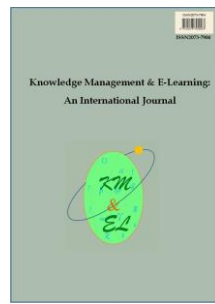

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Accountants' information technology reskilling: Antecedents and the moderating role of gender

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Abstract: Technological changes lead to the shift of accounting roles. Therefore, accountants need information technology (IT) reskilling. This study aims to explore influential factors driving professional accountants' development of IT skills as well as the moderating impacts of gender. A research framework was introduced covering three aspects of technology, individuals, and organizations. An online survey was conducted. An exploratory factor analysis was carried out to extract potential factors. Hypotheses were tested using hierarchical moderated regression. Perceived IT low complexity, perceived IT trialability, IT knowledge, perceived organizational support, and self-directed learning readiness were found important in improving accountants' intention to IT reskill. However, their IT reskilling behavior was influenced only by their past behavior in terms of non-IT reskilling behavior. This work makes a crucial contribution to the understanding of what factors motivate accountants' IT reskilling, which is currently essential for accountants to maintain their professions. Findings could be generalized to both new and mid-career accountants since the data was collected from wide working aged accountants, both males and females.

Keywords: Accountancy profession; Lifelong learning; IT reskilling; Diffusion of innovation theory; Gender; Intention

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1. Introduction

The accountancy profession faces challenges from technological advances such as intelligent automation, blockchain, big data, and cloud computing, which increase the complexity of technological tasks and impact accountants' skills (Bootnoi et al., 2020; Jackson et al., 2020, 2022, 2023; Pasewark, 2021; Taib et al., 2023). Technical transformation in professional accountants significantly affects business profitability (Awang et al., 2023; Taib et al., 2023). Accountants are thus expected to improve their information technology (IT) knowledge and skills to better complete tasks and make decisions as well as to ensure their survival (Awang et al., 2023; Bootnoi et al., 2020; Jackson et al., 2020; Taib et al., 2023).

Although IT knowledge and skills are crucial for contemporary accounting success (Jackson et al., 2020), they are not frequently used in work by professional accountants (Rufino et al., 2017). Less attention has been given to IT preparedness among early career accountants (ECAs) (Jackson et al., 2022). Concerns about whether formal education and professional training effectively prepare accountants for IT challenges are also raised (Awang et al., 2023). In addition, there are documented gaps regarding the technology-related competencies of graduate accountants (Jackson et al., 2023). Industry 4.0 increases demand for accountants skilled in both accounting and IT, requiring new competencies in data analytics, automation, and process optimization (Alkoutaini et al., 2024). Accounting firms must equip accountants with technology skills to leverage technological advancements in the profession (Fetzer et al., 2023).

The need to keep up to date with the latest IT knowledge and skills requires a commitment to lifelong learning (LLL) (Jackson et al., 2020; Suwardy et al., 2011), particularly for accountants (Jackson et al., 2020, 2022, 2023; Lindsay, 2016). Continuing Professional Development (CPD) is a part of LLL, which relates to the ongoing, deliberate, and self-motivated pursuit of knowledge (Jackson et al., 2023; Lindsay, 2016; Mashile et al., 2020). However, there have been limited studies on the effectiveness of CPD in accounting (Suwardy et al., 2011). According to Bootnoi et al. (2020), working and LLL skills, which can be measured by digital literacy, are part of

Thai accounting graduates' desirable skills. Digital competence is also one of the fundamental competencies for LLL (Rivadeneira et al., 2022; Taib et al., 2023). Universities play a vital role in instilling LLL mindsets and preparing students for continuous change (De Villiers, 2021; Lui & Shum, 2022). With tasks increasingly automated and technology integrated into accounting, professionals must evolve from routine roles to analytical and strategic ones, making LLL essential (Akpan, 2024; Nimigean, 2021).

The role of accountants has been changed (Jackson et al., 2022; Mashile et al., 2020). They need to develop several skills and competencies to perform a variety of tasks (Awang et al., 2023; Taib et al., 2023). Many tasks traditionally done by ECA are substituted by highly skilled responsibilities such as optimizing capital and improving processes (Jackson et al., 2022). Soon, some core roles and tasks of professional accountants will be performed by artificial intelligence (AI). Accountants are thus needed to collaborate with IT to fill new roles (Taib et al., 2023). However, the profession faces a growing digital skills gap, as 69% of new accountants report lacking advanced technological competencies. Practicing accountants also lag in essential areas like data mining and business intelligence. To remain relevant, they must acquire capabilities that drive efficiency and strategic value in e-accounting (Nwakeze & Onwuliri, 2021).

It is thus important for professional accountants to proactively reskill through LLL (Awang et al., 2023; Ditkaew, 2023; Jackson et al., 2023; Mashile et al., 2020; Paderanga et al., 2023; Russo, 2023; Taib et al., 2023; Vinayan et al., 2020; Yu et al., 2023). Reskilling refers to learning new skills to do a different job (Hasa, 2021; Monear, 2020). It enables employees to transition to a different job role when the current role becomes irrelevant (Gupta, 2023; Kar et al., 2021; Monear, 2020). This is especially critical as automation and AI transform accounting roles (Lui & Shum, 2022). Organizations must support this shift by launching reskilling and transition programs to minimize job displacement and mismatch (Ajayi-Nifise et al., 2024; Prasertianingrum & Sonjaya, 2024). Accountants need to reskill to learn software and hardware skills (Fetzer et al., 2023) as well as digital tools, automation, and data analytics (Alkoutaini et al., 2024). Globally, over a billion people are expected to need reskilling by the next decade (Kusaila & Kulesza, 2022), while accounting professionals in places are already seeing new job opportunities emerge from Industry 4.0 (Alkoutaini et al., 2024). Data and technology skills are ranked as the first skills to succeed in the accounting profession (Jackson et al., 2022).

