Accounting Careers in the Era of Digitalisation: Insights from Future Professionals from an Emerging Economy



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1 Introduction

The accounting profession, historically deep-rooted in well-structured rules, concepts, and practices, is undergoing a rapid transformation driven by digitalisation (Taib et al., 2023). The deep integration of emerging technologies such as big data, robotic process automation, machine learning (ML), blockchain, and artificial intelligence (AI) that once seemed like a mere hype, has evolve into reality transforming industries by automating the traditional human tasks (Ozili, 2025), altering the roles of accounting professionals, and redefining the skills required for success in the field. While digitalisation offers significant opportunities, such as reengineering accounting procedures, reducing accounting information errors and distortions, improving accounting efficiency, and promoting the transformation of accounting career structures (Zhang et al., 2020), it also brings about deep-seated concerns among accountants and future professionals as many fear that automation will replace traditional accounting roles, rendering certain skill sets obsolete, eliminating jobs in the near future (Yigitbasioglu et al., 2023), thus, throwing people into panic of job displacement (Baiod & Hussain, 2024). Additionally, the rapid pace of technological change raises concerns about whether accountants will be able to upskill quickly enough to remain relevant in the evolving job market. Consequently, the constant question on what the future holds for

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T. Moloi (ed.), *Embracing Technological Agility in Accounting and Business – Vol. 1*, Springer Proceedings in Business and Economics,
https://doi.org/10.1007/978-3-032-13380-9_6

professionals due to digital transformation and what accountants need to do to remain relevant (Moll & Yigitbasioglu, 2019).

Although these technologies are enhancing corporate processes, and reshaping professions, yet, its impact, whether positive or negative, requires deep thoughts. For instance, according to Ozili (2025), one could view digitalisation as a double-edge sword that would make accounting professionals to lose their jobs if they fail to upgrade their digital skills to meet the needs of the industry. However, the reverse would be their case if future professionals work on their ability to adapt to the evolving landscape.

While, automation continues to affect several professions, especially those at the forefront of technological advancements due to them having numerous processes wherein tasks are repetitive, linear and involves little social interaction (Yigitbasioglu et al., 2023). Accounting professions stands out as the most vulnerable to extinction (Ozili, 2025), yet, still uniquely positioned to adapt. Reason because despite fears of automation depleting the profession (Yigitbasioglu et al., 2023), accountants judgement remains indispensable for analysing and interpreting complex data and delivering strategic insights (Richins et al., 2017). Rather than completely replacing the accountants or diminishing their roles, technology shifts their focus towards high-valued professional skills and technical decision-making knowledge required for organisational success (Jackson & Allen, 2024). To thrive well and remain relevant, there is need for accountants to evolve into multi-skilled professionals, capable of integrating technical and strategic competencies.

Despite the widespread integration of digital tools, there remains uncertainty around how it will shape the future of accounting. On the one hand is the view that digitalisation enhances productivity and strategic decision-making, while on the other hand is the fear of job displacement and skills redundancy. Yet, current research has offered only limited insights into how future professionals perceive these developments—an opportunity or a threat? Meanwhile, the pace of digitalisation calls into question whether existing and future professionals are prepared for this shift, especially as many businesses remain hesitant to fully embrace the digital tools (Baiod & Hussain, 2024). This study addresses the gap by investigating how future professionals perceive digitalisation of the accounting profession—whether as an opportunity to reinvent the profession or a threat to their future career prospects. The study hereby seeks to answer the following research questions:

RQ1. Do future professionals perceive digitalisation of the accounting profession as an opportunity or threat?
RQ2. Does gender influence their views of how digitalisation impacts the profession?

This study therefore examined the impact of digitalisation in terms of opportunity or risk on the accounting profession, using the perception of future accountants. Specifically, the study:

1. Analyse the views of future accountants regarding whether they perceive digitalisation as an opportunity or a risk.
2. Investigate whether the perceptions noted is influenced by the gender of the future professional accountants.

This study contributes to knowledge as it offers a novel perspective by capturing the views of future accounting professionals who are still undergoing training but poised to shape the profession in the future within an emerging country context. Unlike existing studies that focused on the developed climes and primarily on current practitioner, this research explores how prospective accountants in Nigeria perceive digitalisation as both an opportunity and a threat. The study bridges a critical gap by providing empirical evidence on the nuanced perceptions of digital transformation and integrating gender views. Through this approach, the study provides practical insights for educators, policymakers, and professional bodies to design relevant curricula and upskilling strategies that equip future professionals with the requisite skills and knowledge necessary for navigating the digital landscape and aligning with the realities of a digitally transformed accounting profession.

To this end, the study provides insights on the concerns and expectations of future professional accountants of what lies ahead of their fate in the Era of 4IR, with the broader goal to inform educational institutions, professional bodies, and policy makers what need to be done to alleviate the concerns. The insights generated are crucial for shaping adaptive strategies that ensure relevance and resilience in a digitally evolving accounting profession.

The rest of the paper is structured as follows: Section 2 reviews the literature; Sect. 3 explains the methodology; Sect. 4 discusses findings; and Sect. 5 concludes the study.

