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## The Adoption and Readiness of Digital Technologies Among Auditors in Public Accounting Firms: A Structural Equation Modeling Analysis

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### Abstract

This research aims to investigate the influence of auditors' optimistic and innovative attitudes on their intention to conduct audits using Computer-Assisted Audit Techniques (CAATs). The study adopts a quantitative approach and gathers data from 224 respondents employed in 20 Public Accounting Firms located in Central Java, selected through random sampling techniques. Structural Equation Modeling (SEM) is employed for data analysis. The research findings reveal that auditors' optimistic and innovative attitudes have a positive and significant impact on their perceived ease of use of CAATs and their perception of improved performance when utilizing CAATs in conducting audits. These positive perceptions subsequently influence the auditors' intention to adopt and incorporate CAATs in their audit practices. The results of this study contribute valuable insights into the importance of auditors' attitudes in shaping their intention to adopt CAATs, emphasizing the significance of positive attitudes towards technological innovations in the audit profession. These findings hold implications for audit firms and professionals, highlighting the need to foster optimistic and innovative mindsets to facilitate the integration of CAATs into audit practices effectively. This research provides a foundation for further studies in the domain of audit technology adoption and underscores the significance of fostering a forward-thinking culture within the audit profession to enhance the use of CAATs and optimize audit performance.

### Keywords

Optimism, Innovativeness, Behavioural Intention, CAATs

## 1. Introduction

The rapid development of Information and Communication Technology (ICT) has significantly influenced the global economy. During the period from 1999 to 2000, developing countries in the Asia-Pacific region, including Indonesia, demonstrated a strong positive correlation between the diffusion of information technology and the per capita income, which is one measure of a country's welfare. The continuous development of information and communication technology has brought about changes in various aspects of human life, such as culture, economy, defense and security, and education. Therefore, all parties involved must adapt and keep up with these advancements.

One field closely related to the utilization of information technology is accounting. The process of recording financial transactions is typically done manually and requires accuracy and keen attention from the workforce (employees). The use of computers as a tool for processing accounting data has become a necessity nowadays. According to Legowo (2014), the increasing use of information technology is not only felt by companies as a whole but also by Public Accounting Firms, especially auditors or public accountants working within them. The use of computer-based information systems in accounting has become essential in supporting the reliability and accuracy of the generated data (output).

In accounting practice, the objective of using computer-based accounting information systems is to provide relevant, timely, complete, and understandable information. Compared to manual data processing (manual-based information systems), computer-based information systems have the advantage of processing data faster and more efficiently, thus saving time in generating information for companies. With the aid of computer technology, auditors' capabilities in analysis will increase and become more complex. However, information generated using Computer-Based Information Systems must remain trustworthy so that it can be used to determine the quality of performance of Public Accounting Firms.

The growing economic activities in this era, along with technological advancements, have led to an increasing demand for the services of public accountants, thus requiring auditors to deliver high-quality audit performance. The development of information technology has resulted in the majority of companies using accounting software for their financial recording and reporting, where financial statements (accounting products) become the subject of financial statement audits. According to Jati & Laksito (2012), the increased use of computer technology as a form of information technology development has significantly transformed manual accounting data processing into automated processes.

However, achieving better performance is influenced by various factors. Ayudiati (2010) mentioned that performance improvement is influenced by certain conditions, namely external factors referred to as situational factors and internal factors referred to as individual factors. Situational factors, or environmental factors, consist of eight components, one of which is technology. Pradnyani (2014) explained that the use of application assistance in forensic audits has effectively and successfully revealed occurrences of fraud or irregularities. Considering the described phenomena, Computer-Assisted Audit Techniques (CAATs) will be used as one of the factors in this research. Thus, the researcher is interested in discussing the integration of the adoption and readiness of digital technologies among auditors in Public Accounting Firms in Central Java, Indonesia.

## **2. Literature Review**

### **2.1. Optimism, Effort Expectancy, Performance Expectancy, and Behavioral Intention**

Seligman (1995) defined optimism as a perspective of seeing things positively, thinking positively, and easily attributing meaning to oneself. Individuals with high optimism will attribute positive meaning to every event that happens to them (Seligman, 1995). While Seligman emphasizes optimism as attributing meaning to every event that happens to an individual, Scheier et al. (1994) focus on an individual's actions to align with what they desire and avoid what they do not desire. Meanwhile, Goleman (2000) views optimism through the lens of emotional intelligence, as a self-defense mechanism to prevent oneself from falling into ignorance, despair, and depression when facing difficulties. Goleman (2000) describes optimism as an attitude with strong expectations that everything in life will turn out well, even in the face of setbacks and frustrations.