Although IT reskilling for accountants is important, universities do not actively participate in LLL (Pasewark, 2021). Understanding the opportunities for universities, organizations, and professional associations is essential to better develop IT skills for accountants (Jackson et al., 2020). There is also a need to explore the digital competencies required for future accountants to perform their duties in digitalized environments (Taib et al., 2023). In practice, accountants must take initiative in managing their own learning by consistently reskilling to meet evolving labor market needs (Tsiligiris & Bowyer, 2021), especially in developing countries where limited access to training can intensify unemployment and inequality (Anomah et al., 2024). The question of the effectiveness and efficiency of formal and non-formal education in preparing accountants to cope with technological challenges is also raised (Awang et al., 2023). Digital technology skills not only improve general competency but are shown to significantly enhance auditors' ability to assess fraud risks (Mohd Razali et al., 2025). Past research on learning intention is limited (Kyndt et al., 2011). Only a few studies investigate the connection between self-directed learning and outcomes such as entrepreneurial learning (Tseng, 2013). Workplace learning studies are also scarce,

despite their value in informing learning strategies in professional contexts (Kusaila & Kulesza, 2022). Little research has been conducted to explore gender as a moderator, for instance, moderating the relationship between perceived learning support and learning performance (Wongwatkit et al., 2020). Previous studies on gender differences in self-efficacy for self-regulated learning generally focus on school-age students (Alghamdi et al., 2020).

Prior literature highlights the relevance of several factors. Technological readiness has been identified as critical to successful digital transformation in accounting (Prasetianingrum & Sonjaya, 2024) (Anomah et al., 2024). Individual-level factors such as IT knowledge, self-directed learning readiness, and motivation are also essential, as informal learning alone may not be effective without reflective practices and structured support (Kusaila & Kulesza, 2022). Organizational culture and support such as training, leadership engagement, and resource allocation are crucial in enhancing accountants' digital capabilities and their intention to reskill (Ditkaew, 2023; Fetzer et al., 2023; Prasetianingrum & Sonjaya, 2024). Regarding actual IT reskilling behavior, experiences may shape future behavior (Kusaila & Kulesza, 2022). Furthermore, gender remains a relevant moderator in technology adoption models. While past research indicated men were more likely to adopt technology, recent studies suggest the gap is narrowing, making gender an important but evolving factor to examine in relation to IT reskilling (Aruleba et al., 2022; Awang et al., 2023).

To fulfill the above research gaps, this study aims to answer key research questions (RQ) i.e., 1) do factors relating to technology (perceived IT low complexity and perceived IT trialability), people (IT knowledge and self-directed learning readiness), and organizations (perceived organizational support) impact intention to IT reskilling of accountants? 2) do IT reskilling intention and past behavior (non-IT reskilling frequency) impact IT reskilling behavior? 3) Is gender a moderator of the relationships in the first RQ?

1.1. Literature review

Nimigea (2021) discusses how the COVID-19 pandemic accelerated the need for accountants to adapt to technological changes, reshaping relevant competencies and redefining the accountant's role in a post-pandemic world. Nwakeze and Onwuliri (2021) highlight the need for Nigerian accounting diplomates to upskill in response to technological disruptions. Their study reveals a gap in digital competencies and advocates for integrating advanced digital skills into accounting curricula. Tsiligiris and Bowyer (2021) highlight key skills for future accountants, including digital, ethical, business, and soft skills, emphasizing adaptability and lifelong learning. They propose a framework to guide accounting education reforms in response to the fourth industrial revolution (4IR). Raghavan (2021) discusses how the COVID-19 pandemic accelerated digital transformation in accounting. The study stresses the need for advanced digital and cognitive skills, urging academia to adjust curricula to meet industry demands.

Awang et al. (2022) found that accounting interns perceive both opportunities and risks in the profession's digitalization under 4IR, with no significant gender influence. The study emphasizes the importance of adapting to digital transformation to stay relevant in the evolving workplace. Mohd Faizal et al. (2022) developed a framework to assess accounting professionals' readiness for digital technology adoption, finding that performance expectancy, social influence, and optimism are key factors influencing adoption. Kusaila and Kulesza (2022) investigated auditors' engagement in learning activities integrated into daily tasks and factors influencing this engagement. The study

explored auditors' informal learning preferences across different experience levels and their tendency to participate based on the perceived organizational learning culture. Lui and Shum (2022) explored accounting students' perceptions of RPA's impact, finding an initial expectation gap. After engaging with automation software, students recognized a higher likelihood of RPA replacing accounting jobs. Jackson et al. (2022) found that while early career accountants and organizations agreed on essential skills, ECAs were not fully prepared to leverage new technologies. The study emphasized the need for increased exposure to technology, a change in mindset, and lifelong learning to prepare ECAs.

Awang et al. (2023) found that information and digital literacy significantly impact the digitalization of the accounting profession, while media and ICT literacy were less influential. Mbizi et al. (2022) identified essential skills for African accountants in the 4IR, including computer skills, critical thinking, and data management. The study highlights the need for curricula to include advanced technologies like blockchain and robotics. Jackson et al. (2023) found differing views between early career accountants and managers on technology preparedness, emphasizing the shared role of universities, employers, and associations in building technology-related skills. Fetzner et al. (2023) found that gaps between traditional accounting and technology skills hinder effective technology use in firms. The study highlights the need for leadership support, internal IT staff, and targeted training to adapt to technological change and improve accounting services.

Alkoutaini et al. (2024) found that Iraqi accountants are unprepared for 4IR due to digital, technical, and regulatory challenges. The study highlights potential benefits like improved efficiency and accurate reporting, urging investment in education, infrastructure, and innovation. Prasertianingrum and Sonjaya (2024) conducted a systematic literature review on digital accounting and AIS, highlighting their transformative impact on efficiency, transparency, and strategic decision-making. The study stresses the need for organizations to embrace emerging technologies while addressing cybersecurity, regulatory, and readiness challenges. Anica-Popa et al. (2024) identify the evolving competencies needed for accounting and auditing professionals amid the rise of Generative AI, emphasizing data analysis, risk management, and effective AI interaction. They propose a system model to integrate Generative AI into decision-making and lifelong learning. Anomah et al. (2024) examine how accounting professionals in Ghana adapt to AI disruption, identifying key adaptability attributes like readiness, leadership, and resistance to change. Alkhwalidi et al. (2024) extended the Unified Theory of Acceptance and Use of Technology (UTAUT) model to examine blockchain adoption in accounting and auditing in Jordan, finding that performance expectancy, social influence, and blockchain transparency and efficiency significantly influence user intention and actual use, which in turn impact knowledge acquisition and user satisfaction.

While prior studies highlight the need for reskilling due to technological disruption, they do not comprehensively analyze the combined effects of technological, individual, and organizational factors on IT reskilling behavior. Many of them focus on intention or perception, while this study pays attention to intention to reskill with actual IT reskilling behavior. Some studies mentioned the absence of gender influence in perception, but they do not test gender as a moderating variable. This study specifically examines gender's moderating effect, offering nuanced insights into demographic influences on IT reskilling. Past studies are limited to early-career or student populations. The current study improves generalizability by including a wide age range of accounting professionals across career stages.

