

BEYOND AUTOMATION: SUSTAINABLE EMPLOYEE ENGAGEMENT AMONG ACCOUNTING PROFESSIONALS

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Abstract. The rapid adoption of Artificial Intelligence (AI) is transforming the accounting profession, creating opportunities for enhanced efficiency while raising concerns regarding employees' adaptability, job security, and long-term engagement. This conceptual study proposes an integrated framework for examining Sustainable Employee Engagement (SEE) among accounting professionals in Malaysia. Grounded in Self-Determination Theory (SDT), the framework investigates AI adoption, perceived organizational support, and job security as key technological and organizational factors influencing SEE through the mediating role of technology self-efficacy. SEE extends conventional employee engagement by emphasizing employees' capacity to sustain physical, cognitive, emotional, and behavioural involvement while maintaining adaptability, well-being, and professional relevance during continuous technological transformation. The proposed framework suggests that supportive organizational conditions, employment stability, and effective AI adoption strengthen employees' confidence in learning, using, and adapting to emerging technologies, thereby fostering sustainable engagement. The study contributes to the literature by positioning technology self-efficacy as a psychological mechanism linking technological and organizational conditions with SEE. Practically, the framework provides guidance for accounting firms and HRD practitioners in developing training, digital upskilling, organizational support, and talent management strategies that promote a resilient, adaptable, and sustainably engaged accounting workforce in AI-enabled workplaces.

Keywords: *sustainable employee engagement, technology self-efficacy, AI adoption, job security, perceived organizational support*

Introduction

The global professional context is undergoing a significant transformation in digitalization and sustainability in the organizations. The technological advancements such as Artificial Intelligence (AI), automation, cloud computing, and data analytics are reshaping traditional work practices into digitalization work design (Alim, 2025). The accounting practices that were once heavily dependent on manual and repetitive processes are increasingly changed to automated and digitalization process. The changes enable the accounting professionals to focus on more strategic, analytical, and advisory responsibilities (Munap et al., 2024; Adnan et al., 2024). Although this transformation provides substantial opportunities for productivity improvement and service innovation, it also creates a critical workforce challenge. The accounting firms must ensure that accounting professionals remain motivated, psychologically secure, technologically capable, and continuously engaged while adapting to rapidly changing job requirements. Therefore, the organisational challenge is on sustainable employee engagement throughout continuous technological transformation. This transformation has been accelerated by the transition from Industry 4.0 to Industry 5.0. Industry 4.0 emphasizes the use of advanced technologies, including AI, big data analytics,

automation, and digital systems, in order to improve organizational efficiency and productivity. Although these technologies have generated substantial operational benefits, their rapid implementation has also raised concerns regarding technological anxiety, job insecurity, skill obsolescence, and employee disengagement (Cho, 2024). In contrast, the Industry 5.0 introduces a more human-centered perspective by emphasizing employee well-being, sustainability and meaningful collaboration between humans and intelligent technologies. For accounting firms, this transition creates an organisational tension. While firms are under pressure to accelerate technological adoption, the same transformation may weaken long-term employee engagement if they perceive AI as difficult to use, feel insufficiently supported in adapting to new work requirements, or believe that automation threatens the security of their employment (Fauzi et al., 2025; Zotorvie et al., 2025; Cho, 2024; Akter et al., 2021).

