OPPORTUNITIES AND CHALLENGES OF ARTIFICIAL INTELLIGENCE IN ACCOUNTING: ARE ACCOUNTING STUDENTS READY TO ADOPT AND DEVELOP IT?

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ABSTRACT

Introduction: This study aims to analyze the readiness of accounting students in adopting and developing AI. This research aims to obtain a comprehensive insight into the knowledge, perceptions, and readiness of accounting students in adopting and developing Artificial Intelligence (AI) in the context of accounting. The results of the study show that the readiness of accounting students to face AI opportunities and challenges is still quite low. The research shows that the higher students' knowledge of AI concepts and applications, and the better their perceptions of AI opportunities and challenges, the higher their readiness to face AI integration will be. The findings of this study are expected to complement the academic literature by providing new insights into the opportunities and challenges faced by accounting students in adopting and developing AI technologies in the accounting context.

Methods: This research method uses a quantitative descriptive method with data collected through questionnaires distributed to respondents as an instrument used on the object of research, namely accounting students who are studying in Semarang City, Indonesia. The technique is used in collecting samples using the purposive sampling method. The analysis methods used include a Descriptive Test, Validity Test, Reliability Test, Determination Coefficient, Classical Assumption Test, and Multiple Linear Regression with F Test and T-test.

Results: The results of the study show that the readiness of accounting students to face AI opportunities and challenges is still quite low. The research shows that the higher students' knowledge of AI concepts and applications, and the better their perceptions of AI opportunities and challenges, the higher their readiness to face AI integration will be. The findings of this study are expected to complement the academic literature by providing new insights into the opportunities and challenges faced by accounting students in adopting and developing AI technologies in the accounting context.

INTRODUCTION

The development of the times followed by technological advances makes the modern era closely related to the use of technology to help various human activities. According to Forbes, USA Today, Money, the Guardian, Business Insider, and the World Economic Forum (WEF), technological advances have changed industries globally. The development of Artificial Intelligence, or AI, is proof of technological progress (Martaseli, 2023). AI is increasingly important in many fields, such as education in accounting students. AI is becoming increasingly important and interesting to research in the context of education, especially in accounting. In the context of education AI can enable a more personalized and adaptive approach to learning, AI can influence the field of education through the ability to analyze and process data, artificial intelligence enables a more personalized and adaptive approach to learning (Hidayanti & Azmiyanti, 2023). Students are no longer tied to conventional learning and have easier access to educational resources according to their needs. AI, if properly used and mastered, can assist users in analyzing problems that need to be solved effectively and efficiently (Losbichler & Lehner, 2021).

The application of AI in accounting dates back to 1980, the scope of AI research was used for auditing, tax, management accounting, financial planning, and financial accounting by experts and practitioners (Riadi, 2022). However, there are still weaknesses in the utilization of AI in the lack of knowledge and learning. AI makes the confirmation process, which includes the collection, delivery, and evaluation of results, faster. Software and cameras can also be used to manually count inventory (Andya & Rahman, 2023). In 2016, Xero research predicted that AI would replace administrative recorders and the accounting profession (Triatmaja et al., 2019). Many well-known accounting firms use AI, such as Klynveld Peat Marwick Goerdeler (KPMG), PricewaterhouseCoopers (PwC), Deloitte and Optix (Amdanata, Burhan, Seswandi, & Annisava, 2023). This shows that world-renowned companies are starting to develop and take Artificial Intelligence seriously. Therefore, accounting students and prospective accountants must be able to follow and adapt to the technology that continues to develop. Today, advances in AI have transformed the application of accounting. Automation of repetitive tasks, financial oversight of teams, and effective and efficient data analysis are some of the benefits of implementing AI. Accountants can focus on more important matters as AI can automate data entry, invoice processing, and even reconciliation (Nugrahanti, Puspitasari, & Andaningsih, 2023). However, things like data security, big data, blockchain, and data prediction, among others, will be both opportunities and challenges for accountants (Rini, 2019). The implications of AI will have an impact on changing accounting standards, reducing accounting errors, increasing efficiency, and driving changes in accounting structures (Manel, Sania, Fadhillah, & Mahmud, 2023). There are challenges and difficulties for accounting students and accountants in Indonesia because there are no clear rules regarding the application of AI.

McKinsey in 2017 conducted a survey stating that only 48% of 300 leaders of leading companies in Southeast Asia are ready to face technological developments (Rini, 2019). If students do not know the ease of current accounting information technology, it will not be beneficial to students in the use of technology (Amdanata et al., 2023). Based on previous research, it shows that the use of AI such as Chat GPT and chatbot in accounting learning can improve students' understanding of accounting concepts, practical ability, student encouragement and interest, and increase individualized support (Rahaningsih et al., 2023). This means that students' readiness for AI will have a positive impact.

This research is very important because the use of AI in accounting learning is still new and it is necessary to investigate how this use has an impact on the readiness of accounting students to prepare for the world of work (Silva, 2024).