2. Hypothesis development

2.1. *Perceived IT low complexity*

Rogers' diffusion of innovation theory (DOI) tries to explain how innovations are adopted. The theory introduces five attributes of innovation impacting decision process and adoption i.e., relative advantage, compatibility, complexity, trialability, and observability (Bodea et al., 2017; Duan et al., 2010; Russo, 2023; Scott et al., 2008; Warner et al., 2019). Complexity is the degree to which an innovation is perceived as difficult to understand and use (Hsbollah & Idris, 2009; Nik Azman et al., 2021; Scott et al., 2008; Tan, 2013). When key players perceive an innovation as being simple to use, it will be adopted more easily (Scott et al., 2008). Complexity is also defined as an innovation easy to use (Al-Rahmi et al., 2019; Bodea et al., 2017). Innovations involving additional knowledge might be more difficult for people to understand (Duan et al., 2010; Nik Azman et al., 2021).

Not only in the context of innovation, DOI could be employed to address technological characteristics influencing adoption (Mirabolghasemi et al., 2019; Russo, 2023) as well as in other contexts such as e-learning (Duan et al., 2010). Past research states that complexity is generally perceived as an innovation characteristic for preparation, teaching delivery, and managerial tasks in schools (Ntemana & Olatokun, 2012). Perceived complexity can enhance the positive perception of virtual learning among educators (Nik Azman et al., 2021). Behavioral intention to use is negatively affected by the complexity of the e-learning system (Al-Rahmi et al., 2019). Complexity is significantly associated with e-learning readiness (Mirabolghasemi et al., 2019). It also significantly decreases Open Educational Resources (OER) adoption (Menzli et al., 2022). Complexity has a significant impact on learners' intention to use mobile learning (Joo et al., 2014). Complexity significantly increases both perceived ease of use and perceived usefulness, which later significantly lead to academic self-efficacy and learning persistence respectively (Alamri, 2022).

The complexity in terms of ease of using ICTs is proposed to positively affect the attitude of lecturers toward using the technology (Ntemana & Olatokun, 2012). Technological complexities are one of the obstacles to adopting AI and robotics (Nam et al., 2021). Yu et al. (2023) state that the complexity of AI could be an obstacle to adoption since it may be perceived as difficult to understand or operate. The perceived complexity of large language models (LLMs) in software engineering is a critical aspect of understanding their diffusion (Russo, 2023). In the context of 4IR accounting technologies, the extent to which these innovations are perceived as advantageous, compatible with existing values, easy to use (low complexity) and testable (trialability) strongly influences adoption, encouraging technology diffusion (Mbizi et al., 2022).

2.2. *Perceived IT trialability*

Trialability is an attribute of innovation (Soltani et al., 2023). It is the degree to which an innovation can be experimented with on a limited basis (Scott et al., 2008; Tan, 2013). Innovations that can be tried before fully implemented under limited time, energy, and resources are more adopted (Scott et al., 2008). Trialability is indicated by whether a potential adopter can test innovation before complete adoption (Nik Azman et al., 2021; Warner et al., 2019), giving him/ her ample time to understand the functions and benefits of innovation (Nik Azman et al., 2021). Triable innovation presents less uncertainty to an individual who considers adoption (Duan et al., 2010).

The trialability of ICTs is proposed to positively affect lecturers' attitudes toward using the technology (Ntemana & Olatokun, 2012). Trialability is proposed to have a positive influence on OER adoption (Menzli et al., 2022) and learners' intention to use mobile learning (Joo et al., 2014). The association between perceived trialability and virtual learning adoption by educators in Malaysia is also proposed (Nik Azman et al., 2021). The perceived trialability of e-learning significantly influences the intention to adopt e-learning (Duan et al., 2010). Trialability also significantly increases the perceived usefulness of an e-learning system, which later affects behavioral intention to use the system (Al-Rahmi et al., 2019) and academic self-efficacy and learning persistence respectively (Alamri, 2022).

Past research supports the positive relationship between perceived trialability and adoption decisions (Nik Azman et al., 2021). For AI, trialability could positively affect users' attitudes toward adoption (Yu et al., 2023). Trialability, which can be achieved through pilot projects, is one of the key criteria for Industry 4.0 adoption as well (Soltani et al., 2023).

2.3. IT knowledge

A technological perspective of knowledge is required to be added to the TPACK framework for effective teaching and learning (Gou et al., 2020; Wardoyo et al., 2021). Technological knowledge facilitates the teaching and learning process (Wardoyo et al., 2021). Firms need to present a strong intention to learn and gain technological knowledge to produce quality products (Si et al., 2018). Individuals should have the necessary IT skills to use e-learning systems. Users should have computer knowledge to participate in an online environment (Mirabolghasemi et al., 2019).

Technological knowledge acquisition from mobile devices is proposed to increase technological content knowledge (Hossain et al., 2021). Technology knowledge significantly affects game-based learning tools, which significantly enhance learning achievement (Wardoyo et al., 2021). Technology knowledge of teachers has a significant effect on their behavior to use blended learning for teaching (Anthony et al., 2023). Information systems (IS) or IT knowledge is proposed to be associated with e-learning readiness (Mirabolghasemi et al., 2019). Technology readiness of students significantly positively correlates with student-teaching presence and learning motivation (Geng et al., 2019). Technology self-efficacy significantly increases teachers' and students' continuous intention to use the e-learning platform (Saeed Al-Marroof et al., 2020).

Digital literacy significantly improves course satisfaction (Thamrin et al., 2023). The perceived digital literacy of students is proposed to positively predict their self-efficacy in online education (Maftei et al., 2023). Students' digital competence has a significant influence on digital informal learning and their academic performance (Mehrvarz et al., 2021). The digital readiness of students is significantly positively related to their academic engagement (Kim et al., 2019).

In the accounting context, digital competence, which includes information, media, communication, and digital literacy, has been found to significantly impact the digitalization of accounting profession among postgraduate accounting students, showing the importance of foundational IT knowledge in adapting to technological changes (Awang et al., 2023). Furthermore, auditor competency, which encompasses both knowledge and experience, has been shown to enhance fraud risk assessment, and this effect is amplified when digital capability is high, indicating the necessity of IT knowledge for professional effectiveness (Mohd Razali et al., 2025).

