The Impact of AI Tools Usage, Microsoft Excel Proficiency and Accounting Software Proficiency on Final-Year Accounting Students' Readiness for the Workforce

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Abstract

The fast development of technology has fundamentally reshaped the global market, with the accounting profession experiencing significant transformation. Technological tools such as Artificial Intelligence (AI), Microsoft Excel and specialised accounting software have changed the capabilities required for success in the labour market. The changes also have redefined the core skills expected of graduates entering the workforce. However, despite this shift, there remains a concern regarding whether accounting students are sufficiently equipped with these technological proficiencies to meet the demands of modern workplaces. Thus, this study is interested in examining the impact of proficiency in AI tools, Microsoft Excel and accounting software on students' readiness for the workplace. Specifically, the study seeks to (1) assess the level of proficiency in AI tools, Microsoft Excel and accounting software among final-year accounting students; (2) examine the influence of each of these proficiencies on students' readiness for employment, and (3) determine which of these technological competencies contributes most significantly to students' workplace preparedness. This study adopts a quantitative approach, with 68 out of 75 sets of questionnaires returned from the final-year students of accounting from the Faculty of Management, Universiti Teknologi Malaysia (UTM). The data were analyzed using SPSS software, incorporating both descriptive (mean and percentage) and statistical (correlation and multiple linear regression) analyses. The results of descriptive analysis show that the majority of students possess high level proficiencies in using AI tools and accounting software but moderate proficiency in utilizing Microsoft Excel. Meanwhile, the result also reveals that all the technological proficiencies have positive relationships with students' readiness to the workplace. However, the multiple regression shows that only proficiencies in Microsoft Excel and accounting software have positive and significant impacts, while proficiency in AI tools is found to be insignificant. This suggests that while students know AI tools, they may lack practical exposure to their application in accounting works. It is recommended that accounting programs provide more

targeted AI training specifically related to accounting tasks. The moderate Microsoft Excel proficiency also shows the need for more advanced practice and real-world projects to better prepare students for the workplace.

Keywords: AI Tools, Microsoft Excel, Accounting Software, Proficiency, Workforce Readiness, Accounting Students, Final Year

Introduction

In the contemporary accounting environment, the incorporation of technology is crucial in defining the abilities necessary for professional success. Artificial intelligence (AI) technologies, sophisticated spreadsheet applications such as Microsoft Excel and specialised accounting software have become essential to contemporary accounting processes, requiring a transformation in accounting education to adequately prepare students for the workforce (Brynjolfsson & McAfee, 2014; Mirzaie, 2025). Studies demonstrate that AI technologies are progressively employed in accounting to automate functions like classification, analysis, and financial reporting, thereby improving efficiency and decision-making abilities (Anh, Hoa, Thao et al., 2024). Moreover, the importance of AI in automating repetitive work is transforming the profession. A recent investigation indicates that AI automates repetitive, high-volume and time-intensive processes typically executed by humans, such as data entry, reconciliation, classification, and analysis of financial transactions (Breheney, 2023). Expertise in Microsoft Excel is essential competency for accounting professionals (Doe, Annan, Kwasi et al. 2016). The functions of Microsoft Excel, like VLOOKUP, HLOOKUP and intricate financial calculations, remain indispensable instruments in the routine tasks of accountants. These competencies empower accountants to effectively assess and communicate data, which is crucial in the contemporary data-driven landscape. Proficiency in accounting software like QuickBooks or SAP is widely esteemed by businesses. The incorporation of such software into accounting education equips students with practical applications that prepare them for professional settings. A study conducted by Concordia University revealed that students utilising accounting software exhibited a superior comprehension of the accounting cycle in contrast to their peers who did not use such software, underscoring the pedagogical advantages of incorporating software into the curriculum (Boulianne, 2014). Hence, 3 research objectives were developed in this study:

1. To assess the level of proficiency among final-year accounting students in AI tools, Microsoft Excel and accounting software.
2. To examine the influence of AI tools usage, Microsoft Excel proficiency and accounting software proficiency on final-year accounting students' readiness for the workforce.
3. To identify which among AI tools usage, Microsoft Excel proficiency and accounting software proficiency has the most significant impact on final-year accounting students' readiness for the workforce.

Literature Review

Workforce Readiness in Digital Era

Work readiness, also known as work preparedness or workforce readiness, is defined as a collection of competencies, knowledge, and attitudes that enable students to engage actively in the job market and contribute to the overarching objectives of an organisation (Mason, Williams & Cranmer, 2009). Graduate work readiness is described as a collection of skills, knowledge, attitudes and comprehension that empowers individuals to engage effectively in the job market and contribute to organisational objectives (Caballero & Walker, 2010).