LITERATURE REVIEW

AI Technology in Accounting Students

Accounting is one of the study programs that students are interested in at the tertiary level because the accounting profession is needed in every line of work, this makes accounting majors in demand in universities and is used as an option for education and careers in the future (Silva, 2024). Currently, students, academics, and researchers are starting to use AI to do many academic things, such as concept planning, summarizing literature, writing essays, and general things in doing daily activities (Bin-Nashwan, Sadallah, & Bouteraa, 2023). AI has made

a huge impact on higher education. The current generation can utilize technology to simplify their daily lives with the advancement of digital technology today (Hidayanti & Azmiyanti, 2023). Students can utilize AI and intensive accounting learning that will improve their accounting practice (Abdullah & Almaqtari, 2024). AI provides solutions to a more personalized and adaptive learning approach, so that students can access educational resources that can be tailored to their individual needs and are no longer limited to conventional learning approaches (Muarif, Jihad, Alfadli, & Setiabudi, 2023).

AI can personalize learning and improve the quality and accessibility of education, allowing students to learn in a more personalized and effective way (Putri, Sotyawardani, & Rafael, 2023). AI can help students find career options that match their interests, talents and skills. It helps students make more accurate decisions about their courses and career paths, so that they can minimize the risk of making wrong decisions.

This raises a new question, how well prepared are accounting students in implementing AI with the current technological developments? Given the fact that most universities do not teach accounting students to have the knowledge, skills, and competencies required to implement AI in the accounting profession (Amdanata et al., 2023). Today most companies and industries are already adopting AI to improve and automate their financial operations (Afiqah Zamain & Subramanian, 2024). With technology constantly evolving, students have perceptions about the opportunities and challenges in AI implementation. Students think that new technologies such as AI and software, which are already widely used, will eventually replace accounting graduates. Students' perceptions and beliefs will affect their attitudes and subjective norms in seeing the prospects of the accounting profession (Karlsson & Noela, 2022). This seems to label accountants and practitioners who are considered to be only administrative workers (Silva, 2024). These assumptions and perceptions trigger students not to choose accounting study programs as their education and career path. To prepare students for the future, it is important to study how students' perceptions and knowledge in using AI. This will help develop learning that is integrated with AI morally and pedagogically (Hadi Mogavi et al., 2024).

Students' Knowledge of the Concept and Application of AI in Accounting

Students' knowledge in understanding the concept and application of AI plays a very important role for the competence of accounting students in the future. In today's academic world, some academics, researchers, and students have started using AI models such as Chat GPT (Bin-Nashwan et al., 2023). Currently, many students use AI such as Chatbot and Chat GPT as an alternative to complete their daily and final assignments (Hidayanti & Azmiyanti, 2023). AI is very effective in college learning and can be used as an aid in learning. It also helps students become more confident and reduce social anxiety associated with learning (Baig & Yadegaridehkordi, 2024). AI provides benefits to the field of accounting, such as journal management, non-consolidated financial statements, and bookkeeping, so accounting students have the opportunity to use AI in their learning and evaluation. AI provides benefits to students in the development of accounting students' competencies, it is beneficial to help learning difficulties and save time to concentrate on education (Hidayanti & Azmiyanti, 2023).

Accounting students need to understand that with the potential of AI, it provides both a threat and an opportunity in accounting. Concerns about academic integrity and AI assisted cheating may arise due to the use of AI in academic settings (Bin-Nashwan et al., 2023). If AI is used inappropriately, it can lead to problems such as plagiarism, loss of academic ability, reduced social skills, loss of communication ability, and dependency leading to poor learning (Hadi Mogavi et al., 2024). Students may commit acts of lack of integrity such as cheating on their assignments, which can undermine the main purpose of college education to develop students' creativity in critical thinking (Hidayanti & Azmiyanti, 2023).

The utilization of AI makes a positive contribution to the learning of accounting. It can be an innovative way to support education in the future. Students should understand and consider the ethics, privacy and data security related to (Muarif et al., 2023). About 47% of students consider artificial intelligence as a useful tool to improve their learning process, but 29% of students consider artificial intelligence is still quite limited in learning (Putri et al., 2023). So it can be concluded that some students have sufficient knowledge of the concept and application of AI in accounting, with this fact whether accounting students already have sufficient knowledge of the concept and application of AI in accounting to support their readiness for future career paths. Based on this explanation, the first hypothesis submitted by the researcher is:

H1: Knowledge has a significant effect on Readiness in Accounting Students to Adopt and Develop AI.

Understanding Student Perceptions of AI Opportunities and Challenges

Students rely on the accounting curriculum to increase their knowledge and proficiency in accounting, auditing, tax while they are in college to prepare for their future careers. Students also need to conduct career exploration to gain insight into the career they are taking, so that it can help reduce doubts and uncertainties that arise during the decision making process when choosing a study program (Kleine, Schmitt, & Wisse, 2021). Students' knowledge and abilities can affect their advantages, abilities, goals, and beliefs in finding a career of interest. Business, sales, marketing, customer service, finance and accounting are the fields that most often require labor. Companies also want employees who are skilled and knowledgeable and can adjust to changes in the workplace that are happening. This suggests that economics will remain a popular and rapidly growing occupation for many years. As a result, many students choose economics as their major of choice (Nguyen et al., 2023). This leads to students' perception that they will be employable when they graduate with career prospects and their readiness to work because they have knowledge in accounting. With this perception, universities can respond on how they help students grow and support development from a career perspective (Gilbert, Turner, & Haass, 2022). Thus, the existence of broad job prospects can affect students' interest in choosing a study program. The more program areas that offer job opportunities, the more likely students are to choose the study program for their future career sustainability (Nguyen et al., 2023). However, currently accounting students are forced to need to have technological knowledge and skills to prepare for their future careers in the face of AI integration (Amdanata et al., 2023).