2.4. *Perceived organizational support*

Perceived organizational support (POS) is an employee's perception of how he/she is treated by an organization (Afzali et al., 2014). It is also defined as general perceptions of support from an organization (Puah et al., 2016), which is shaped by an employee's work experience (Kebede & Wang, 2022). Positive POS can increase an employee's commitment and loyalty as well as help the organization accomplish its goals (Afzali et al., 2014). Employees with higher organizational support have greater creativity, commitment, and optimal performance (Kasmari et al., 2022).

POS significantly increases job performance, psychological empowerment, and organizational learning (Afzali et al., 2014). It significantly encourages employees' felt obligation to care about a company's welfare and to help the company reach its objectives (Eisenberger et al., 2001). POS significantly increases employee's commitment to the organization (Kasmari et al., 2022; Mihalache & Mihalache, 2022). POS significantly predicts teachers' career satisfaction (Oubibi et al., 2022) and their continuance intention to use e-learning platforms (Saeed Al-Marroof et al., 2020). POS significantly influences a lecturer's self-efficacy and readiness for change (Taufikin et al., 2021). It also significantly mediates the relationship between organizational justice and employee readiness for change (Kebede & Wang, 2022). POS significantly improves self-efficacy, work engagement, and job satisfaction (Caesens & Stinglhamber, 2014).

Perceived support i.e., managerial support, job support, and organizational support has a significant and positive effect on intention to use e-learning (Tang et al., 2014). In the context of enterprise resource planning (ERP) systems, the availability of support materials significantly affects subjective norms, perceived behavioral control, and intention to continue using ERP systems as well (Chen et al., 2011). In the accounting profession, promoting continuous learning and professional development such as offering targeted training programs and incentives for reskilling can reflect an organization's support for staying relevant in the digital era (Alkoutaini et al., 2024).

2.5. *Self-directed learning readiness*

Self-directed learning (SDL) is accounted for as the process by which individuals acquire new knowledge, skills, and competencies for their performance (Tseng, 2013). The relationship between SDL and LLL is reciprocal since SDL pursues learning throughout life, to engage in non-routine analytic tasks and complex problem-solving (Salleh et al., 2019; Teo et al., 2010). SDL forms the basis for an accounting professional's LLL (Malan & Stegmann, 2018). Self-directed learners generally more actively engage in learning tasks (Geng et al., 2019). Learning readiness encapsulates strong personal belief and self-management to learn (Ahmed, 2023). SDL readiness normally deals with adult education (Ahmed, 2023; Teo et al., 2010). It effectively predicts learning behavior in blended learning in past research. A student with high SDL readiness tends to be an autonomous learner (Ahmed, 2023).

Self-directedness in career processes is positively associated with the intention to participate in future learning activities, particularly for low-qualified employees (Kyndt et al., 2011). SDL significantly contributes to LLL (Salleh et al., 2019). It significantly improves perceived learning presence and learning motivation (Chau et al., 2021) as well as students' readiness affecting behavioral intention to use and perceived behavioral control impacting actual use of blended learning (Almulla, 2022a). It is also proposed as a driver for entrepreneurial learning, knowledge, and experience, which consequently increases entrepreneurial performance (Tseng, 2013). SDL readiness significantly affects

the intention to engage in SDL for digital competence (Ahmed, 2023). It also significantly positively correlates with student cognitive presence and learning motivation for students in the blended learning group (Geng et al., 2019). SDL orientation is a significant predictor of work-related learning (Gijbels et al., 2010). SDL attitude and SDL approach significantly enhance the perceived value of knowing learning goals, which is related to behavioral, emotional, and cognitive engagement (Sun et al., 2023). Students' SDL skills significantly increase their online learning engagement and decrease their negative academic emotions (Li et al., 2023). To this end, the following hypotheses have been proposed:

H1: There is a positive relationship between a) perceived IT low complexity, b) perceived IT trialability, c) IT knowledge, d) perceived organizational support, e) self-directed learning readiness, and accountants' intention to IT reskill.

2.6. Intention to IT reskill

Behavioral intention is the likelihood that a person will use an information system and educational technology (Almogren & Aljammaz, 2022). An individual's learning intention determines the participation in learning activities (Kyndt et al., 2011). There is a significant relationship between behavioral intention and the actual use of digital tools for teaching and learning (Almulla, 2022b). Student's behavioral intention to use blended learning significantly increases the actual use of blended learning (Azizi et al., 2020). Intention to use e-learning significantly drives e-learning impact, which subsequently increases both individual and organizational impacts (Tang et al., 2014). Learners' intention to use mobile learning significantly affects their actual use of mobile learning (Almogren & Aljammaz, 2022; Alzaza, 2013; Joo et al., 2014). Users' intention to continue using the information system has a significant and positive effect on actual use (Al-Emran et al., 2020). In the context of AI adoption, reskilling is essential for equipping employees with relevant capabilities for new technology-driven roles and enabling them to adapt effectively, transforming intention into actionable behavior (Santandreu Calonge et al., 2025).

2.7. Past behavior

Past behavior symbolizes the habitual aspect of human behavior affecting their desires, intentions, and actions. The frequency of past behavior refers to how often that behavior was conducted in the past. Regular activities will be enhanced (Bui & Kiatkawsin, 2020). Past behavior has a significant and positive effect on behavioral intention (Budovska et al., 2020). Past behavior regarding Internet-based learning technologies (IBLT) significantly increases IBLT's continued use (Limayem & Cheung, 2008). Past behavior significantly improves attitudes, social norms, and behavioral control, which later affects behavioral intention (de Leeuw et al., 2014; Patiro & Sihombing, 2016; Wu, 2023). Past behavior significantly influences a customer's intention to visit a green hotel (Wu & Teng, 2011). Past behavior in this study refers to a participant's non-IT reskilling frequency. Hence, the following hypotheses are set for verification:

H2: There is a positive relationship between a) non-IT reskilling frequency, b) intention to IT reskill, and IT reskilling behavior.