Individuals who fulfil job requirements can effectively meet essential criteria in the workplace (Harvey, 2001). Work readiness is a significant indicator of students' employability (Bridgstock, Goldsmith, Rodgers & Hearn, 2018) and their potential for success in the workplace (Caballero, Walker & Fuller-Tyszkiewicz, 2011). Basically, university graduates have to satisfy the criteria of competency and knowledge in their subject of study as well as concurrently acquiring skills relevant for employment (Harvey, 2001). Consequently, as this issue is seen as a predictor of employability, work performance and career prospects of graduates, researchers have paid great attention to the capacity of students to meet the job requirements (Caballero et al., 2011). Many studies have confirmed the strong correlation between higher education and employment, in which the job preparedness of graduate students acts as an important outcome standard of higher education (Billett, 2012; Oprean, 2007).

AI Integration in Accounting Education and Workforce Readiness
By helping to solve current issues and challenges, artificial intelligence (AI) has the power to bring about major changes in many scientific, industrial, financial and social spheres (Mirzaie, 2025). Accounting is one field that would gain from artificial intelligence. Recording, reporting and analysing financial and accounting data (Odonkor, Kaggwa, Uwaoma et al., 2024a, b; Shoetan & Familoni, 2024) is a necessary activity for any company or corporation. Mirzaie (2025) stated that among the technologies most likely to shape the future are artificial intelligence, the Internet of Things, cloud computing and blockchain. Considered a fundamental component is a machine's capacity to replicate human actions like communication and decision-making. Many different spheres of operation have already seen some of the advantages of using artificial intelligence solutions, such as more accurate findings and time savings during data processing of enormous volumes (Mirzaie, 2025). Though they are not a novel issue for academics or a rare approach for advanced technology businesses, AI solutions remain an intriguing subject for case studies, especially in terms of their effect on the accounting profession (Almagtome, 2021; Alshurafat, 2023). Tandiono's (2023) research shows that although accounting students understand the possible advantages of artificial intelligence, many lack confidence in using such technologies due to little exposure and training. In poor nations where access to AI technology and knowledge may be uneven, this digital divide is especially important. Bui, Phan & Nguyen (2025) contend similarly: awareness, practical experience and the integration of artificial intelligence into real-world accounting simulations and examinations define successful AI adoption in accounting education.

Thody (2024) predicts that the integration of artificial intelligence into audit, tax and financial services will define accountancy going forward, so accounting graduates have to become competent in AI applications to remain competitive. Nowadays, companies are increasingly requiring entry-level accountants to be familiar with artificial intelligence-driven environments. According to a survey conducted by Thody (2024), employers are seeking graduates who are capable of evaluating the data generated by artificial intelligence systems in addition to operating them. It is imperative that accounting education not only emphasize ethical analysis, decision-making and human-AI cooperation but also provide artificial intelligence tools. Consequently, the necessity of a comprehensive curriculum reform is underscored by the fact that work readiness is now contingent upon a combination of soft abilities and digital skills (Mohamed Saad, 2025; Burney & Church, 2024).

Microsoft Excel Proficiency and Job Readiness
One of the most sought-after technical abilities needed by companies hiring recent graduates in corporate accounting is mastery of spreadsheet programs such as Microsoft Excel (Doe et al., 2016). MS Excel spreadsheets include more complex and powerful functionalities that require regular use to commit to memory (Grant, Malloy & Murphy, 2009). Students' competency in MS Excel was shown to be lower than their ability in other MS Office products (Grant et al., 2009; Guy & Lownes-Jackson, 2010). The predominant tool and standard program for financial analysis and journal entry preparation utilised for the collection and processing of financial data in a computerised accounting information system is the Excel spreadsheet (PWC, 2004). Businesses nowadays rely on Excel for a wide range of tasks, including financial modelling, tax calculations, basic record keeping, payroll processing, financial and investment analysis, capital budgeting, variance analysis and cost-benefit analysis scenarios (Baker & Sugden, 2007; Sugden & Miller, 2011). According to several sources, including Burnett (2003); Johnson, Bartholomew & Miller (2006); Awayiga, Onumah & Tsamenyi (2010); Lai & Ahamad Nawawi (2010) and Elsaadani (2015), the ability to use spreadsheets is the most important technological skill for accounting graduates. Numerous companies depend on Excel spreadsheets as either a primary or supplementary tool for their financial reporting and operational procedures, so they become a crucial component of information and decision-making (Panko, 2006; PWC, 2004). In some organizations, particularly those with limited resources, spreadsheets serve as instruments for conventional tasks such as planning, budgeting and forecasting, as well as for contemporary decision-making functions (Block & Ansari, 2008). They are utilized for monitoring business process data, managing model decisions, verifying totals recorded in accounting systems, and affecting the values assigned to each item in the financial statement (Walters & Pergola, 2012).

