ANALYSIS OF TECHNOLOGY READINESS OF GENERATION Z ACCOUNTANTS WITH THE TECHNOLOGY ACCEPTANCE MODEL IN ADOPTING ARTIFICIAL INTELLIGENCE TECHNOLOGY

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ABSTRACT

Everything related to Artificial Intelligence (AI) technology has a crucial role to play in helping to improve efficiency, lowering expenses, and optimizing decision-making across numerous industries, including accounting, where Generation Z accountants, particularly in Batam, must continuously develop their skills and readiness to leverage AI despite challenges related to data privacy and security. This research seeks to evaluate the readiness of a Generation Z accountant to embrace artificial intelligence (AI) technology by applying the Technology Acceptance Model (TAM). In the context of the fourth industrial revolution, AI adoption is crucial for improving efficiency and effectiveness in accounting practices. The study employs a quantitative approach with purposive sampling, involving 220 Generation Z accountant participants from Batam City. The analysis, conducted using the PLS-PM method in R programming and data processing with Google Colab statistics, reveals that the Technology Readiness (TR) variable significantly influences the interest of Generation Z accountants in adopting AI technology. While the perceived ease of use (PEOU) variable showed no significant effect, perceived usefulness (PU) emerged as the dominant factor in technology adoption. The R-Squared value of 0.920 indicates that 92% of the variables influencing AI technology adoption are explained by TR and PU. This study highlights the importance of technology readiness in helping Generation Z accountants adapt to technological advancements and offers recommendations for enhancing education, training, and technology development within the accounting profession.

KEYWORDS	*Technology readiness; perceived ease of use; perceived usefulness; AI adoption; Generation Z accountants.*

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INTRODUCTION

Technological advancements have brought about the Fourth Industrial Revolution, which is leading to full automation and digitization processes, one example is the adoption of Artificial Intelligence (AI) technology. The adoption of AI is highly urgent given the rapid advancement of technology and digitization, the adoption of Artificial Intelligence (AI) technology has become increasingly important. The benefits of AI adoption include increased efficiency, cost reduction, and support for better business decision-making (Gulliford & Dixon, 2019). Research conducted by (Năstasă, Dumitra, & Grigorescu, 2024) also suggests that digitization, especially through AI technology, can contribute to sustainable business practices. The use of AI technology allows companies to implement integrated strategies that support the three pillars of sustainabilityeconomic, social, and environmental by ensuring that technological advancements, such as AI, contribute to long-term economic growth, foster social equity, and minimize environmental impact. This can be achieved by implementing AI solutions that enhance efficiency, create job opportunities, and promote eco-friendly practices. AI adoption is becoming increasingly common across various industries, including education, finance, and accounting. Accounting work, which is structured and repetitive, is highly suitable for AI adoption. The significant benefits of AI adoption include facilitating task automation and enhancing analytical capabilities compared to manual methods. The growing size of accounting databases encourages the need to integrate AI paradigms to reduce potential challenges with manual systems. With the advent of new technology, manual accounting processes are being replaced by technology for automatic journal entry (Damerji & Salimi, 2021).

AI also has the potential to reduce the risk of financial statement fraud, improve the quality of accounting information (Hasan, 2021), and eliminate manual audit practices. The implementation of AI automates tasks, leading to increased operational efficiency and more effective cost control, as well as improved quality and accuracy of operational procedures (Liu, Su, & Chiang, 2023). AI technology can detect fraud in real-time, helping accountants protect companies from fraud risks and providing more effective preventive measures, supporting business growth and sustainability in the era of digitization. Adopting AI is crucial for ensuring the continued relevance of the accounting profession in the digital era, as it enables accountants to automate routine tasks, enhance data analysis capabilities, and provide more strategic insights, thereby increasing efficiency and accuracy in financial management. The accounting profession is one of the sectors that will be significantly impacted by AI-based technology (Leitner-Hanetseder, Lehner, Eisl, & Forstenlechner, 2021). According to Google Indonesia, 43 percent of Generation Z are already aware of AI technology. Many of them even use AI to assist with their daily activities. Additionally, Generation Z is an early adopter of generative AI platforms. Generation Z utilizes AI to streamline processes and analyze financial data more efficiently, as well as predict current accounting trends. The importance of AI technology is the focus of this research, especially for Generation Z accountants, who are closely aligned with technological advancements and live in Batam, an industrial city, where many Generation Z individuals work while studying. However, despite its many benefits, AI implementation also faces ethical

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challenges such as data privacy and security, and requires technology readiness. Generation Z accountants need to continuously enhance their knowledge and skills to adopt and effectively utilize AI technology, as it will assist accountants both in education and industry. Several factors impact the adoption of AI technology by Generation Z accountants, with key elements including technology readiness and technology acceptance, which determine their willingness and ability to integrate AI into their professional practices.

