

# Digital Audit Readiness in the Malaysian Public Sector: A Conceptual Framework Integrating Organisational Readiness and Commitment Theories

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## Abstract

**Purpose:** The current paper aimed to review the existing literature on digital audit implementation and to develop a conceptual framework of organisational readiness, which encompasses the antecedents of readiness for change, measures of readiness for change, change-related effort, and the outcomes of change, for digital audit implementation in the public sector.

**Design/ Methodology/ Approach:** This paper was based on a review and synthesis of the existing literature on readiness to implement digital audits in the public sector. Specifically, a systematic search across major academic databases and institutional sources covering the period from 2000 to 2024 was conducted to identify relevant publications, with the proposed conceptual framework grounded in the theory of organisational readiness for change (Weiner, 2009) and complemented by the three-component model of organisational commitment (Allen & Meyer, 1990).

**Findings:** The proposed conceptual framework connected antecedents of organisational readiness, collective work commitment, and outcomes of digital audit implementation and highlighted how motivation, capability, and organisational support could contribute to higher degrees of readiness and work commitment, ultimately leading to improved audit quality, effectiveness, and accountability in the digital transformation process.

**Practical Implications:** Using the framework in gathering empirical evidence could offer practical guidance for public-sector audit institutions, especially the National Audit Department (NAD), to assess digital audit readiness, identify barriers, and design targeted interventions, such as training, communication, and resource allocation. Concurrently, the framework assisted in fostering collective work commitment and guaranteeing more effective and accountable digital audit transformation in the public sector.

**Originality/ Value:** The proposed conceptual framework incorporated Weiner's theory of organisational readiness for change and Allen and Meyer's (1990) three-component model of commitment to develop a holistic conceptual framework in explaining auditors' readiness for digital audit implementation in the public sector in Malaysia.

**Keywords:** Digital transformation, digital audit, public sector, organisational readiness, work commitment.

## 1.0 Introduction

In the modern era, digital transformation has emerged as a defining force in reshaping institutions across all sectors, including governmental auditing. In the Fourth Industrial Revolution (IR 4.0) era, public-sector organisations have increasingly been expected to modernise existing systems, enhance efficiency, and promote transparency through digital technologies, with digital audit, which is defined as the use of digital technologies, tools, and techniques to support and deliver audit work (Audit Scotland, 2017), emerging as a strategic mechanism to improve the current levels of quality, timeliness, and relevance of public-sector audits. Internationally, the transition towards digital auditing has also gained momentum, particularly among Supreme Audit Institutions (SAIs) in Europe, Asia, and the Americas, wherein artificial intelligence (AI), data analytics, and cloud computing have been incorporated into existing auditing functions (INTOSAI, 2023). Nonetheless, the readiness of public-sector institutions to adopt and sustain digital audit practices remains a critical challenge, particularly in developing countries where resource limitations, legacy systems, and human resistance have often impeded digital transformation. Meanwhile, in Malaysia, the digital agenda of the government is guided by long-term strategies, such as the MyDigital Economy Blueprint (2021–2030) and the Malaysia Plans, which collectively aim to accelerate digital adoption and strengthen governance through technology-driven reformations. The NAD, which functions as the supreme audit institution of Malaysia, plays a vital role in guaranteeing satisfactory levels of transparency, accountability, and integrity in public-sector financial management. By recognising the importance of digitalisation, the NAD has outlined a Digital Strategic Plan (2021–2025) to help improve audit efficiency through data analytics and secure information systems.

