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ANALYSIS OF AUDITORS' PERCEPTIONS OF ARTIFICIAL INTELLIGENCE IN THE AUDIT PROCESS

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Abstract

This research aims to determine the influence of Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, and Perceived Usefulness Augmented System on the Audit Process. This research uses primary data obtained from questionnaire data distributed to accountants who work in public accounting firms in Indonesia. The sampling technique used was purposive sampling with multiple regression analysis method. The analytical tool used in this research is SPSS 27.0. The results of research using multiple data regression analysis show (1) Perceived Easy of Use Assisted System has an effect on the Audit Process (2) Perceived Easy of Use Augmented System has no effect on the Audit Process (3) Perceived Usefulness of the Assisted System has no effect on the Audit Process (4) Perceived Usefulness of the Augmented System has no effect on the Audit Process.

Keywords: Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, Perceived Usefulness Augmented System, and Audit Process

Introduction

The quality of financial and accounting information is very important because there is a lot of data of different types and it is required to process it quickly and accurately, and at the same time it is difficult for auditors to process this data, while audited financial reports must truly reflect the company's activities. and processed into financial information that will have an impact on decision makers to determine a decision. Therefore, the use of AI or artificial intelligence technology is an alternative to support the output of company operations, namely financial reports, because using Artificial Intelligence speeds up the audit procedure process and the possibility of errors is not due to computers or machines that work on the algorithms received. but rather the initial entry of data by accountants or auditors (Davis, 1989; Isam AL-Qatamin & Salleh, 2020; Kokina & Davenport, 2017).

In this era, companies are required to provide fast and reliable information so that stakeholders can make the right decisions so that these decisions can bring the company to compete with competitors who are dynamic about change to achieve and exceed the company's own targets (Alsheyadi et al., 2024; Birkel & Hartmann, 2020; Nandi et al., 2021).

The current digitalization of business means that many companies are required to improve and develop information technology to improve the business prospects of these companies, where big data is one of the keys to winning competition in today's business (Kraus & Kraus, 2021; Ribeiro-Navarrete et al., 2021; Setyowati et al., 2021).

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Every day more and more data is being collected and this data is piling up, especially in the financial sector where the invoice process and the preparation of financial reports occur, making companies need to have a cloud database. However, the process doesn't stop there. Companies need to bring this data to be processed into insight or wisdom that is used for company business decisions. Processing this data requires human intervention for the continuity of company operations, but currently the term Artificial Intelligence has emerged.

Artificial Intelligence or what is commonly known as Artificial Intelligence is a simulation or depiction of the intelligence possessed by humans and made into a computer program so that it can act like a human mind. In the journal Fedyk et al. (2022) quotes that the Organization for Economic Co-operation and Development (OECD) defines Artificial Intelligence (AI) as "a machine-based system that can, for a specific set of human-determined goals, make predictions, recommendations or decisions that affect real or virtual environments.

Basically, management could process the data manually, but that would make the business decision process time-consuming and would create potential losses because other companies' business competitors could have already finished processing the information data they received.

The potential of AI to make things easier for users, especially auditors, can make the process of audit procedures faster, and because the procedures use artificial intelligence technology, the possibility of errors is minimal and insignificant or it could be said that there is no human error.

Reported by CNBC Indonesia, Jakarta. Asia is said to be a promising market for the implementation of big data as the main core for the development of artificial intelligence. In fact, Indonesia is one of the leaders in Asia because 65% of the industry has or is currently developing artificial intelligence technology. Indonesia is the country with the highest growth in spending in the big data sector with an average of 19.7% over the 5 years since 2018.

Reported CNBC Indonesia, Jakarta, There are many use cases or applications of AI for companies. In the financial sector, for example, AI can be used for auditing or invoicing processes. As has been done by several global firms, PWC and AY, in conducting audits and invoicing, they have used AI. So you can carry out the process more quickly. Because AI technology like ChatGPT is relatively new, there are still no leading players in the market.

This research aims to see whether there is an influence between Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, and Perceived Usefulness Augmented System on the Audit Process. It is hoped that this research can contribute to public accountants in Indonesia regarding the use of Artificial Intelligence in the Audit Process.

