

The Relationship between the Level of Artificial Intelligence Knowledge in Accounting and Employability Skills Among Accounting Graduates

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Abstract

Accounting graduates in the era of the Fourth Industrial Revolution face a lack of knowledge and skills in artificial intelligence (AI), which negatively impacts their employability in a job market increasingly reliant on advanced technology. Although these graduates possess basic technical skills, they often do not understand the potential of AI in enhancing efficiency and accuracy in accounting, which could open up broader career opportunities. This study aims to examine the relationship between the level of AI knowledge related to accounting and employability skills among accounting graduates, focusing on technological and technical skills. The study employs a quantitative design with a correlational approach, conducted through a survey involving the distribution of questionnaires. The respondents included 210 Diploma in Accounting graduates from various polytechnics in Malaysia, showing a significant positive correlation between AI proficiency and the enhancement of technological and technical skills in graduates' employability. Analysis using SPSS software and Spearman's correlation test revealed a p-value < 0.01, indicating a very strong relationship between knowledge of artificial intelligence (AI) and employability skills. The level of AI knowledge among accounting graduates recorded a mean score of 4.01 (high). For employability skills, the mean score for the technology skills aspect was 4.09 (high), and for the technical skills aspect, it was 4.02 (high). The correlation indicated a significant positive relationship between AI knowledge and technological skills ($\rho = 0.567$) as well as a moderate positive relationship with technical skills ($\rho = 0.534$). In conclusion, the findings of this study contribute significantly to the development of accounting education curricula, suggesting improvements that incorporate AI elements more deeply, thereby helping graduates to compete more effectively in the digital accounting landscape. This study also paves the way for further research into the practical applications of AI in the accounting sector and how educational institutions can equip graduates with the necessary skills to face the challenges of the future industry.

1. Introduction

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The accounting industry is increasingly relying on artificial intelligence (AI) in the era of the Fourth Industrial Revolution (Pebrina et al., 2022). To remain competitive in a constantly changing job market, graduates of Technical and Vocational Education and Training (TVET) need to possess skills and knowledge in AI (Chen et al., 2023). For accounting graduates, acquiring these additional skills is crucial for achieving success in a digital and data-driven accounting sector (Firdaus & Furqorina, 2024). These skills not only enhance their understanding of accounting concepts but also equip them with the technological and technical skills necessary to navigate an increasingly challenging work environment (Salsabilla et al., 2023). By integrating AI competencies into their skill set, these graduates can better position themselves for success in the modern job market.

In the field of accounting, technological skills such as digital skills, information technology, robotic process automation, and cybersecurity are becoming increasingly important (Shaleh, 2024). Graduates with these abilities can adapt and utilize AI tools to improve the accuracy and efficiency of financial management (Ramadiani et al., 2023). Technical skills such as the use of accounting software, financial data analysis, and ethics and responsibility in the use of AI are also essential. AI can assist graduates in making better decisions by analyzing financial data more comprehensively (Raup et al., 2022).

1.1 Problem Statement

Polytechnics play a crucial role in producing highly skilled graduates through technical and vocational education that aligns with industry needs, including the use of advanced technologies such as AI and automation. Although Polytechnic graduates possess technical skills, many accounting graduates are less aware of the importance of AI knowledge and its impact on their employability. A lack of skills in AI, automation, cybersecurity, and data analysis diminishes the competitiveness of accounting graduates in the job market. They risk falling behind in an industry that relies on the latest technologies and face challenges in making accurate decisions and protecting financial data. The deficiency in technical skills and ethics also hinders them from reaching their full potential in the job market, which could lead to higher unemployment rates among accounting graduates.

1.2 Research Objectives

- i. To identify the level of AI knowledge related to accounting among accounting graduates.
- ii. To identify the level of employability skills related to accounting among accounting graduates in terms of technology skills.
- iii. To identify the level of employability skills related to accounting among accounting graduates in terms of technical skills.
- iv. To examine the relationship between the level of AI knowledge related to accounting and employability skills among accounting graduates in terms of technology skills.
- v. To examine the relationship between the level of AI knowledge related to accounting and employability skills among accounting graduates in terms of technical skills.

