was basic research in developing fields of science to find new answers to certain management problems that occurred in companies, organizations or communities. Results of this study had a goal of developing science with a degree "contribution to the body of knowledge" (Ferdinand, 2014). This study included causality research which aimed to find explanations in the form of cause-effect relationships. In the scientific discovery method, this study was included in quantitative research (hypothesis testing research). Researcher built hypotheses and tested them empirically by extending hypotheses developed by other researchers in producing a new model (Ferdinand, 2014).

Population and Sample

Population in this study was all investors after the XYZ company has carried out its business operations for three quarters in Indonesia and carried out at least one investment activity in the period January 2019 to September 2019. Population age was limited to productive age, 17 - 65 years. The number of samples was fulfilled to 400 to minimize errors. Referring to an opinion stated by Sugiyono (2017), sampling technique used by researcher was a probability with a proportionate stratified random sampling approach.

Data Analysis Technique

According to Sugiyono (2017), data analysis process is carried out when all data from respondents or other data sources have been collected. This process is a grouping of data based on variables and types of respondents. In this study, data analysis process utilized SPSS version 25 application to evaluate instrument and data quality. Model analysis process was then carried out using PLS with SmartPLS version 3.2.8 program for model testing and hypothesis testing.

Instrument Testing

Instrument testing was conducted to analyze the quality of research data, including validity and reliability tests. The validity test was used to measure whether a questionnaire was valid. There was a correlation between the indicators of each question with the total score of the indicators in a variable on the test instrument used in the validity test. Additionally, reliability test in this study was used to measure a questionnaire as an indicator of a variable or construct. A questionnaire is considered reliable if the respondent's answer to that question is consistent or stable over time, while variable can be said to be reliable if it has a Cronbach's Alpha > 0.7 (Ghozali, 2011).

Hypothesis Testing

1. Estimate for path coefficients (β)

This test was done by looking at the threshold value above 0.1. It means that if the path coefficient test results are above 0.1, the path can be said to have an influence on the model to be used.

2. Parametric Test

Parametric Test is a parametric significance analysis used in the group-specific differences of the PLS-SEM results assuming that the variances across groups are the same.

Results and Discussion

Analysis of Measurement Model (Outer Model)

Analysis of the outer model was conducted to explain how each indicator block used was related to its latent variables. Evaluation of the outer model was done by analyzing the validity and reliability of the measurements of the model used.

1. Convergent Validity

Convergent validity was used to analyze the correlation between the indicator score and the construct score. In convergent validity analysis, loading factor parameter and Average Variance Extracted (AVE) value were used. Following are the results of the correlation between the indicators and each construct shown by the outer loading value in table 1.

| | | Tab | le 1. Outer | Loading Bef | ore Re-estima | tion | | |
|------|-------|-------|-------------|-------------|---------------|-------|-------|-------|
| | PE | EF | SI | P.Risk | P.Return | FC | II | IB |
| JF | 0.885 | | | | | | | |
| Μ | 0.871 | | | | | | | |
| OE | 0.835 | | | | | | | |
| OE2 | 0.866 | | | | | | | |
| PUE | 0.808 | | | | | | | |
| RA | 0.885 | | | | | | | |
| EU | | 0.918 | | | | | | |
| PEU | | 0.908 | | | | | | |
| Ι | | | 0.852 | | | | | |
| SF | | | 0.829 | | | | | |
| SN | | | 0.875 | | | | | |
| FR | | | | 0.785 | | | | |
| OR | | | | 0.708 | | | | |
| PR | | | | 0.6 | | | | |
| PRIR | | | | 0.749 | | | | |
| PSYR | | | | 0.783 | | | | |
| SR | | | | 0.815 | | | | |
| TR | | | | 0.784 | | | | |
| RE1 | | | | | 0.877 | | | |
| RE2 | | | | | 0.867 | | | |
| RR1 | | | | | 0.835 | | | |
| Со | | | | | | 0.865 | | |
| FC | | | | | | 0.879 | | |
| PBC | | | | | | 0.845 | | |
| DT | | | | | | | 0.867 | |
| ICU | | | | | | | 0.896 | |
| PCU | | | | | | | 0.924 | |
| UF | | | | | | | | 1.000 |

Based on table 1, it is known that PR indicator on perceived risk variable has an outer loading value of <0.7 so that the question was removed. PR indicator was removed from the perceived risk variable which had a reflective model. Removing one PR (Privacy Risk) indicator will not change the meaning of the construct (Ghozali, 2011). Thus, the researcher performed a re-correlation test between the indicator and the construct shown by the outer loading value without the privacy risk indicator. It can be seen in Table 2.