Accounting Software Proficiency and Workforce Readiness
The increasing complexity of the accounting system has heightened susceptibility to errors and escalated the volume of transactions, necessitating a system capable of processing and storing accounting data with enhanced speed and substantial storage and processing capability (Chong & Nizam, 2018). To meet the rising demand for current and precise information, accounting software, which integrates accounting and information technology, was launched (Wickramsainghe, Pemarathna, Cooray & Dissanayake, 2017). Accounting software is a specialised category of computer applications designed to facilitate business management. The most appropriate definition of 'accounting software' is provided by Barron's Accounting Dictionary, which defines it as applications utilised to manage financial records on computers. The software facilitates transaction recording, account balance maintenance and the preparation of financial records and reports (Siegel & Shim, 2005). According to Joseph (2024), accounting software automates data entry and offers real-time updates, hence reducing errors and ensuring accurate financial reports. This automation improves operational efficiency by minimising the time allocated to regular chores like bookkeeping, invoicing and payroll processing, enabling personnel to concentrate on more strategic endeavours. Accounting systems integrated with various management platforms, including inventory control, storage management, purchase management, customer relationship management, enterprise resource planning, sales and manufacturing planning, enterprise quality control and supply chain and distribution systems, necessitate that accounting software transcend basic functionalities of recording and storing financial

information (Marushchak, Pavlykivska, Liakhovych et al., 2021). Accounting software has become essential for all business types. Numerous accounting software applications are engineered to facilitate basic monetary transactions (bookkeeping) among enterprises, while others are intended to document comprehensive financial inflows and outflows to streamline analytical operations and decision-making processes (Marushchak et al., 2021).
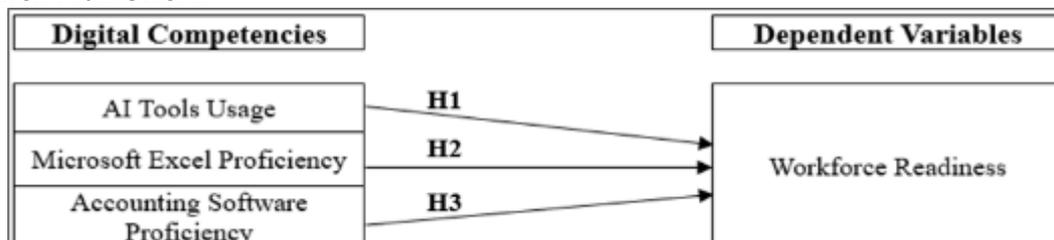
Research Framework

Figure 1. Research Framework

Hypotheses

H1   = There is a positive relationship between AI tools usage and final-year students' workforce readiness.

H2   = There is a positive relationship between Microsoft Excel proficiency and final-year students' workforce readiness.

H3   = There is a positive relationship between accounting software proficiency and final-year students' workforce readiness.

Research Methodology

This study uses a quantitative research design to examine the association between final-year accounting students' workforce preparation and digital skills like artificial intelligence tools, Excel competence and accounting software skills. Measuring variables numerically and spotting trends and linkages using statistical analysis calls for quantitative research (Asenahabi, 2019; Fraenkel, Wallen & Hyun, 2012). Participants will be gathered from one moment in time using a cross-sectional survey approach, whereby data is gathered. In social science studies and education, this approach is extensively applied to evaluate the present knowledge, attitudes or practices in a population (Saha, 2022). In accounting programs, it is especially helpful for collecting students' self-reported degrees of digital competency and perceived work readiness. The approach of the research is explanatory as well as descriptive. While the explanatory portion concentrates on knowing how these skills affect perceived work readiness, the descriptive element seeks to give a general picture of the present digital skills of pupils. This double goal helps determine which AI technologies, Microsoft Excel or accounting software, have the most important predictive impact on worker preparedness (Saha, 2022).