This tension is particularly relevant to Sustainable Employee Engagement (SEE). Unlike conventional employee engagement, this generally focuses on employees' current emotional, cognitive, and behavioural connection with their work. SEE emphasises the organisation's capacity to maintain employee motivation, well-being, adaptability, and productive engagement over time (Saranya et al., 2025). This distinction is important in technology-intensive workplaces because employees may remain productive during the initial implementation of new technologies while simultaneously experiencing increasing anxiety, uncertainty, workload pressure, or declining confidence in their future employability. If these pressures remain unmanaged, organisations may experience resistance to technological change, declining motivation, and difficulties in retaining a capable and adaptable workforce. In Malaysia, the significance of AI adoption has grown together with national digital transformation initiatives, including the Artificial Intelligence Roadmap 2021-2025 and MyDIGITAL. Those government initiatives aim to accelerate digital innovation and strengthen the country's digital economy (Khalid et al., 2025; Adnan et al., 2024). Simultaneously, the role of accountants is evolving, with increasing expectations to contribute to areas such as Environmental, Social, and Governance (ESG) reporting, business analytics, and data-driven decision-making. These developments require professionals to continuously adapt their skills and competencies to meet changing workplace demands (Zain et al., 2026). However, challenges such as heavy workloads, insufficient training opportunities, and technological anxiety may hinder employees' readiness to embrace digital transformation and maintain sustainable levels of engagement. Thus, perceived organisational support and job security are critical for SEE during AI-driven transformation. Adequate training, resources, managerial support, and employment security can reduce uncertainty and strengthen employees' confidence in adapting to technological change. Technology self-efficacy therefore serves as a psychological mechanism translating organisational conditions into SEE (Adnan et al., 2025; Fülöp et al., 2025).

Although employee engagement has been widely studied, existing literatures has predominantly focused on outcomes such as job performance, organizational commitment, and job satisfaction. Comparatively less attention has been paid to SEE which emphasizes the long-term sustainability of employee well-being, adaptability, and workforce resilience in technology-driven environments (Sypniewska et al., 2023; Podgorodnichenko et al., 2022; Parr et al., 2013). Furthermore, the past studies that examining AI adoption, digital transformation, and sustainable human resource management have frequently investigated these factors in isolation, resulting in a

fragmented understanding of how technological, organizational, and psychological factors collectively influence employee engagement (Atalla et al., 2025; Milliman et al., 2018). Notably, the Malaysian accounting profession represents a particularly relevant context for examining these issues because it is increasingly exposed to AI-driven transformation, automation, and the evolving workforce expectations associated with technological advancement (Adnan et al., 2025; Munap et al., 2024). Nevertheless, empirical evidence on the factors influencing SEE among Malaysian accounting professionals remains limited. To address this gap, the present study aims to investigate how AI adoption, perceived organizational support, and job security influence SEE through the mediating role of technology self-efficacy among accounting professionals in Malaysia.

Results and Discussion

Sustainable Employee Engagement (SEE)

Kahn (1990) defined engagement as the extent to which employees express themselves physically, cognitively, and emotionally while performing their work roles. Schaufeli and Bakker (2010) further characterized engagement as a positive and fulfilling work-related state reflected through vigor, dedication, and absorption. Over the years, the understanding of employee engagement has evolved considerably due to the changes in workplace dynamics, organizational priorities, and technological advancements. Building on these foundations, a substantial body of research has demonstrated that employee engagement contributes to favourable individual and organisational outcomes, including job satisfaction, organisational commitment, employee well-being, job performance, and organisational effectiveness (Parr et al., 2013; Wiley, 2012; Beatty, 2011). Research has also identified leadership quality, organisational support, HRM practices, communication, job design, workplace spirituality, job crafting, and work-life balance as important conditions for fostering employee engagement (Tuin et al., 2020; Dubbelt et al., 2019; Dhir and Shukla, 2019; Milliman et al., 2018; Howell, 2017; Rozier et al., 2017; Kihara et al., 2016; García-Campayo et al., 2016; Albrecht et al., 2015; Muli et al., 2014). Despite these contributions, the traditional employee engagement perspective may be insufficient to explain employee experiences in contemporary AI-enabled workplaces. Traditional engagement research predominantly captures employees' current levels of energy, dedication, involvement, and connection with their work. However, high levels of engagement at a particular point in time do not necessarily indicate that such engagement can be maintained over the long term. Employees may remain highly involved in their work while simultaneously experiencing increasing technological anxiety, work intensification, skill obsolescence, job insecurity, or declining well-being. Therefore, the central issue in AI-enabled workplaces is not only whether employees are engaged, but whether their engagement can be maintained while they continuously adapt to technological change without compromising their well-being, confidence, and professional relevance.