The opportunities and challenges caused by AI integration cause accounting students to look at the accounting field going forward in a different way. This makes them concerned about AI integration that could eliminate and replace the accounting profession and accounting practitioners (Grosu, Cosmulese, Socoliuc, Ciubotariu, & Mihaila, 2023). In the future, the accounting profession will find it more difficult to compete due to AI integration (Awang, Shuhidan, Taib, Rashid, & Hasan, 2022). With the information, and news circulating the opportunities and challenges of AI, causing an understanding of the perceptions of accounting students can make decisions in action, whether the integration of AI will have a prospective or detrimental impact on future career paths (Silva, 2024). Students' acceptance and readiness to apply technology is influenced by the effectiveness of the accounting curriculum in higher education. In addition, the use of AI in learning can affect students' interest and motivation to learn. The knowledge that students have about AI can also affect their learning experience and their readiness in the future (Rahaningsih et al., 2023).

Some students have a good understanding of AI and believe that AI has made a significant impact on the ease of access to learning materials, which shows that students have a strong understanding of AI. AI integration will not be a big problem because accountants in the future attach more importance to analytical skills, communication, innovative problem solving, and client relationships (Howieson, 2003). In addition, accountants' daily work will become more efficient and flexible with the help of digital technologies such as AI (Mohd Faizal, Jaffar, & Mohd nor, 2022). Students believe that the integration of AI will have a positive impact on accountants in the future if they can collaborate, which certainly makes them better prepared to face future technological advancements.

However, some students have a limited understanding of AI, so learning and accessibility for them is still limited. The lack of understanding of AI is due to the lack of popularity in the use of technologies such as AI among university accounting academics (Al-Hattami, 2023). This indicates a lack of readiness from students and universities regarding the importance of technology education and digital literacy. Students need to be given more facilities to deepen their knowledge of AI concepts that include an indepth understanding of the use of technology in accounting that has an impact in various fields, as well as how the use of this technology can affect future jobs as a preparation of current students for the jobs they will take after graduation (Peres, Schreier, Schweidel, & Sorescu, 2023).

Therefore, education is critical to the preparation of students with the technological knowledge and skills necessary for their career success. The different rate of recent technology adoption between the business sector and educational institutions increases the knowledge gap between companies and students (Andya & Rahman, 2023).

There is a need for continuous efforts in education and building perceptions of AI integration in accounting (Acosta-Enriquez et al., 2024). By knowing the perceptions of accounting students regarding the opportunities and challenges faced, it can determine the urgency and direction of accounting students' future movements to take what kind of actions are needed in facing these opportunities and challenges. Based on this explanation, the second hypothesis submitted by the researcher is:

H2: Perceptions have a significant effect on Readiness in Accounting Students to Adopt and Develop AI.

Student Readiness for AI Implementation

Accounting students' knowledge in understanding the concept and application of AI still varies. In the academic context, some students have sufficiently understood the benefits of AI and are able to use it to improve their efficiency and competence. However, there are also those who still experience limitations in the understanding and application of AI. Unethical use of AI, will cause many problems, such as copyright infringement, data privacy, bias, and potentially AI can encourage academic fraud among students (Rajabi, Taghipour, Cukierman, & Doleck, 2024) Risks such as over-dependence and plagiarism will arise when students do not understand AI well (Hidayanti & Azmiyanti, 2023).

This has an impact on accounting students' perceptions of opportunities and challenges in AI integration. Some students believe that if they improve their accounting knowledge, certification, and the development of AI technology, they can compete with AI in the future (Prasetio, 2024). Of course, this will increase their readiness to face technological advances in the future, while some students still feel unprepared due to limited knowledge about accounting and AI.

This unpreparedness points to the need for increased education and digital literacy in the accounting curriculum (Putri et al., 2023). The lack of clear academic policies on AI hinders universities, study programs, and students from having sufficient knowledge and perceptions to deal with AI integration (Villarreal, 2023). In facing AI integration, universities can design, refine, and improve their accounting curriculum that is tailored to the characteristics of the university (Acosta-Enriquez et al., 2024). Academics should also have a positive attitude towards AI if universities and policy makers want to encourage and incorporate AI into the education curriculum (Al-Hattami, 2023). Universities have the opportunity to create measures to make changes to their curricula as the main driver of educational transformation in accounting and AI, as well as the fusion of technical skills and practical competencies((Tettamanzi, Minutiello, & Murgolo, 2023). In addition, universities can organize supporting activities to increase knowledge and perceptions that will help students understand accounting and AI (Karlsson & Noela, 2022). The education system serves to support the current evolution or development to remain relevant. Universities have the opportunity to increase the potential of accounting in the direction of current developments, such as training accounting professionals to join and lead the digital transformation of the accounting profession (Guşe & Mangiuc, 2022). To meet the requirements of the industry in meeting new skills, educational institutions and all parties involved in the work, such as governments, professional associations, and companies, should provide appropriate accounting education. They should also build cooperation that supports and motivates human resources to retrain, learn, and develop new skills required in the ongoing AI integration era (Tavares, Azevedo, Marques, & Bastos, 2023). This needs to be done to improve students' knowledge, perception and performance to be ready for the opportunities and challenges presented by AI (Saadullah, Ammar, & Alazzani, 2024).