2.8. *Gender as a moderator*

Girls tend to cooperate with their science teachers and have more positive reactions to the teachers' instruction than boys (Jiang et al., 2021). Males perceive significantly greater pedagogy, technology, and technological content knowledge compared to females (Gou et al., 2020). Many differences have been found between males and females related to academic achievement. However, conflicting results have been shown by researchers (Fin & Ishak, 2012). The effect of socioeconomic status on academic self-concept is moderated by gender. The influence is found to be stronger for female students than for male students (Fin & Ishak, 2012). Gender moderates learning behavior in professional development. Female employees' intention to learn and actual learning behavior is more robust than male colleagues. They tend to choose a skill development program and reskill themselves (Kar et al., 2021). Previous studies indicate that female students show greater self-efficacy for self-regulated learning and are more confident in metacognitive abilities than males. They also exhibit more capabilities in the aspects of goal setting, planning, and self-monitoring compared to their male counterparts. There are also gender differences in cognitive ability associated with dual information processing (Alghamdi et al., 2020).

Past research reveals gender differences in communication technology adoption such as email (Park et al., 2019). Gender significantly moderates factors e.g., intention to use relating to learning performance in personalized e-learning environments (Wongwatkit et al., 2020). The influence of perceived usefulness on the intention to use multimedia technology for learning and the effect of task-technology fit on perceived usefulness is significantly stronger for men (Park et al., 2019). The relationship between perceived content usefulness and behavioral intention is also significantly greater for male students than for females (Goethals et al., 2011). In the e-learning adoption, gender significantly moderates the relationships between computer self-efficacy (CSE)/ system characteristics (SC)/ social influence (SI)/ perceived ease of use (PEOU) and perceived usefulness (PU), enjoyment/ computer anxiety (CA)/ SC and PEOU, PU and behavioral intention (BI), and PEOU and attitude (Kanwal et al., 2020). Gender significantly moderates the impact of content quality on students' PEOU of a learning management system. The effect is stronger in male students than in females (Binyamin et al., 2020). Considering the intention to pay for massive open online courses (MOOCs), the effect of social influence is weaker in females, but performance expectancy has more effect on females than males (Asokkumar et al., 2024). Women tend to participate in MOOCs less frequently than men (Castano-Munoz et al., 2017).

Gender is a moderator in several contexts related to technology (Park et al., 2019; Venkatesh et al., 2000; Williams et al., 2016). In the accounting context, gender moderates the relationship between behavioral intention and technology adoption, with men showing stronger links between performance expectancy and behavioral intention, while women are more influenced by social pressure (Alkhwaldi et al., 2024). Females are generally more anxious and less confident in using IT, which affects their self-efficacy (Awang et al., 2022). Women in accounting face greater risk of job displacement and are underrepresented in emerging technological roles, highlighting a critical gender gap (Alderman, 2021). As a result, the following hypotheses are proposed:

H3: Gender will significantly moderate the relationships between a) perceived IT low complexity, b) perceived IT trialability, c) IT knowledge, d) perceived organizational support, e) self-directed learning readiness, and accountants' intention to IT reskill.

H4: Gender will significantly moderate the relationships between a) non-IT reskilling frequency, b) intention to IT reskill, and IT reskilling behavior.

3. Method

This paper is a sub-project of the project titled ‘Lifelong learning for professional accountants to develop IT skills. Participants included 658 accountants including 338 female accountants and 320 male accountants. Surveys were distributed to prospective participants with instructions to complete them only if they were accounting professionals with ages ranging from 20-59 years. This study adopts a quantitative research approach, employing a cross-sectional survey design, which is suitable for examining relationships between variables at a specific point in time. The research strategy uses structured questionnaires to collect data efficiently across a large sample. Quota sampling was applied to collect data from males and females equally. It was chosen as the most appropriate non-probability sampling technique for this study because it ensures representation of both genders, and gender is examined as a moderating variable in the analysis. By setting equal quotas for male and female participants, the study can meaningfully compare perceptions and behaviors across gender groups.

A research assistant team helped to gather data. Participants completed online surveys assessing their perceptions and behavior relating to IT reskilling. However, collecting data from accountants online was quite difficult. Therefore, the paper-based survey was used additionally to collect data in the accounting seminars/ training sessions. The data was later input into the Google form by research assistants. All participants read an information sheet detailing their rights as research participants and signed a consent form. The instrument took around 20 minutes to complete.

All participants were fluent in Thai and completed the questionnaire in Thai. The first section collected general information about respondents i.e., gender, age, job area, and reskilling frequency. The last section was about perceptions, intentions, and behaviors. All items were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), except for the past behavior variable. The measurement details are as follows. Perceived IT low complexity was measured using the questions: “Using IT in accounting is easy/simple to use”, “Using IT in accounting would be easy for me”, and “It would be easy for me to become skillful at using IT in accounting” (Scott et al., 2008; Warner et al., 2019). Perceived IT trialability was measured using the questions: “IT in accounting is available to try before I make a decision about using them.”, “I have the opportunity to test IT in accounting before you make a decision about changing your work routine.”, and “I am able to experiment with IT in accounting as needed.” (Scott et al., 2008; Warner et al., 2019). For IT knowledge, these questions were asked: “I know how to solve my own technical IT problems.”, “I know how to handle common IT problems.”, and “I have the technical skills I need to use IT.” (Gou et al., 2020). Perceived organizational support is evaluated using the items: “The company takes pride in my accomplishments.”, “The company values my contributions.”, and “The company strongly considers my goals and values.” (Eisenberger et al., 2001). For SDL readiness, these questions were applied: “I find out more information on the Internet to help me do my job better.”, “I use the computer to work with information for learning.”, and “I use the computer to develop a skill that I am interested in.” (Teo et al., 2010). Intention to IT reskill was measured using these items: “I intend to participate in IT reskilling activities regularly.”, “I intend to follow news about IT reskilling training regularly.”, and “I intend to continuously look for information about IT reskilling courses or activities.” (Kyndt et al., 2011). Past behavior was assessed using the self-reported frequency of non-IT reskilling frequency (hours/ week).