2. Literature Review

This chapter discusses the relationship between knowledge of artificial intelligence (AI) and the employability skills of accounting graduates. It also examines the technological and technical skills required, as well as identifies gaps in existing research to assist graduates, educators, and employers in addressing future challenges.

2.1 Accounting in Technical and Vocational Education and Training (TVET)

Technical and Vocational Education and Training (TVET) in accounting aims to equip graduates with the necessary technical and vocational skills in the accounting field (Kathure et al., 2024). TVET combines theoretical and practical education, emphasizing the use of modern accounting software, automation, and data analysis, which are becoming increasingly important in the accounting industry. Technology advancements such as AI play a significant role in improving financial management and making decisions more accurate. Graduates trained in TVET must master these technology skills to remain relevant in an increasingly digital world (Abdul Wahab et al., 2022).

Polytechnics in Malaysia, as TVET institutions, play a key role in preparing high-skilled graduates to meet industry demands. The accounting diploma program at polytechnics provides the knowledge and skills required to face challenges in the accounting world (Odonkor et al., 2024). This education focuses on practical applications and the use of the latest technology. Polytechnics accredited by the Malaysian Qualifications Agency (MQA) provide good learning facilities and industrial training, offering students opportunities to gain practical experience in the accounting sector.

2.2 Artificial Intelligence in Accounting

AI has transformed accounting by introducing automation in calculations and data analysis, enhancing efficiency and reducing human errors. AI helps accounting professionals focus on strategic analysis and decision-making (Agil et al., 2024). It is used in financial data analysis, fraud detection, invoice management, and improving accuracy and speeding up decision-making processes (Caldwell, 2023).

AI in accounting refers to the use of technology to perform accounting tasks automatically and efficiently. It improves accuracy, reduces errors, and accelerates decision-making. AI is also crucial in fraud detection and financial analysis (Caldwell, 2023). This technology has been in use for decades and continues to evolve, with the emergence of machine learning and Robotic Process Automation (RPA) (Mihai & Duțescu, 2022). By using AI, accountants can offer better strategic advice, improving financial decision-making and planning.

The accounting industry has changed with the introduction of AI for automation and financial data analysis (Odonkor et al., 2024). Large firms like Deloitte use AI to enhance the accuracy of audits (Chien, 2020). Accounting graduates must master the latest technologies, including AI, to remain relevant in an industry that increasingly depends on technology. AI knowledge and skills help graduates offer better advice to clients and adapt to industry changes (Yang, 2024). Education and training in AI are essential to prepare graduates for challenges in a competitive job market.

2.3 Employability Skills of Accounting Graduates

The employability skills of accounting graduates refer to the practical skills and knowledge that enable them to meet industry demands and compete in a competitive job market. Among the skills involved, graduates need to master technical skills such as financial reporting, auditing, and tax regulations to enhance their job prospects (Nguyen & Nguyen, 2022). Additionally, technological skills such as the use of modern accounting software and data analysis are essential for improving graduates' employability in the digital era (Suarta et al., 2023).

Technological skills, such as proficiency in Robotic Process Automation (RPA) and cybersecurity, play a significant role in enhancing productivity and protecting financial data in accounting. Graduates need to be proficient in accounting software such as MYOB, QuickBooks, and Xero, as well as financial data analysis skills to meet the requirements of the modern industry (Efriyenti et al., 2023). Mastery of these skills enables graduates to plan budgets, manage inventory, and prepare more accurate financial reports, making them more competitive in the job market.

3. Methodology

This chapter discusses the key aspects of conducting the study smoothly, including research design, population and sample selection, instruments used, pilot procedure, and data analysis methods. A systematic and well-planned study helps in gathering high-quality data and ensures that the study is reliable through detailed explanations of each element.

3.1 Research Design

This study employs a quantitative design with a correlational approach to assess the relationship between knowledge of artificial intelligence (AI) in accounting and the employability skills of graduates. Data were collected and analyzed according to the research framework as outlined by Creswell and Guetterman (2019). The survey method used allows for extensive implementation, the use of a large sample, direct information collection from participants, and the generalization of results to the population (Mohamed Berawi, 2017). The study design involves the distribution of a structured questionnaire to respondents. The data collection process utilizes descriptive statistics for an overall overview and Spearman correlation to identify the relationship between the variables studied.