Differences in knowledge and perceptions among accounting students will determine their readiness for AI implementation in the future. On the other hand, Accountants and practitioners are facing new challenges and opportunities as a result of the adoption of AI technologies (Gonçalves, da Silva, & Ferreira, 2022). If students are not prepared for the opportunities and challenges posed by AI, they risk being left behind and replaced by AI itself or even by those who are better prepared. The importance of the readiness of accounting students in their current knowledge and perceptions needs to be questioned and studied further, whether accounting students really have the necessary readiness or they only validate themselves, therefore the readiness of accounting students needs to be tested on the extent understanding their current knowledge and perceptions. Based on this explanation, the third hypothesis submitted by the researcher is:

H3: Accounting students' readiness to adopt and develop AI is strongly influenced by accounting students' knowledge and perception.

Therefore, the development model proposed in this research can be seen in the figure below.
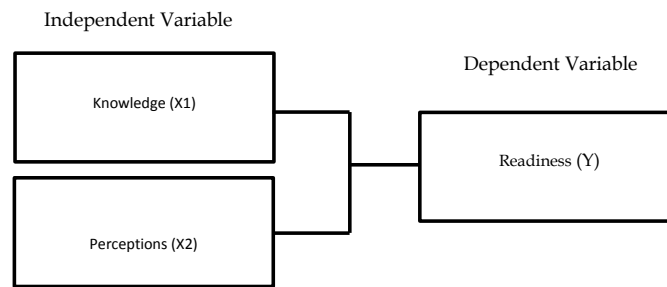
Independent Variable

Knowledge (X1)

Perceptions (X2)

Dependent Variable

Readiness (Y)

Figure 1 Conceptual Framework

RESEARCH METHODS

This study uses a quantitative descriptive method with the data used is primary data containing information or facts obtained directly from the field which is the subject of research or from respondents. Primary data sources in this study are the results of processing questionnaires distributed to several accounting students at universities in Semarang City. This method aims to gain a comprehensive insight into the understanding, perception, and readiness of accounting students in adopting and developing Artificial Intelligence (AI) in the context of accounting.

Data collection techniques through surveys will be used to collect quantitative data through questionnaires distributed to selected respondents. The data used is primary data obtained through distributing questionnaires as an instrument used on the object of research, namely accounting students. The focus of the survey also includes how far students have used AI in their education, such as using AI-based online learning platforms, or AI-based learning tools in the accounting scope.

The data analysis process in this study is to test the relationship between the independent variable and the dependent variable using the SPSS 26 program. This analysis includes the procedures required for this research, including Descriptive statistics, Validity test, Reliability test, classical assumption test, multiple regression analysis, and model or hypothesis testing T test, F test, and Determination R2.

RESULT AND ANALYSIS

The results of the questionnaire obtained, there were 100 respondents who filled out the questionnaire, then the questionnaire data will go through the tabulation stage to determine the number of numbers from each indicator of the independent variable and the dependent variable.

Table 1 Responden description

Information	Amount	Precentage
Gender		
Male	46	46%
Female	54	54%
Age		
18-19 Years	18	18%
20-21 Years	72	72%
>22 Years	10	10%
Semester		
2-4 Semester	29	29%
5-6 Semester	64	64%
7-8 Semester	7	7%

Source: Data Procesed 2025

The table above provides an overview of the respondents from several key characteristics, namely gender, age, and Semester. In terms of gender, the majority of respondents are female at 54% and male at 46%. Most of the respondents' ages were in the range of 20-21 years, which amounted to 72%. A small proportion of respondents were aged in the 18-19 year range at 18%, and respondents aged >22 years which only reached 10%. In terms of semester, the majority of respondents were in the 5-6 semester by 64%, in the 2-4 semester by 29%, and the rest were in the 7-8 semester by 7%. The following table illustrates the characteristics of the population involved in this survey.

Table 2 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge (X1)	100	60	125	89.34	11.555
Perception (X2)	100	32	65	50.72	7.953
Readiness (Y)	100	25	60	39.79	7.210

Source: Data Procesed 2025

Descriptive statistics are carried out through collecting information and data, making conclusions, and making generalizations to make decisions based on the results obtained from respondents' answers to each measurement indicator variable.