According to Henderson and Divett (2003), positive perceptions of usefulness and ease of use will directly influence the intention to use. Shittu et al. (2011) define behavioral intention as a measure of the strength of an intention to perform a particular behavior, especially the use of information systems. Usage intention is the behavioral tendency to continue using a technology. Many auditors face difficulties when examining the adoption of innovations because auditors with behavioral intentions do not always apply their behavioral intentions to usage behavior (Arts et al., 2011). Interest is a person's desire to engage in a particular behavior. A person will engage in a behavior if they have the desire or interest to do so (Shomad & Purnomosidhi, 2012). When someone assesses that something will be beneficial, they will become interested, and this will lead to satisfaction. This means that interest is related to values that make someone have choices in their life. Interest in using CAATs is defined as the level of desire or intention of an individual to use CAATs to assist in completing the audit to achieve audit objectives. An activity will be carried out or not depending on a person's interest in that activity. Interest serves as a strong motivator to engage in an activity. Interest functions as a driving force that directs someone to perform specific activities.

*H1: Optimism has a significant positive effect on Effort Expectancy*

*H2: Optimism has a significant positive effect on Performance Expectancy*

*H3: Optimism has a significant positive effect on Behavioral Intention*

### **2.2. Innovativeness, Effort Expectancy, Performance Expectancy and Behavioral Intention**

Innovation involves creativity in creating new products, services, ideas, or processes (Okpara, F. O. (2007). Innovation can be interpreted as a process of adapting existing products, services, ideas, or processes, both within and outside the organization (Taylor, 2017). Numerous studies have demonstrated a strong positive correlation between innovativeness and effort expectancy. Individuals with higher levels of innovativeness tend to perceive innovative technologies as more user-friendly and easier to adopt (Lee, 2004). This perception arises from their inherent proclivity to embrace and explore novel solutions. Innovativeness also fosters a positive attitude towards learning and adapting to new technologies, reducing perceived barriers and effort associated with usage. The Technology Acceptance Model (TAM) provides a theoretical framework to understand technology adoption (Koul & Eydgahi, 2018). According to TAM, performance

expectancy, defined as the extent to which individuals believe that using a technology will improve their performance, significantly influences their intention to adopt the technology. Innovativeness, as a personal characteristic, aligns with the perception that adopting innovations will lead to improved performance outcomes. Lastly, in the impact of innovativeness on behavioral intention, a plethora of empirical studies consistently demonstrate a significant positive association between innovativeness and behavioral intention (Tu et al, 2021). Individuals with higher levels of innovativeness are more likely to exhibit a stronger intention to adopt and use innovative technologies. Their openness to new experiences and positive attitudes towards change enhance their motivation to embrace and explore novel solutions, translating into increased behavioral intention (Mühlig-Versen et al, 2012).

*H4: Innovativeness has a significant positive effect on Effort Expectancy*

*H5: Innovativeness has a significant positive effect on Performance Expectancy*

*H6: Innovativeness has a significant positive effect on Behavioral Intention*

### **2.3. Effort Expectancy, Performance Expectancy and Behavioral Intention**

Davis (1989) defines perceived ease of use as the extent to which people believe that information technology can be easily understood. Davis (1989) also provides ease of use of information systems, which includes being easy to learn and operate, easy to work with according to users' desires, and enhancing the skills of clients or customers. As stated by Davis in Jogiyanto (2007), if someone feels or believes that an information technology system is easy to use, they will use it. Conversely, if someone feels or believes that an information technology system is not easy to use, they will not be able to use it. This is in line with the analysis conducted by Priambodo and Prabawani (2016) to show that ease of use is a factor considered by customers in using IT.