To examine the factor structure, an exploratory factor analysis (EFA) was conducted. Although some constructs and items were adapted from existing literature,

this study focused on IT reskilling behavior among professional accountants, which was a relatively new application area. Therefore, EFA was necessary to identify whether the factor structure remained valid and appropriate for this specific population and research context. EFA was generally applied to investigate underlying factors when there was not much past theoretical guidance for the domain of interest (Dirani & Kuchinke, 2011). Besides, the original questions were designed and used in Western context. Confirmatory Factor Analysis (CFA) was initially considered; however, it was not ultimately used due to several issues encountered during the model evaluation. The CFA results revealed problems with convergent validity, discriminant validity, and construct reliability. For example, the average variance extracted (AVE) for multiple constructs was below the recommended threshold, indicating poor convergent validity. The square roots of the AVEs were lower than the inter-construct correlations, suggesting inadequate discriminant validity. Several constructs also had composite reliability (CR) values below 0.70, indicating measurement inconsistency. Due to these concerns, the CFA results did not meet the acceptable standards for construct validity. As such, EFA was deemed more suitable at this stage to examine the empirical grouping of items without imposing a rigid theoretical structure. Correlation analysis and scale reliability tests were conducted to evaluate internal consistency. Descriptive statistics were calculated for all instruments. Hierarchical multiple regression analyses were used to examine the associations between antecedents of intention to IT reskill and IT reskilling behavior as well as the interaction effect of gender. A P-value less than .10, showing moderated statistical significance, was considered.

3.1. Reliability and validity analysis

Table 1
Factor analysis and reliability

Construct	Item	Factor Loading	Cumulative Percentage of Variance	Cronbach's Alpha
Intention to IT reskill	INT_RESKILL3	.773	11.063	.710
	INT_RESKILL2	.748		
	INT_RESKILL1	.710		
IT knowledge	TECH_KNOW1	.755	21.502	.683
	TECH_KNOW2	.583		
	TECH_KNOW3	.486		
Perceived IT low complexity	T_COMPLX3	.746	31.667	.672
	T_COMPLX1	.672		
	T_COMPLX2	.660		
Perceived organizational support	ORG_SUP2	.749	41.760	.639
	ORG_SUP1	.734		
	ORG_SUP3	.644		
Self-directed learning readiness	SELF_READY3	.802	51.535	.630
	SELF_READY2	.603		
	SELF_READY1	.537		
Perceived IT Trialability	T_TRIAL3	.707	61.022	.640
	T_TRIAL1	.645		
	T_TRIAL2	.626		

Construct validity was assessed by EFA. The significant level of Bartlett's test of Sphericity on measures was 0.000, showing the related variables and suitable for factor analysis. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was .919, indicating the proportion of variance that underlying factors contributed. The principal

component analysis with varimax rotation was applied. As shown in Table 1, all factor loadings were greater than 0.3, which was a threshold for factor analysis (Wang et al., 2005). The results supported six constructs i.e., intention to IT reskill, IT knowledge, perceived IT low complexity, perceived organizational support, self-directed learning readiness, and perceived IT trialability. Each construct had three items. These factors explained 61.022 percent of the total variance. For reliability, all Cronbach's alphas were satisfactory (above 0.6) (Al-Mushasha, 2013; Churchill, 1979; Dinev & Hart, 2004; Janssens et al., 2008; Raharjanti et al., 2022; Rahimnia & Hassanzadeh, 2013). Table 2 presents means, standard deviations, and correlations between the dependent variable and all independent variables.

Table 2

Means, SD, and correlations on variables used in the study

Variables	Mean (SD)			Correlations					
	Male	Female	All	1	2	3	4	5	6
1 Intention to IT reskill	3.68 (.92)	3.68 (.96)	3.68 (.94)	1.000					
2 Perceived IT low complexity	3.90 (.78)	3.68 (.83)	3.79 (.81)	.449***	1.000				
3 Perceived IT trialability	3.81 (.90)	3.72 (.82)	3.77 (.86)	.436***	.547***	1.000			
4 IT knowledge	3.88 (.78)	3.68 (.87)	3.77 (.84)	.462***	.485***	.449***	1.000		
5 Perceived organizational support	3.95 (.80)	3.76 (.82)	3.85 (.82)	.345***	.369***	.440***	.480***	1.000	
6 Self-directed learning readiness	4.06 (.70)	3.82 (.82)	3.93 (.77)	.360***	.363***	.303***	.554***	.373***	1.000
7 IT reskilling behavior (hours/ week)	5.66 (6.56)	5.8 (8.04)	5.73 (7.35)						

Note. *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$

4. Results

4.1. Demographic profile

Table 3 shows participants' demographic profiles. Female participants were slightly more than male participants, as well as their ages. The majority of participants and female accountants worked in the auditing area, while many of the male accountants' jobs were general accounting. For reskilling frequency, all of them averagely did both IT/ non-IT reskilling around 2 hours per day and 2 days per week. Interestingly, all, female, and male accountants preferred non-formal learning to IT reskill the most. Non-formal learning is learning in addition to formal learning such as training which takes place in community-based settings, the workplace, etc. (Osman et al., 2017). Data analytics, cybersecurity, and data/database management were the top three IT knowledge or skills that all participants were interested in continuously developing. Female accountants were also interested in networks & cloud computing, whereas male accountants wanted to know more about software/application/app development.

Table 3
Demographics of the study sample

Sample Characteristics	All	Female	Male
Gender	658	338	320
Average age	40.5	40.9	40.0
Area of accounting Job:			
Audit	113	64	49
General accounting	106	48	58
Tax	72	40	32
Costing	76	35	41
Account receivables/ account payable/ inventory	91	54	37
Financial accounting	94	46	48
Administrative work related to accounting/ finance	106	51	55
Reskilling frequency			
Non-IT reskilling (hours/ day)	2.1	2.0	2.1
Non-IT reskilling (days/ week)	2.5	2.5	2.4
IT reskilling (hours/ day)	2.0	2.0	2.1
IT reskilling (days/ week)	2.2	2.3	2.2
Preferred learning forms to IT reskilling			
Formal learning	248	131	117
Non-formal learning	395	202	193
Informal learning	191	85	106
IT knowledge/ skills that are interested in continuously develop			
Data analytics	206	102	104
Automation & robotics	148	74	74
Artificial intelligence & machine learning	165	74	91
Networks & cloud computing	194	100	94
Cybersecurity	207	105	102
Data/database management	221	99	122
Internet of things	188	98	90
Software/application/ apps development	199	90	109

4.2. Hierarchical moderated regression analysis

The necessary assumptions were evaluated and were satisfied. Testing assumptions include normality, linearity, homoscedasticity, and the absence of multicollinearity (Statistics Solutions, 2025). Normality of residuals was evaluated using a normal Predicted Probability (P-P) plot. The residuals followed a normal distribution. They aligned closely with the plot's diagonal line, indicating that the assumptions of the regression model are met. The assumption of homoscedasticity was evaluated by plotting scatterplots. The residuals spread across the range of predicted values. Points were quite equally distributed above and below zero on the X axis and on the left and right of zero on the Y axis. For linearity, if the residuals were normally distributed and homoscedasticity exhibited, linearity typically holds (Statistics Solutions, 2025). For absence of multicollinearity, the correlations between independent variables were below 0.7, suggesting that multicollinearity was not a serious problem (Wang et al., 2018). Besides, tolerance values were larger than 0.1 and variance inflation factors (VIF) were less than 10 (Awang et al., 2023). In terms of independence of observations, the Durbin-Watson statistical values were in the range of 1.5 to 2.5, indicating no autocorrelation. To reduce kurtosis and skewness, the logarithm value of IT reskilling behavior was applied.