Despite the above initiatives, existing empirical evidence has indicated that progress in public-sector digital audit implementation remains modest, owing to the presence of relevant issues, such as insufficient infrastructure, limited staff competency, and resistance to change, thereby restricting the required level of readiness (Mokhtar et al., 2024; Nik Man, 2024), which are similar to the broader issues of digital unreadiness in the Malaysian public sector, wherein technology investments have not frequently been translated into more effective digital transformation (Ramli et al., 2017; OECD, 2024). Organisational readiness for change, which refers to the shared belief among members that the organisation is both willing and able to implement change (Weiner, 2009), has widely been recognised as a determinant of successful transformation. In the digital audit context, readiness reflects not only the availability of technical resources but also the psychological and behavioural preparedness of auditors to embrace change. Furthermore, existing studies have demonstrated that when employees perceive their organisations as ready for change, the employees tend to exhibit higher levels of commitment and proactive engagement, which will subsequently enhance performance outcomes (Qureshi et al., 2021; Zappalà et al., 2019). Conversely, lower degrees of readiness often manifest as resistance, reduced morale, and poor implementation outcomes (Oreg, 2003; Vakola, 2014). Hence, assessing the antecedents and outcomes of organisational readiness is key to having a deeper understanding of how the NAD can effectively transition to digital auditing.

In the current study, the extant literature on digital audit implementation was reviewed to propose a conceptual framework by incorporating two (2) key theoretical perspectives, namely the theory of organisational readiness for change (TORC) (Weiner, 2009) and the three-component model of organisational commitment (TCM) (Allen & Meyer, 1990). Particularly, the proposed framework could offer a more holistic understanding of how organisational and behavioural factors would interact to influence the levels of readiness, commitment, and ultimately audit effectiveness and public accountability. Therefore, the present investigation would contribute to the growing discourse on public-sector digitalisation by synthesising existing knowledge, identifying key gaps, and proposing an integrated conceptual model tailored to the context of public-sector audit transformation in Malaysia. The current paper is structured into seven (7) sections, which begin with an overview of the research methodology in Section 2, with the subsequent three (3) sections reviewing the related literature on digital transformation and digital audit, public-sector auditing, the role played by the NAD, and organisational readiness for digital audit. Section 6 introduces the proposed conceptual framework, whereas the final section concludes this paper by identifying key research gaps, providing directions for future studies, and outlining the theoretical and practical implications of the proposed framework.

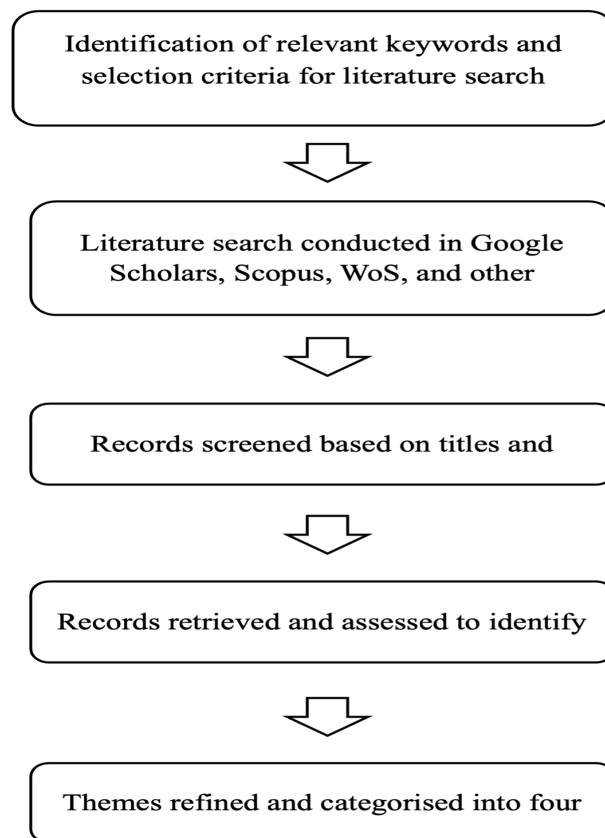
## 2.0 Methodology

The current study adopted a qualitative and conceptual research design, which aimed at reviewing and synthesising existing literature to develop an integrated theoretical model of auditors' readiness to implement digital audit in the public

sector. Owing to the limited empirical research on the current topic, especially in the context of developing countries, a conceptual review approach was deemed appropriate to consolidate dispersed knowledge and establish a foundation for future empirical inquiry (Torraco, 2016; Snyder, 2019).