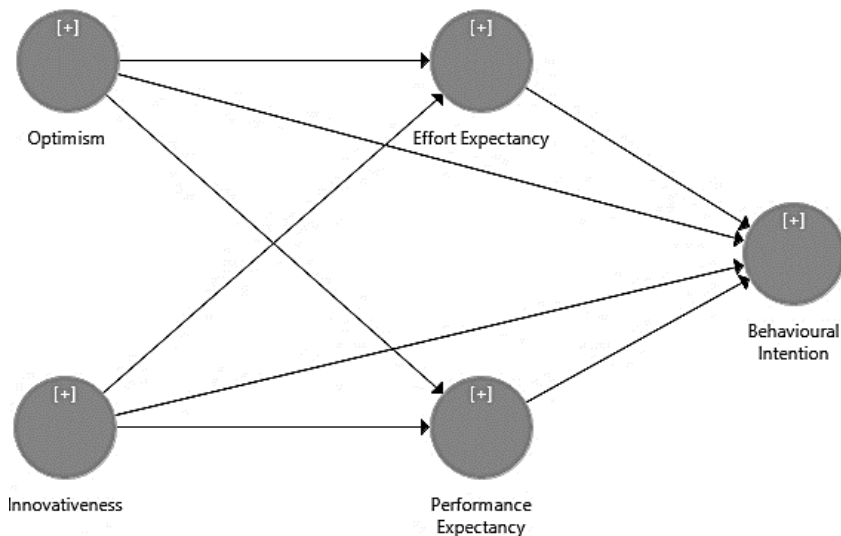
Shomad & Purnomosidhi (2012) provide an explanation of perceived usefulness, which refers to the perception of how beneficial a technology is to its users. According to Davis (1989), the measurement of perceived usefulness comprises five factors: 1) enhancing work efficiency, 2) usefulness, 3) increasing productivity, 4) improving effectiveness, and 5) enhancing job performance. These findings are corroborated by Shomad & Purnomosidhi (2012), Indriastuti and Wicaksono (2014), and Yutadi and Haris (2014), who demonstrate that perceived benefits are significant factors influencing customers' adoption of information technology (IT). Furthermore, it is suggested that the adoption of CAATs (Computer Assisted Audit Techniques) can enhance auditors' efficiency and effectiveness by leveraging the full capabilities of computers. According to research conducted by Pratiyaksa & Widhiyani (2016) and Legowo (2014), computer-assisted audit techniques have a positive impact on auditor performance. This is evident in auditors' increased frequency of using CAATs for examinations and audit processes, resulting in improved performance (Davis, 1989; Surya & Widhiyani, 2016). A key construct of TAM (Technology Acceptance Model) indicates that individuals have the intention to perform certain behaviors, partly based on their affective feelings about the system (Lu and Viehland 2008). The TAM model can be applied because the decisions made by individuals to accept an information technology system are conscious actions that can be explained and predicted by their interest. TAM adds two main constructs to the TRA (Theory of Reasoned Action) model. These two main constructs are perceived usefulness and perceived ease of use (Henderson & Divett, 2003). TAM argues that individual acceptance of information technology systems is determined

by these two constructs (Shittu et al., 2011). Both perceived usefulness and perceived ease of use have an influence on behavioral interest (Lee et al., 2006). Technology users will have an interest in using the technology (behavioral interest) if they feel that the technology system is useful and easy to use. Perceived ease of use also influences perceived usefulness, but not vice versa. System users will use the system if they find it useful, whether the system is easy to use or not. A system that is difficult to use will still be used if it is perceived to be useful.

*H7: Effort Expectancy berpengaruh positif signifikan terhadap Behavioural Intention*

*H8: Performance Expectancy berpengaruh positif signifikan terhadap Behavioural Intention*

Based on the description of the literature review and previous research, the framework developed in this study is described in a chart as follows:



**Figure 1.** Structural Equation Model

### 3. Methods

The research method employed in this study is a quantitative approach, which involves the use of numerical measurements and statistical tools to test theories and hypotheses (Indriantono and Supomo, 2002). Specifically, this research adopts an explanatory research design to analyze relationships between variables and test how one variable influences another (Sugiyono, 2008). The main variables under investigation are auditors' optimistic and innovative attitudes, perceived ease of use of CAATs, perception of improved performance when using CAATs, and intention to use CAATs in audits. These variables are operationalized using Likert-scale-based questions in the questionnaire. The researchers have carefully defined each variable to ensure clarity and relevance to the research objectives.

The sampling technique utilized in this study is Random Sampling. From a population of auditors working in Public Accounting Firms in Central Java, a sample of 224 respondents was randomly selected. The researchers chose this method to ensure the sample is representative of

the larger population and to generalize the findings to the entire auditor community in the region. Data collection primarily relies on primary data obtained through a questionnaire. The researchers directly administer the survey to auditors to gather relevant information on their attitudes and intentions towards the use of CAATs in audits. Using a structured questionnaire allows for standardized data collection, ensuring consistency in responses and facilitating data analysis.

Data analysis in this research is conducted using Structural Equation Model - Partial Least Squares (SEM-PLS) with the aid of SmartPLS software. SEM-PLS is a powerful statistical tool that enables the examination of complex relationships among multiple variables and constructs. This analysis technique allows for testing the proposed hypotheses and assessing the strength and significance of relationships between variables. By employing a quantitative approach, conducting explanatory research, employing random sampling, collecting primary data through a questionnaire, and using SEM-PLS analysis, this research aims to provide valuable insights into the influence of optimistic and innovative attitudes on auditors' intention to use CAATs in audits. The findings may contribute to the advancement of audit practices and foster a more technology-driven approach within the audit profession.