This limitation has become particularly important with the transition towards Industry 5.0, which extends the efficiency-oriented technological focus of Industry 4.0 by emphasising human-centricity and sustainable human-technology collaboration. The increasing use of AI changes work processes, job responsibilities, and competency requirements, requiring employees to continuously learn, reskill, and adapt. Although

digital technologies can enhance productivity and decision-making, technological transformation may also create psychological and employment-related pressures that challenge employees' ability to remain engaged over time. The COVID-19 pandemic further demonstrated the importance of workforce adaptability, digital readiness, and organisational support in maintaining engagement under rapidly changing working conditions (Podgorodnichenko et al., 2022; Madero Gómez et al., 2022; Akter et al., 2021; Garg et al., 2021; Matli, 2020). More recent studies from 2023 onwards have introduced the concept of Sustainable Employee Engagement (SEE). This emerging perspective extends traditional views of employee engagement by incorporating employee well-being and sustainability-oriented practices within digitalized work environments. The past studies suggest that sustainable workplace initiatives, such as green HRM practices, work-life balance programs, flexible work arrangements, sustainable leadership, and employee well-being strategies, are important drivers of enduring engagement (Sultan and Hussain, 2025; Atalla et al., 2025; Sutanto et al., 2024; Sypniewska et al., 2023; Jing et al., 2023). Collectively, this literature indicates that sustainable employee engagement requires more than employees' immediate enthusiasm or involvement; it requires organisational, individual and behavioural related factors that enable employees to preserve their motivation, well-being, adaptability, and capacity to contribute over an extended period.

Thus, SEE is operationalised as the extent to which accounting professionals can sustain their physical, cognitive and behavioural engagement while remaining motivated, and adaptable over time. Particularly, the physical engagement through sustained effort and energy in performing tasks; cognitive engagement through continued attention and concentration; and behavioural engagement through active participation, persistence, and constructive involvement in organisational activities. The sustainability of these engagement expressions is reflected in employees' capacity to maintain them while adapting to technological change and preserving their well-being and professional relevance. SEE therefore provides a more appropriate perspective for examining employee engagement under Industry 5.0 because it captures not only employees' current involvement in work but also their capacity to remain engaged throughout continuing technological transformation. (Kurniasih et al., 2026; Bai, 2025; Alfadel et al., 2025; Joon et al., 2025; Al-Sabi et al., 2024) (*Table 1*).

Table 1. Operationalizations of sustainable employee engagement in previous studies.

Author(s) and Year	Context / Sample	Key Variables	Main Findings
Kurniasih et al. (2026)	Higher Education Institutions (HEIs)	Green culture, engagement	Engagement mediates sustainability outcomes
Joon et al. (2025)	Petronas employees in Malaysia	Sustainable leadership, engagement	Leadership and culture increase engagement
Atalla et al. (2025)	Multi-sector	Green HRM, engagement	Environmental HR practices strengthen engagement
Sultan and Hussain (2025)	Organizations	Green leadership, engagement	Leadership fosters sustainable workforce engagement
Bai (2025)	Sustainable HRM	Well-being, sustainability	Sustainable HRM drives engagement and workforce sustainability
Al-Sabi et al. (2024)	Multi-industry	Green HRM, engagement	Green HRM increases engagement and job satisfaction
Sutanto et al. (2024)	Indonesian employees	Work-life balance, engagement	Engagement mediates performance outcomes
Jing et al. (2023)	Firms worldwide	Sustainability, satisfaction	Employees prefer environmentally responsible firms
Sypniewska et al. (2023)	Sustainable HRM	Employee well-being	Sustainable HRM enhances engagement and well-being