2 Literature Review

2.1 Digitalisation and the Transformation of the Accounting Profession

The accounting profession has experienced significant transformation due to digitalisation, with emerging technologies such as artificial intelligence (AI), robotic process automation (RPA), blockchain, big data analytics, and cloud computing reshaping traditional accounting functions (Ozili, 2025; Taib et al., 2023). Research indicates that these technologies enhance efficiency, improve data accuracy, and streamline financial reporting processes (Zhang et al., 2020). Digital tools have automated routine and repetitive accounting tasks, allowing professionals to shift their focus towards more strategic and advisory roles (Richins et al., 2017). However, concerns persist regarding the adaptability of accountants to these rapid technological changes and whether existing accounting education adequately prepares future professionals for a digital-driven work environment (Baiod & Hussain, 2024; Moll & Yigitbasioglu, 2019; Yigitbasioglu et al., 2023).

Digitalisation is the transition to a digital business (Awang et al., 2022) while digital transformation refers to when organisations employ technologies to change business models and strategies such as boosting financial performance, internal control systems, and sustainable development capabilities (Wei et al., 2025). This

implies that more responsibilities are delegated to technologies for processing and execution. With the push towards digitalisation, the accounting profession is one of the professions anticipated to undergo parallel transformations (Ozili, 2025; Yigitbasioglu et al., 2023). As such, it is vital to understand that digitalisation has not only come to stay, but it remains an indispensable requirement for the comprehensive development of professionals who are capable of leading financial management and data research to improve decision-making in organisations (Soldevilla et al., 2025).

To meet the requirements of a variety of business models, research noted that several digital technology advancements have been developed and adopted for accounting usage like cloud computing, Big data and data analytics, blockchain, artificial intelligence (AI), and Robotic process automation (Baiod & Hussain, 2024; Berikol & Killi, 2021; Nguyen et al., 2025).

2.1.1 Opportunities Presented by Digitalisation to the Accounting Profession

Digitalisation offers numerous advantages to the accounting profession. AI and machine learning enhance fraud detection and risk assessment by identifying anomalies in large datasets more efficiently than traditional methods (Brennan et al., 2017). Cloud computing is radically changing how enterprises view, use, and pay for computing resources, as it facilitates real-time financial reporting and enhances collaboration between accountants and clients, eliminating geographical barriers (Baiod & Hussain, 2024). Cloud solutions or services are also available in various key functions that are often recognised as part of the accountant's work, like accounting, analytics, control, monitoring, compliance and reporting, and data governance (Moll & Yigitbasioglu, 2019). Blockchain technology notable for its potential to ensure trust in a network without a central authority has introduced new levels of transparency and security in financial transactions, reducing the risk of fraud and manipulation (Baiod & Hussain, 2024). The blockchain has also transformed the profession through its ability to enable triple-entry accounting, where transactions are automatically verified, enhancing accuracy and security (Al Shanti & Elessa, 2023). Smart contracts further streamline record-keeping and real-time tracking (Karajovic et al., 2019). This shift reduces costs, accelerates settlements, and strengthens regulatory compliance (Baiod & Hussain, 2024; Gomaa et al., 2023). As a result, accountants now focus on verifying transaction authenticity and assessing smart contracts, while auditors analyse business legitimacy rather than detecting misstatements (Baiod & Hussain, 2024; Kroon et al., 2021). These advancements enable accountants to focus on higher-value tasks such as financial analysis, business advisory, and strategic decision-making, thereby increasing the profession's overall impact on business success (Syed et al., 2020).

Askary et al. (2018) suggest that AI might be more helpful in internal control functions as it can assist managers in making an informed decision regarding accounting information. This will help to reduce internal control weakness and improve audit quality. Shi (2020) took a more pessimistic stance towards digitalisation and argued that while technology (AI) may improve efficiency and reduce risk, it is a double-edge sword because it can make accounting professionals to lose their jobs if they fail to upgrade their digital skills to meet the current needs of the industry trend. Contrarily, Li and Zheng (2018) argued that digitalisation (AI adoption) will not lead to massive loss of jobs; rather, it will create new jobs for accountants since technologies cannot independently make decisions by themselves. This means that accountants will be needed to make decisions using the outputs produced by technology. Mohammad et al. (2020) examined the potential effect of artificial intelligence on new-generation accounting professionals using qualitative document analysis and found that new generation accountants raised concerns that they think AI systems will replace their jobs. The authors noted that accountants must learn to adapt with technologies for them to remain relevant. In addition to this, Zhang et al. (2020) urged higher institutions to prepare the future accountant for the realities of the digitalised environment by introducing them to important technologies (accounting software) employed in accounting practices and teaching them how to interpret outputs produced by the software.

According to Ozili (2025), AI can be applied in accounting for complete automation of bookkeeping, tax, and audit tasks; analyse and clear invoice payment; assist companies in efficient auditing by ensuring they comply with auditing rules and regulations; act as artificial fiduciaries; assist with financial reports preparations; assist with client communications; useful for sales and revenue forecasting; analyse financial data and detect abnormalities; for effective data analysis.