Table 3 Validity Test

No	Variable	Item	Pearson Correlation	Decription
1	Knowledge (X1)	X1.1	0.652	Valid
		X1.2	0.553	Valid
		X1.3	0.396	Valid
		X1.4	0.403	Valid
		X1.5	0.621	Valid
		X1.6	0.665	Valid
		X1.7	0.516	Valid
		X1.8	0.555	Valid
		X1.9	0.678	Valid
		X1.10	0.694	Valid
		X1.11	0.591	Valid
		X1.12	0.672	Valid
		X1.13	0.670	Valid
		X1.14	0.669	Valid
		X1.15	0.599	Valid
		X1.16	0.736	Valid
		X1.17	0.714	Valid
		X1.18	0.360	Valid
		X1.19	0.285	Valid
		X1.20	0.400	Valid
		X1.21	0.312	Valid
		X1.22	0.431	Valid
		X1.23	0.315	Valid
		X1.24	0.474	Valid
		X1.25	0.444	Valid
2	Perception (X2)	X2.1	0.666	Valid
		X2.2	0.754	Valid
		X2.3	0.707	Valid

		X2.4	0.754	Valid
		X2.5	0.741	Valid
		X2.6	0.741	Valid
		X2.7	0.800	Valid
		X2.8	0.778	Valid
		X2.9	0.844	Valid
		X2.10	0.773	Valid
		X2.11	0.767	Valid
		X2.12	0.751	Valid
		X2.13	0.748	Valid
3	Readiness (Y)	Y.1	0.616	Valid
		Y.2	0.729	Valid
		Y.3	0.698	Valid
		Y.4	0.694	Valid
		Y.5	0.662	Valid
		Y.6	0.672	Valid
		Y.7	0.727	Valid
		Y.8	0.62	Valid
		Y.9	0.646	Valid
		Y.10	0.498	Valid
		Y.11	0.554	Valid
		Y.12	0.741	Valid

Source: Data Procesed 2025

The table above is the result of the Validity Test for each variable consisting of Knowledge, Perception, and Readiness. The validity test was carried out to measure the validity of the research variable indicators, and the test results showed that all question indicators used in the variable were valid.

Table 4 Reliability Test

Var.	Cronbach's Alpha
Knowledge (X1)	0.894
Perception (X2)	0.937
Readiness (Y)	0.879

Source: Data Procesed 2025

The table above is the result of the Validity Test for each variable consisting of Knowledge, Perception, and Readiness. The validity test was carried out to measure the validity of the research variable indicators, and the test results showed that all question indicators used in the variable were valid.

Table 5 Coefficient Determination Test

R	R Square	Adj. R Square	Std. Error of the Est.
0.818[a]	0.669	0.662	4.194

Source: Data Procesed 2025

Based on the table above, it shows that the adjusted R^2 value has an acquisition of 0.669 or 66% on the Knowledge variable (X1) and the Perception variable (X2) affecting the Readiness variable (Y). While the rest gets an acquisition of 100% - 66% = 43% influenced by other variables not examined.

Table 6 T Test Result

Var.	t value	Sig.
Knowledge (X1)	5.629	0.000
Perception (X2)	5.032	0.000

Source: Data Procesed 2025

To determine whether partially variable X1 (Knowledge) has a significant effect on variable Y (Readiness) on Accounting Students in Adopting and Developing AI. The conclusion obtained is the sig value, 0.000, the t value 5.032, meaning H1 is accepted. This means that there is a positive and significant influence from the calculation of the Knowledge variable (X1) with the Readiness variable (Y).

To determine whether partially variable X2 (Perception) has a significant effect on variable Y (Readiness) on Accounting Students in Adopting and Developing AI. The conclusion obtained is the sig value, 0.000, the t value 5.032, meaning H2 is accepted. This means that there is a positive and significant influence from the calculation of the Perception variable (X2) with the Readiness variable (Y).

Table 7 F Test Result

	Sum of Square	Df	Mean Square.	F	Sig.
Regression	3440.502	2	1720.251	97.805	0.000[b]
Residual	1706.088	97	17.589		
Total	5146.590	99			

Source: Data Procesed 2025

To determine whether simultaneously the variables X1 (Knowledge) and X2 (Perception) have a significant effect on variable Y (Readiness) on Accounting Students in Adopting and Developing AI. The conclusion obtained is the sig value, 0.000, The f value 97.805, means H3 is accepted. This means that there is a positive and significant influence from the calculation of the variables X1 (Knowledge) and X2 (Perception) with the readiness variable (Y).

Table 8 Multiple Linear Regression Analysis

Model			Standardized Coefficients		
	Unstandardized Coefficients				
	B	Std. Error	Beta	t	Sig.
Constant	-5.424	3.329		-1.629	0.106
Knowledge	0.291	0.052	0.467	5.629	0.000
Perception	0.378	0.075	0.417	5.032	0.001

Source: Data Procesed 2025

The table above shows the results of multiple linear regression testing. Based on the table above, a multiple linear regression equation model is studied, namely. Y = (-5.424) + 0.291 X1 + 0.378 X2.

Student Readiness for AI Implementation

Based on the results of the acquisition of the research analysis, the researcher found that the regression coefficient obtained a magnitude of 5.629 t value with a magnitude of 5.629 sig = 0.000 when compared to 0.05, so H1 is accepted. This explains that the knowledge of accounting students in understanding the concepts and application of AI in accounting has a positive and significant influence on the readiness of accounting students to adopt and develop AI.