Technology Readiness refers to the degree to which an individual or organization is equipped and willing to embrace and utilize new technology, including their attitudes, skills, and resources needed for successful adoption. In a business context, technology readiness can affect operational efficiency, innovation, and competitiveness. For individuals, technology readiness relates to their ability and willingness to adopt new technologies and applications in their daily lives. Readiness in technology has four dimensions including, innovative, uncomfortable, insecure, and optimistic (Parasuraman & Colby, 2015). The dimensions of optimism and innovativeness represent a positive perspective on an individual's willingness to embrace technology. If Generation Z accountants are optimistic and believe that technology will provide benefits, and are interested in adopting technological innovations or willing to try new technology, this will influence their interest in adopting AI technology. Conversely, discomfort and insecurity reflect a negative view of technology. If Generation Z accountants feel uncomfortable (discomfort) or anxious about the emergence of new technology, and are concerned or insecure about privacy and data security when new technology emerges, this will also affect their interest in adopting AI technology. Research conducted by (Moron & Diokno, 2023) shows that technology readiness plays a good role in the adoption of AI technology. The accounting profession in general is increasingly integrating AI technology, because in the era of the Fourth Industrial Revolution, AI plays an increasingly vital role in data analysis, decision-making, and business strategy development for accountants. Research conducted by (Anh et al., 2024; Nga, Xuan, Trong, Thao, & Doanh, 2023; Paudel, Gartaula, Justice, Krupnik, & McDonald, 2023) also shows a good link between technology readiness and AI technology adoption among accounting and auditing professionals. The following is an explanation of the first hypothesis:

H1: Technology readiness influences the interest of Generation Z accountants in Batam in adopting Artificial Intelligence technology.

The technology readiness of Generation Z accountants is also related to the acceptance of AI technology. While technology readiness (TR) has been seen to help foster user trust in technology, TR provides evidence in cases where individuals with high TR are unable to use new and advanced technologies. Research conducted by (Wang, Luo, Sa, Zhou, & Yu, 2023) also argues that TR determines individuals' general confidence in technology, but its application to specific technology domains is still limited. Thus, the Technology Acceptance Model (TAM) by Fred Davis (1989) supports in the explanation of a person's acceptance or rejection as the use of new technology, including the use of AI.

The Technology Acceptance Model (TAM) explains that someone who wants to use technology will try to show behavior that leads to the adoption or use of this

technology (Zhang, Imeni, & Edalatpanah, 2023). TAM also provides a statement if the decision to use new technology is supported by user intention or interest in using the system, which is influenced by perceived usefulness (PU) and perceived ease of use (PEOU). Here, Generation Z accountants' attitudes towards AI technology are influenced by two main factors: perceived usefulness and perceived ease of use.

Perceived ease of use (PEOU) is one of the components of the Technology Acceptance Model (TAM) developed by Fred Davis (1989). PEOU relates to an individual's belief that using a particular technology will make little or no effort or difficulty. This indicates that the higher the perception of ease of use, the more likely someone will be willing to try and adopt AI technology in their daily activities. In the context of Generation Z accountants, if they perceive AI technology as easy to use, they are more likely to adopt AI technology in their work. Accountants' intent to adopt cloud computing technology is also determined by the perceived ease of use of the application (Kholilah, Kawulur, & Subekti, 2022). Research conducted by (Anh et al., 2024) also shows that perceived ease of use influences the interest of workers in the accounting and auditing industries in adopting AI technology.

H2: Ease of use has an influence on the interest of Generation Z accountants in Batam in adopting Artificial Intelligence technology.

Perceived usefulness (PU) is also one of the components of the technology acceptance model (TAM), which can be a significant predictor of behavioral intention, interest, and usage behavior of AI. Studies conducted by (Abdullah & Almaqtari, 2024; Sudaryanto, Hendrawan, & Andrian, 2023) have shown that perceived usefulness is a factor that can influence the adoption interest in AI technology. An individual who sees AI as an opportunity will be inclined to adopt it because they believe this technology offers perceived usefulness in terms of increased efficiency, accuracy, and analytical capabilities. As a result, individuals tend to be interested in adopting AI technology as they see it as a relevant and beneficial innovation in modern and increasingly digitized accounting practices. This statement aligns with the research conducted by (Vărzaru, 2022), where accounting specialists were satisfied using AI technology and recognized the benefits it provided, which positively impacted accountants' interest in adopting AI in the workplace. Therefore, the second hypothesis in this study can be drawn as follows:

H3: Perceived usefulness influences the interest of Generation Z accountants in Batam City in adopting Artificial Intelligence technology.

Model TAM also states that the acceptance of new technology is influenced by the high user intention in using the system, which is shaped by their perceptions of the technology's ease of use (perceived ease of use) and its usefulness (perceived usefulness) (Salman & Ismael, 2023). Perceived ease of use is also considered a factor that influences perceived usefulness, as it can affect how users perceive the value of adopting a technology. Consequently, the perceived usefulness (PU) of Generation Z accountants towards a specific technology may decline if they struggle to use it effectively. On the other hand, their perceived usefulness (PU) is likely to increase if they find the technology easy to use. The research conducted

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by (Sudaryanto et al., 2023) also found that PEOU and PU have an impact on the use of AI technology in accounting students' work. Thus, it is concluded that if Generation Z accountants find AI easy to use and believe that AI will improve their work efficiency, they are likely to adopt AI in their profession, given the many advantages of using AI technology.