Another important benefit of digitalisation for accounting profession is the ability of technology (AI) to provide improved accuracy, efficiency, and speed in data processing and analysis. Moll and Yigitbasioglu (2019) noted that technological tools automate routine tasks like data entry, enabling accountants to focus on strategic activities and enhancing productivity. This ability compared to the traditional methods drive technologies adoption especially for firms seeking competitive advantages.

Furthermore, building on earlier innovations such as computerised accounting systems and enterprise resource planning (ERP) software, digitalisation brought about significant shifts in accounting as it has revolutionised financial information processing, improving accuracy, efficiency, and decision-making (Assidi et al., 2025). Technology application to the accounting profession has also introduced advanced automation and predictive analytics, transforming traditional roles by enabling faster and more precise data management.

2.1.2 Risks and Challenges Posed by Digitalisation to Accountants

Gulin et al. (2019) noted that the key challenges of digitalisation often stem from the use of technologies like big data, cloud computing, AI, and blockchain for continuous accounting and reporting. A major concern around this is job displacement due to the functional processing of these technologies in terms of automation, consequently taking over traditional bookkeeping and transactional tasks. Similarly, Tavares et al. (2023) mentioned that the rise of robotic process automation systems, through AI, presents critical challenges to accounting and auditing jobs. This may be a probable reason why many accountants now fear that AI and automation will reduce the demand for entry-level roles, creating uncertainty about career stability and growth opportunities. Additionally, concerns have been raised that digitalisation brings a new type of risk, like cybersecurity risk due to the possibility of unauthorised data access (Savić & Pavlović, 2023). This suggests that as the reliance on technology increases, financial data may become more susceptible to breaches and cyberattacks.

The foregoing discussions suggest that integrating technologies into the accounting profession will likely introduce significant risks including job loss and privacy breaches. Hence, it is important to ensure that these technologies are seamlessly integrated and user-friendly within organisations to mitigate some of these risks even though they might not be eliminated completely. Table 1 summarises the opportunities and risks discussed.

2.2 Digitalisation and Gender

Numerous discourses have been raised in the past on the linkage between gender and digitalisation with research suggesting societal expectations and perceptions of gender roles having an impact on individual's career decisions, leading to occupational segregation (Senyah, 2023). Similarly, research noted that gender diversity

Table 1 Summary of opportunities and risks of digitalisation

Opportunities brought by digitalisation	Risk/challenges posed by digitalisation
Creation of new jobs	Jobs displacement
Working time reduction and increased work autonomy	Working-time extension—an increase of "anytime, anywhere" work
New forms of collaboration and cooperation between workers and machines	Weakening of workers' representation and bargaining coverage
Better ergonomics due to support in performing heavy and complex work	Increased competition between workers to reduce costs
Smart factories—jobs that have been offshored to low-pay countries will come back	Work intensification, dependence on "data masters" and surveillance
More gender equality	Increased inequality between workers
Sharing economy	Erosion of tax base and social insurance financing

Source: Awang et al. (2022) and Voss and Riede (2018)

foster innovation and facilitate successful digital transformation efforts within organisations (Živković et al., 2024). Furthermore, it is believed that organisations with higher gender diversity tend to exhibit higher levels of innovation, and able to generate new ideas, develop innovative products and services, and implement creative solutions to complex problems (Živković et al., 2024). In addition, gender diversity often encourages open communication, collaboration and valuing different opinions within the organisation.

Research identified dynamic relationship exists between digitalisation and gender. On the one hand, it is argued that digitalisation is a powerful tool to influence gender diversity and on the other hand, it has numerous positive effects on digitalisation. Gender diversity brings different perspectives, creativity, innovation, and inclusion to organisations. Empirical research has shown that in countries with a high proportion of women in top level management positions, the integration of digital technologies within the organisations tends to be higher, and more demanding ICT tasks are performed by women in the workplace (Živković et al., 2024). However, it is noted that digitalisation is shifting the boundaries between paid and unpaid labour with far-reaching repercussions for women and men (Kohlrausch & Weber, 2021).

Furthermore, debates suggest that for emerging professions, occupations involving extensive use of new technologies are predominantly occupied by males (Markoc, 2025) and only fewer women are employed in ICT and STEM-related fields. Thus, research call for equal opportunities to be provided to all gender to bridge the digital divide. Meanwhile, it is argued that women have a low preference for technology-related disciplines in both vocational training and higher education. As a result, traditional gender roles continue to be the primary cause of digital gender divide, as women continue to be employed in low-paying and uninsured positions (Markoc, 2025).

Empirical research recorded varying evidence for the perception of women and men for digitalisation. Sen (2019) found that men and women have different perception about digitalisation. The author found that men believe digitalisation positively affects their lifestyle and improved quality of life but women hold a contrary view. Markoc (2025) found women have a higher digitalisation tendency than men. Contrarily, Awang et al. (2022) found no significant difference in the perception of male and female towards digitalisation. Schillo and Ebrahimi (2022) found low women's participation in digitalisation resulting in a negative relationship with venture capital funding.