In this case, the higher the level of knowledge of accounting students in understanding the concept and application of AI, the higher their readiness to adopt and develop AI in preparation for the world of work. The results showed that AI knowledge is still quite low among accounting students, only a few students have sufficient

knowledge in understanding AI concepts. This knowledge is obtained on the basis of how often and familiar they use AI, they consider AI as a useful tool in their learning process such as journal management, non-consolidated financial statements, and bookkeeping, so accounting students have the opportunity to use AI in their learning and evaluation.

However, there are still many accounting students who have limited knowledge of AI, students think that AI is still lacking in learning because they are not familiar with AI in the accounting context. This also refers to the university education curriculum that does not highlight AI in education and the lack of activities at the university related to increasing knowledge about AI in accounting. Universities need to facilitate students to further deepen their knowledge of AI concepts that have an impact in various fields, especially in accounting. Accounting students need to improve their knowledge in preparing themselves to enter the workforce which is currently growing by the integration of AI.

Perceptions Significantly Affect Readiness in Accounting Students to Adopt and Develop AI

Based on the results obtained from the research analysis, the researcher found that the regression coefficient obtained a magnitude of 5.032 t value with a magnitude of 5.032 sig = 0.000 when compared to 0.05, so H2 is accepted. This explains that understanding accounting students' perceptions of AI opportunities and challenges has a positive and significant influence on accounting students' readiness to adopt and develop AI.

In this case, the higher the level of perception of accounting students regarding AI opportunities and challenges, the higher their readiness to adopt and develop AI in preparation for the world of work. The development of AI today certainly has its own opportunities and challenges for accountants, practitioners, and students who will later enter the workforce. If students have a good understanding of perceptions of opportunities and challenges, they can take the right steps and make decisions regarding the continuation of their careers in order to collaborate with AI technology that is increasingly developing. Conversely, if accounting students have a poor understanding of perceptions of opportunities and challenges, they may not be able to plan their future careers and make good decisions, so accounting students who have a poor understanding of perceptions will not be ready to compete, collaborate, and face future opportunities and challenges by the integration of AI technology. Therefore, there is a need for action from universities in an ongoing effort to improve education and build perceptions of AI integration in accounting.

Accounting Students' Readiness to Adopt and Develop AI is Strongly Influenced by Accounting Students' Knowledge and Perception

Based on the results obtained from the research analysis, the researcher found that the regression coefficient obtained a magnitude of 97.805 f value with a magnitude of 97.805 sig = 0.000 when compared to 0.05, so H3 was accepted. This explains that the readiness of accounting students in Adopting and Developing AI has a positive and significant influence on the knowledge and perceptions of accounting students simultaneously.

Knowledge and perceptions of accounting students are very important to support the readiness of accounting students. Differences in knowledge and perceptions among accounting students will determine their readiness to implement AI in the future. The results show that currently students are not ready to adopt and develop AI in the future, because they do not have sufficient knowledge and perceptions to face the opportunities and challenges posed by AI integration. The level of knowledge and perception of accounting students will determine their readiness for AI implementation in the future. If students are not ready to face the opportunities and challenges posed by AI, they risk being left behind and replaced by AI itself or even by those who are better prepared.

CONCLUSION

This study shows that the readiness of accounting students in facing the opportunities and challenges posed by AI is still quite low. In some of the test results conducted show that the knowledge and perceptions of accounting students have a significant influence on their readiness to adopt and develop AI, but the current readiness of accounting students has negative results in knowledge and perceptions of AI. It can be concluded that currently students do not have the readiness to adopt and develop AI in the future, due to the lack of knowledge about AI and the low level of understanding of perceptions. This is because only some accounting students have good knowledge

and perceptions of AI integration in the future, so their readiness to face AI in the future will be much greater than some students who lack and understand knowledge and perceptions of AI.

Research shows that the higher students' knowledge of AI concepts and applications, and the better their perceptions of AI opportunities and challenges, the higher their readiness to face AI integration. Therefore, accounting students are required to increase their knowledge and improve their perceptions to support their readiness to compete and collaborate with AI technology in the future.

REFERENCES

Abdullah, A. A. H., & Almaqtari, F. A. (2024). The impact of artificial intelligence and Industry 4.0 on transforming accounting and auditing practices. *Journal of Open Innovation: Technology, Market, and Complexity*, *10*(1), 100218. https://doi.org/10.1016/j.joitmc.2024.100218

Acosta-Enriquez, B. G., Farroñan, E. V. R., Italo, L., Zapata, V., Garcia, F. S. M., Rabanal-León, H. C., … Bocanegra, J. C. S. (2024). Acceptance of Artificial Intelligence in University Contexts: A Conceptual Analysis Based on UTAUT2 Theory Abstract. *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e38315

Afiqah Zamain, N. S., & Subramanian, U. (2024). The Impact of Artificial Intelligence in the Accounting Profession. *Procedia Computer Science*, *238*, 849–856. https://doi.org/10.1016/j.procs.2024.06.102

Al-Hattami, H. M. (2023). Understanding perceptions of academics toward technology acceptance in accounting education. *Heliyon*, *9*(1), e13141. https://doi.org/10.1016/j.heliyon.2023.e13141

Amdanata, D. D., Burhan, Seswandi, A., & Annisava, A. R. (2023). Siapkah Mahasiswa Akuntansi Menghadapi Artificial Intelligence Dalam Akuntansi? *Jurnal Akuntansi Kompetif*, *6*(10), 163–174. https://doi.org/10.35446/akuntansikompetif.v6i1.1282

Andya, N. R., & Rahman, A. (2023). Pengaruh Artificial Intelligence (AI) pada Profesi Akuntan. *Politeknik STIA LAN Bandung*, *7*(1), 23–28.