3.2 Population and Sample

The population of this study consists of graduates from the Diploma in Accounting program who have completed their studies at Malaysian Polytechnics from 2020 to 2024. The sample size for this study is 210 graduates, which is considered sufficient to accurately represent the study population. In this study, the sample size was determined using the sample size calculator by Bukhari (2020) with a margin of error of 7% and a confidence level of 95%. This ensures that the study results obtained are cost-effective and time-efficient while maintaining accuracy and reliability (Shewangizaw & Hailu, 2024). The study employs a purposive sampling method, where respondents are selected based on their relevance to the study's objectives. This method allows the researcher to gain a more comprehensive perspective from graduates who have completed their studies in the diploma in accounting program (Rahman, 2023).

3.3 Research Instruments

This study utilizes an online questionnaire distributed through communication channels such as WhatsApp and email to collect data from respondents. The questionnaire is divided into three main sections: Section A contains questions regarding the demographic information of respondents, such as gender, age, graduation year, employment in accounting, and experience using AI in accounting tasks; Section B measures the level of knowledge of artificial intelligence (AI) in accounting through 10 questions; and Section C assesses the marketability skills of respondents, focusing on technological skills and technical skills, each through 10 questions. The questionnaire employs a 5-point Likert scale for evaluation, with a score of 1 for "Strongly Disagree" to 5 for "Strongly Agree."

4. Findings and Discussion

This chapter presents the findings of the study based on the established objectives. Data were analyzed using SPSS, with descriptive analysis to assess respondent trends and correlation analysis to examine the relationship between knowledge of artificial intelligence and the employability skills of graduates. These findings are crucial for addressing the research questions and evaluating the achievement of the study's objectives.

4.1 Respondent Demographics

The analysis of respondent demographics aims to understand their background characteristics. Based on the study, 100% of the respondents are graduates of the Accounting Diploma from Malaysian Polytechnics. In terms of AI usage experience, 54.5% of respondents have experience using AI in accounting tasks, while 45.5% do not. Gender analysis shows 72% of respondents are female, and 28% are male. Most respondents (65.4%) are in the 20–24 age group, followed by 34.1% in the 25–29 age group. Regarding ethnicity, the majority of respondents are Malay (72%), followed by Indian (19%) and others. A large portion of respondents graduated in 2023–2024 (56%). Polytechnic analysis shows that Polytechnics like Sultan Abdul Halim Mu'adzam Shah have the most respondents (15.6%). Regarding employment in the accounting sector, 63.5% of respondents work as accountants, followed by 21.8% in the financial sector. Most respondents (47.9%) have less than one year of work experience, and the majority work in the private sector (91.5%). This analysis provides a clear picture of the demographic background of accounting graduates involved in the study, as shown in Table 1.

Table 1: Respondent Distribution

Characteristic	Category	Frequency	Percentage
Study Program	Accounting Diploma Graduate	210	100
Experience Using AI Tools	Yes	115	54.5
	No	95	45.5
Graduation Year	2019 – 2020	24	11.4
	2021 – 2022	68	32.6
	2023 – 2024	118	56
Polytechnic	Polytechnic Ungku Omar	10	4.7
	Polytechnic Melaka	10	4.7
	Polytechnic Sultan Abdul Halim Mu'adzam Shah	33	15.6
	Polytechnic Tuanku Sultanah Bahiyah	12	5.7
	Polytechnic Tuanku Syed Sirajuddin	18	8.5
	Polytechnic Seberang Perai	22	10.9
	Polytechnic Sultan Azlan Shah	16	7.6
	Polytechnic Port Dickson	25	11.8
	Polytechnic Kota Bharu	13	6.2
	Polytechnic Hulu Terengganu	5	2.4
	Polytechnic Muadzam Shah	23	10.9
	Polytechnic Kuching Sarawak	23	10.9
Accounting Sector	Accounting	133	63.5
	Auditing	25	11.8
	Taxation	46	21.8
	Management	3	1.4
	Accounting Lecturer	3	1.4