Madero Gómez et al. (2022)	HR sustainability	Work-life balance, engagement	Sustainable work systems support engagement
Podgorodnichenko et al. (2022)	Sustainable HRM	Engagement, satisfaction	Sustainable HRM practices increase engagement
Garg et al. (2021)	Logistics organizations	AI analytics, engagement	Digital tools can measure employee engagement
Akter et al. (2021)	Financial sector	Engagement determinants	Organizational factors strongly affect engagement
Matli (2020)	COVID workplace in South Africa	Remote work, engagement	Pandemic changes engagement dynamics
Tuin et al. (2020)	Global review	Work engagement	Engagement drives productivity and well-being
Dhir and Shukla (2019)	Indian organizations	Engagement, organizational performance	Engagement improves overall performance
Dubbelt et al. (2019)	Multinational firms	Job crafting, engagement	Job crafting improves engagement and performance
Milliman et al. (2018)	Hospitality	Spirituality, engagement	Workplace spirituality enhances engagement and retention
Rezapouraghdam et al. (2018)	Hospitality sector	Workplace spirituality, sustainability	Spirituality promotes sustainable employee behavior
Howell (2017)	Corporate employees	Leadership, culture, engagement	Leadership and culture enhance engagement
García-Campayo et al. (2016)	European workers	Work engagement, well-being	Engagement improves productivity and well-being
Kihara et al. (2016)	Manufacturing firms in Kenya	Leadership, engagement	Leadership style increases employee engagement
Albrecht et al. (2015)	Multisector review	Engagement antecedents	Identified leadership and HR practices as major drivers
Muli et al. (2014)	Banking industry in Kenya	HRM practices, engagement	HR practices positively influence employee engagement
Parr et al. (2013)	US employees	Engagement, job performance	Engagement strongly predicts task performance
Wiley (2012)	HR practitioners	Engagement, employee well-being	Engagement linked with positive workplace outcomes
Beatty (2011)	Organizations in North America	Engagement, organizational outcomes	Engagement significantly improves job satisfaction and organizational commitment

Self-Determination Theory

Self-Determination Theory (SDT) (Deci and Ryan, 1985) is a widely recognized theory of human motivation and well-being that explains how individuals' behaviours are influenced by both intrinsic and extrinsic motivations (Deci and Ryan, 2008). SDT proposes that individuals are naturally growth-oriented and motivated in order to achieve psychological development. The theory emphasizes three basic psychological needs, namely autonomy, competence, and relatedness, which are essential for sustaining motivation, engagement, and psychological well-being (Laguerre and Barnes-Farrell, 2024). Autonomy refers to individuals' sense of control and personal choice over their actions, competence reflects the ability to perform tasks effectively and develop skills, while relatedness refers to feelings of connection and support within social environments (Laguerre and Barnes-Farrell, 2024). When these needs are satisfied, individuals are more likely to demonstrate higher levels of motivation, persistence, and engagement. Conversely, unmet psychological needs may result in disengagement, stress, and reduced well-being (Nwanzu and Babalola, 2024; Ryan and Deci, 2020). In organizational settings, SDT provides a useful framework for understanding SEE and workplace behaviour. Employees tend to demonstrate stronger commitment and sustainable engagement when their work environment supports autonomy, competence, and relatedness (Shen et al., 2024). SDT explains how the organizational related factors may either enhance or weaken employees' intrinsic motivation. For instance, it can strengthen employees' psychological need and

sustainable engagement via greater task flexibility (i.e., autonomy), job efficiency (i.e., competence), and support collaborative interactions (i.e., relatedness) (Salaheldin and Hussein, 2025; Jia and Hou, 2024).

In this study, AI adoption enhances employees' perceived competence in utilizing AI technologies effectively, whereas technology self-efficacy further strengthens individual psychological competence and confidence in adapting to digital transformation (Sun and Yoon, 2025; Celestin, 2024). Perceived organization support the need for relatedness through organizational care, training support, and collaborative work environments, while job security strengthens employees' sense of autonomy by reducing uncertainty and maintaining stability over professional roles and career development (Huo et al., 2025). Therefore, the SDT enables the proposed framework to explain how technological and psychological factors jointly sustain employee engagement among accounting professionals.