This research aims to determine the influence of Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, and Perceived Usefulness Augmented System on the Audit Process.

Research Methods

This research is a type of descriptive research which is analyzed using a quantitative approach. This quantitative approach was carried out by distributing online questionnaires which were distributed via various social media and short message applications. The method for determining the research sample uses a purposive

sampling technique with the criteria of public accountants who use artificial intelligence in Indonesia. The distribution process for distributing this questionnaire was carried out from May to June 2024. The collection was carried out using Google form media which consists of general auditor information such as name, age, education, Big4/Non Big-4, position, and length of service. Then the next section contains statements that correspond to the variables used in this research. Each statement will be presented with answer options using a 1-6 Likert scale (1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, and 6=strongly agree).

The analytical tool used is IBM SPSS Statistics version 27. To test the quality of the data, first carry out a validity and reliability test to check that each question indicator is valid and reliable. Validity test with a significance value of <0.05 and reliability test with a Cronbach Alpha value of >0.70, then hypothesis testing was carried out by carrying out multiple regression tests and Sobel tests (Ghozali, 2018). Below are the indicators used to measure each variable:

An independent variable is a free variable or variable that can influence the emergence of a dependent or bound variable (Sugiyono, 2017). The independent variables used in the research are Perceive Ease of Use, Perceive Usefulness.

Artificial Intelligence

1. The first form of artificial intelligence is an Assisted AI System, which helps individuals inthe process of making decisions or responding to different situations by repeating many tasks humans have already done. This Assisted AI System is usually implemented based on predetermined procedures. From this point of view, machines perform the actions, and humans make the decisions. AI-assisted systems are considered 'mechanical intelligence' that allows AI to carry out everyday tasks (Munoko et al., 2020).
2. The second form is Augmented AI System yi.e. in this type, the machine performs the action, but collaborative decision making between humans and machines is required. These systems can interact with their environment and learn from auditors (Guang-huan, 2017), and are, therefore, considered “analytical intelligence.” In this setting, the auditor and AI are co-decision makers. This strengthened AI allows companies to achieve previously unattainable goals (Albawwat & Frijat, 2021).

The dependent variable is the dependent variable or variable that is influenced by the existence of an independent variable (Sugiyono, 2017). The dependent variable used in this research is Audit Process.

The audit process is carried out by an auditor who has the ability and competence to carry out audits. The Audit process requires many stages, costs, time, energy, and others. The implementation of the audit process carried out by the auditor really determines whether the quality of the resulting audit is good or bad (Adawiyah, 2022).

Results and Discussion

This research is quantitative research that uses a questionnaire as a data collection instrument. Data was collected from May 25 2024 to June 15 2024. During this period, 107 respondents were obtained.

Respondent Demographics

This section explains the demographics of respondents which describes the characteristics of respondents consisting of gender, age, education level, income/pocket money, domicile, and frequency of online shopping.

Table 1. Respondent Demographics

Characteristic	Frequency	Percentage
Gender		
a. Male	31	34.1%
b. Female	60	65.9%
Total	91	100.0%
Age		
a. 21 - 26 Years	37	40.7%
b. 26.1 - 30 Years	37	40.7%
c. 31.1 - 35 Years	14	15.4%
d. 35.1 - 40 Years	3	3.3%
e. 40.1 - 46 Years	0	-
Total	91	100.0%
Highest Education		
a. Diploma or D3	12	13.2%
b. Bachelor's Degree (S1)	71	78.0%
c. Master's Degree (S2)	8	27.9%
d. Doctorate (S3)	1	1.1%
Total	91	120.2%
Public Accounting Firm		
a. Big - 4	20	22.0%
b. Non-Big - 4	71	78.0%
Total	91	100.0%
Position		
a. Associate	48	52.7%
b. Senior Associate	14	15.4%
c. Supervisor	6	6.6%
d. Manager	12	13.2%
e. Partner	11	12.1%
Total	91	100.0%
Work Experience		
a. < 3 Years	52	57.1%
b. 2 Years	34	37.4%
c. 3 Years	5	5.5%
d. 9.1 - 12 Years	0	0.0%
e. 12.1 - 16 Years	0	0.0%
Total	91	100.0%

Table 1 shows that the gender proportion of female respondents is twice that of male respondents. The majority of respondents were aged in 2 categories, namely 21 – 26 years and 26.1 – 30 years with the last level of education taken being Bachelor or Bachelor (78%), with Non – Big 4 auditors excelling in the Public Accounting Firm questionnaire, with the position of associate the most superior were 48 people (52.7%), and the auditor's length of service was under 3 years (57.1%).