This study focuses on final-year accounting students at the Faculty of Management, UTM Skudai. Several criteria motivated the researcher to choose final-year accounting students from the Faculty of Management as respondents in this study. First, the researcher is a final-year student at UTM's Faculty of Management. As a result, the researcher may better manage and control the data collection process. Second, only accounting program students have expertise using accounting software; thus, this study is appropriate for them. Furthermore, final-year accounting students have completed educational phases ranging

from Year 1 to Year 4, preparing them to enter the actual world. The population is the comprehensive collection of individuals or objects that share a shared characteristic that is significant to a particular study in the field of research (Creswell & Creswell, 2018). The population of this research consists of 75 final-year undergraduate accounting students who are registered at UTM. These students are chosen because they are at the transitional stage of employment and are suitable for evaluating their digital skill competency and work readiness. The sample is a subset of the population that has been selected for participation in the research (Etikan, Musa & Alkassim, 2016). A total of 68 students were selected for this investigation, which represents approximately 91% of the population. This figure was determined using the Krejcie & Morgan (1970) Table for Determining Sample Size, which indicates that a minimum sample size of 63 is required for a population of 75. Consequently, the sample size in this study is adequate for a thorough statistical analysis.

The Statistical Package for the Social Sciences (SPSS) is a widely utilised tool for quantitative research in education and social sciences; the data collected from the questionnaire were analysed. SPSS is suitable for both descriptive and inferential statistical methods, making it ideal for analysing relationships and patterns among variables in this study (Pallant, 2020). Descriptive statistics are fundamental in quantitative research as they provide a clear overview of the data set (Gravetter & Wallnau, 2017). A Cronbach's alpha test was conducted to assess the internal consistency reliability of the Likert-scale items in Parts 2 to 5. A Cronbach's alpha score of 0.70 or higher is considered acceptable for social science research, indicating the degree of interrelatedness among a set of items (Tavakol & Dennick, 2011; Edelsbrunner, Simonsmeier & Schneider, 2025). Pearson correlation is a well-established method for analysing bivariate relationships between continuous variables (Field, 2018). A multiple linear regression analysis was conducted to identify the independent variable that most significantly influenced work readiness. Multiple regression is a technique frequently employed in educational research to examine the extent to which a set of predictors explains variation in a dependent variable (Cohen, Cohen, West & Aiken, 2013).

Results and Discussions
Demographic Profile of Respondents
Table 1
Respondents' Demographics

	Items	Frequency	Percentage (%)
Gender	Male	19	27.9
	Female	49	72.1
Race	Malay	47	69.1
	Chinese	12	17.6
	Indian	6	8.8
	Melanau	1	1.5
	Siamese	1	1.5
	Bumiputera Sabah	1	1.5
Course	SBSC/SBSCH - Bachelor of Accounting with Honours	68	100
Age	20 - 23 years old	44	64.7
	24 - 26 years old	23	33.8
	≥ 27 years old	1	1.5
Academic Year	Forth year	68	100

Table 1 presents the demographics profile of the final-year accounting students investigated in this study. A total of 68 samples are collected. A total of 68 accounting students participated in this study. Female respondents (72.1%) outnumber male

respondents (27.9%), consistent with accounting program patterns. The bulk of respondents were Malay (69.1%), followed by Chinese (17.6%), Indian (8.8%) and Melanau, Siamese and Bumiputera Sabah (1.5% each). This shows that Malaysian students are multicultural. All participants were in their fourth year of Bachelor of Accounting with Honours (SBSC/SBSCH), making them competent employment readiness evaluators. Most responders (64.7%) were aged 20–23, 33.8% were aged 24–26 and 1.5% were aged 27 or older. The age distribution shows that most sample members were nearing graduation, within the undergraduate age range.

Level of Proficiency in AI Tools Usage
Table 2
Students' Proficiency in AI Tools

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**	**Mean**
AIU1: I am familiar with AI tools (e.g., ChatGPT, AI-based financial analysis software).	1 (1.5%)	1 (1.5%)	2 (2.9%)	**27 (39.7%)**	**37 (54.4%)**	4.44
AIU2: I have used AI tools to assist with accounting-related tasks.	1 (1.5%)	3 (4.4%)	9 (13.2%)	**24 (35.3%)**	**31 (45.6%)**	4.19
AIU3: AI tools have helped me understand complex accounting concepts.	1 (1.5%)	2 (2.9%)	7 (10.3%)	**28 (41.2%)**	**30 (44.1%)**	4.23
AIU4: AI-powered automation can improve efficiency in accounting tasks.	1 (1.5%)	0 (0%)	10 (14.7%)	**24 (35.3%)**	**33 (48.5%)**	4.29
AIU5: I feel confident in using AI tools for financial analysis and reporting.	1 (1.5%)	7 (10.3%)	15 (22.1%)	**22 (32.4%)**	**23 (33.8%)**	3.86
Average Mean						**4.20**

Table 2 above summarizes the results of a survey examining respondents' familiarity with and attitudes towards AI tools in accounting, utilising a 5-point Likert scale. The total average mean of 4.20 across all statements shows that people have a very good view of AI's role in accounting.