H4: Perceived ease of use influences the perceived usefulness of Generation Z accountants in Batam City.

Technology Readiness is also linked to the Technology Acceptance Model (TAM), also known as the Technology Readiness Acceptance Model (TRAM), as proposed by (Bogdan, Rus, Gherai, Florea, & Bugnar, 2023), which aims to explain better how the relationship between optimism, innovation, discomfort, and insecurity—dimensions of technology readiness—interacts with the technology acceptance model, specifically perceived ease of use and perceived usefulnessThe proposed model enhances the two specific dimensions of TAM (PEOU and PU) by incorporating the personality dimensions of TR. In the context of this study, TR helps to explain how general knowledge and experience with technology influence the attitudes of Generation Z accountants toward accepting or rejecting a technology.

Related to the results of research (Paudel et al., 2023; Wang et al., 2023), which explained that the TAM and TR models are related. A person's belief about belief in PU and PEOU. TAM is able to estimate the ability to adopt certain technologies, while TR is a model that has value in determining individual generalizations about technology (Bogdan et al., 2023) also proposed that TR should be linked to PU and PEOU. On materials related to technology, if someone has good TR, it will improve PEOU. In this study, if Generation Z accountants have positive technology readiness in adopting AI technology, they will have a higher perception that the technology is useful and easy to use. Additionally, (Firoiu et al., 2023) stated that PU and PEOU are able to mediate the link between individual TR and their tendency to adopt and use the technology. Based on this, the next hypothesis that can be proposed in this study is:

H5: Technology readiness affects the perceived ease of use among Generation Z accountants in Batam City.

Additionally, TR should also be linked to PU. In the context of technology adoption, if Generation Z accountants have positive technology readiness (being ready and optimistic in terms of knowledge and skills) in adopting AI technology, they will tend to be more open to AI and more willing to use it because they will feel there are many benefits to using the technology. However, if Generation Z accountants have negative technology readiness in adopting AI, they will have a lower perception that the technology is beneficial and easy to use. Moreover, (Firoiu et al., 2023) states that PU and PEOU effectively mediate the relationship between individuals' technology beliefs (TR) and their tendency to adopt and use the technology. Based on this explanation, the hypothesis that can be drawn in this study is:

H6: Technology readiness influences the perceived usefulness of Generation Z accountants in Batam City.

RESEARCH METHOD

Quantitative method is the method in this research. The quantitative method is used with an associative descriptive approach, because it investigates the relationship between variables. The purpose of this study is to analyze the relationship between the independent variables in this study, namely the technological readiness of Generation Z accountants and the Technology Acceptance Model (perceived ease of use and perceived usefulness), while the dependent variable is the adoption of artificial intelligence technology. The target population of this research is Generation Z accountants born between 1997 and 2012 who live in Batam City. Based on data from the Batam City Statistics Agency, the number of Generation Z residents in Batam City aged 12-27 years is approximately 441,328 people. In this study, simple random sampling was used to select samples from the identified population (Sugiyono, 2019). Sampling from the population is done randomly without considering the strata within the population, hence this method is called simple random sampling. This approach provides an equal chance for every element in the population to be selected as a sample member, this makes it a simple and effective way to obtain the desired sample.

To determine the sample size, the researcher employed the Maximum Likelihood estimation method in SEM, which suggests a sample size of 100-200 respondents. Data analysis using SEM and the Maximum Likelihood Estimation (MLE) technique requires a sample size within the range of 100-200 to meet the data analysis method requirements. The criteria for selecting the sample in this study are Generation Z accountants who are Indonesian citizens residing in Batam City, aged 12 to 27 years (born between 1997 and 2012), and who completed the questionnaire with all required information. Thus, the number of respondents set for this study is 220, in accordance with the recommendations and requirements of the analysis method used. The data collection method used is a questionnaire. The responses to the questionnaire will be measured using a modified Likert scale, meaning that the respondents' answers will be rated on a 5-point scale. Data analysis techniques involve Partial Least Square Path Modeling (PLS-PM) with the R programming language.

RESULT AND DISCUSSION

1. Descriptive Statistical Analysis

This study utilized descriptive statistics to analyze quantitative variables related to the characteristics of Generation Z accountants in Batam City, and the researcher successfully gathered valid data from 220 respondents. The analysis reveals that 61.40% of the respondents are male, with the majority (79.10%) falling in the 22-27 age range. Most respondents are either pursuing or have completed a bachelor's degree in Accounting, with 95 respondents (43.20%). The complete data is presented in Table 1 below.