Awang, Y., Shuhidan, S. M., Taib, A., Rashid, N., & Hasan, M. S. (2022). Digitalization of Accounting Profession: An Opportunity or a Risk for Future Accountants? *Proceedings*, *82*(93), 1–10. https://doi.org/10.3390/proceedings2022082093

Baig, M. I., & Yadegaridehkordi, E. (2024). ChatGPT in the higher education: A systematic literature review and research challenges. *International Journal of Educational Research*, *127*, 102411. https://doi.org/10.1016/j.ijer.2024.102411

Bin-Nashwan, S. A., Sadallah, M., & Bouteraa, M. (2023). Use of ChatGPT in academia: Academic integrity hangs in the balance. *Technology in Society*, *75*, 102370. https://doi.org/10.1016/j.techsoc.2023.102370

Gilbert, G., Turner, M., & Haass, O. (2022). Working up to work: Perceived employability of students commencing a project management degree. *Project Leadership and Society*, *3*, 100048. https://doi.org/10.1016/j.plas.2022.100048

Gonçalves, M. J. A., da Silva, A. C. F., & Ferreira, C. G. (2022). The Future of Accounting: How Will Digital Transformation Impact the Sector? *Informatics*, *9*(1), 1–17. https://doi.org/10.3390/informatics9010019

Grosu, V., Cosmulese, C. G., Socoliuc, M., Ciubotariu, M. S., & Mihaila, S. (2023). Testing accountants' perceptions of the digitization of the profession and profiling the future professional. *Technological Forecasting and Social Change*, *193*, 122630. https://doi.org/10.1016/j.techfore.2023.122630

Guşe, G. R., & Mangiuc, M. D. (2022). Digital Transformation in Romanian Accounting Practice and Education: Impact and Perspectives. *Amfiteatru Economic*, *24*(59), 252–267. https://doi.org/10.24818/EA/2022/59/252

Hadi Mogavi, R., Deng, C., Juho Kim, J., Zhou, P., D. Kwon, Y., Hosny Saleh Metwally, A., … Hui, P. (2024). ChatGPT in education: A blessing or a curse? A qualitative study exploring early adopters' utilization and perceptions. *Computers in Human Behavior: Artificial Humans*, *2*(1), 100027. https://doi.org/10.1016/j.chbah.2023.100027

Hidayanti, W., & Azmiyanti, R. (2023). Dampak Penggunaan Chat GPT pada Kompetensi Mahasiswa Akuntansi: Literature Review. *Seminar Nasional Akuntansi Dan Call for Paper UPN "VETERAN" JATIM*, *3*(1), 83–91. Retrieved from https://senapan.upnjatim.ac.id/index.php/senapan/article/view/288

Howieson, B. (2003). Accounting practice in the new millennium: Is accounting education ready to meet the challenge? In *British Accounting Review* (Vol. 35). https://doi.org/10.1016/S0890-8389(03)00004-0

Karlsson, P., & Noela, M. (2022). Beliefs influencing students' career choices in Sweden and reasons for not choosing the accounting profession. *Journal of Accounting Education*, *58*, 100756. https://doi.org/10.1016/j.jaccedu.2021.100756

Kleine, A., Schmitt, A., & Wisse, B. (2021). Students ' career exploration : A meta-analysis. *Journal of Vocational Behavior*, *131*, 103645. https://doi.org/10.1016/j.jvb.2021.103645

Losbichler, H., & Lehner, O. M. (2021). Limits of artificial intelligence in controlling and the ways forward: a call for future accounting research. *Journal of Applied Accounting Research*, *22*(2), 365–382. https://doi.org/10.1108/JAAR-10-2020-0207

Manel, H. A., Sania, W., Fadhillah, N., & Mahmud, A. (2023). Implementasi Artificial Intelligence dalam Sistem Informasi Akuntansi dan Manajemen. *Jurnal Akuntansi Bisnis Dan Ekonomi (JABE)*, *9*(2), 3460–3467. https://doi.org/10.33197/jabe.vol9.iss2.2023.1181

Martaseli, E. (2023). THE IMPACT OF ARTIFICIAL INTELLIGENCE ON THE ACCOUNTING PROFESSION IN THE ERA OF INDUSTRY 4.0 AND SOCIETY 5.0. *Journal of Accounting for Sustainable Society (JASS)*, *5*(1), 1–9. https://doi.org/10.35310/jass.v5i01.1053

Mohd Faizal, S., Jaffar, N., & Mohd nor, A. S. (2022). Integrate the adoption and readiness of digital technologies amongst accounting professionals towards the fourth industrial revolution. *Cogent Business and Management*, *9*(1), 1–14. https://doi.org/10.1080/23311975.2022.2122160