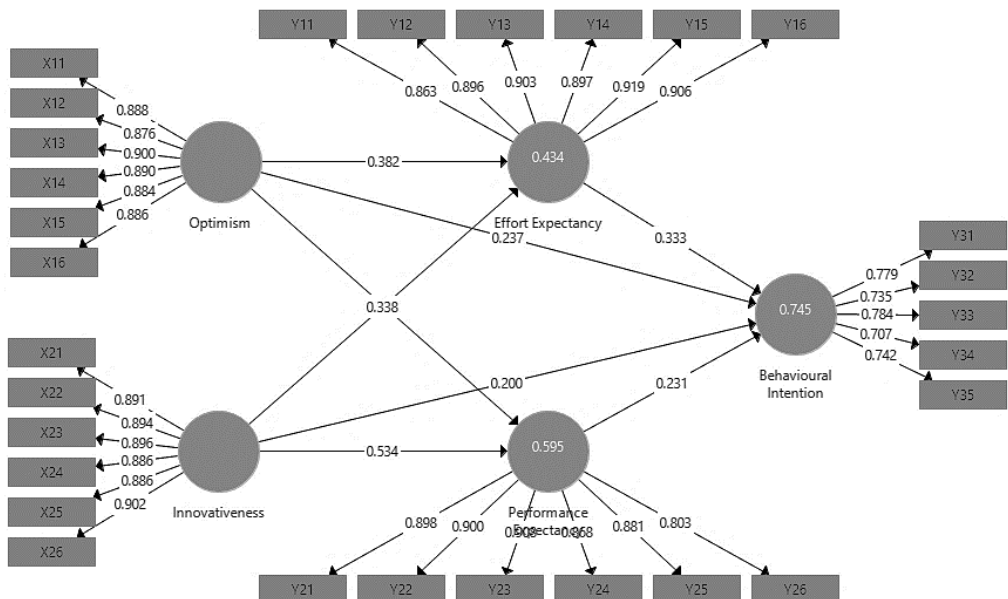
#### **4. Results and Discussion**

Table 1 provides descriptive statistics for a set of variables (X11 to Y35). Each row represents a different variable, and the columns present various statistical measures. Mean: The mean represents the average value of each variable. It is calculated by adding up all the values of the variable and dividing the sum by the total number of observations. For example, the mean of variable X11 is 3.585, indicating that, on average, respondents scored 3.585 on this item. Median: The median is the middle value of the variable when the data is arranged in ascending order. In this case, the median is 4.000 for all variables, implying that half of the respondents scored 4 or above, and the other half scored below 4. Min: The minimum value represents the smallest score observed for each variable. Here, the minimum value for all variables is 1.000, indicating that the lowest possible score is 1. Max: The maximum value represents the highest score observed for each variable. In this dataset, the maximum value for all variables is 5.000, suggesting that the highest possible score is 5.

The outer loading values signify the strength of the relationship between each item and its underlying construct (Table 2). Higher outer loadings indicate stronger associations between the items and their respective constructs. The results show that the items related to Optimism and Innovativeness have relatively high outer loadings, indicating a significant relationship with their corresponding constructs. Similarly, the items associated with Effort Expectancy and Performance Expectancy also exhibit strong associations with their respective constructs. For Behavioral Intention, the outer loading values are slightly lower but still substantial, indicating a notable connection between the items and the construct. These results demonstrate the validity and reliability of the measurement model, supporting the notion that the selected items effectively capture the underlying constructs they represent. The findings provide valuable insights into the relationships between the observed variables and the latent constructs, contributing to a comprehensive understanding of the research model.