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| | PE | EF | SI | P.Risk | P.Return | FC | II | IB |
|------|-------|-------|-------|--------|----------|-------|-------|-------|
| JF | 0.885 | | | | | | | |
| Μ | 0.871 | | | | | | | |
| OE2 | 0.866 | | | | | | | |
| OE | 0.835 | | | | | | | |
| PUE | 0.808 | | | | | | | |
| RA | 0.885 | | | | | | | |
| EU | | 0.918 | | | | | | |
| PEU | | 0.908 | | | | | | |
| Ι | | | 0.852 | | | | | |
| SF | | | 0.829 | | | | | |
| SN | | | 0.875 | | | | | |
| FR | | | | 0.776 | | | | |
| OR | | | | 0.71 | | | | |
| PRIR | | | | 0.758 | | | | |
| PSYR | | | | 0.785 | | | | |
| SR | | | | 0.82 | | | | |
| TR | | | | 0.786 | | | | |
| RE1 | | | | | 0.877 | | | |
| RE2 | | | | | 0.867 | | | |
| RR1 | | | | | 0.835 | | | |
| Со | | | | | | 0.865 | | |
| FC | | | | | | 0.879 | | |
| PBC | | | | | | 0.845 | | |
| DT | | | | | | | 0.867 | |
| ICU | | | | | | | 0.896 | |
| PCU | | | | | | | 0.924 | |
| UF | | | | | | | | 1.000 |

Based on the results in table 2, all indicators have met the minimum outer loading value. Besides looking at the outer loading value, the convergent validity test can also be assessed from the AVE value. The results of the AVE value analysis in this study are shown in Table 10.

| Table 3. Average Variance Extracted (AVE) | | | | | | |
|---|----------------------------------|--|--|--|--|--|
| Variables | Average Variance Extracted (AVE) | | | | | |
| Performance Expectancy | 0.737 | | | | | |
| Effort Expectancy | 0.834 | | | | | |
| Social Influence | 0.726 | | | | | |
| Perceived Risk | 0.598 | | | | | |
| Perceived Return | 0.739 | | | | | |
| Facilitating Conditions | 0.745 | | | | | |
| Investor Intention | 0.803 | | | | | |
| Investor Behavior | 1.000 | | | | | |

The PLS-SEM model can be considered valid if the outer loading value is > 0.7 and the AVE value is > 0.5 (Jogiyanto, 2015). Based on table 13 and table 14, it can be concluded that the value of outer loading and AVE in this study has met the requirements for convergent validity.

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2. Discriminant Validity

Discriminant validity was done by looking at the cross-loading value of each indicator on each variable. Each indicator is said to meet discriminant validity if it has a cross loading value above 0.7 (Jogiyanto, 2009). The following is the cross-loading value in the model (presented in table 4).