4.2 Data Analysis on the Level of Artificial Intelligence Knowledge Related to Accounting Among Accounting Graduates

Table 2 shows that the level of accounting graduates' AI knowledge is very encouraging, with most statements recording high means. Among the highest is B3 (4.09, standard deviation 0.892), indicating that graduates believe AI can reduce the time spent on repetitive tasks. Other statements such as B1 (4.03), B2 (4.05), B6 (4.04), B9 (4.10), and B10 (4.03) also recorded high means, reflecting graduates' acceptance of AI in improving efficiency and reliability in accounting. Conversely, a moderately high statement is B4 (4.00, standard deviation 0.899), indicating that graduates see AI focusing on strategic roles in accounting, compared to other statements such as B5 (3.95), B7 (3.90), and B8 (3.98) that had slightly lower means. Overall, the average mean for all statements is 4.01, with a standard deviation of 0.903, indicating a consistent and high understanding of AI applications in accounting.

Table 2: Level of Artificial Intelligence Knowledge Related to Accounting Among Accounting Graduates

Item	Statement	Mean	Standard Deviation	Interpretation
B1	Artificial Intelligence is an application that helps in accounting.	4.03	.877	High
B2	Artificial Intelligence helps accountants perform their tasks more efficiently.	4.05	.887	High
B3	Artificial Intelligence can reduce the time spent by employees in the accounting sector to complete repetitive tasks.	4.09	.892	High
B4	Artificial Intelligence enables accountants to focus more on strategic decision-making in the workplace.	4.00	.899	Moderate-High
B5	The use of Artificial Intelligence in accounting will create concern over the role of accountants in this profession.	3.95	.932	Moderate-High
B6	Artificial Intelligence helps restructure the data collection process and the preparation of financial reports.	4.04	.885	High
B7	The use of AI applications can increase the level of confidence in financial data.	3.90	.971	Moderate-High
B8	Through AI systems, routine accounting and audit tasks can be carried out more efficiently.	3.98	.928	Moderate-High
B9	I believe accountants need to enhance their technology skills and keep up with the latest AI advancements.	4.10	.847	High
B10	Artificial Intelligence increases the transparency of accounting processes and financial audits.	4.03	.914	High
Overall Mean		4.01	0.903	High

4.3 Data Analysis on the Level of Employability Skills in Terms of Technology Skills

Based on Table 3, the technology employability skills of accounting graduates are high, with most statements recording high means. Among the highest is C10 (mean 4.25, standard deviation 0.867, interpretation "High"), which shows graduates support enhancing the curriculum to support technology development in accounting. Additionally, other statements such as C1 (4.08), C2 (4.17), C3 (4.17), C5 (4.10), C6 (4.08), C7 (4.16), and C8 (4.17) also recorded high means, reflecting the graduates' competence in modern technologies such as cloud computing, cybersecurity, and artificial intelligence. On the other hand, statement C9 (mean 3.99, standard deviation 0.925, interpretation "Moderately High") is slightly higher than C4 (3.70), showing a slight decrease in the graduates' practical knowledge of integrating artificial intelligence and experience with big data analysis. Overall, the average mean of 4.09 and the standard deviation of 0.878 indicate that accounting graduates are ready to face technology challenges in the accounting industry.

Table 3; Level of Employability Skills in the Aspect of Technology Skills

Item	Statement	Mean	Standard Deviation	Interpretation
C1	I possess the skill to use spreadsheets to manage accounting data digitally.	4.08	.883	High
C2	I understand security issues such as data theft and cybersecurity.	4.17	.858	High
C3	I am proficient in using cloud computing software (e.g., data storage and processing applications).	4.17	.850	High
C4	I have analytical skills in handling large-scale data using Artificial Intelligence.	3.70	1.048	Moderate-High

C5	I am aware that artificial intelligence is rapidly transforming with emerging technologies (e.g., updated software systems).	4.10	.864	High
C6	I believe that the use of artificial intelligence tools will revolutionize the accounting industry.	4.08	.888	High
C7	The technology skills I possess can increase work efficiency and productivity in the workplace.	4.16	.841	High
C8	Mastery of technology skills has a positive impact on the accuracy and integrity of accounting data.	4.17	.828	High
C9	I am familiar with the integration of artificial intelligence applications in existing accounting systems.	3.99	.925	Moderate-High
C10	I am confident that technology expertise will continue to be enhanced with future developments in accounting-related artificial intelligence.	4.25	.867	High
Overall Mean		4.09	0.878	High