**Table 1.** Descriptive Analysis

| Items | Mean  | Median | Min   | Max   | Standard Deviation | Excess Kurtosis | Skewness |
|-------|-------|--------|-------|-------|--------------------|-----------------|----------|
| X11   | 3.585 | 4.000  | 1.000 | 5.000 | 0.941              | 0.903           | -0.765   |
| X12   | 3.607 | 4.000  | 1.000 | 5.000 | 0.929              | 0.766           | -0.719   |
| X13   | 3.460 | 4.000  | 1.000 | 5.000 | 0.839              | 0.648           | -0.535   |
| X14   | 3.531 | 4.000  | 1.000 | 5.000 | 0.896              | 0.697           | -0.620   |
| X15   | 3.621 | 4.000  | 1.000 | 5.000 | 0.965              | 1.168           | -1.065   |
| X16   | 3.491 | 4.000  | 1.000 | 5.000 | 0.945              | 0.587           | -0.677   |
| X21   | 3.478 | 4.000  | 1.000 | 5.000 | 0.930              | 0.688           | -0.654   |
| X22   | 3.491 | 4.000  | 1.000 | 5.000 | 0.881              | 0.546           | -0.544   |
| X23   | 3.598 | 4.000  | 1.000 | 5.000 | 0.871              | 1.012           | -0.836   |
| X24   | 3.500 | 4.000  | 1.000 | 5.000 | 0.926              | 0.650           | -0.646   |
| X25   | 3.545 | 4.000  | 1.000 | 5.000 | 0.920              | 1.019           | -0.842   |
| X26   | 3.567 | 4.000  | 1.000 | 5.000 | 0.884              | 0.953           | -0.791   |
| Y11   | 3.719 | 4.000  | 1.000 | 5.000 | 0.914              | 1.466           | -1.070   |
| Y12   | 3.723 | 4.000  | 1.000 | 5.000 | 0.966              | 0.193           | -0.618   |
| Y13   | 3.692 | 4.000  | 1.000 | 5.000 | 0.935              | 0.160           | -0.537   |
| Y14   | 3.772 | 4.000  | 1.000 | 5.000 | 0.895              | 0.477           | -0.664   |
| Y15   | 3.710 | 4.000  | 1.000 | 5.000 | 0.996              | -0.330          | -0.374   |
| Y16   | 3.719 | 4.000  | 1.000 | 5.000 | 0.976              | 0.079           | -0.571   |
| Y21   | 3.661 | 4.000  | 1.000 | 5.000 | 0.978              | 0.586           | -0.717   |
| Y22   | 3.522 | 3.000  | 1.000 | 5.000 | 0.901              | 0.258           | -0.270   |
| Y23   | 3.549 | 4.000  | 1.000 | 5.000 | 0.900              | 0.326           | -0.425   |
| Y24   | 3.705 | 4.000  | 1.000 | 5.000 | 0.883              | 0.245           | -0.601   |
| Y25   | 3.545 | 4.000  | 1.000 | 5.000 | 0.905              | 1.190           | -0.897   |
| Y26   | 3.504 | 4.000  | 1.000 | 5.000 | 0.866              | 0.525           | -0.512   |
| Y31   | 3.973 | 4.000  | 1.000 | 5.000 | 1.004              | 0.612           | -0.985   |
| Y32   | 3.527 | 4.000  | 1.000 | 5.000 | 0.901              | 0.462           | -0.541   |
| Y33   | 3.951 | 4.000  | 1.000 | 5.000 | 0.912              | 1.639           | -1.145   |
| Y34   | 3.643 | 4.000  | 1.000 | 5.000 | 0.865              | 0.529           | -0.698   |
| Y35   | 3.920 | 4.000  | 1.000 | 5.000 | 0.937              | 0.243           | -0.757   |



**Figure 2.** Result analysis of research model

**Table 2.** Results of outer loading

| Items | Optimism | Innovativeness | Effort Expectancy | Performance Expectancy | Behavioural Intention |
|-------|----------|----------------|-------------------|------------------------|-----------------------|
| X11   | 0.888    |                |                   |                        |                       |
| X12   | 0.876    |                |                   |                        |                       |
| X13   | 0.900    |                |                   |                        |                       |
| X14   | 0.890    |                |                   |                        |                       |
| X15   | 0.884    |                |                   |                        |                       |
| X16   | 0.886    |                |                   |                        |                       |
| X21   |          | 0.891          |                   |                        |                       |
| X22   |          | 0.894          |                   |                        |                       |
| X23   |          | 0.896          |                   |                        |                       |
| X24   |          | 0.886          |                   |                        |                       |
| X25   |          | 0.886          |                   |                        |                       |
| X26   |          | 0.902          |                   |                        |                       |
| Y11   |          |                | 0.863             |                        |                       |
| Y12   |          |                | 0.896             |                        |                       |
| Y13   |          |                | 0.903             |                        |                       |
| Y14   |          |                | 0.897             |                        |                       |
| Y15   |          |                | 0.919             |                        |                       |
| Y16   |          |                | 0.906             |                        |                       |
| Y21   |          |                |                   | 0.898                  |                       |
| Y22   |          |                |                   | 0.900                  |                       |
| Y23   |          |                |                   | 0.908                  |                       |
| Y24   |          |                |                   | 0.868                  |                       |
| Y25   |          |                |                   | 0.881                  |                       |
| Y26   |          |                |                   | 0.803                  |                       |
| Y31   |          |                |                   |                        | 0.779                 |
| Y32   |          |                |                   |                        | 0.735                 |
| Y33   |          |                |                   |                        | 0.784                 |
| Y34   |          |                |                   |                        | 0.707                 |
| Y35   |          |                |                   |                        | 0.742                 |

The results of convergent validity demonstrate that the observed items are well-aligned with their respective constructs (Table 3). Table 3 shows the variables Average Variance Extracted (AVE) Optimism 0.787, Innovativeness 0.797, Effort Expectancy 0.806, Performance Expectancy 0.770, and Behavioral Intention 0.563 greater than 0.5, which means it can be said to have convergent validity. The external loading factors are all above the commonly accepted threshold of 0.7, indicating strong associations between the items and their underlying constructs. Additionally, the AVE values are all above 0.5, indicating that a substantial proportion of variance in the items is attributed to the constructs and not due to measurement error. These findings affirm the convergent validity of the measurement model, providing evidence that the selected items effectively measure the latent constructs they represent.