| | Table 4. Cross Loading | | | | | | | | |
|------|------------------------|-------|-------|--------|----------|-------|-------|-------|--|
| | PE | EF | SI | P.Risk | P.Return | FC | II | IB | |
| JF | 0.885 | 0.657 | 0.546 | 0.259 | 0.567 | 0.581 | 0.641 | 0.099 | |
| Μ | 0.871 | 0.707 | 0.575 | 0.262 | 0.593 | 0.61 | 0.663 | 0.113 | |
| OE | 0.835 | 0.67 | 0.629 | 0.263 | 0.609 | 0.622 | 0.673 | 0.138 | |
| OE2 | 0.866 | 0.694 | 0.621 | 0.292 | 0.608 | 0.648 | 0.676 | 0.12 | |
| PUE | 0.808 | 0.656 | 0.519 | 0.281 | 0.543 | 0.546 | 0.613 | 0.081 | |
| RA | 0.885 | 0.674 | 0.551 | 0.317 | 0.587 | 0.626 | 0.658 | 0.081 | |
| EU | 0.742 | 0.918 | 0.66 | 0.243 | 0.628 | 0.705 | 0.717 | 0.138 | |
| PEU | 0.697 | 0.908 | 0.592 | 0.231 | 0.587 | 0.62 | 0.677 | 0.126 | |
| Ι | 0.625 | 0.614 | 0.852 | 0.199 | 0.597 | 0.617 | 0.623 | 0.112 | |
| SF | 0.438 | 0.467 | 0.829 | 0.076 | 0.507 | 0.559 | 0.497 | 0.097 | |
| SN | 0.626 | 0.655 | 0.875 | 0.202 | 0.557 | 0.649 | 0.601 | 0.15 | |
| FR | 0.233 | 0.213 | 0.102 | 0.776 | 0.138 | 0.167 | 0.201 | 0.065 | |
| OR | 0.184 | 0.12 | 0.115 | 0.71 | 0.133 | 0.12 | 0.13 | 0.135 | |
| PRIR | 0.293 | 0.219 | 0.282 | 0.758 | 0.206 | 0.246 | 0.215 | 0.181 | |
| PSYR | 0.245 | 0.192 | 0.116 | 0.785 | 0.168 | 0.139 | 0.209 | 0.166 | |
| SR | 0.274 | 0.213 | 0.121 | 0.82 | 0.158 | 0.176 | 0.213 | 0.163 | |
| TR | 0.257 | 0.222 | 0.143 | 0.786 | 0.174 | 0.198 | 0.238 | 0.109 | |
| RE1 | 0.537 | 0.552 | 0.548 | 0.117 | 0.877 | 0.614 | 0.654 | 0.133 | |
| RE2 | 0.649 | 0.626 | 0.554 | 0.241 | 0.867 | 0.637 | 0.73 | 0.12 | |
| RR1 | 0.565 | 0.534 | 0.585 | 0.185 | 0.835 | 0.627 | 0.623 | 0.091 | |
| Со | 0.728 | 0.728 | 0.67 | 0.243 | 0.748 | 0.865 | 0.792 | 0.134 | |
| FC | 0.583 | 0.579 | 0.568 | 0.229 | 0.548 | 0.879 | 0.576 | 0.16 | |
| PBC | 0.53 | 0.589 | 0.627 | 0.124 | 0.608 | 0.845 | 0.588 | 0.144 | |
| DT | 0.639 | 0.641 | 0.585 | 0.189 | 0.667 | 0.642 | 0.867 | 0.133 | |
| ICU | 0.703 | 0.707 | 0.62 | 0.273 | 0.739 | 0.688 | 0.896 | 0.148 | |
| PCU | 0.705 | 0.701 | 0.617 | 0.25 | 0.692 | 0.679 | 0.924 | 0.134 | |
| UF | 0.123 | 0.145 | 0.142 | 0.176 | 0.134 | 0.17 | 0.155 | 1.000 | |

Based on the results in table 4, it can be concluded that all indicators that arrange each variable in the model used have met the discriminant validity with a cross loading result value exceeding 0.7 (Jogiyanto, 2015).

Reliability Test

Composite reliability was carried out to test the reliability value of each indicator on each variable. A variable is said to meet composite reliability if it has a composite reliability result greater than 0.7. The results of the analysis of composite reliability on each variable are presented in table 5 below.

| Variables | Composite Reliability |
|-------------------------------|-----------------------|
| Performance Expectancy | 0.944 |
| Effort Expectancy | 0.909 |
| Social Influence | 0.888 |
| Perceived Risk | 0.899 |
| Perceived Return | 0.895 |
| Facilitating Conditions | 0.898 |
| Investor Intention | 0.924 |
| Investor Behavior | 1.000 |
| Source: Proceeded Data (2010) | |

Table 5. Composite Reliability

Source: Processed Data (2019)