2.3 Theoretical Approach

This study employs a hybrid theoretical framework combining the Resource-Based View (RBV), the Technology–Organisation–Environment (TOE) framework, and the Diffusion of Innovation (DOI) theory to offer a multidimensional insight into the views held by the future professional accountants in Nigerian higher institutions about digitalisation.

2.3.1 Resource-Based View (RBV) Application to Digitalisation

RBV anchors the belief that sustainable competitive advantage is rooted in the strategic use of internal resources that individuals possess which are valuable, rare, inimitable, and non-substitutable (Weigel & Hiebl, 2023; Yigitbasioglu et al., 2023). In the context of accounting education, digital competencies like data analytics, AI literacy, and cloud-based financial tools represent critical intangible resources. Therefore, in a place like Nigeria, if accounting students acquire this form of digital skills, they can be better positioned for employability and professional success (Ebekozien et al., 2024). Hence, students who perceive digitalisation as an opportunity are likely to view adaptability to digitalisation as a personal and institutional resource that can enhance their career prospects and professional relevance.

However, according to critics, RBV can be limited owing to its static focus on internal resources. As a result, its applicability in dynamic contexts like digitalisation in Nigeria, infrastructural instability, institutional incapabilities, systemic inequalities that may be existing across different regions and between genders, other market conditions which may not go in tandem with the fast-paced digital landscape, can render these resources obsolete quickly.

2.3.2 Technology–Organisation–Environment (TOE) Framework

To complement the RBV, this study integrates the TOE framework. The TOE framework adds a broader perspective by incorporating three key contextual dimensions that influence embracing digitalisation. Namely:

- Technological context—i.e., availability, accessibility, and suitability of digital tools
- Organisational context—i.e., institutional support/readiness, curriculum design, and lecturer/instructor's digital competence
- Environmental context—Digital infrastructures, National University Commission (NUC) policy, economic trends, and socio-economic factors.

In Nigerian context, where resource constraints, unequal access to digital tools, and policy gaps persist, the TOE framework allows this study to account for both micro- and macro-level enablers and barriers shaping students' perceptions of digitalisation. It also contextualises how institutional support and external pressures affect the integration of digital technologies in accounting education. Within the Nigeria context, this broader perspective addresses RBV's limitation on external factors, such as intermittent power supply and unstable Internet, which influence digital adoption significantly.

2.3.3 Diffusion of Innovation Theory (DIT)

Completing the above theories is the DIT which offers a behavioural lens to understand how individuals may respond to innovation or perceive digitalisation over time. The theory suggests there are five types of "adopters" including: innovators, early adopters, early majority, late majority, and laggards (Rogers, 2010). Hence, the innovation attributes that will shape adoption decisions include relative advantage, compatibility, complexity, trialability, and observability (Assidi et al., 2025; Ebekozien et al., 2024). Aligning the theory to this study helps offer insight into students' varied behaviour and perception to digitalisation of accounting. For instance, depending on individual student's socio-economic background and gender, those who identify as early adopters may view digitalisation as an opportunity for advancement, while others may feel threatened due to their limited exposure, technical skills, or confidence. Furthermore, it also reflects the influence of social networks, peer norms, and institutional culture in shaping digital adoption behaviours.

3 Methods

3.1 Population, Sample, and Research Design

Using a purposive sampling technique, the study unit of analysis were undergraduate students enrolled into Bachelor of Science (BSc.) and Higher National Diploma (HND) in accounting in the public higher institutions in Nigeria. The study focused Nigeria due to its status as a rapidly developing economy, with a growing accounting profession faced with evolving digital transformation. As Africa's largest economy and a regional financial hub, Nigeria presents a unique environment where the accounting sector is posed not just with digital divide but technological adoption in uneven, revealing both the opportunities and challenges associated with digitalisation. The students herein referred to as future professionals (prospective accountants) undertaking a degree programme that qualifies them to become an accountant later in the future. Some of the students enrolled also combined their programme with the qualifying professional exams to become chartered accountants upon graduation, while others proceed with their professional exams after graduation. Hence, the participants are accounting students who will soon enter the profession.

Online questionnaires were sent via Google Forms to undergraduate accounting students across the public higher institutions in the six (6) geo-political zones in Nigeria, with a total response of 191. For the data analysis, the study employed a descriptive approach focused on explaining the perception of future accounting

Table 2 List of items

Opportunities for Prospective Accountants	Digitalisation creates more new jobs
	Digitalisation reduces working time
	Digitalisation raises more work autonomy
	Digitalisation provides better agronomics
	Digitalisation enhances gender equality for women in work
Risks for Prospective Accountants	Digitalisation would introduce challenges to the work
	Digitalisation would raise job instability
	Digitalisation would expand working time, i.e. working from anywhere and at any time
	Digitalisation would increase the workload
	Digitalisation would increase competition among employees

Source: Awang et al. (2022) and Voss and Riede (2018)

professionals on digitalisation. Given the exploratory nature of the research and the categorical structure of the variables, descriptive statistics and t-tests of means were deemed sufficient for analysing the data. Regression analysis was not employed because the study does not seek to predict outcomes or model any complex relationship between variables. Similarly, factor analysis, which is often employed to reduce data dimensions, and identify latent constructs, was deemed not necessary since the questionnaire items were designed to directly measure specific predefined constructs of perceived opportunities and risks, rather than to uncover underlying factors.