The results of discriminant validity indicate that the constructs in the measurement model are distinct and not highly correlated with each other. All correlation coefficients between constructs are below 0.900, which is the commonly accepted threshold for discriminant validity (Table 4). This suggests that the observed variables for each construct are more strongly related to their corresponding latent constructs than to other constructs in the model. The findings confirm the discriminant validity of the measurement model, providing evidence that the constructs are indeed

unique and contribute to a clear understanding of the relationships among the variables in the research context. This ensures that the model accurately captures the individual characteristics of each construct and allows for reliable and meaningful interpretation of the research results.

**Table 3.** Convergent validity

| Variables                     | External loading factors | AVE   |
|-------------------------------|--------------------------|-------|
| <b>Behavioural Intention</b>  | 0.707-0.784              | 0.563 |
| <b>Effort Expectancy</b>      | 0.863-0.919              | 0.806 |
| <b>Innovativeness</b>         | 0.886-0.902              | 0.797 |
| <b>Optimism</b>               | 0.884-0.900              | 0.787 |
| <b>Performance Expectancy</b> | 0.803-0.908              | 0.770 |

**Table 4.** Discriminant Validity

|                               | <b>Behavioural Intention</b> | <b>Effort Expectancy</b> | <b>Innovativeness</b> | <b>Optimism</b> | <b>Performance Expectancy</b> |
|-------------------------------|------------------------------|--------------------------|-----------------------|-----------------|-------------------------------|
| <b>Behavioural Intention</b>  | 0.750                        |                          |                       |                 |                               |
| <b>Effort Expectancy</b>      | 0.752                        | 0.898                    |                       |                 |                               |
| <b>Innovativeness</b>         | 0.729                        | 0.596                    | 0.893                 |                 |                               |
| <b>Optimism</b>               | 0.729                        | 0.610                    | 0.674                 | 0.887           |                               |
| <b>Performance Expectancy</b> | 0.760                        | 0.671                    | 0.738                 | 0.663           | 0.877                         |

In addition to testing the validity, researchers also conducted reliability tests. To determine the reliability of each construct in this study, a test was carried out by looking at the Composite Reliability and Cronbachs Alpha values of each construct. According to Jogiyanto and Abdillah (2014) Cronbach's Alpha coefficient of at least 0.6 indicates that the questionnaire has a fairly good level of reliability.

**Table 5.** Composite Reliability dan Cronbach's Alpha

|                               | <b>Cronbach's Alpha</b> | <b>Composite Reliability</b> |
|-------------------------------|-------------------------|------------------------------|
| <b>Behavioural Intention</b>  | 0.807                   | 0.865                        |
| <b>Effort Expectancy</b>      | 0.952                   | 0.961                        |
| <b>Innovativeness</b>         | 0.949                   | 0.959                        |
| <b>Optimism</b>               | 0.946                   | 0.957                        |
| <b>Performance Expectancy</b> | 0.940                   | 0.952                        |

The results of the reliability test presented in Table 5 indicate that the research variables can be considered dependable, as the Cronbach's alpha value exceeds 0.6. This confirms that these variables can serve as reliable instruments for measuring the specific constructs under investigation in this study. In the Partial Least Squares (PLS) analysis, the accuracy of the proposed model is evaluated using two metrics: R-Square (R2) and Path Coefficient (PC). The assessment of the structural model (inner model) involves analyzing the R2 value for the endogenous latent construct and the t-value for each exogenous latent variable on the endogenous latent construct, derived from bootstrapping results. Regarding R-Square, a value of 0.67 is considered strong, 0.333 signifies moderate, and 0.19 indicates weak (Indrawati, 2015). In this study, the R-Square value is presented in Figure 3, showing the strength of the relationships

between the variables in the proposed model. In summary, the reliability test confirms the dependability of the research variables, and the inner model analysis, based on R-Square and Path Coefficient values, assesses the accuracy and strength of the proposed model. Figure 3 depicts the path diagram for the inner model, illustrating the relationships between the latent constructs and variables under investigation in this study.