Level of Proficiency in Microsoft Excel
Table 3
Students' Proficiency in Microsoft Excel Skills

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
EXP1: I know how to use Excel for basic accounting functions (e.g., data entry, simple calculations).	3 (4.4%)	0 (0%)	3 (4.4%)	**26 (38.2%)**	**36 (52.9%)**	4.35
EXP2: I am proficient in advanced Excel functions (e.g., VLOOKUP, Pivot Tables, Macros).	4 (5.9%)	11 (16.2%)	**27 (39.7%)**	15 (22.1%)	11 (16.2%)	3.26
EXP3: I can analyze financial data effectively using Excel.	0 (0%)	11 (16.2%)	16 (23.5%)	**23 (33.8%)**	**18 (26.5%)**	3.71
EXP4: I believe I have enough Excel skills for success in accounting careers.	1 (1.5%)	10 (14.7%)	22 (32.4%)	**21 (30.9%)**	**14 (20.6%)**	3.54
EXP5:I frequently use Excel throughout my university studies.	2 (2.9%)	8 (11.8%)	14 (20.6%)	**26 (38.2%)**	**18 (26.5%)**	3.73
Average Mean						**3.72**

Table 3 presents the results of a survey assessing respondents' proficiency and perceptions of Excel skills, particularly in the context of accounting and academic use. The overall average mean of 3.72 across all statements shows that people are moderately in agreement with their Microsoft Excel skills.

Level of Proficiency in Accounting Software
Table 4
Students' Proficiency in Accounting Software

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
ASP1: I have experience using accounting software for bookkeeping and reporting.	2 (2.9%)	1 (1.5%)	7 (10.3%)	**26 (38.2%)**	**32 (47.1%)**	4.25
ASP2: I feel confident using accounting software for financial statement preparation.	2 (2.9%)	5 (7.4%)	12 (17.6%)	**24 (35.3%)**	**25 (36.8%)**	3.96
ASP3: My university courses have provided me with practical training on accounting software.	1 (1.5%)	1 (1.5%)	9 (13.2%)	**21 (30.9%)**	**36 (52.9%)**	4.32
ASP4: I believe accounting software proficiency is a key factor in securing a job in accounting.	1 (1.5%)	0 (0%)	4 (5.9%)	**23 (33.8%)**	**40 (58.8%)**	4.49
ASP5: I can efficiently handle transactions and reconciliations using accounting software.	1 (1.5%)	3 (4.4%)	21 (30.9%)	**18 (26.5%)**	**25 (36.8%)**	3.93
Average Mean						**4.19**

Table 4 shows that all correlation coefficients are positive, with values exceeding 0.7, indicating strong to very strong relationships. The Pearson Correlation analysis reveals that AIS adoption (AAIS) has a positive and significant correlation with Effort Expectancy (EE), Performance Expectancy (PE), Social Influence (SI), Facilitating Conditions (FC), and Self-Efficacy (SE). This suggests that all these factors are strongly related to the adoption of AIS technology among SMEs. In summary, the results confirm that each of the technology acceptance factors is positively and significantly associated with the adoption of AIS technologies.

Summary of Digital Proficiencies (AI Tools, Microsoft Excel, Accounting Software)
Table 5
Mean Scores for Digital Proficiencies

Digital Proficiencies	Average Mean
AI Tools Usage (IV1)	4.20
Excel Proficiency (IV2)	3.72
Accounting Software Proficiency (IV3)	4.19

According to Table 5, final-year accounting students demonstrated proficiency in the utilisation of AI tools (average mean = 4.20) and accounting software (average mean = 4.19). Students are quite comfortable with and self-assured in utilising digital technologies that are

pertinent to their profession, as indicated by the statistics. This outcome supports the findings of Tandiono (2023) and Abdo-Salloum & Al-Mousawi (2025), who noted that students are cognisant of the increasing significance of AI in accounting; however, their proficiency may be primarily indicative of awareness rather than substantial practical experience. Similarly, the extensive knowledge of accounting software is consistent with the findings of Chong & Nizam (2018) and Bui et al. (2025), who emphasised that students' job-related confidence and competency are significantly enhanced by practical experience with accounting software.