The study sought participants' consents, assured anonymity and confidentiality prior to administering the questionnaire. The study also got ethical approval from Kwara State University Centre for Research and Development (CR&D), with reference number: KWASU/CR&D/REA/2025/0107.

3.2 Measures

The questionnaire assessed responses based on demographic data and respondents' perspectives on the digitisation of the accounting profession. Five measurement items adapted from (Awang et al., 2022; Voss & Riede, 2018) were used to evaluate the respondents' opinions from the perspectives of "opportunities or risks" for prospective accountants. The items were scored on a four-point Likert scale ranging from "1: Strongly disagree" to "4: Strongly agree". The items for the variables are listed in Table 2.

4 Analysis and Findings

We employed SPSS to conduct analyses for the 191 responses received from the online questionnaires. These comprised an analysis of demographic data, a mean score to determine the level of opportunity and risk associated with the digitalisation of the accounting profession, and an independent *t*-test to determine whether there is a statistically significant difference in the gender perception of digitalisation as either an opportunity or a risk.

4.1 Summary of Demographic Data

A total of 110 (57.4%) of the respondents were females, while 81 (42.6%) were males. Most respondents, i.e., 107 (53.6%), fall between the ages of 18 and 20, while 73 (38.45%) fall between the ages of 21 and 25. 172 (90.5%) of the respondents were enrolled for BSc Accounting, of which 77 (40.5%) are already a student member of the professional accounting body in Nigeria. Most respondents, i.e., 96 (50.5%), hailed from universities within the North-central followed by the South-western region, i.e. 38 (20%) of Nigeria.

4.2 Reliability Testing

Instrument reliability was tested using the Cronbach's alpha and this gave us values greater than 0.7 (see Table 3) for both constructs, an acceptable threshold according to Forero (2023), suggesting the reliability of the instrument items for further analysis.

4.3 Mean Score for Opportunity and Risk of Digitalisation

To answer the first research question RQ1, we evaluated the responses gathered from respondents on the perspectives about digitalisation based on whether they present opportunities or risks for future professionals, as shown in Table 4. Interpretation of the mean score levels is low (1.00–2.00), medium (2.01–3.00), and high (3.01–4.00), respectively. Table 5 displays the mean scores for each item including the overall mean scores for both constructs.

The findings reveal a nuanced perception of digitalisation among future accounting professionals. From Table 5, the highest rated under opportunity is "digitalisation will raise more work autonomy" with MS of 2.83. This indicates that students acknowledge technology's potential to promote work flexibility by

Table 3 Reliability statistics

	Cronbach's alpha	Cronbach's alpha based on standardised items	*N* of items
Opportunities	0.815	0.815	5
Risk	0.736	0.736	5
Combined	0.754	0.751	10

Table 4 Interpretation of mean score

Mean score range	Interpretation	Mean score range	Category	Interpretation
1.00–1.75	Strongly Disagree	1.00–2.00	Low	Respondents generally disagree (low support)
1.76–2.50	Disagree	2.01–3.00	Medium	Respondents are neutral or slightly agreeing/disagreeing
2.51–3.25	Agree	3.01–4.00	High	Respondents generally agree (gave high support)
3.26–4.00	Strongly agree			

Table 5 Items mean scores (MS)

Opportunity	*N*	Mean	Std. Dev	Min	Max
Digitalisation can create more new jobs	191	2.71	0.983	1	4
Digitalisation would reduce working time	191	2.68	0.977	1	4
Digitalisation will raise more work autonomy	191	2.83	0.975	1	4
Digitalisation will provide better ergonomics like support in performing heavy, dangerous, or complex task	191	2.76	0.987	1	4
Digitalisation will enhance more gender equality	191	2.62	0.992	1	4
Overall Mean Score (OMS)	191	2.72			
Risk					
Digitalisation would introduce challenges to work	191	2.74	0.873	1	4
Digitalisation would raise job instability	191	2.69	0.898	1	4
Digitalisation might expand working time (working from anywhere and at any time)	191	2.96	0.845	1	4
Digitalisation would increase the workload (work intensification, dependence on "data masters" and surveillance)	191	2.84	0.894	1	4
Digitalisation would increase competition among employees	191	2.84	0.877	1	4
Overall Mean Score (OMS)	191	2.814			

Note: *N* = population size; Min = Minimum; Max = Maximum; Mean = Average of a dataset; Std. Dev = Standard Deviation

providing employees the opportunity to work remotely using digital tools, encourage independent decision-making by reducing dependence on supervisors for routine tasks, and ability to handle repetitive tasks, thus allowing employees to focus on strategic work. This build up the findings of (Awang et al., 2022; Moll &

Yigitbasioglu, 2019). It also aligns with the stance of RBV that digital competencies, autonomy, and enhanced technologies are intangible resources that can assist individuals to build strategic advantage. However, the lowest rated item "enhancing gender equality" with MS of 2.62, reflects low confidence that students have in digitalisation's broader social benefits. This also highlights RBV's limitation in explaining socio-structural perceptions that lie outside individual resource endowment.