Hypothesis Results

The data collected has passed a quality test to see the seriousness of the respondents in answering questions and to see situational factors at the time the research was conducted. The test carried out was a validity test using Pearson Correlation < 0.05 and a reliability test using Cronbach's Alpha > 0.70. All question indicators for each

variable have been proven valid because all significance values are below 0.05 and each variable has been proven reliable with Cronbach's Alpha values above 0.70.

This research uses multiple regression to test the hypothesis using the coefficient of determination (adjusted R2), model feasibility test (F test), and partial test (t test). Table 3 shows the results of hypothesis testing.

Table 2. Regression Results

Research Model: PA = a + b1.PAEOU + b2.PAGEOU + b3.PAU + b4.PAGU + e							
Variable	Prediction	Unstandardized Coefficients		t	Sig		
		B	Std. Error			Sig/2	Decision
(Constant)		22.819	2.883	7.915	0.000		
Perceived Assist Ease (X1)	+	0.693	0.168	4.139	0.000	0.000	H1 = Accepted
Perceived Augmented Ease (X2)	+	0.173	0.228	0.786	0.434	0.217	H2 = Rejected
Perceived Assist Usefulness (X3)	+	0.045	0.210	0.214	0.831	0.416	H3 = Rejected
Perceived Augmented Usefulness (X4)	-	0.007	0.225	0.032	0.974	0.487	H4 = Rejected
Adjusted R2	0.316						
F Test	11.074						
F Significance	0.001						
Dependent Variable: Immersion (Y)							

Source: Processed with SPSS 27

From table 2, it can be seen that the Adjusted R^2 value is 0.0.316. This means that 31.6% of the variation in the Audit Process variable can be explained by the variables Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, and Perceived Usefulness Augmented System. While 68.4% is caused by other factors which is not included in this model. The significant F value shows 0.001, which means this model is fit. From the results of the partial t test, it was found that Perceived Easy of Use Assisted System influences the Audit Process. This can be seen from the significance value of t/2 which is smaller than 0.05.

Conclusion

This research tries to test the influence of Perceived Easy of Use Assisted System, Perceived Easy of Use Augmented System, Perceived Usefulness Assisted System, Perceived Usefulness Augmented System on the Audit Process. By looking at the research results that have been discussed, we can draw the conclusion that the Perceived Ease of Use Assisted AI variable (X1) has a significant influence on the Audit Process, indicating that with easy use in GPT Chat operations, the synchronized audit process will be made easier. The variable Perceived Ease of Use Augmented AI (X2) does not have a significant influence on the Audit Process because it is not easy to use the operation of the AI analytics system, so it hampers the audit process because there needs to be training first so that you are good at operating it. The variable Perceived Usefulness Assisted AI (X3) does not have a significant influence on the Audit Process, indicating that Chat GPT has limited information and is not real time when handling audit case analysis so that Chat GPT only provides information that has

been published on certain sites. The Perceived Usefulness Augmented AI variable (X4) does not have a significant influence on the Audit Process, indicating that the AI analytics system is sophisticated, but if it is too complex for the auditor to learn and use, the perceived usefulness will be low. The auditor may feel that the time and effort required to learn the system is not commensurate with the benefits obtained.

The author realizes that there are limitations in conducting this research. Some limitations in this research are that the use of AI system applications has not yet spread in Indonesia. This research only uses public accountants as research objects, so the results of this research may not be generalized to auditees in the specific industrial sector of the company. Based on the results of this research, it is hoped that auditors or public accountants can understand more deeply about artificial intelligence so that it can facilitate the stages of the audit process. It is hoped that further research can develop the theory used and add variables to the research. And can be used as additional knowledge and theory development related to the variables involved in research.

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