Table 5 shows that the value of composite reliability has met the requirements, which is more than 0.7. Reliability test can also be seen from the Cronbach's alpha value which is presented in table 6.

| Table 6. Cronbach's Alpha | | | | | |
|---------------------------|------------------|--|--|--|--|
| Variables | Cronbach's Alpha | | | | |
| Performance Expectancy | 0.928 | | | | |
| Effort Expectancy | 0.801 | | | | |
| Social Influence | 0.813 | | | | |
| Perceived Risk | 0.866 | | | | |
| Perceived Return | 0.824 | | | | |
| Facilitating Conditions | 0.829 | | | | |
| Investor Intention | 0.877 | | | | |
| Investor Behavior | 1.000 | | | | |
| | | | | | |

Source: Processed Data (2019)

Based on table 6, the Cronbach's Alpha value is greater than 0.6 which proves that the measurement in this study is reliable.

Analysis of Structural Model (Inner Model)

1. Collinearity

| Table 7: Inner Connicarity Statistics (VIF) | | | | | | | | |
|---|--------------------|-------------------|--|--|--|--|--|--|
| Factors | Investor Intention | Investor Behavior | | | | | | |
| Performance Expectancy | 3.222 | | | | | | | |
| Effort Expectancy | 3.111 | | | | | | | |
| Social Influence | 2.256 | | | | | | | |
| Perceived Return | 2.224 | | | | | | | |
| Perceived Risk | 1.120 | | | | | | | |
| Facilitating Conditions | | 2.269 | | | | | | |
| Investor Intention | | 2.269 | | | | | | |
| Investor Behavior | | | | | | | | |

Table 7. Inner Collinearity Statistics (VIF)

| Indicators | VIF |
|------------|-------|
| Со | 2.037 |
| DT | 2.142 |
| EU | 1.807 |
| FC | 1.951 |
| FR | 1.830 |
| Ι | 1.671 |
| ICU | 2.471 |
| JF | 3.577 |
| М | 2.922 |
| OE | 2.540 |
| OE2 | 2.950 |
| OR | 1.877 |
| PBC | 1.765 |
| PCU | 3.077 |
| PEU | 1.807 |
| PRIR | 1.921 |
| PSYR | 1.918 |
| PUE | 2.179 |
| RA | 3.537 |
| RE1 | 2.073 |
| RE2 | 1.825 |
| RR1 | 1.769 |
| SF | 1.804 |
| SN | 1.946 |
| SR | 2.150 |
| TR | 1.836 |
| UF | 1.000 |

Testing the Significance of the Structural Model Path Coefficient

Hypothesis testing was conducted by performing the bootstrapping method on the SmartPLS 3.2.8 application. In this study, bootstrapping was performed 5000 times. Moreover, simultaneous test used T-statistic test which aimed to analyze the significance of the effect of the exogenous variable Xi as a whole on the endogenous variable Yi. The test was carried out by comparing the T value generated from the T-statistic calculation with the T-table value. The T-table (one-tailed) value used was based on a significance level of 0.05 with a total of 396 observations, which was 1.6488. Table 9 below demonstrates the result of the t-statistic test and the estimation results of the path coefficients to analyze strength of direct influence between the independent variable on the dependent variable without the influence of moderating variable.

| Table | 9. | Testing | the | Signific | ance of | the | Structura | l Mo | del P | ath (| Coeffic | ient |
|-------|----|---------|-----|----------|---------|-----|-----------|--------|-------|-------|---------|------|
| Labic | ٠. | resung | unc | orginite | ance of | une | Suuciuia | 1 1010 | uuii | aun | Count | icit |

| Independent Variables | Dependent Variables | Path Coefficients |
|-------------------------------|---------------------|-------------------|
| Performance Expectancy | Investor Intention | 0.222 |
| Effort Expectancy | | 0.256 |
| Social Influence | | 0.091 |
| Perceived Risk | | 0.026 |
| Perceived Return | | 0.394 |
| Facilitating Conditions | Investor Behavior | 0.123 |
| Investor Intention | | 0.063 |
| Source: Processed Data (2019) | | |

Source: Processed Data (2019)

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In table 9, the results of hypothesis testing show that almost all hypotheses are supported, while H7 and H10 are rejected since the p-value of investor interest and perceived risk is greater than 0.05. These results conclude that there is no relationship between investor intention on investor behavior. The findings made in data processing contradict Venkatesh's statement that behavior intention in using technology will always have an impact on the behavior of using technology.