Competency with Microsoft Excel was ranked relatively low, with an average mean value of 3.72, indicating that it ranged from modest to high levels of proficiency. This could indicate a lack of proficiency in the use of advanced Microsoft Excel tools, such as Pivot Tables, Power Query and Macros. Hurst (2021) emphasised the importance of advanced Microsoft Excel skills in financial reporting and data administration. This suggests that greater emphasis on challenging Microsoft Excel functions in the curriculum could enhance students' digital competency and employability, as well as assist them in maintaining a digital presence.

Reliability Test
Table 6 indicates that all variables in the study exceeded the suggested value of 0.70. The AI Tools Usage variable exhibited a Cronbach's Alpha of 0.828, indicating a high level of internal consistency among the five items utilised. The alpha value for Microsoft Excel proficiency was 0.784, indicating its reliability. The Accounting Software Proficiency construct exhibited a Cronbach's Alpha of 0.897, indicating high reliability. The Workforce Readiness variable exhibited the highest reliability score of 0.915, indicating substantial internal consistency. The results indicate that all measuring items in the survey demonstrated reliability and may be utilised for further research.

Table 6
Cronbach's Alpha Values for Study Variables

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
IV1: AI Tools Usage	0.828	0.835	5
IV2: Microsoft Excel Proficiency	0.784	0.781	5
IV3: Accounting Software Proficiency	0.897	0.901	5
DV: Workforce Readiness	0.915	0.917	5

Pearson Correlation Analysis
The Pearson correlation coefficient is a statistical measure that determines the strength and direction of the linear link between two continuous variables. It yields a value (r) ranging from -1 to +1. A value of +1 indicates a perfect positive linear correlation, while a value of -1 signifies a perfect negative linear correlation and a value of 0 denotes the absence of a linear relationship (Pallant, 2020).

Table 7 below demonstrated a significant and statistically relevant positive correlation between all three independent variables and the preparation of final-year students for the workforce (p < .001). The use of artificial intelligence tools was positively correlated with workforce preparedness (r =.632). This implies that students who demonstrate a higher level of proficiency in AI tools are more likely to perceive themselves as prepared for the workforce. This supports the assertions of Tandiono (2023) and Abdo-Salloum & Al-Mousawi (2025), who emphasized that the practical implementation of AI is the determining factor in the development of actual competency, despite the fact that students comprehend the significance of AI in the accounting sector.

Microsoft Excel proficiency demonstrated a substantial positive correlation (r =.663) with employment preparedness, which is in accordance with Hurst (2021), who emphasized the significance of Excel in accounting practice for financial analysis and reporting. Accounting software knowledge revealed the strongest correlation (r =.803), indicating that students who are proficient in accounting systems felt the most confident in their employability. This finding agrees with the studies from Chong & Nizam (2018), Uyanik & Güler (2013) and Bui et al. (2025), who emphasized that students' readiness for the workforce is significantly enhanced by genuine exposure to accounting software. In general, the results validate hypotheses H1, H2 and H3, indicating that each of the three digital abilities is significantly associated with students' perceptions of their readiness for employment. The strength of the correlation indicates that accounting students proficient in technology exhibit greater self-confidence while transitioning from learning to the workforce.

Table 7
Pearson Correlation Coefficients Between Independent Variables and Workforce Readiness (N = 68)

Correlations		DV	IV1	IV2	IV3
DV	Pearson Correlation	1	.632**	.663**	.803**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	68	68	68	68
IV1	Pearson Correlation	.632**	1	.497**	.714**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	68	68	68	68
IV2	Pearson Correlation	.663**	.497**	1	.580**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	68	68	68	68
IV3	Pearson Correlation	.803**	.714**	.580**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	68	68	68	68
**. Correlation is significant at the 0.01 level (2-tailed).					

Multiple Regression Analysis
Multiple regression analysis is a statistical method employed to examine the relationship between one dependent variable and two or more independent variables. It enables researchers to assess the efficacy of a collection of predictors in elucidating the variations in the outcome variable and to determine the contribution of each independent variable while accounting for the influence of others (Uyanik & Güler, 2013). This approach is highly

beneficial in educational and social science research when multiple factors may simultaneously influence the same outcome (Keith, 2019).

Model Summary

In Table 8 below, AI tools usage (IV1), Microsoft Excel competency (IV2) and accounting software proficiency (IV3) explain variances in students' work preparation. The multiple correlation coefficient (R) is 0.840, showing a strong positive association between predictors and the dependent variable. The R Square score is 0.706, indicating that the three digital competency categories explain 70.6% of job readiness variance. This shows the model possesses substantial explanatory capacity. The Adjusted R Square drops to 0.692, indicating that the model explains 69.2% of workforce preparedness variance after considering variables and sample size. The estimated standard error is 0.44973, the mean variation between observed values and the regression line. The regression model analyses data well and the three independent variables accurately measure final-year students' employment readiness.