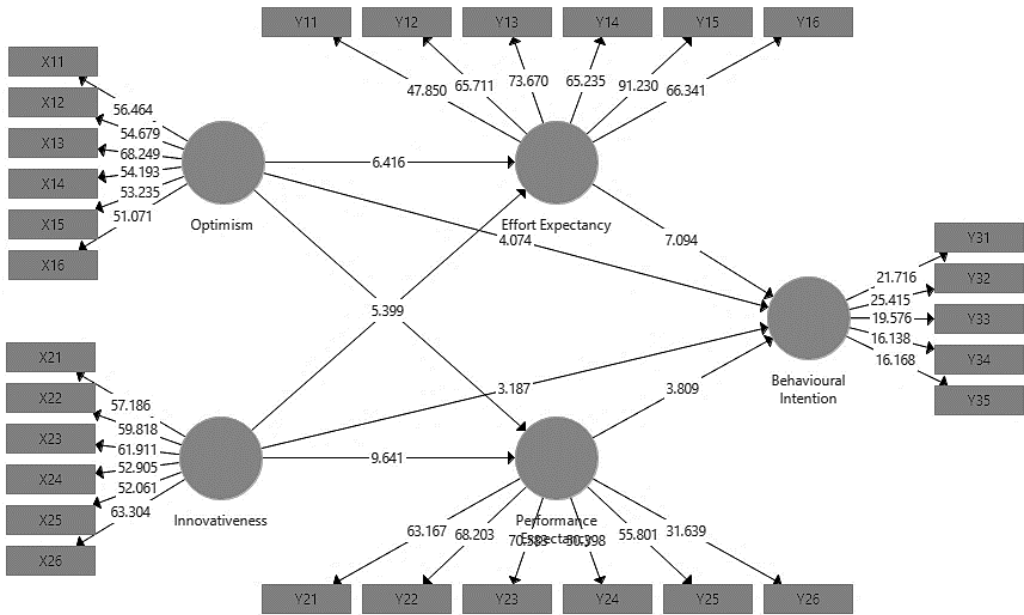


Figure 3. Bootstrapping's results

Moreover, Table 6 demonstrated that the R-square value of Effort Expectancy is 0.434 or 43.4%, which means that the Effort Expectancy variable can be explained by the Optimism and Innovativeness variables by 43.4%, and the remaining 56.6% is explained by other factors not examined in this study. This value is considered moderate as it is below 0.67. Next, the R-square value of Performance Expectancy is 0.595 or 59.5%, which means that the Performance Expectancy variable can be explained by the Optimism and Innovativeness variables by 59.5%, and the remaining 50.5% is explained by other factors not examined in this study. This value is considered moderate as it is below 0.67. Furthermore, the R-square value of Behavioral Intention is 0.745 or 74.5%, which means that the Behavioral Intention variable can be explained by the Optimism, Innovativeness, Performance Expectancy, and Effort Expectancy variables by 74.5%, and the remaining 25.5% is explained by other factors not examined in this study. This value is considered strong as it is above 0.67.

Table 6. R Square

|                               | R Square | R Square Adjusted |
|-------------------------------|----------|-------------------|
| <b>Effort Expectancy</b>      | 0.434    | 0.429             |
| <b>Performance Expectancy</b> | 0.595    | 0.591             |
| <b>Behavioural Intention</b>  | 0.745    | 0.741             |

To assess the presence and direction of the relationship between independent variables, one can examine the t-value and path coefficients. For path coefficients to be considered significant, their t-values should exceed 1.96, which corresponds to a confidence level of 0.05 and is derived from the t-table.

**Table 7.** Path Coefficient

| Path   | T-value | P-value | Decision  |
|--|---------|---------|-----------|
| H1 Optimism -> Effort Expectancy                   | 6.416   | 0.000   | Supported |
| H2 Optimism -> Performance Expectancy              | 5.533   | 0.000   | Supported |
| H3 Optimism -> Behavioural Intention               | 4.074   | 0.000   | Supported |
| H4 Innovativeness -> Effort Expectancy             | 5.399   | 0.000   | Supported |
| H5 Innovativeness -> Performance Expectancy        | 9.641   | 0.000   | Supported |
| H6 Innovativeness -> Behavioural Intention         | 3.187   | 0.002   | Supported |
| H7 Effort Expectancy -> Behavioural Intention      | 7.094   | 0.000   | Supported |
| H8 Performance Expectancy -> Behavioural Intention | 3.809   | 0.000   | Supported |

Table 8 showed that the t-values for all specific indirect effects are greater than 1.96, indicating that these paths are statistically significant at the 0.05 significance level. This suggests that there is a significant indirect effect of Optimism and Innovativeness on Behavioral Intention, which is mediated through Effort Expectancy and Performance Expectancy, respectively. The p-values of 0.000 for all specific indirect effects further support the statistical significance of these paths. These findings provide evidence that the intermediate variables (Effort Expectancy and Performance Expectancy) play a significant role in explaining the relationship between Optimism, Innovativeness, and Behavioral Intention in the research model.