In contrast, the highest MS under risk was 2.96 for the item "digitalisation would expand working time" highlights student's concerns about digitalisation leading to an extension of working hours, consequently blurring work–life boundaries. This suggests students are perturbed with the need to carry on their work from anywhere and at any time, increasing expectations for availability, fostering a culture of continuous productivity such that if not managed properly may lead to employee burnout. This scenario highlights that organisational and environmental contexts have critical roles to play in shaping these perceptions, confirming the arguments of TOE framework. For instance, organisational cultures that lack boundaries for digital work, and inadequate institutional frameworks to protect work–life balance could raise these fears. More so, this concern could be the case in a technologically constrained environment like Nigeria, where there are limited supportive organisational practices. In addition, weak regulatory policies protecting employee rights and welfare may reinforce fears of burnout and continuous productivity expectations.

Similarly, comparing the overall mean scores for opportunity (OMS = 2.72) and risk (OMS = 2.81), the risks was slightly higher than opportunities, indicating a higher concern about the disruptive potential of digitalisation, while acknowledging its advantages. This implies that future accounting professionals in Nigerian higher institutions perceive digitalisation as a double-edged sword, presenting both risk and opportunities. Aligning this to the lens of DIT, one can infer that while digitalisation is seen as offering relative advantage through autonomy and flexibility, the perceived complexity of managing work–life boundaries and the low observability of social gains (like gender equality) slow its full acceptance. These findings suggest that without adequate support systems and cultural shifts, the adoption of digitalisation will remain cautious and segmented. In short, these findings suggest a cautiously optimistic position, where respondents admit the empowering potential of digital transformation yet, remain perturbed about workload spiralling. The findings build up early work of (Assidi et al., 2025; Awang et al., 2022; Richins et al., 2017) on the barriers to digitalisation adoption.

4.4 Gender-Based Perception of Digitalisation

The findings for RQ2 on whether perception about digitalisation differ based on gender are examined and summarised in Table 6. For both opportunities and risks, the average of the perception observed by female future professional accountants

Table 6 Independent *t*-test results

Group statistics										
		Gender		*N*		Mean		Std. deviation	Std. error mean	
Opportunity Overall_Score		Male		80		2.6525		0.75019	0.08387	
		Female		111		2.7694		0.74061	0.07030	
Risk Overall_Score_Risk		Male		80		2.7825		0.66614	0.07448	
		Female		111		2.8324		0.57242	0.05433	
Independent samples test										
		Levene's test for equality of variances		*t*-test for equality of means						
		F	Sig.	*T*	*df*	Sig.2-tailed	Mean diff	Std. error diff	95% confidence interval of the difference	
									Lower	Upper
Opportunity	Equal variances assumed	0.103	0.749	−1.070	189	0.286	−0.11687	0.10921	−0.33229	0.09855
Risk	Equal variances assumed	0.810	0.369	−0.555	189	0.579	−0.04993	0.08995	−0.22737	0.12751

was slightly higher for both (2.7694 and 2.8324, respectively). However, the differences were insignificant based on the values revealed for the 2-tailed Sig. value, $t = -1.070$; $df = 189$; $p = 0.286$ for opportunities and $t = -0.555$; $df = 189$; $p = 0.579$ for risks. The magnitude of both mean differences (−0.12 and −0.05 approximately) was equally small. Overall, the findings reveal that females though perceived slightly more opportunities and risks than males. Yet, these differences were not statistically significant suggesting that gender does not significantly influence perceptions of opportunities and risks of digitalising the accounting profession.

5 Conclusion

This study addresses the concerns held by future professional accountants on digitalising the accounting profession. The conclusion from the study highlights a divide between optimism and fear of digitalisation. The findings reveal a nuanced perspective among future accounting professionals, who perceived digitalisation as a double-edge sword, offering both opportunity and threat irrespective of gender. While concerns were raised on job displacement, increased workload, and disruptions to traditional accounting processes, there is also the optimism that digitalisation has the potential to foster greater work flexibility, enhance accountant roles, and new service opportunities particularly for those who embrace multidisciplinary skills in areas like computer science technology, engineering, etc., and continuous upskilling.

These insights therefore underscore the urgent need for accounting educators to integrate digital competencies and strategic thinking within the university teaching curriculum. Similarly, professional bodies and industry stakeholders have a proactive role to play by investing in targeted training programmes and supporting lifelong learning initiatives that will empower future accountants to navigate the demands of the 4IR.

While there is no doubt that digitalisation will pose both challenges and opportunities to the profession, it is crucial to understand that digitalising the profession is unavoidable. It is important to also understand that digitalisation does not negate the relevance of human expertise or professional judgement. Instead, it redefines the accountant's role, demanding adaptability, innovation, and critical thinking. Hence, prospective accountants are encouraged to make themselves open to the digital innovation and explore all its opportunities to remain relevant in their work environment.