4.4 Data Analysis on the Level of Employability Skills in Terms of Technical Skills

Table 4 shows that the technical employability skills of accounting graduates are high, with statements recording high means. Among the highest is D5 (mean 4.20, standard deviation 0.859, interpretation "High"), which indicates that graduates recognize the importance of expanding their skills to adapt to the latest technology developments, particularly artificial intelligence. Additionally, other statements such as D1 (4.11), D2 (4.15), D4 (4.02), D9 (4.03), and D10 (4.13) also recorded high means, reflecting graduates' readiness for the Fourth Industrial Revolution (IR 4.0) and their understanding of the importance of technical skills in accounting. On the other hand, the statement with the most moderately high interpretation is D7 (3.94, standard deviation 0.942), indicating that graduates are still learning to use technology tools for big data analysis, compared to the mean for D3 (3.94), D6 (3.67), and D8 (3.94), which also show lower means. Overall, the average mean of 4.02 and standard deviation of 0.990 indicate that accounting graduates possess high technical skills and are prepared to adapt to technological developments in the accounting industry.

Table 4: Level of Employability Skills in the Aspect of Technical Skills

Item	Statement	Mean	Standard Deviation	Interpretation
D1	I am prepared to apply technical skills in job tasks as required during the Industrial Revolution 4.0.	4.11	.843	High
D2	I am capable of working with numerical data effectively in the preparation of financial statements.	4.15	.831	High
D3	I have experience in addressing accounting problems (e.g., identifying errors in transactions and other related accounting issues).	3.94	.926	Moderate-High
D4	I possess deep competencies in financial reporting.	4.02	.875	High
D5	I believe accountants should improve their technical skills in line with the latest developments in AI technology.	4.20	.859	High
D6	I have qualifications in fields related to accounting and IT.	3.67	1.099	Moderate-High
D7	I am proficient in using tools and technology for data analysis (e.g., Microsoft Power BI, Tableau, etc.).	3.94	.942	Moderate-High
D8	I understand the regulations related to cloud computing.	3.94	.929	Moderate-High
D9	I have knowledge regarding regulatory requirements in financial reporting.	4.03	.855	High
D10	I believe university curricula should include relevant technical skills to align with the advancement of artificial intelligence in accounting.	4.13	.908	High
Overall Mean		4.02	0.990	High

4.5 Data Analysis on the Relationship Between the Level of AI Knowledge Related to Accounting and Employability Skills Among Accounting Graduates in Terms of Technology Skills

Table 5 shows the correlation between AI knowledge in accounting and technology employability skills. The Spearman's Correlation test indicates a significant positive relationship ($\rho = 0.567$, $p = 0.000$) between these two variables at the 0.01 level. This implies that the higher the graduates' knowledge of AI, the higher their technology skills, which are crucial for employability in the job market. This result emphasizes the importance of continuous education in artificial intelligence to enhance the technical skills of accounting graduates and help them compete in an industry that increasingly requires advanced technology.

Table 5: Relationship Between the Level of AI Knowledge Related to Accounting and Employability Skills Among Accounting Graduates in The Aspect of Technology Skills

		Correlation		
			Artificial Intelligence	Technology Skills
Spearman's Rho	Artificial Intelligence	Correlation Coefficient	1.000	.567**
		Sig. (2-tailed)	.	.000
		N	210	210
	Technology Skills	Correlation Coefficient	.567**	1.000
		Sig. (2-tailed)	.000	.
		N	210	210

** . Correlation is significant at the level 0.01 (2-tailed).

4.6 Data Analysis on the Relationship Between the Level of AI Knowledge Related to Accounting and Employability Skills Among Accounting Graduates in Terms of Technical Skills

Table 6 shows a moderate positive correlation (0.534) between AI knowledge in accounting and technical employability skills. This means that graduates with deeper knowledge of AI tend to possess higher technical skills. While this relationship is significant ($p = 0.000$), it is not very strong, suggesting that other factors, such as work experience, technical training, and educational background, also influence technical skills. Overall, AI knowledge plays a significant role in enhancing the technical skills of accounting graduates, which is crucial for meeting the needs of an accounting industry that increasingly depends on technology.