Table 4

Moderated regression analysis for intention to IT reskill as a dependent variable

Independent Variables	Step 1: Main effects			Step 2: Interaction effects		
	<i>B</i>	<i>SE</i>	<i>R Square Change</i>	<i>B</i>	<i>SE</i>	<i>R Square Change</i>
(Constant)	.468*	.198	.324***	.845**	.269	.009
Perceived IT low complexity	.233***	.048		.189**	.064	
Perceived IT trialability	.194***	.045		.246***	.064	
IT knowledge	.230***	.049		.192**	.064	
Perceived organizational support	.074+	.045		.028	.060	
Self-directed learning readiness	.134**	.048		.109+	.063	
Gender (0 = Female, 1 = Male)	-.166**	.062		-1.077**	.407	
Gender x Perceived IT low complexity				.080	.097	
Gender x Perceived IT trialability				-.122	.090	
Gender x IT knowledge				.102	.100	
Gender x Perceived organizational support				.104	.090	
Gender x Self-directed learning readiness				.070	.098	

Note. Dependent variable: Intention to IT reskilling; *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$

Table 5

Moderated regression analysis for log of IT reskilling behavior as a dependent variable

Independent Variables	Step 1: Main effects			Step 2: Interaction effects		
	<i>B</i>	<i>SE</i>	<i>R square change</i>	<i>B</i>	<i>SE</i>	<i>R square change</i>
(Constant)	.225	.057	.427***	.238	.081	.004
Non-IT reskilling Frequency	.047***	.002		.042***	.003	
Intention to IT reskilling	.003	.014		.006	.020	
Gender (0 = Female, 1 = Male)	-.027	.027		.005	.115	
Gender x Non-IT Reskilling Frequency				.009+	.004	
Gender x Intention to IT Reskilling				-.023	.030	

Note. Dependent variable: Log of IT reskilling behavior; *** $p < .001$; ** $p < .01$; * $p < .05$; + $p < .10$

To test the moderating effect of gender, hierarchical regression procedures were employed as recommended by Baron and Kenny (1986) and Huo and Kong (2014). In the first step, predictor variables were entered. Then, the interactions were added in the second step. For both Table 4 and Table 5, there were no significant changes in R^2 for the interaction terms, showing insignificant moderating impacts of gender. Hence, there was not enough evidence to reject the null hypotheses of H3a – H3e and H4a – H4b.

As indicated in Table 4, results indicated that all predictors explained a significant proportion of variance in intention to IT reskill, $R^2 = .324$, indicating that approximately 32.4% of the variance in intention to IT reskill was accounted for by the six predictors. This model is statistically significant, $F(6, 651) = 51.927$, $p < .001$, which exceeds the commonly accepted threshold of $p < .05$ for significance. All predictors were statistically significant based on standard cutoff values: Perceived IT low complexity ($\beta = .233$, $p < .001$), perceived IT trialability ($\beta = .194$, $p < .001$), IT knowledge ($\beta = .230$, $p < .001$),

perceived organizational support ($\beta = .074, p < .1$, marginally significant), SDL readiness ($\beta = .134, p < .01$), and gender ($\beta = -.166, p < .01$) significantly predicted intention to IT reskill. Each of these p-values falls below the conventional significance levels ($p < .05, p < .01$, or $p < .001$), indicating statistically significant contributions, except for perceived organizational support, which is marginally significant at $p < .10$.

The results of the second regression in Table 5 indicated one predictor explained 42.7% of the variance ($R^2 = .427, F(3,653) = 162.132, p < .001$). The only predictor of the model was non-IT reskilling frequency ($\beta = .047, p < .001$), surpassing the threshold for significance. In conclusion, all proposed hypotheses (H1a-H1e and H2a) were supported based on the significance levels compared against standard cutoff values.

5. Discussion

According to the literature review in the hypothesis development section, this study presents significant influences of perceived IT low complexity, perceived IT trialability, IT knowledge, perceived organization support, self-directed learning readiness as well as gender on intention to IT reskill. Besides, technology has a positive impact on accountants' attitudes and behaviors (Santandreu Calonge et al., 2025). However, past studies present insignificant relationships between perceived complexity and intention to adopt e-learning (Duan et al., 2010), organizational support and e-learning continuance intention (Mohammadyari & Singh, 2015), facilitating conditions and digital technology adoption (Mohd Faizal et al., 2022), SDL and learning motivation in non-blended learning groups (Geng et al., 2019).

Although gender does not predict informal learning participation among auditors (Kusaila & Kulesza, 2022) and does not influence perceptions of opportunity and risk in the digitalized accounting profession (Awang et al., 2022), it affects IT reskilling intention in this study.

The insignificant moderating effects of gender on all relationships could be explained that gender has a direct impact on the intention to IT reskill. Binyamin et al. (2020) also point out the insignificant moderating effects of gender on the technology acceptance model (TAM)'s constructs i.e., PEOU, PU, BI, and actual use. Alghamdi et al. (2020) reveal an insignificant moderating effect of gender in face-to-face classes. Faqih and Jaradat (2015) showed an insignificant moderating impact of gender on perceived ease of use, perceived usefulness, and subjective norm on behavioral intention to use m-commerce. Gender does not moderate the effects of perceived usefulness on fintech usage adoption (Wijaya et al., 2024), the effects of perceived usefulness and perceived ease of use on e-learning adoption (Omar et al., 2022), or the effects of perceived usefulness, attitude, subjective norm, and perceived behavioral control on the intention to use accounting software applications (Hassan et al., 2021). Besides, past studies have found no differences in technology knowledge and technology readiness (Awang et al., 2023), technology adoption (Bukchin & Kerret, 2020), academic achievement (Fin & Ishak, 2012) and learning intention (Kyndt et al., 2011) based on gender.