Table 8
Model Summary of Multiple Regression Predicting Workforce Readiness

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840[a]	.706	.692	.44973
a. Predictors: (Constant), IV3, IV2, IV1				

Analysis of Variance (ANOVA)

ANOVA, or Analysis of Variance, is a statistical technique employed to ascertain whether significant differences exist between group averages or in the context of regression analysis, to determine if a collection of independent variables accounts for a substantial portion of variance in a dependent variable. A substantial F-value ($p < 0.05$) indicates that the model demonstrates superior fit compared to a model devoid of predictors, hence justifying the use of independent variables to forecast the outcome (Uyanik & Güler, 2013). Table 9 shows that the regression model has an F-value of 51.199 with 3 degrees of freedom for regression and 64 for residual error. The model is statistically significant as the p-value ($p < .001$) is much lower than the conventional alpha level of 0.05. This suggests that the three independent variables explain a large amount of student workforce readiness disparities.

Table 9
ANOVA Results for the Multiple Regression Model Predicting Workforce Readiness

ANOVA[a]					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.065	3	10.355	51.199	<.001[b]
	Residual	12.944	64	.202		
	Total	44.009	67			
a. Dependent Variable: DV						
b. Predictors: (Constant), IV3, IV2, IV1						

Coefficients Table
The coefficients table illustrates the contribution of each independent variable, AI tools usage (IV1), Microsoft Excel proficiency (IV2) and accounting software proficiency (IV3) to the prediction of the dependent variable, workforce readiness, while controlling for the other predictors.

Table 10 below confirms that accounting software proficiency (IV3) has the highest standardized beta coefficient ($\beta = 0.586$), making it the most accurate predictor of workforce readiness. This concurs with the assertions of Chong & Nizam (2018), Uyanik & Güler (2013) and Bui et al. (2025), who emphasized that students' job confidence is enhanced by practical accounting software experience. Microsoft Excel proficiency (IV2) also had a significant positive effect ($\beta = 0.289$, $p = 0.001$), which is consistent with the emphasis placed on Excel's importance in financial reporting and data analysis by Hurst (2021). The use of AI tools (IV1) was not a significant predictor ($\beta = 0.069$, $p = 0.481$), as indicated by the results of Tandiono (2023) and Abdo-Salloum & Al-Mousawi (2025), who observed that students may acknowledge the role of AI but lack the necessary applied training to confidently integrate AI into accounting practice.

Table 10
Coefficients Table for Predictors of Workforce Readiness

		Coefficients[a]				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.203	.363		-.561	.577
	IV1	.082	.115	.069	.709	.481
	IV2	.309	.090	.289	3.440	.001
	IV3	.610	.109	.586	5.616	<.001
a. Dependent Variable: DV						

Summary of the Study
This study examined how AI tools, Microsoft Excel skills and accounting software knowledge affect final-year accounting students' workplace preparation. A total of 68 final-year accounting students completed a standardised questionnaire for a quantitative approach. Data is analysed using descriptive statistics, reliability analysis, normality tests, Pearson correlation, ANOVA and multiple regression in SPSS Version 30.

Accounting software proficiency improved employment readiness the most, followed by Microsoft Excel proficiency. AI approaches have no statistically significant effect on the regression model. These findings support the claims of Chong & Nizam (2018), who said accounting software improves job performance and Hurst (2021), who said accountants need Excel. Tandiono (2023) and Abdo-Salloum & Al-Mousawi (2025) found that students acknowledge the importance of AI but lack confidence due to insufficient exposure or practical training. The study identifies the technological skills that most affect accounting students' career prospects in the digital era, adding to research on digital competences and graduate employability. Burney & Church (2024) and Thody (2024) examine how technology is rapidly changing accounting. That context makes these findings important.

Key Findings and Implications of the Study

The researcher examined the impact of AI tools, proficiency in Microsoft Excel and proficiency in accounting software on the workforce readiness of final-year accounting students. Both multiple regression and simple linear regression analyses indicated that proficiency in accounting software was the most significant predictor of employment readiness, as evidenced by the highest standardised beta coefficients. This outcome corroborates the assertions of Chong and Nizam (2018) and Uyanik & Güler (2013) that extensive use of accounting systems significantly enhances students' competence and confidence in their professional roles. Proficiency in Excel significantly contributed to positive outcomes, corroborating Hurst's (2021) assertion that advanced Excel capabilities such as VLOOKUP, PivotTables and Macros are essential for data management and analysis in accounting. The results indicate that students require more comprehensive and pragmatic training in both accounting software and Excel to enhance their employability.