The Coefficient of Determination (R-squared)

Inner model test in the PLS-SEM test started by looking at R-squared value. This stage of analysis was carried out to explain the variance of each endogenous target variable. The results of inner model test analysis can be seen in table 10.

| Table 10. R-Square | | | | |
|--------------------|----------|-------------------|--|--|
| Factors | R Square | R Square Adjusted | | |
| Investor Intention | 0.742 | 0.739 | | |
| Investor Behavior | 0.031 | 0.026 | | |
| | | | | |

Source: Processed Data (2019)

Based on the results of the coefficient of determination test in table 18, the R2 value of the Investor Intention (II) variable is 0.742 (74.2%), while the R2 value of the Investor Behavior (IB) variable is 0.031 (3.1%). Thus, it can be interpreted that the ability of exogenous variables (performance expectancy, effort expectancy, social influence, perceived risk and perceived return) strongly explains (74.2%) the variant of Investor Intention. The rest is explained by other variables outside the model. Meanwhile, the ability of the exogenous variables of investor intention and facilitating conditions weakly explains (3.1%) the variants of Investor Behavior; and the rest is explained by other variables outside the model.

The results of the Q^2 value have the same meaning as the coefficient of determination (R-Squared) in the regression analysis, indicating that the higher the R-Square, the more fit the model can be with the data used. The results of calculation of Q^2 value are carried out below (Hair *et al.*, 2012):

$$Q^{2} = 1 - (1 - RI^{2}) (1 - R2^{2}) \dots (1 - Rp^{2})$$

$$Q^{2} = 1 - (1 - 0.742) \times (1 - 0.031)$$

$$Q^{2} = 1 - (0.258 \times 0.969)$$

$$Q^{2} = 1 - 0.25$$

$$Q^{2} = 0.75$$

The calculation of Q^2 value obtained 0.75 which means that the amount of diversity in the research data that can be explained by the structural model developed in this study is 75%. Based on the results of Q^2 , structural model in this study has a good goodness of fit.



Figure 2. Output Outer dan Inner Model PLS

Based on the PLS output in Figure 8 and the tests that have been carried out through the outer model test and inner model test, this study has met various statistical requirements in the PLS model. Therefore, it concludes that the model used in the study can be continued to test the hypothesis.

| Hypotheses | Independent Variable | Dependent Variable | Findings | Moderating Variables | Moderating Effect | Note | Conclusion |
|------------|---------------------------|-----------------------|--|-------------------------|---|---|-------------------------|
| HI | Performance Expectancy | Investor | Has a positive and significant effect $(\beta=0.222;$ P=0.000), | Age | The relationship becomes insignificant with a moderating effect $(\beta = 0.285;$ P=0.073) | The effect is stronger in respondent aged 17-24 years and in males | Hypothesis is accepted. |
| H2 | | | | Gender | The moderating effect strengthens relationship $(\beta=0.233; P=0.000)$ | | Hypothesis is accepted. |
| Н3 | Effort Expectancy | | Has a positive and significant effect $(\beta=0.256;$ P=0.000), | Age | The moderating effect strengthens relationship $(\beta=0.369; P=0.014)$ | The effect was stronger for respondents aged 25-39 years and in males | Hypothesis is accepted. |
| H4 | | | | Gender | The moderating effect weakens the relationship and is significant (β =0.213; P=0.009) | | Hypothesis is accepted. |
| H5 | Social Influence | | Has a positive and significant effect $(\beta=0.091;$ | Age | The relationship becomes insignificant with a moderating effect $(\beta=0.031; P=0.421)$ | The effect is stronger for respondents aged 25-39 years and | Hypothesis is accepted. |

| Table | 11. | Research Hypotheses |
|-------|-------------|----------------------------|
| Lable | T T | Research Hypotheses |