Table 6: Relationship Between the Level of AI Knowledge Related to Accounting and Employability Skills Among Accounting Graduates in The Aspect of Technical Skills

		Correlation		
			Artificial Intelligence	Technical Skills
Spearman's Rho	Artificial Intelligence	Correlation Coefficient	1.000	.534**
		Sig. (2-tailed)	.	.000
		N	210	210
	Technical Skills	Correlation Coefficient	.534**	1.000
		Sig. (2-tailed)	.000	.
		N	210	210

** . Correlation is significant at the level 0.01 (2-tailed).

4.7. Discussion

This discussion reviews the study findings regarding the level of artificial intelligence (AI) knowledge in accounting and the employability skills of accounting graduates, particularly in terms of technology and technical skills. It evaluates the relationship between AI knowledge and graduate employability, as well as the impact of AI knowledge on employability skills within the accounting industry. This study also explores how these factors can enhance the employability of graduates in the job market.

4.7.1 AI Knowledge in Accounting Among Accounting Graduates

The findings suggest that accounting graduates have a strong understanding of the use of AI in accounting, which improves efficiency, accuracy, and financial management. AI helps reduce the time required for repetitive tasks and enhances the employability of graduates in an industry increasingly dependent on advanced technology. Research by Adeyelu et al. (2024) highlights that graduates skilled in technologies such as database management and data analysis can handle big data more efficiently, improving the quality of financial reports and speeding up decision-making.

However, Kwarteng and Mensah (2022) suggest that while graduates are skilled in using AI tools, skills in modern accounting software and financial data analysis still need to be enhanced. This confirms that, although most graduates have developed important skills in AI, they still need to equip themselves with deeper knowledge of technologies like modern accounting systems and process automation. Ismail et al. (2020) also emphasize that technology skills, particularly the use of accounting software, are among the most sought-after skills by employers, providing graduates with higher job opportunities.

Overall, knowledge and skills in AI applications in accounting are key to improving graduate employability. Therefore, accounting education institutions need to ensure that their curricula are updated with the latest technologies, particularly AI, to prepare graduates for industry challenges.

4.7.2 Technology Employability Skills

The findings show that accounting graduates have made significant progress in technology skills, which are essential in facing the challenges of an increasingly digital job market. These technology skills include the ability to use tools and applications of current technology, while technical skills relate to knowledge and expertise in specific areas, such as data analysis and system management (Fernandez & Aman, 2022). Mastery of accounting software, financial management applications, and data analysis has become a key element sought by employers in the fast-evolving accounting industry (Firdaus & Furqorina, 2024). Research by Ismail et al. (2020) also emphasizes that technology skills like cloud computing and data management are key factors in improving graduates' competitiveness in the job market.

This study also found that accounting graduates from Malaysian Polytechnics possess high technology skills, with favorable assessments of their mastery of technology skills. Respondents showed high readiness to face the Fourth Industrial Revolution (IR 4.0), mastering modern accounting systems, cloud computing, and data analysis tools like Big Data and AI (Kwarteng & Mensah, 2022). This shows that these graduates are not only proficient in basic technical skills but are also prepared to apply them in a high-tech work environment (Briones et al., 2021).

Overall, this study underscores that mastering technology skills is a key factor in improving the employability of accounting graduates in an increasingly competitive job market. Educational institutions need to update their curricula by incorporating the latest technologies like modern accounting systems, AI.

4.7.3 Technical Employability Skills

The findings indicate that technical skills among accounting graduates play an essential role in enhancing their employability and providing a strategic advantage in a job market that is becoming increasingly digital and global. Technical skills, such as the use of accounting software and financial data analysis, allow graduates to adapt to changes in the industry (Briones et al., 2021). According to Nik Salleh et al. (2023), technical skills are a crucial element for ensuring that graduates can compete in a job market that is increasingly technology-driven. Studies by Manap and Buntat (2021) also support the idea that graduates who are skilled in these technical aspects will find it easier to meet the market's demands for technology-oriented solutions.

Research by Kwarteng and Mensah (2022) indicates that employers in the accounting sector now prioritize mastery of technical skills, particularly in accounting software and modern financial management systems. Mastery of these skills makes graduates more competitive in providing accurate and efficient financial solutions. This aligns with the findings of Firdaus and Furqorina (2024), who discovered that graduates skilled in advanced accounting software and cloud computing tools are more successful in the increasingly high-tech accounting sector.