Although the use of AI technologies was associated with workplace readiness, it did not serve as a significant predictor in the multiple regression analysis. Nonetheless, when examined independently, simple linear regression indicated that the utilisation of AI technologies was a significant predictor of workforce readiness. Tandiono (2023) and Abdo-Salloum and Al-Mousawi (2025) assert that students recognise the increasing significance of AI in accounting; yet they lack preparedness for real-world application due to insufficient practical experience. Students require more than mere theoretical understanding; they necessitate systematic, practical AI training integrated into authentic accounting challenges. These findings are crucial for educators and curriculum designers. Burney and Church (2024) and Thody (2024) assert that accounting education must incorporate practical software training and AI-integrated modules to adequately equip graduates for the evolving digital accounting profession.

Recommendations

Universities should improve practical teaching in accounting software like Xero, QuickBooks and MYOB. Students should use accounting software in real-world simulations, industry case studies, and project-based learning since it is the best predictor of workforce preparedness. Chong & Nizam (2018) suggest embedding such software into basic accounting disciplines to bridge academic and workplace learning. Second, institutions should teach Microsoft Excel beyond basics. The study found that Microsoft Excel competence considerably improves workforce readiness, demonstrating that accounting professionals still prioritise spreadsheet skills. Therefore, students should learn PivotTables, Macros, Power Query and financial modelling in Microsoft Excel. According to Hurst (2021), Excel remains important in financial reporting and data analysis.

In addition, AI tools correlated positively with readiness in the regression model while not having a statistically significant effect. This suggests students recognise AI's importance but lack confidence or training. Thus, accounting programmes should educate on AI and how it may be used in audit automation, fraud detection, and financial forecasting. Burney and Church (2024) urge responsible AI integration in accounting education. Lastly, universities should work with companies and professional associations to adapt accounting courses to meet industry standards. Students can learn the newest digital skills businesses want through guest lectures, industry panels, internships and job placement programmes. Students should

learn soft skills like communication, adaptability and ethical decision-making in a digital context together with technical training. Students need these diverse talents to succeed in a fast-changing accounting field.

Limitation and Suggestions for Future Research

Despite several limitations, this study provides perspective on how digital abilities affect final-year accounting students' career preparation. Data collection and analysis were limited to three months, restricting the study's scope. The researcher could not increase the sample size or use a continuous technique due to scheduling constraints. To better evaluate students' preparation, long-term studies could use more reliable data from several sources or track their development over time. Second, the quantitative study used self-reported survey data, which may be affected by social desirability bias or self-evaluated competency flaws. Students may overestimate their digital talents, especially with AI and accounting software. Future research should use a mixed-methods approach with practical evaluations, interviews or supervisor input to evaluate and improve data reliability.

The study included only 68 final-year accounting students from one university, limiting its generalisability. The data are useful, but they may not fully represent accounting students from different areas, institutions or educational frameworks. Future studies should use more diverse samples from other universities to improve reliability. The study tested three digital proficienciew of AI, Microsoft Excel and accounting software. It ignored internship experience, soft skills, digital ethics and communication skills, which could improve job readiness. To better understand employability, future researchers may include more characteristics. Given AI's rapid progress, future study may examine specific AI tools, training quality or institutional assistance to help students adapt to using AI in accounting.

Conclusion

This study examined the impact of proficiency in AI tools, Microsoft Excel and accounting software on the preparation of final-year accounting students for employment. The findings indicated that proficiency in accounting software was the most significant indicator of students' readiness for employment, succeeded by proficiency in Microsoft Excel. The regression study indicated that the use of AI tools was not a robust predictor of readiness, despite a good correlation with it. The results underscore the significance of practical digital skills for students, particularly those applicable to accounting roles, in enhancing their confidence and preparedness for the labour market.

This study's findings indicate that colleges and universities are required to incorporate practical tools and experiential training into their accounting curricula. Incorporating further practical experience with accounting software and sophisticated Excel skills, along with progressively integrating applied AI education, can assist students in fulfilling the demands of their future careers. By using this approach, educational institutions will more effectively prepare graduates for the evolving digital workforce, facilitate their employment opportunities and assist both the nation and the global community in achieving objectives related to enhanced education and economic advancement.

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