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Table 1. Respondent Characteristic Data

Characteristic	Description	Percentage	Amount
Gender	Female	38,60%	85
	Male	61,40%	135
Age	12-16 Years	0,50%	1
	17-21 Years	20,50%	45
	22-27 Years	79,10%	174
Current Education (If already graduated, fill in last education)	Senior High School/Equivalent	9,10%	20
	Diploma 3 in Accounting	19,50%	43
	Diploma 4/Applied Bachelor in Accounting	25,50%	56
	Bachelor's Degree in Accounting	43,20%	95
	Master's Degree in Accounting	2,70%	6
	Doctorate in Accounting	-	-
Residing in Batam City	Yes	100%	220
	No	-	-
Are you currently employed?	Yes	100%	220
	No	-	-
If employed, have you worked in the field of accounting/audit?	Yes	100%	220
	No	-	-

2. Inferential Analysis

This data processing technique uses the PLS-PM method in the R program, with data processing facilitated by the Google Colab application. In this case, inferential analysis is divided into two parts: outer model analysis and inner model analysis.

a. Outer Model Test

1) Validity Test

The validity test is a test that has the aim of knowing the accuracy of the questionnaire that represents the variable being studied, thus also determining whether a questionnaire is valid or not. In this study, the validity test consisted of

convergent validity and discriminant validity, which was carried out using Google Colab as follows:

    a. Convergent Validity Test Results

The results of the convergent validity measurement can be observed through the outer loadings test and AVE (Average Variance Extracted) in the table below:

Table 2. Convergent Validity Test Results

Variable	Indicator	Loadings	AVE
Technology Readiness (TR)	opt_1	0.922	0.853
	opt_2	0.913	
	opt_3	0.905	
	opt_4	0.930	
	inn_1	0.919	
	inn_2	0.928	
	inn_3	0.917	
	inn_4	0.925	
	dis_1	0.932	
	dis_2	0.923	
	dis_3	0.928	
	dis_4	0.935	
	ins_1	0.925	
	ins_2	0.927	
	ins_3	0.929	
	ins_4	0.922	
Perceived Ease Of Use (PEOU)	peou_1	0.936	0.877
	peou_2	0.937	
	peou_3	0.934	
	peou_4	0.945	
	peou_5	0.925	
	peou_6	0.941	
Perceived Usefulness (PU)	pu_1	0.931	0.865
	pu_2	0.921	
	pu_3	0.923	
	pu_4	0.938	
	pu_5	0.935	
	pu_6	0.932	
Technology AI Adoption (TA)	ta_1	0.951	0.905
	ta_2	0.951	

Source: Processed Data, 2024

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Based on the data above, it can be seen that the outer loading values for all indicators of each variable are greater than 0.7, which means they have good convergent validity. Additionally, the AVE values for the variables are greater than 0.5, which means the convergent validity requirement is also met because the construct is able to explain 50% or more of the variation in the items. Therefore, it can be concluded that the indicators of the independent and dependent variables are valid and can be used to proceed with the next data processing step.

b) Discriminant Validity Test Results

The results of the discriminant validity test can be seen in the table below.

Table 3. Cross-Loadings Test Results

	TR	PEOU	PU	AI
opt_1	0.922	0.907	0.898	0.877
opt_2	0.913	0.897	0.894	0.880
opt_3	0.905	0.898	0.900	0.862
opt_4	0.930	0.913	0.917	0.891
inn_1	0.919	0.912	0.903	0.884
inn_2	0.928	0.899	0.904	0.877
inn_3	0.917	0.905	0.901	0.876
inn_4	0.925	0.906	0.913	0.884
dis_1	0.932	0.916	0.920	0.884
dis_2	0.923	0.914	0.921	0.890
dis_3	0.928	0.906	0.907	0.876
dis_4	0.935	0.919	0.915	0.895
ins_1	0.925	0.913	0.905	0.876
ins_2	0.927	0.903	0.905	0.884
ins_3	0.929	0.902	0.898	0.885
ins_4	0.922	0.899	0.904	0.885
peou_1	0.916	0.936	0.906	0.893
peou_2	0.926	0.937	0.918	0.905
peou_3	0.911	0.934	0.901	0.874
peou_4	0.930	0.945	0.922	0.887
peou_5	0.906	0.925	0.897	0.851
peou_6	0.926	0.941	0.923	0.906
pu_1	0.918	0.914	0.931	0.890
pu_2	0.897	0.888	0.921	0.896
pu_3	0.907	0.893	0.923	0.862
pu_4	0.920	0.923	0.938	0.891
pu_5	0.910	0.907	0.935	0.891
pu_6	0.925	0.905	0.932	0.896
ta_1	0.907	0.902	0.906	0.951
ta_2	0.908	0.898	0.909	0.951

Source: Processed Data, 2024

The cross-loadings test is conducted to compare the loading values between indicators and their respective latent variables, ensuring that the loading value of an indicator with its associated latent variable is higher than its loading value with any other latent variable. This aims to assess discriminant validity, ensuring that indicators accurately reflect the latent variable they are intended to represent and do not exhibit stronger correlations with other latent variables. Good discriminant validity is essential to confirm that the constructs being measured are distinct and unique from one another. An indicator's higher loading value on its associated latent variable reflects a stronger relationship, showing that the indicator effectively captures the essence of the variable it represents. This is an essential component of construct validity, ensuring the indicator aligns with the theoretical concept underlying the latent variable. The cross-loadings test results reveal that the indicators for technology readiness, perceived ease of use, perceived usefulness, and AI technology adoption have higher loading values on their respective latent variables than on other variables. These results confirm that the constructs meet the requirements for discriminant validity, indicating that each variable is distinct and accurately represented within the model.