Muarif, J. A., Jihad, F. A., Alfadli, M. I., & Setiabudi, D. I. (2023). Hubungan Perkembangan Teknologi AI Terhadap Pembelajaran Mahasiswa. *Jurnal Pendidikan : SEROJA*, *2*(2), 117–127. https://doi.org/10.572349/seroja.v1i2.548

Nguyen, T. L., Nguyen, H. T., Nguyen, N. H., Nguyen, D. L., Nguyen, T. T. D., & Le, D. L. (2023). Factors affecting students' career choice in economics majors in the COVID-19 post-pandemic period: A case study of a private university in Vietnam. *Journal of Innovation and Knowledge*, *8*, 1–8. https://doi.org/10.1016/j.jik.2023.100338

Nugrahanti, T. P., Puspitasari, N., & Andaningsih, I. R. (2023). Transformasi Praktik Akuntansi Melalui Teknologi: Peran Kecerdasan Buatan, Analisis Data, dan Blockchain dalam Otomatisasi Proses Akuntansi. *Jurnal Akuntansi Dan Keuangan West Science*, *2*(3), 213–221. https://doi.org/10.58812/jakws.v2i03.644

Peres, R., Schreier, M., Schweidel, D., & Sorescu, A. (2023). On ChatGPT and beyond: How generative artificial intelligence may affect research, teaching, and practice. *International Journal of Research in Marketing*, *40*(2), 269–275. https://doi.org/10.1016/j.ijresmar.2023.03.001

Prasetio, T. (2024). Persepsi Mahasiswa Program Studi Akuntansi Terhadap Dampak Artificial Intelligence Pada Profesi Akuntan. *Jurnal Perspektif*, *22*(1), 29–36. https://doi.org/10.31294/jp.v22i1.20453

Putri, V. A., Sotyawardani, K. C. A., & Rafael, R. A. (2023). Peran Artificial Intelligence dalam Proses Pembelajaran Mahasiswa di Universitas Negeri Surabaya. *Prosiding Seminar Nasional Universitas Negeri Surabaya*, *2*, 615–630.

Rahaningsih, N., Suarna, N., Nuris, N. D., Kurnia, D. A., Rasyid, A., & Frihandiansah, R. (2023). Pemanfaatan Chatgpt Dalam Pembelajaran Persamaan Dasar Akuntansi. *Jurnal Teknologi Informasi Komunikasi (TEMATIK)*, *10*(2), 328–334. https://doi.org/10.38204/tematik.v10i2.1642

Rajabi, P., Taghipour, P., Cukierman, D., & Doleck, T. (2024). Unleashing ChatGPT's Impact in Higher Education: Student and Faculty Perspectives. *Computers in Human Behavior: Artificial Humans*, *2*(2), 100090. https://doi.org/10.1016/j.chbah.2024.100090

Riadi, S. (2022). DIGITALIZATION ERA: HOW IS THE FUTURE OF ACCOUNTANTS? *Equilibrium: Jurnal Ekonomi-Manajemen-Akuntansi*, *18*(1), 85–90.

Rini, Y. T. (2019). Mengurai Peta Jalan Akuntansi Era Industri 4.0. *Jurnal Ilmu Manajemen Dan Akuntansi*, *7*(1), 58–68.

Saadullah, S. M., Ammar, S., & Alazzani, A. (2024). Exploring verbal, interpersonal, and visual intelligences in accounting education: Effects on student learning and performance. *Journal of Accounting Education*, *68*, 100917. https://doi.org/10.1016/j.jaccedu.2024.100917

Silva, E. (2024). Penggunaan Artificial Intelligence, Software Akuntansi, dan Peneyebaran Berita di Sosial Media terhadap Jumlah Peminat Jurusan Akuntansi. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, *5*(3), 1207–1215. https://doi.org/1047467/elmal.v5i3.5654

Tavares, M. C., Azevedo, G., Marques, R. P., & Bastos, M. A. (2023). Challenges of education in the accounting profession in the Era 5.0: A systematic review. *Cogent Business and Management*, *10*(2), 1–30. https://doi.org/10.1080/23311975.2023.2220198

Tettamanzi, P., Minutiello, V., & Murgolo, M. (2023). Accounting education and digitalization: A new perspective after the pandemic. *International Journal of Management Education*, *21*(3), 100847. https://doi.org/10.1016/j.ijme.2023.100847

Triatmaja, M. F., Acc, M., Acpa, A., Program, *, Akuntansi, S., Ekonomika, F., … Pekalongan, P. (2019). DAMPAK ARTIFICIAL INTELLIGENCE (AI) PADA PROFESI AKUNTAN. *Seminar Nasional Dan The 6th Call for Syariah Paper (SANCALL)*, 1007–1019. https://doi.org/10.13140/RG.2.2.20276.40320

Villarreal, E. a. (2023). Challenges and Opportunities of Generative AI for Higher Education as Explained by ChatGPT [Desafíos y oportunidades de la IA generativa para la educación superior explicados por ChatGPT].

Education Sciences, *13*(856), 1–18. Retrieved from https://doi.org/ 10.3390/educsci13090856