Despite the study contribution, it is not without setbacks. This study's limited focus on accounting students across Nigerian higher institutions may affect the generalisability and applicability of the findings to another geographical context. Additionally, the nature of the research provides only a snapshot in time failing to capture how perceptions may shift as digitalisation progresses or as students transition into the workforce. Hence, future research should examine longitudinal shifts in perceptions towards digitalisation and explore regional differences in digital adoption to provide broader insights into the profession's evolving landscape.

References

Al Shanti, A. M., & Elessa, M. S. (2023). The impact of digital transformation towards blockchain technology application in banks to improve accounting information quality and corporate governance effectiveness. *Cogent Economics and Finance, 11*(1), 2161773. https://doi.org/10.1080/23322039.2022.2161773

Askary, S., Abu-Ghazaleh, N., & Tahat, Y. A. (2018). *Artificial intelligence and reliability of accounting information*. 17th Conference on E-Business, e-Services and e-Society (I3E), 11195 LNCS (pp. 315–324). https://doi.org/10.1007/978-3-030-02131-3_28

Assidi, S., Omran, M., Rana, T., & Borgi, H. (2025). The role of AI adoption in transforming the accounting profession: A diffusion of innovations theory approach. *Journal of Accounting and Organizational Change, 21*(5), 1–22. https://doi.org/10.1108/JAOC-04-2024-0124

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 of International Academic Symposium of Social Science, 82*, 93. https://doi.org/10.3390/proceedings2022082093

Baiod, W., & Hussain, M. M. (2024). The impact and adoption of emerging technologies on accounting: Perceptions of Canadian companies. *International Journal of Accounting and Information Management, 32*(4), 557–592. https://doi.org/10.1108/IJAIM-05-2023-0123

Berikol, B. Z., & Killi, M. (2021). The effects of digital transformation process on accounting profession and accounting education. *Ethics and Sustainability in Accounting and Finance, 2*, 219–231. https://doi.org/10.1007/978-981-15-1928-4_13

Brennan, B., Baccala, M., & Flynn, M. (2017). Artificial intelligence comes to financial statement audits. In *Cfo* (pp. 2–5). https://www.cfo.com/news/artificial-intelligence-comes-to-financial-statement-audits/660745/

Ebekozien, A., Hafez, M. A., Aigbavboa, C., Samsurijan, M. S., Al-Hasan, A. Z., & Nwaole, A. N. C. (2024). Appraising education 4.0 in Nigeria's higher education institutions: A case study of built environment programmes. *Sustainability (Switzerland), 16*(20), 8878. https://doi.org/10.3390/su16208878

Forero, C. G. (2023). Cronbach's alpha. In F. Maggino (Ed.), *Encyclopedia of quality of life and well-being research* (pp. 1505–1507). Springer. https://doi.org/10.1007/978-3-031-17299-1_622

Gomaa, A. A., Gomaa, M. I., Boumediene, S. L., & Farag, M. S. (2023). The creation of one truth: Single-ledger entries for multiple stakeholders using blockchain technology to address the reconciliation problem. *Journal of Emerging Technologies in Accounting, 20*(1), 59–75. https://doi.org/10.2308/JETA-19-06-01-28

Gulin, D., Hladika, M., & Valenta, I. (2019). Digitalization and the challenges for the accounting profession. *ENTRENOVA-ENTerprise REsearch InNOVAtion, 5*(1), 428–437. https://doi.org/10.2139/ssrn.3492237

Jackson, D., & Allen, C. (2024). Technology adoption in accounting: The role of staff perceptions and organisational context. *Journal of Accounting and Organizational Change, 20*(2), 205–227. https://doi.org/10.1108/JAOC-01-2023-0007

Karajovic, M., Kim, H. M., & Laskowski, M. (2019). Thinking outside the block: Projected phases of blockchain integration in the accounting industry. *Australian Accounting Review, 29*(2), 319–330. https://doi.org/10.1111/auar.12280

Kohlrausch, B., & Weber, L. (2021). Gender relations at the digitalised workplace: The interrelation between digitalisation, gender, and work. *Gender a Vyzkum/Gender and Research, 21*(2), 13–31. https://doi.org/10.13060/GAV.2020.010

Kroon, N., Do Céu Alves, M., & Martins, I. (2021). The impacts of emerging technologies on accountants' role and skills: Connecting to open innovation-a systematic literature review. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(3), 163. https://doi.org/10.3390/joitmc7030163

Li, Z., & Zheng, L. (2018). *The impact of artificial intelligence on accounting*. 4th International Conference on Social Science and Higher Education (ICSSHE 2018) (pp. 247–265). https://doi.org/10.1007/978-3-031-19886-1_18

Markoc, I. (2025). The digitalization tendency of young adults: Differences by living environment, gender and education. *Online Information Review, 49*(1), 136–163. https://doi.org/10.1108/OIR-01-2023-0020

Mohammad, S. J., Hamad, A. K., Borgi, H., Thu, P. A., Sial, M. S., & Alhadidi, A. A. (2020). How artificial intelligence changes the future of accounting industry. *International Journal of Economics and Business Administration, 8*(3), 478–488. https://doi.org/10.35808/ijeba/538