2) Reliability Test

The reliability test is conducted to measure whether an indicator can be considered reliable for a variable. In this reliability test, the R programming language is used via the Google Colab application.

a) Variable Reliability Test

Table 4. Variable Reliability Test Results

Variabel	Cronbach_Alpha	Keterangan
TR	0.989	Reliabel
PEOU	0.972	Reliabel
PU	0.969	Reliabel
AI	0.895	Reliabel

Source: Processed Data, 2024

Based on the data above, it shows that the Cronbach's Alpha value for each variable is above 0.7, which means that each variable meets the reliability test criteria and can be considered reliable.

Reliability Test for the Strength of Indicator Relationships

Table 5. Indicator Reliability Test Results

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Indicator	Loadings	Communality
opt_1	0.922	0.851
opt_2	0.913	0.834
opt_3	0.905	0.819
opt_4	0.930	0.864
inn_1	0.919	0.844
inn_2	0.928	0.862
inn_3	0.917	0.842

Source: Processed Data, 2024

In testing the strength of indicator reliability, this is done to assess how well each indicator is related and has good reliability, with the expected outer loading value being > 0.7 and communality value > 0.5.

Based on the data above, all the indicators of the variables have outer loading values > 0.7 and communality test values > 0.5, indicating that they have good reliability relationships.

b. Inner Model Test

Coefficient of Determination (R^2) and Redundancy

The determination test (R^2) is used to assess the extent to which independent variables can explain the dependent variable in a regression model. The R^2 value represents the proportion of variation in the dependent variable that can be explained by the independent variables in the model. A higher R^2 value indicates a better ability of the model to explain the relationship between the independent and dependent variables. However, a very high R^2 does not always indicate an ideal model, as it could suggest overfitting or the influence of other variables not included in the model. In this context, the R^2 value is categorized into three levels. If R^2 is greater than 0.67, the relationship between the independent and dependent variables is considered strong. If the value is greater than 0.33 but less than 0.67, the relationship is classified as moderate. Conversely, if R^2 is only greater than 0.19, the relationship is deemed weak. These categories help researchers evaluate how well the statistical model used in a study explains the phenomenon being analyzed.

The redundancy test is calculated in the same way as R-squared. The higher the redundancy value, the greater the independent variable's ability to measure its endogenous variables. Based on this, the following data is presented.

Table 6. Coefficient of Determination (R^2) and Mean Redundancy Test Results

| Variable	R-Squared	Mean Redudancy
AI	0.920	0.832

Source: Processed Data, 2024

Based on the data obtained above, it shows that the R-Squared value for the AI Technology variable is 0.920, which falls into the strong category. This indicates

that the AI Technology variable is influenced by 92% by the variables technology readiness, perceived ease of use, and perceived usefulness, while the remaining 8% is influenced by other variables not examined in this study.

c. Evaluation of Goodness of Fit (GoF) Model Criteria

The higher the GoF value, the better the performance and overall quality of both the inner model and outer model measurements.

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#goodness of fit
aitechnology_plspm$gof

0.905770915181345
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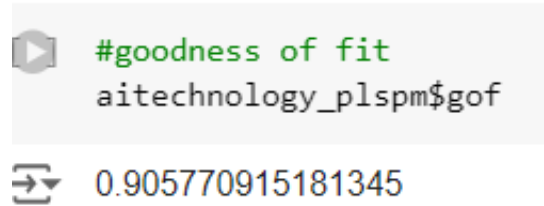
Source: Processed Data, 2024

In this study, the GoF value obtained is 0.91. Thus, this value indicates that the performance and quality of the Inner and Outer Model measurements are satisfactory or excellent.

d. Hypothesis Testing

Hypothesis testing is a statistical procedure that aims to assist researchers in proving the proposed hypotheses or determining whether the data processing results support accepting or rejecting the hypothesis. The results of hypothesis testing in this study were conducted using the bootstrapping test, which can be observed in the following table.