AI adoption

Artificial Intelligence (AI) adoption refers to the extent to which individuals and organizations accept, integrate, and utilize AI-driven technologies within their work processes (Shahzadi et al., 2024). AI technologies such as automated data processing and data analytics are increasingly important to improve operational efficiency, data accuracy, and support strategic decision-making in accounting profession (Shamsudin et al., 2025). These technologies have enabled the accounting professionals to shift the focus from the repetitive transactional tasks toward higher-value activities (i.e., financial analysis, forecasting, and advisory services) (Theodorakopoulos et al., 2024). They may adopt AI systems due to changes in their job description on digitalization perspectives (Salaheldin and Hussein, 2025). In Malaysia, accounting professionals are increasingly encouraged to adopt AI technologies in order to remain competitive in the business environment. Notably, perceived ease of use and perceived usefulness has been viewed as the important factors affecting the AI adoption among accounting practitioners (Alwi and Khan, 2025; Lim and Seng, 2024). Both explain the extent to which individuals perceive a technology as functional, simple and effortless to operate (Mujalli et al., 2024). Generally, AI systems are with a clear functional and descriptive processes and operational manual. Hence, the employees are more likely to integrate AI tools to enhance the efficiency of their professional tasks (Moron and Diokno, 2023). When AI systems are seen as user-friendly, employees are more likely to feel capable and confident in using the technology effectively (Toumeh, 2024). They are more likely to improve technology self-efficacy in meeting work requirement through AI systems (Abreh et al., 2025; Alwi and Khan, 2025).

Perceived Organizational Support

Perceived Organizational Support (POS) is defined as employees' perception that the employer supports their well-being and job performance achievement. POS is viewed as the provision of facilitating conditions such as internal infrastructure, administrative assistance, training and development programmes, and supportive work environments. It aims to lessen employees' anxiety toward new technologies learning and adoption in AI enabled workplace (Soomro et al., 2026). Previous research shows that organizations that offer relevant training and upskilling on AI technologies can boost employees' self-efficacy in using technology and their readiness to adopt AI systems (Adelakun et al.,

2024; Fenwick et al., 2024). Abhari (2025) found that POS is vital for improving employees' mental well-being by creating an environment where they feel valued and supported during technological changes in the context of Malaysian accounting firms. Additionally, employees who perceive strong POS are more likely to feel confident in using AI systems and less likely to experience technological anxiety. By providing adequate training, technical resources, and organizational support can strengthen employees' technology self-efficacy (Alwi and Khan, 2025; Akben and Dong, 2025). Consequently, supportive organizational environments enable employees to move beyond basic technology adoption and engage more effectively in higher-value and opportunity-enhancing tasks, thereby contributing to long-term employee engagement (Jia and Hou, 2024).

Job security

Job security is another important factor influencing AI adoption among accounting professionals. Job security refers to employees' confidence that their employment and job conditions will remain stable without the threat of displacement or deterioration (Üngüren et al., 2024). In the Malaysian accounting sector, many professionals perceive AI as a tool that automates the repetitive tasks, which enabling the them to focus on strategic responsibilities that requiring analytical skills, professional judgment, and decision-making capabilities (Choi and Xie, 2025; Adnan et al., 2024). When the employees perceive their employment as stable, they are more likely to develop positive attitudes toward AI adoption and invest in acquiring new technological competencies rather than resisting technological change (Wong and Yap, 2024). Employees who perceive greater job security are more likely to invest sustained effort in their work, concentrate on acquiring new technological competencies, maintain positive attachment to their evolving professional roles, and actively participate in organisational transformation. Thus, job security can support the physical dimension of SEE through sustained effort and energy, the cognitive dimension through continued attention and learning, the emotional dimension through positive attachment and confidence in professional continuity, and the behavioural dimension through persistence and constructive participation in AI-enabled work activities (Sinha and Derichs, 2025). Job security also influences technology self-efficacy and professional identity. Employees who perceive AI as complementing rather than replacing human capabilities tend to demonstrate greater confidence and competence in utilizing AI systems (Schmitt et al., 2024). Conversely, low job security may increase technological anxiety and concerns regarding professional relevance and deskilling (Sinha and Derichs, 2025). Therefore, job security contributes to SEE not merely by reducing concerns about AI-related displacement but by providing the long-term stability for employees to remain energetic, focused and behaviourally involved in the work place (Golgeci et al., 2025).