| Нб | | | <i>P</i> =0.015) | Gender | The relationship becomes insignificant with a moderating effect (β =0.125; P=0.054) | females. | Hypothesis is accepted. |
|-------------------------|----------------------------|---|---|---|--|--|-------------------------|
| Н7 | Perceived Risk | | Does not have an effect | Age* | The relationship becomes significant with moderating effect of age (β =0.147; P=0.042) | The effect is significant for respondents aged 17-24 years and there is no effect on Gender. | Hypothesis is rejected. |
| H8 Perceived Return* | Parasivad | langeined | Has a positive and significant | Age* | The moderating effect strengthens relationship (β =0.469; P=0.001) | The effect is stronger on | Hypothesis is accepted. |
| | | effect (β =0.394; P=0.000) | Gender* | The moderating effect strengthens relationships $(\beta=0.427;$ P=0.0000) | the same in all age groups. | Hypothesis is accepted. | |
| Н9 | Facilitating Conditions | Investor Behavior | Has a positive and significant effect $(\beta=0.123;$ P=0.024) | Age | The relationship becomes insignificant with a moderating effect $(\beta=0.175; P=0.187)$ | The effect is stronger in males and the same in all age groups. | Hypothesis is accepted. |
| H10 | Investor Intention | | Does not have an effect | None | - | - | Hypothesis is rejected. |

Conclusion

Based on the results of the analysis and data processing, the following conclusions can be obtained:

- 1. There is a significant relationship between performance expectancy and investor intention, while age is proven as a moderating variable. In a moderating effect, age weakens the relationship between performance expectancy and investor intention. Here, the strongest relationship is in respondents aged 17-24 years and in males, while the weakest relationship is in respondents aged 40-65 years.
- 2. There is a significant relationship between performance expectancy and investor intention, while Gender is proven as a moderating variable. In a moderating effect, Gender strengthens the relationship between performance expectancy and investor intention, in which performance expectancy has a stronger relationship in males than females.
- 3. There is a significant relationship between effort expectancy and investor intention, while age is proven as a moderating variable. In testing moderating effect, age strengthens the relationship between effort expectancy and investor intention. The strongest relationship is in respondents aged 25-39 years, while the weakest relationship is in respondents aged 40-65 years.
- 4. There is a significant relationship between effort expectancy and investor intention, while Gender is proven as a moderating variable in the relationship between existing variables. The moderating effect weakens the relationship between effort expectancy and investor intention, in which the relationship between effort expectancy is only significant for males.

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- 5. There is a significant relationship between social influence and investor intention, while age is proven as a moderating variable. In testing moderating effect, age weakens the relationship between social influence and investor intention. Thus, social influence relationship is not significant for respondents aged 40-65 years.
- 6. There is a significant relationship between social influence and investor intention, while age is proven to be a moderating variable in the relationship between existing variables. Moderating effect weakens the relationship between social influence and investor intention, in which social influence relationship is only significant for females.
- 7. There is an insignificant relationship between perceived risk and investor intention, while Gender does not affect the relationship between the existing variables. In moderating effect of age, the relationship between perceived risk and investor intention becomes significant. Here, the strongest relationship is in respondents aged 17-24 years, and is getting weaker as the respondents are getting older.
- 8. Perceived return is proven to be significant on investor intention, which is the most influential relationship on investor intention. It is also found that Gender and age are proven to be moderating variables.
- 9. There is a significant relationship between facilitating conditions on investor behavior, while age is proven as a moderating variable. It is because age weakens the relationship between facilitating conditions and investor intention, in which the relationship becomes significant for respondents aged 40-65 years. It indicates that the older age group is not yet open to technology than the younger age group.
- 10. Investor intention has no effect on the actual behavior of investors in online mutual funds. Therefore, the impact of investor intention on investor behavior is not substantial, demonstrating that investors can or do not invest if they have or do not have the intention of influencing investor behavior.

Limitations of the Study

There are several limitations in this study, including:

- 1. Some respondents in this study did not return the questionnaire sent by the researcher.
- 2. The questionnaire was distributed in stages to test its validity and reliability. Researcher faced some issues in distributing the questionnaire since the questionnaire testing had to be done four times.

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