Moll, J., & Yigitbasioglu, O. (2019). The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *British Accounting Review, 51*(6), 100833. https://doi.org/10.1016/j.bar.2019.04.002

Nguyen, T., Le-Anh, T., Nguyen Thi Hong, N., Huong Nguyen, L. T., & Nguyen Xuan, T. (2025). Digital transformation in accounting of Vietnamese small and medium enterprises. *Journal of Financial Reporting and Accounting, 23*(2), 769–787. https://doi.org/10.1108/JFRA-12-2023-0761

Ozili, P. K. (2025). Artificial intelligence application and research in accounting, finance, economics, business, and management. In *Generative artificial intelligence in finance: Large language models, interfaces, and industry use cases to transform accounting and finance processes* (pp. 3–19). Wiley Online Library. https://doi.org/10.1002/9781394271078.ch1

Richins, G., Stapleton, A., Stratopoulos, T. C., & Wong, C. (2017). Big data analytics: Opportunity or threat for the accounting profession? *Journal of Information Systems, 31*(3), 63–79. https://doi.org/10.2308/isys-51805

Rogers, E. M. (2010). Diffusion of innovations. In *Simon and Schuster*. https://ocw.metu.edu.tr/file.php/118/Week9/rogers-doi-ch1.pdf

Savić, B., & Pavlović, V. (2023). Impact of digitalization on the accounting profession. In *Digital transformation of the financial industry: Approaches and applications: Vol. Part F233* (pp. 19–34). Springer International Publishing. https://doi.org/10.1007/978-3-031-23269-5_2

Schillo, R. S., & Ebrahimi, H. (2022). Gender dimensions of digitalisation: A comparison of Venture Capital backed start-ups across fields. *Technology Analysis and Strategic Management, 34*(7), 733–745. https://doi.org/10.1080/09537325.2021.1918336

Sen, D. (2019). Do men and women perceive digital economy in india differently? *Journal of Multidisclipinary Research, 77*(10), 68–77.

Senyah, M. M. (2023). Digitalisation, gender, and career intentions: Knowledge mapping. *Virtual Economics, 6*(3), 38–55. https://doi.org/10.34021/VE.2023.06.03(3)

Shi, Y. (2020). The impact of artificial intelligence on the accounting industry. *Advances in Intelligent Systems and Computing, 928*, 971–978. https://doi.org/10.1007/978-3-030-15235-2_129

Soldevilla, O. A. L., Ibarra, V. M., Cuaresma, J. R. M., Sibina, R. U., Stone, D., Cerrón, A. H., & Pintado, E. A. P. (2025). Transforming accounting education: Integrating technological, soft and research skills in education. *Cogent Education, 12*(1). https://doi.org/10.1080/2331186X.2025.2478304

Syed, R., Suriadi, S., Adams, M., Bandara, W., Leemans, S. J. J., Ouyang, C., ter Hofstede, A. H. M., van de Weerd, I., Wynn, M. T., & Reijers, H. A. (2020). Robotic process automation: Contemporary themes and challenges. *Computers in Industry, 115*, 103162. https://doi.org/10.1016/j.compind.2019.103162

Taib, A., Awang, Y., Shuhidan, S. M., Zakaria, Z. N. Z., Sulistyowati, S., & Ifada, L. M. (2023). Digitalization of the accounting profession: An assessment of digital competencies in a Malaysian comprehensive university. *Asian Journal of University Education, 19*(2), 365–380. https://doi.org/10.24191/ajue.v19i2.22229

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), 2220198. Cogent OA. https://doi.org/10.1080/23311975.2023.2220198

Voss, E., & Riede, H. (2018). *Digitalization and worker participation: What trade unions. Company level workers and online platform workers in Europe think* (pp. 1–37). Syndicat European Trade Union.

Wei, C., Zhou, H., Zhang, X., & Ouyang, S. (2025). The dark side of digital transformation: Digital washing and accounting conservatism. *International Review of Economics and Finance, 98*, 103933. https://doi.org/10.1016/j.iref.2025.103933

Weigel, C., & Hiebl, M. R. W. (2023). Accountants and small businesses: Toward a resource-based view. *Journal of Accounting and Organizational Change, 19*(5), 642–666. https://doi.org/10.1108/JAOC-03-2022-0044

Yigitbasioglu, O., Green, P., & Cheung, M. Y. D. (2023). Digital transformation and accountants as advisors. *Accounting, Auditing and Accountability Journal, 36*(1), 209–237. https://doi.org/10.1108/AAAJ-02-2019-3894

Zhang, Y., Xiong, F., Xie, Y., Fan, X., & Gu, H. (2020). The impact of artificial intelligence and blockchain on the accounting profession. *IEEE Access, 8*, 110461–110477. https://doi.org/10.1109/ACCESS.2020.3000505

Živković, L., Štrbac, D., & Paunović, M. (2024). Digitalisation, growth vision and gender equality practices in the machines and equipment sector—Does gender matter? *Journal of Women's Entrepreneurship and Education, 1–2*, 157–176. https://doi.org/10.28934/jwee24.12.pp157-176