Technology self-efficacy

Generally, self-efficacy refers to an individual's belief in their capability to perform tasks and achieve desired outcomes effectively (Çavuş and Gökçen, 2015; Stajkovic and Luthans, 1998). In technology-oriented workplaces, this concept extends to technology self-efficacy, which refers to individuals' confidence in their ability to utilize digital technologies to accomplish professional tasks successfully (Conte et al., 2025). Within the accounting profession, technology self-efficacy involves confidence in using AI-

enabled systems for financial reporting, auditing, and data analytics (Li and Goel, 2025; Ahmad, 2024). Employees with higher technological confidence are generally more willing to integrate AI systems into their daily work processes and adapt to technological transformation (Gaviria Rodriguez et al., 2025). Hence, technology self-efficacy plays an important role in reducing technological anxiety and strengthening professionals' readiness for AI adoption. Accounting professionals who see themselves as capable of managing AI systems are more likely to view AI as a tool that enhances professional performance (Naiseh et al., 2025). Previous studies show that individuals with high self-efficacy feel less stress and anxiety when using new technologies. They believe in their ability to learn and operate digital systems effectively (Han et al., 2025). In AI-context accounting environments, professionals with high self-efficacy are more likely to adapt to digital innovations, and engage proactively with intelligent accounting systems (Grassi et al., 2025; Muterera, 2024). Consequently, higher levels of technology self-efficacy would improve SEE in achieving their performance goals in midst of technological advancement (Wong and Yap, 2024; Ahmad, 2024).

Notably, technology self-efficacy may serve as a cognitive mechanism through which AI adoption, job security, and perceived organizational support translate into sustainable employee engagement. AI adoption provides opportunities for technology mastery, while job security creates a psychologically stable environment for employees to develop confidence in adapting to technological change. Similarly, perceived organizational support provides the resources, training, and encouragement needed to strengthen employees' technology-related capabilities and confidence (Li and Goel, 2025; Grassi et al., 2025). Thus, these organizational, individual and technological conditions are more likely to foster SEE when they enhance employees' belief in their capacity to use and adapt to emerging technologies effectively. Hence, we suggest the proposition as below: Proposition 1: There is a positive relationship between AI adoption and technology self-efficacy among accounting professional. Proposition 2: There is a positive relationship between perceived organizational support and technology self-efficacy among accounting professional. Proposition 3: There is a positive relationship between job security and technology self-efficacy among accounting professional. Proposition 4: There is a positive relationship between technology self-efficacy and sustainable employee engagement among accounting professional. Proposition 5: Technology self-efficacy mediates the positive relationship between AI adoption and sustainable employee engagement among accounting professional. Proposition 6: Technology self-efficacy mediates the positive relationship between POS and sustainable employee engagement among accounting professional. Proposition 7: Technology self-efficacy mediates the positive relationship between job security and sustainable employee engagement among accounting professional.