**Table 8.** Specific Indirect Effect Result

| Path  | T-value | P-value |
|---|---------|---------|
| Optimism -> Effort Expectancy -> Behavioural Intention            | 4.643   | 0.000   |
| Optimism -> Performance Expectancy -> Behavioural Intention       | 3.316   | 0.001   |
| Innovativeness -> Effort Expectancy -> Behavioural Intention      | 4.174   | 0.000   |
| Innovativeness -> Performance Expectancy -> Behavioural Intention | 3.670   | 0.000   |

The results showed that optimism motivates individuals to work hard in seeking solutions and improving situations for the better. Optimism empowers individuals to anticipate and overcome threats through the belief they hold within themselves (Reivich & Shatte, 2002). Essentially, optimism is a state of always expecting good things to happen (Seligman, 1995). Auditors with strong optimism are more likely to use CAATs in their audits because when auditor optimism is high, they expect positive outcomes in terms of ease and performance improvement when using CAATs in audits. Consequently, this also influences the intention to use CAATs in audits by auditors in accounting firms in Central Java. These findings are also consistent with the research by Kaushik and Agrawal (2021) examining the use of CAATs by students in India. The results of Kaushik and Agrawal's research (2021) indicate that optimistic and innovative attitudes of auditors towards CAATs motivate them to use CAATs.

In the effect of innovativeness on effort expectancy, performance expectancy, and behavioral intention, the results highlight innovation as an open-mindedness, willingness to change, and ability to innovate or be creative (Berthon et.al., 1999). One of the crucial characteristics of an

entrepreneur is their ability to innovate (Larsen & Lewis, 2007). Without innovation, companies will not be able to survive in the long run. This is because the needs, desires, and demands of clients keep changing. The research results indicate that the innovative attitude of auditors has a positive and significant impact on the expectation of ease and performance when using CAATs during audits. Therefore, this also influences the intention of auditors in accounting firms in Central Java to use CAATs. Thus, it means that the higher the innovation possessed by an auditor, the stronger the influence on the intention to use CAATs during audits. These findings align with previous research that examined the influence of innovation on behavioural intentions among auditors.

## 5. Conclusion

The path coefficients indicate significant relationships between the variables, as evidenced by their respective high t-values and low p-values (all p-values are 0.000). Thus, H1 to H8, which explore the relationships between Optimism, Innovativeness, Effort Expectancy, Performance Expectancy, and Behavioral Intention, are all supported. The findings suggest that Optimism and Innovativeness positively influence Effort Expectancy and Performance Expectancy, which, in turn, influence Behavioral Intention. This study provides robust evidence of the significant impact of these psychological factors on auditors' intention to adopt Computer-Assisted Audit Techniques (CAATs). Moreover, the research results from the indirect effect analysis show significant indirect relationships between the psychological factors (Optimism and Innovativeness) and Behavioral Intention. These indirect effects are mediated through the intermediate variables, Effort Expectancy and Performance Expectancy. The t-values for all indirect effects are substantial (ranging from 3.316 to 4.643), and the p-values are all 0.000, indicating high statistical significance. The findings suggest that both Optimism and Innovativeness positively influence Behavioral Intention through their impact on Effort Expectancy and Performance Expectancy. This highlights the importance of psychological factors in shaping auditors' intention to utilize Computer-Assisted Audit Techniques (CAATs) in their auditing practices.

The research findings contribute significantly to the existing literature on auditors' adoption of Computer-Assisted Audit Techniques (CAATs) by highlighting the importance of psychological factors, namely Optimism and Innovativeness, in shaping auditors' Behavioral Intention. The support for all hypotheses and the significant path coefficients underscore the relevance of these psychological factors in influencing auditors' perceptions and attitudes towards CAATs. This study provides theoretical evidence of the relationships between these variables, enriching our understanding of the factors influencing technology adoption in the auditing context. The practical implications of this research are crucial for audit firms and practitioners seeking to enhance the adoption and implementation of CAATs in their audit processes. Recognizing the positive influence of Optimism and Innovativeness on Effort Expectancy and Performance Expectancy, audit firms can focus on fostering a positive and innovative work environment to encourage auditors to embrace technological advancements. By addressing these psychological factors, audit firms can enhance auditors' Behavioral Intention to use CAATs, leading to improved audit efficiency and effectiveness. Additionally, auditors' training and development programs can emphasize the benefits of CAATs and address any potential concerns,

further promoting technology adoption in auditing practices. Ultimately, the practical implications of this research offer actionable insights for audit firms to harness the potential of technology in the audit profession.

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