Overall, this study highlights that technical skills are the foundation for increasing the employability of accounting graduates, particularly in facing the challenges of an accounting industry that is increasingly reliant on technology and big data. Therefore, strengthening teaching on modern accounting software, advanced financial management tools, and financial data analysis in the educational curriculum is crucial for ensuring that graduates are ready to meet the growing demands of a fast-evolving industry.

4.7.4 The Relationship Between AI Knowledge in Accounting and Technology Employability Skills Among Accounting Graduates

The findings from this study show a positive and significant relationship between the level of artificial intelligence (AI) knowledge and technology skills among accounting graduates. Deep knowledge of AI gives graduates a competitive edge in a technology-driven job market, improving their ability to use modern accounting software and financial management systems based on cutting-edge technology. Graduates proficient in AI can automate routine accounting tasks such as processing financial data and preparing financial statements, thereby increasing the accuracy and efficiency of their work (Fernandez & Aman, 2022). Research by Kwarteng and Mensah (2022) also supports this finding, emphasizing the importance of mastering technologies such as AI to gain a competitive advantage in the job market.

According to Biswas and Tarafder (2025), AI knowledge enhances graduate employability by improving their skills in using sophisticated accounting systems and increasing their work efficiency. Graduates proficient in AI not only improve their performance but also accelerate work processes, reduce human error, and open up more opportunities to face the challenges in an industry that is now driven by technology innovation.

Overall, these findings underscore that AI knowledge plays a critical role in enhancing the technology skills of accounting graduates and preparing them for an accounting industry that increasingly depends on technology and automation. Educational institutions should therefore integrate more AI-related training into their curriculum to ensure graduates are more competitive and relevant in a job market that is increasingly driven by digital technology advancements.

4.7.5 The Relationship Between AI Knowledge in Accounting and Technical Employability Skills Among Accounting Graduates

The findings from this study show a positive and significant relationship between AI knowledge in accounting and technical employability skills among accounting graduates. A deep understanding of AI enhances graduates' technical skills in using advanced accounting software, improving their efficiency in managing financial data and accelerating accounting processes by automating repetitive tasks that previously required significant time and effort (Nik Salleh et al., 2023).

Biswas and Tarafder (2025), graduates skilled in AI can leverage this technology to accelerate financial decision-making and enhance the accuracy of financial management. Additionally, AI knowledge opens up opportunities for graduates to empower their technical skills by using big data analytics, further improving their employability in an accounting industry that now heavily relies on digital technology and automation. Kwarteng and Mensah (2022) also suggest that graduates skilled in digital technologies, particularly AI, are more likely to be hired due to their ability to adapt to rapid industry changes.

In conclusion, the findings of this study confirm that deep knowledge of AI has a significant impact on the technical skills of accounting graduates, enhancing their efficiency in using advanced accounting software and giving them a competitive edge in the job market.

5. Conclusion

This study demonstrates that knowledge of artificial intelligence (AI) in accounting enhances employability by improving graduates' efficiency in using modern accounting software and automating routine processes. AI knowledge helps graduates become better prepared to face a job market that increasingly depends on technology. This study contributes to the development of a model that links AI knowledge to employability skills and provides an effective research instrument for assessing this relationship.

The study's contribution also includes a quantitative approach that provides clear insights into the relationship between AI knowledge and employability skills. Using robust statistical methods, this study provides guidance that can be applied in other studies. These findings are valuable for educational institutions, employers, and graduates in preparing themselves to face the challenges of an industry that is increasingly driven by high-end technology.

Overall, the study emphasizes the need to integrate AI technology into accounting education curricula, giving graduates a competitive edge in the job market. It also provides guidance to employers in selecting employees who are proficient in technology to improve the efficiency of accounting processes within organizations.

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Conflict of Interest

Authors declare that there is no conflict of interest regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: Safiyah Saad, Nur Syamimi Mohd Razali; **data collection:** Safiyah Saad; **analysis and interpretation of results:** Safiyah Saad; **draft manuscript preparation:** Safiyah Saad, Nur Syamimi Mohd Razali. All authors reviewed the results and approved the final version of the manuscript.

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