## 2.1 Literature Search and Selection

A literature search was conducted across major academic databases, including Scopus, Web of Science (WoS), Emerald Insight, and Google Scholar, complemented by institutional documents from the International Organisation of Supreme Audit Institutions (INTOSAI), the International Federation of Accountants (IFAC), and the NAD of Malaysia, with keywords used in various combinations, including digital audit, public sector audit, organisational readiness, digital transformation, and auditors' commitment. In particular, the search focused on peer-reviewed publications and reports from 2000 to 2024 to capture the evolution of digital auditing and organisational readiness in the digital era, with the inclusion criteria as studies addressing (1) technological or organisational transformation in auditing, (2) with determinants of readiness or behavioural change, and (3) in public-sector or institutional settings, whereas exclusion criteria eliminated purely technical studies and those unrelated to audit or organisational change. After screening and evaluating relevance, approximately 90 sources, including journal articles, institutional papers, and policy documents, were retained for synthesis.



**Figure 1: Research Review Procedures**

## 2.2 Analytical and Synthesis Approach

The analysis adhered to an integrative literature review method that allowed for the combination of diverse theoretical and empirical perspectives (Webster & Watson, 2002), wherein the selected literature was organised into four (4) thematic domains, namely, (1) digital transformation and auditing, (2) organisational readiness for change, (3) auditors' behavioral and affective commitment, and (4) outcomes of audit effectiveness and accountability. Subsequently, a

thematic synthesis approach was used to identify relevant patterns, relationships, and theoretical linkages across the above four (4) domains (see Figure 1). To construct the conceptual framework, key perspectives from the reviewed literature were systematically aligned with two (2) foundational theories, namely, Weiner's (2009) TORC and Allen and Meyer's (1990) TCM, which were guided by theoretical triangulation to guarantee sufficient conceptual coherence and explanatory strength.

### **3.0 Digital Transformation and Digital Audit**

#### **3.1 Digital Transformation: Concept and Evolution**

Digital transformation has emerged as a defining paradigm in the modernisation process in both the public and private sectors. Generally, digital transformation refers to the integration of digital technologies into all areas of an organisation, fundamentally changing how the organisation operates and delivers value to various groups of stakeholders. The Organisation for Economic Co-operation and Development (OECD, 2019) described digital transformation as the economic and societal effect of digitisation and digitalisation, while emphasising how pervasive technologies will substantially reshape industries, services, and citizen behaviour. Vial (2019) expanded the above definition by framing digital transformation as a process that "triggers significant changes to an entity's properties through combinations of information, computing, communication, and connectivity technologies" (p. 121). Collectively, the above definitions converge on the understanding that digital transformation is not merely the automation of manual processes but an organisational rethinking of culture, operations, and governance through technology.

In the past decade, technological breakthroughs, such as AI, robotic process automation (RPA), big data analytics (BDA), and cloud computing, have accelerated digital transformation. Specifically, in the private sector, the above technologies have revolutionised supply chains, customer relations, and decision-making processes (Henriette et al., 2016; Gimpel et al., 2018), whereas in the public sector, digital transformation aims to enhance efficiency and transparency (Fatine et al., 2025). Nevertheless, digitalisation in governmental settings entails distinct challenges, due to the presence of bureaucratic structures, rigid regulations, and accountability constraints (Mergel et al., 2019; Otia & Bracci, 2022). Therefore, successful transformation in the public sector requires not only technological innovation but also cultural and structural adaptation. The coronavirus disease (COVID-19) pandemic further highlighted the requirement for digital transformation, in which remote operations, data-driven decision-making, and online service delivery became critical imperatives across various governments worldwide, with numerous public-sector institutions accelerating digital initiatives during the above period to maintain the continuity of services and to guarantee accountability (Agostino et al., 2022). Thus, the above crisis-driven transformation provided valuable lessons about agility and resilience in public administration, thereby establishing the foundation for more strategic and sustainable digital reformations.