Although Han and Sa (2023) show no positive association between past behavior in terms of the frequency of past international travel and the behavioral intentions of vaccinated travelers. Agudo-Peregrina et al. (2014) present insignificant impact of self-reported habit on self-reported frequency of use, this study reveals that the frequency of reskilling in non-IT topics significantly increase participants' IT reskilling frequency.

Surprisingly, the intention to IT reskill does not significantly drive IT reskilling behavior. This could be explained by that IT reskilling behavior may be different from other learning behaviors, as same as the insignificant effect of behavioral intention in past research (Sahadevan & Jedin, 2014; Wu et al., 2017). Besides, Wu and Du (2012) emphasize that actual use such as system usage does not necessarily occur with behavioral intention and suggest that BI may not serve as a good surrogate for usage.

The IT knowledge/ skills that participants are interested in continuously developing are also in line with technical/ digital skills required for current and future accountants (Taib et al., 2023), the need for accountants to participate in system development projects (Taib et al., 2023) and IT investments (Awang et al., 2023), technological trends in accounting (Jackson et al., 2020). Moreover, based on the research results, accountants show strong interest in continuously developing IT knowledge and skills in key areas such as data analytics, automation and robotics, artificial intelligence and machine learning, networks and cloud computing, cybersecurity, data/database management, internet of things, and software development. These interests align with the competencies required to navigate the 4IR. According to Mbizi et al. (2022), the ability to manage 4IR technologies demands not only computer-based accounting knowledge but also critical thinking, problem-solving, emotional intelligence, and the capacity to adapt to fast technological changes. The word cloud analysis in their findings also highlighted data analytics and accounting knowledge as dominant skills.

5.1. Implications for theory and practice

This study supports the application of innovation characteristics of DOI in terms of complexity and trialability together with IT knowledge, perceived organizational support, SDL readiness, and gender in the context of IT reskilling, which is a form of LLL. Researchers could utilize these predictors and the research framework to investigate upskilling and reskilling in other contexts further.

At present, IT in accountancy tasks still relies on simple and traditional IT e.g. accounting software, ERP system while AI adoption in accounting tasks is at a very early stage and data analytic techniques in auditing are on internal data storage which spreadsheet and descriptive data analytics are basic IT skills that all accountants are familiar with. Most of the accounting job areas are IT low complexity as most of the areas are involved with data collection processing and keeping process except the auditing and costing that might related to complex tasks and advanced data analytic tools. However, accountants' tasks are required to change shortly. This work thus guides higher education institutes and workplaces to support accountants in IT reskilling as follows. First, organizations should encourage non-formal, formal, and informal learning for accountants respectively. Non-formal learning is structured through educational and training arrangements, which could be conducted in community-based settings, workplaces, or activities of civil society organizations, while formal learning can be supported by curriculum in educational or training institutions. Informal learning could occur in their daily life through accountants' interests and activities (Osman et al., 2017). Second, accountants' IT reskilling behavior is driven by their past behaviors in terms of their non-IT reskilling frequency. Hence, organizations should enhance accountants' reskilling behavior, not only IT knowledge/ skills benefiting the workplace but also the knowledge/ skills which they prefer and give them advantages. These behaviors will lead to developing IT skills for a different job later.

Third, although the intention to IT reskill does not directly affect accountants' IT reskill behavior, enhancing their IT reskilling intention is a good starting point.

Accountants intend to participate in a job-related learning activity, think about following a job-related training, and look for information about job-related courses and learning activities that they could join to reskill IT because of perceived IT low complexity, IT knowledge, perceived IT trialability, SDL readiness, and perceived organizational support respectively. Therefore, organizations should make their learners/ employees feel that using IT is simple and that becoming skillful at using IT is easy for them. Organizations should also give IT knowledge to accountants, to solve their technical IT problems, to handle common problems with software (e.g., downloading/installing applications), and to add more technical skills that they need to use. In addition, new IT should be available for accountants to try before deciding to use them. They should have an opportunity to assess new IT before committing to their working routine and should be able to experiment with new IT as needed. In addition, organizations should show their employees (accountants) that they take pride in their accomplishments, value their contributions, and strongly consider their goals and values. Organizations should encourage SDL readiness of accountants by enabling them to find more information on the Internet to help them work better and supporting them to use computers to work with information for their learning as well as to form better skills that they are interested in such as learning a language.

Last, compared to female accountants, male accountants have lower intention to IT reskill. Thus, organizations should focus more on supporting the learning about IT such as data/database management, data analytics, and software/application/ app development for men and should enhance women's intention to IT reskill, particularly in the topics about cybersecurity, data analytics, and networks & cloud computing.

6. Conclusion and limitations

This study investigates the antecedents of accountants' IT reskilling behavior and the moderating role of gender. The main findings reveal that accountants' IT reskilling behavior is significantly influenced by perceived IT low complexity, trialability, IT knowledge, perceived organizational support, and self-directed learning (SDL) readiness, while past behavior related to non-IT reskilling also strongly predicts current IT reskilling behavior. Theoretically, this study contributes to LLL and IT reskilling literature by applying innovation characteristics from the Diffusion of Innovation theory along with personal and organizational factors, and SDL readiness. The research provides a validated framework that can be extended to examine upskilling and reskilling in various professional contexts. From a practical standpoint, this study highlights the need for higher education institutions and organizations to support IT reskilling through a mix of formal, non-formal, and informal learning opportunities. Organizations should simplify access to IT, allow hands-on experimentation, build basic IT knowledge, and provide emotional and professional support to foster continuous learning. Moreover, gender-specific strategies may be needed to enhance engagement in reskilling programs. For example, technical topics should be promoted based on interests and skill gaps between male and female accountants.

6.1. Limitations

This work focuses on accountants in a specific country, which may restrict the generalizability of findings. This study does not focus on any form of LLL, which could decrease the specificity of the results. Future research should collect data from other Southeast Asian countries as well as investigate more on a specific form of learning e.g.,

informal learning that could be suitable for IT reskilling. The questions are generalized on IT and not specific to current IT such as Generative AI and Robotic Process Automation (RPA). Future studies should focus on some information technologies to expand the insights of findings. The results show an insignificant effect of behavioral intention on actual behavior. Thus, other qualitative methods such as interviews could be used to explore the reasons further. Because of the validity and reliability problems, this study covers only two innovation characteristics from DOI. Future research could examine more about the impact of relative advantage, compatibility, and observability on IT reskilling intention and behavior.

Author Statement

The authors declare that there is no conflict of interest.

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