Table 7. Hypothesis Test Results

No	Hypothesis	Perc.025	Perc.975
H_1	TR→AI	0.148	0.628
H_2	PEOU→AI	-0.079	0.359
H_3	PU→AI	0.227	0.663
H_4	PEOU→PU	0.114	0.427
H_5	TR→ PEOU	0.976	0.987
H_6	TR→PU	0.563	0.869

Hypothesis of the Influence of Technology Readiness on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

Based on the statistical analysis for H1 shown in Table 7, it is evident that Technology Readiness (TR) significantly influences AI Technology Adoption. This conclusion is supported by the fact that the confidence interval does not include the value 0 between the lower bound (Perc.025) and the upper bound (Perc.975). The absence of a 0 value in this range indicates a statistically significant relationship, confirming that Technology Readiness is a crucial factor in driving the adoption of AI technology. The lack of a 0 within the confidence interval demonstrates that the impact of Technology Readiness on AI Technology Adoption is consistent and not

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random. This aligns with the idea that readiness in terms of technical competence, optimism, and preparedness contributes to the acceptance and effective use of AI systems. Individuals or organizations with higher levels of technological readiness are better positioned to adopt AI technology, highlighting the need to enhance technological capabilities to support successful digital transformation.

Hypothesis of the Influence of Perceived Ease of Use on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

Referring to the statistical calculations for H2 shown in Table 7, it is evident that the variable Perceived Ease of Use (PEOU) does not significantly influence AI Technology Adoption. This conclusion is drawn from the presence of negative values in both the lower percentile (Perc.025) and upper percentile (Perc.975) ranges. When the confidence interval includes or is dominated by negative values, it suggests that the relationship lacks statistical significance, indicating that Perceived Ease of Use does not have a meaningful impact on the adoption of AI technology. The finding implies that the ease of using AI technology alone is not a determining factor in its adoption. Other variables, such as perceived usefulness, organizational support, or individual readiness, may play a more critical role. This highlights the need for a broader approach to understanding the factors influencing AI adoption, as focusing solely on ease of use may not sufficiently address the challenges or motivators for adopting AI systems.

Hypothesis of the Influence of Perceived Usefulness on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

Based on the statistical calculations for H3, as displayed in Table 7, it is evident that Perceived Usefulness (PU) significantly influences AI Technology Adoption. This conclusion is drawn from the observation that the confidence interval does not contain a negative value between the lower percentile (Perc.025) and upper percentile (Perc.975) ranges, specifically showing no value of 0 within this range. The absence of a 0 value indicates a statistically significant relationship, confirming that Perceived Usefulness plays an important role in influencing the interest of Generation Z accountants in adopting AI technology. The result suggests that when Generation Z accountants perceive AI technology as useful, they are more likely to adopt it. This highlights the importance of demonstrating the practical benefits and advantages of AI technology to increase its acceptance among this group. By emphasizing the usefulness of AI in enhancing efficiency, productivity, and decision-making, organizations can encourage greater adoption of AI tools by Generation Z accountants in Batam City.

Hypothesis of the Influence of Perceived Ease of Use on Perceived Usefulness for Generation Z Accountants

Based on the statistical calculations for H4, as shown in Table 7, it can be observed that Perceived Ease of Use (PEOU) significantly influences Perceived

Usefulness (PU). This is indicated by the absence of a negative value between the lower percentile (Perc.025) and upper percentile (Perc.975) ranges, meaning that no 0 value is present within the confidence interval. The lack of 0 in this range suggests a statistically significant relationship, confirming that Perceived Ease of Use plays an important role in shaping the Perceived Usefulness of AI technology among Generation Z accountants in Batam City. This finding implies that when Generation Z accountants find AI technology easy to use, they are more likely to perceive it as useful. It underscores the importance of designing AI systems that are user-friendly and intuitive, as ease of use directly impacts how valuable users perceive the technology to be. Therefore, ensuring that AI tools are simple and accessible can enhance their perceived usefulness, encouraging greater adoption and engagement among Generation Z accountants.

Hypothesis of the Influence of Technology Readiness on Perceived Ease of Use for Generation Z Accountants

Based on the statistical calculations for H5, as shown in Table 7, it is evident that Technology Readiness (TR) significantly influences Perceived Ease of Use (PEOU). This conclusion is drawn from the fact that the confidence interval does not include a value of 0 between the lower percentile (Perc.025) and upper percentile (Perc.975) ranges. The absence of 0 in this range indicates a statistically significant relationship, confirming that Technology Readiness has a notable impact on how Generation Z accountants in Batam City perceive the ease of use of AI technology. This finding suggests that Generation Z accountants with higher levels of Technology Readiness are more likely to find AI technology easier to use. As Technology Readiness encompasses factors such as confidence in using technology and familiarity with digital tools, it highlights the importance of fostering these attributes to enhance the user experience with AI systems. Ensuring that individuals are well-prepared and comfortable with technology can play a crucial role in making AI more accessible and user-friendly, thereby encouraging its adoption.