Sustainable Employee Engagement Model

Based on the theories and theoretical model discussed above, the proposed SEE model explains how technological, individual and organisational factors enable accounting professionals to maintain engagement across physical, cognitive and behavioural dimensions over time. AI adoption creates opportunities for employees to develop technological competence and engage with changing work requirements, while perceived organisational support provides the training, resources, encouragement, and social support necessary for continued adaptation. Job security reduces uncertainty arising from technological change and enables employees to invest sustained effort in

learning and performing their professional roles. These conditions strengthen technology self-efficacy, which reflects employees' confidence in their ability to learn, use, and adapt to workplace technologies (Salaheldin and Hussein, 2025; Jia and Hou, 2024; Geddam et al., 2024). Employees with stronger technology self-efficacy are more likely to sustain physical engagement through continued effort and energy, cognitive engagement through attention and meaningful connection to work, and behavioural engagement through active participation, persistence, and constructive involvement in organisational activities (Do et al., 2025; Halim et al., 2023). From the perspective of Self-Determination Theory, technology self-efficacy represents a cognitive mechanism through which employees develop confidence in coping the work demands. When accounting professionals perceive themselves are capable, they are more likely to invest sustained energy in their tasks. They remain cognitively focused when learning and using new technologies, develop positive emotional connections with their evolving professional roles, and persistently participate in technology-driven organisational activities (Grassi et al., 2025; Muterera, 2024; Wong and Yap, 2024). Thus, SDT explains how supportive technological and organisational conditions contribute to the sustained expression of physical, cognitive, emotional, and behavioural engagement through employees' technology-related competence and confidence (*Figure 1*).

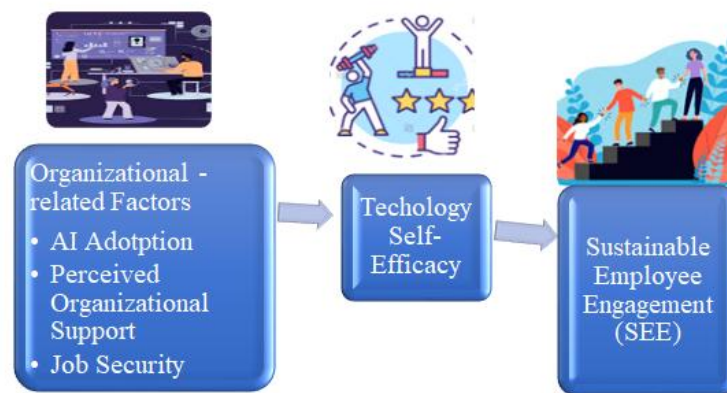


Figure 1. Research framework.

Conclusion

This study contributes to the existing literatures by considering the technology self-efficacy as a psychological-related mediator which would affect sustainable employee engagement (Munap et al., 2024). The study also extends the application of SDT to technology-enabled workplaces by demonstrating how technological and organisational conditions may contribute to sustainable engagement through technology self-efficacy (Do et al., 2025). Furthermore, the study contributes to the engagement literature by distinguishing SEE from conventional employee engagement. The present study emphasises the importance to sustain physical effort, cognitive focus, emotional connection, and behavioural involvement over time. This perspective is particularly relevant accounting professionals who are continuously required to learn, reskill, and adjust to changing work processes. This study also provides practical implications for accounting professionals, employers, and HRD practitioners. From an organisational perspective, the findings may assist accounting firms in developing technology

implementation strategies that balance technological efficiency with employees' capacity to remain engaged and adaptable. Accounting firms should provide customised training and development programmes, continuous digital upskilling opportunities, technical assistance, and managerial support to strengthen employees' technology self-efficacy and sustainable engagement (Munap et al., 2024). HRD practitioners should create supportive learning environments that enable employees to develop confidence in using new technologies and adapting to changing professional responsibilities. In addition, accounting firms should recognise the importance of perceived organisational support and job security during technological transformation. Transparent communication regarding the purpose of technology adoption, changing job responsibilities, reskilling opportunities, and career development pathways can reduce uncertainty and strengthen employees' confidence in their professional future. By combining accessible technologies, organisational support and continuous capability development will enhance SEE in fast changing work places (Shaari et al., 2024). In conclusion, both the psychological and technological related factors are shaping techno self-efficacy and sustainable employee engagement among accounting professionals. The efforts in enhancing employees' self-efficacy would improve the SEE and competitive advantages of the organization.

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Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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