Hypothesis of the Influence of Technology Readiness on Perceived Usefulness for Generation Z Accountants

Based on the statistical calculations for H6, as shown in Table 7, it can be observed that Technology Readiness (TR) significantly influences Perceived Usefulness (PU). This conclusion is supported by the fact that the confidence interval does not contain a negative value between the lower percentile (Perc.025) and upper percentile (Perc.975) ranges, meaning there is no value of 0 within this range. The absence of 0 indicates a statistically significant relationship, confirming that Technology Readiness has a significant effect on how Generation Z accountants in Batam City perceive the usefulness of AI technology.This finding suggests that Generation Z accountants who are more technologically ready are more likely to perceive AI technology as useful. As Technology Readiness reflects

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factors such as familiarity, confidence, and comfort with technology, it emphasizes the importance of cultivating these traits to enhance the perceived benefits of AI tools. By increasing individuals' technological readiness, organizations can improve the likelihood that AI technology will be seen as valuable, thereby encouraging greater adoption among Generation Z accountants.

Discussion

The Influence of Technology Readiness on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

Based on the hypothesis test results, It indicates that technology readiness has a significant impact on the willingness of Generation Z accountants in Batam City to adopt Artificial Intelligence technology. Therefore, H1 is accepted. It is presented if the interest of a Gen Z accountant in Indonesia to be able to use a variety of artificial intelligence is given a fairly good influence based on the indicators on the technology readiness variable. In the hypothesis test results, the technology readiness variable for AI technology adoption does not show a value of 0 between the range of the lower percentile (Perc.025) and upper percentile (Perc.975), which is between 0.148-0.628. This means that the more Generation Z accountants are ready, optimistic, and willing to innovate with the presence of new technology, the higher their interest in adopting Artificial Intelligence technology. This result is also supported by (Anh et al., 2024; Moron & Diokno, 2023), which found that technology readiness in accounting has a positive impact on AI technology adoption. The accounting profession tends to be ready to adopt AI technology as, in the era of Industry 4.0, AI plays an increasingly important role in data analysis, decision-making, and developing business strategies for accountants.

The Influence of Perceived Ease of Use on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

Based on the hypothesis test results for the variable perceived ease of use in relation to AI technology adoption, there is a negative value in the lower percentile (Perc.025) and upper percentile (Perc.975), ranging from -0.079 to 0.359, meaning that the Perceived Ease of Use variable does not influence the AI Technology Adoption variable. Therefore, H2 is rejected. This is found if the interest of Generation Z accountants in adopting Artificial Intelligence technology is not influenced by the various indicators in the perceived ease of use variable. These results also explain if the perceived ease of use is unable to influence Generation Z accountants' decisions in adopting AI technology. This result is supported by (Hair & Alamer, 2022), where PEOU (perceived ease of use) does not have a significant impact on accounting students' decision to adopt AI technology. This means that although AI may be easy to use, other factors, such as perceived usefulness, are more dominant in influencing AI adoption.

The Influence of Perceived Usefulness on Generation Z Accountants' Interest in Adopting Artificial Intelligence Technology

The third hypothesis in this study is that the variable perceived usefulness significantly influences the interest of Generation Z accountants in Batam City in adopting Artificial Intelligence technology. Therefore, H3 is accepted. The hypothesis test results show that there is no value of 0 between the lower percentile (Perc.025) and upper percentile (Perc.975), ranging from 0.227-0.663, indicating that the perceived usefulness variable influences AI technology adoption. This result shows that the more useful a technology is perceived, the more Generation Z accountants will see AI as an opportunity and thus have a greater interest in adopting AI technology. Generation Z accountants view AI as a tool to expand their opportunities and abilities in the increasingly digitized accounting world. Consequently, Generation Z accountants believe that AI technology is a beneficial innovation in modern accounting practices. This belief, that AI technology aids efficiency, predicts market trends, and automates tasks in accounting, strengthens their interest in AI technology for practical accounting purposes. Therefore, this expectation will have a significant impact on AI technology adoption.

This result is also in line with studies conducted by (Anh et al., 2024; Nouraldeen, 2023; Vărzaru, 2022), where accounting specialists are satisfied with AI technology, recognizing its benefits, which positively impact accountants' interest in adopting AI in the workplace. This result also supports the Technology Acceptance Model, where Generation Z accountants believe that using technology will enhance their productivity or performance. When Generation Z accountants see AI technology as a useful tool, they are more likely to adopt it.

The Influence of Perceived Ease of Use on the Perceived Usefulness of Generation Z Accountants

This study shows that perceived ease of use influences the perceived usefulness of Generation Z accountants in Batam City, thus H4 is accepted. The hypothesis test results in Table 7 show that there is no value of 0 between the lower percentile (Perc.025) and upper percentile (Perc.975), ranging from 0.114-0.427, indicating that perceived ease of use influences the perceived usefulness of Generation Z accountants. Perceived ease of use is considered a key determinant of perceived usefulness because it directly influences how users evaluate the value of a technology. When users find a technology easy to use, they are more likely to perceive it as useful, as ease of use reduces barriers to its application and enhances its practical benefits. In turn, the perception of usefulness strengthens the likelihood of technology adoption, as users are more inclined to integrate tools that they believe will improve their efficiency and productivity. Therefore, perceived ease of use not only affects users' experience but also plays a crucial role in shaping their overall perception of the technology's usefulness. Therefore, the higher the perceived ease of use of Generation Z accountants towards AI technology, the higher their perceived usefulness of AI technology. The study by (Sudaryanto et al.,

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2023) also found that PEOU and PU significantly influence the use of AI technology in accounting students' work. This result confirms the Technology Acceptance Model (TAM), where perceived ease of use (PEOU) refers to the extent to which Generation Z accountants see AI technology as easy to use. If they find AI technology easy to use, they are more likely to perceive its usefulness (PU). Perceived Usefulness (PU) for Generation Z accountants reflects their belief that using AI technology will improve efficiency, predict market trends, and automate tasks in modern accounting practices.

The Influence of Technology Readiness on the Perceived Ease of Use of Generation Z Accountants

The hypothesis test results in Table 7 show that there is no value of 0 between the lower percentile (Perc.025) and upper percentile (Perc.975), ranging from 0.976-0.987, meaning that technology readiness significantly influences the perceived ease of use of Generation Z accountants. Therefore, H5 is accepted. This can be explained if the perceived ease of use of Generation Z accountants is able to be influenced by various indicators on the technology readiness variable. This means that the more ready and optimistic Generation Z accountants are in terms of mental readiness, knowledge, and skills, the more prepared they will be for the presence of new technology. Consequently, their perception of ease of use (PEOU) towards new technology will increase. Generation Z accountants with a high level of readiness (TR) will be more confident in handling new technology. When they feel more prepared and have sufficient knowledge, they will find it easier to master the technology. This result confirms the two interrelated models (TAM and TR). An individual's belief in technology readiness is closely related to PU and PEOU. TAM effectively predicts whether an individual will adopt a particular technology, while TR is a valuable model for determining general beliefs about technology. In the context of technology adoption, if someone has a high level of TR, it will increase PEOU. Additionally, (Firoiu et al., 2023) states that PU and PEOU effectively mediate the relationship between an individual's technology beliefs (TR) and their tendency to adopt and use the technology.

The Influence of Technology Readiness on the Perceived Usefulness of Generation Z Accountants

This study found that if technology readiness has an influence on the perceived usefulness of Generation Z accountants in Batam City, so this hypothesis is accepted. The hypothesis test results in Table 7 show that there is no value of 0 between the lower percentile (Perc.025) and upper percentile (Perc.975), ranging from 0.563-0.869, indicating that technology readiness influences the perceived usefulness of Generation Z accountants. According to (Bogdan et al., 2023), TR should also be linked to PU because PU effectively influences the relationship between an individual's technology beliefs (TR) and their tendency to adopt and use the technology. In the context of this study, if Generation Z accountants have a high

level of technology readiness, they will be more ready and optimistic in terms of their knowledge and skills to adopt AI technology, making it easier for them to perceive the benefits of using the technology. This result supports the TRAM theory, where TR and TAM are interconnected, recognizing that the technology readiness of Generation Z accountants plays a significant role in influencing their perception of the usefulness of technology. In this study, Generation Z accountants who feel prepared and confident in facing new technology tend to see many benefits in the accounting and education sectors from using AI technology.

CONCLUSION

Based on the analysis, testing, and data processing, this study concludes several points. The study shows that technology readiness significantly influences the interest of Generation Z accountants in Batam City in adopting Artificial Intelligence (AI) technology. This generation, which lives alongside technological advancements, tends to be more prepared and optimistic in adopting new technology if they feel confident in their abilities and knowledge. The factor of Perceived Usefulness also proves to influence AI adoption, showing that Generation Z accountants are more likely to adopt technology that they perceive as beneficial in improving their work efficiency and effectiveness. However, Perceived Ease of Use does not directly influence the interest in technology adoption, although it contributes to the perceived usefulness of the technology. This study also supports the Technology Acceptance Model (TAM), which emphasizes that the acceptance of new technology is determined by the perceived benefits of the technology by the users. The higher the perceived usefulness of AI technology by Generation Z accountants, the greater their interest in adopting it in accounting practices. Therefore, technology readiness and perceptions of ease and usefulness are key factors in driving technology adoption among Generation Z accountants.

To improve technology readiness among Generation Z accountants, companies and educational institutions in Batam City should provide comprehensive training on the use of AI in accounting. This training should focus on enhancing technical skills and providing a deep understanding of the benefits of AI. Additionally, there should be campaigns or educational programs that explain the tangible benefits of using AI in accounting. This can be done through seminars, workshops, and publications that highlight successful case studies of AI implementation in the accounting field. Companies need to create an environment that supports the adoption of new technologies by providing adequate infrastructure and technical support. It is also essential to eliminate any barriers that Generation Z accountants may face in implementing AI technology. Future researchers are encouraged to conduct further studies exploring other factors that may influence AI adoption among Generation Z accountants, such as social, cultural, and ethical aspects. Such research could provide more comprehensive insights into how to optimize technology adoption in the future.

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