#### **3.2 Digital Transformation in the Public Sector**

The digitalisation of public-sector institutions has been a central focus of governance reformations globally since the early 2010s. Specifically, governments in the United States (U.S.), the United Kingdom (UK), and the European Union have established specialised digital units and policies to institutionalise technology-driven service delivery. For instance, the U.S. Digital Service and the Federal Cloud Computing Strategy, which were introduced in 2011, represented a shift towards more agile and user-centred digital governance (Mergel, 2016), whereas the UK Government Digital Service (GDS) transformed public administration through open data, citizen-centric design, and standardised digital infrastructure (Cordella & Paletti, 2019). Meanwhile, across Europe, the eGovernment Action Plan 2016–2020 and Digital Europe Programme (2021–2027) sought to harmonise digital governance and cross-border interoperability (European Commission, 2020), whereas in Asia, Singapore emerged as a key model of digital government through its Smart Nation initiative, which incorporated digital identity, e-payments, and data analytics into governance processes (Ha & Chuah, 2023). Similarly, the Digital Government Development Plan (2020–2022) in Thailand and the Indonesia's Electronic-Based Government System (SPBE) Roadmap in Indonesia highlighted regional efforts to improve transparency and citizen engagement through information and communications technology (ICT) systems (ASEAN, 2021).

The public-sector digital transformation in Malaysia evolved through successive national strategies, which began with the Electronic Government (e-Gov) Initiative in 1997 and the Public-Sector ICT Strategic Plans (2006–2015), followed by the introduction of the Public Sector Digital Transformation Plan (2016–2020) and the MyDigital Blueprint (2021–

2030) under the Malaysia Digital Economy Corporation (MDEC, 2021), which reflected the long-term commitment of the government to institutionalising digital governance. The above initiatives focused on developing integrated systems, such as ePerolehan (procurement), Human Resource Management Information System (HRMIS), and cloud infrastructure, through MyGovCloud. Nevertheless, despite extensive planning, existing research has suggested that the digital transformation in the Malaysian public sector remains uneven, especially in terms of limited adoption of advanced technologies across ministries (Ramli et al., 2017; OECD, 2024). The UN E-Government Development Index (2024) also ranked Malaysia 57<sup>th</sup> globally, which indicated a decline from 47<sup>th</sup> in 2020 and challenges in implementation and citizen participation. Although the current literature concentrating on the digital transformation in Malaysia has focused on e-government and citizen-facing services (Ismail et al., 2024; Sani & Jaafar, 2025), there have been limited studies examining the transformation in accountability institutions, such as audit bodies. According to Mergel et al. (2019), oversight institutions are critical for ensuring adequate integrity and trust, and this area of study remains understudied in the current landscape of digital governance research, thereby highlighting the importance of examining how SAIs, including the Malaysian NAD, have conceptualised and operationalised digital transformation.

### 3.3 The Rise of Digital Audit

Digital audit represents a substantial evolution in auditing practices, which is mainly driven by the increasing availability of digital data and analytical tools. Historically, auditors employed computer-assisted auditing tools (CAATs) to analyse datasets and support manual procedures (Handoko et al., 2020). Comparatively, recent developments in data analytics, blockchain, and AI have redefined audit processes, which have enabled continuous monitoring, predictive analysis, and automated risk detection (Issa et al., 2016; Kokina et al., 2025). Accordingly, the European Court of Auditors (2020) denoted digital audit as the use of digital technologies, such as process mining and text analytics, to help improve the levels of audit quality and efficiency, whereas Audit Scotland (2017) offered a broader view by describing digital audit as “the use of digital technology, tools, and techniques to support and deliver audit work” (p. 5). In practice, digital audit incorporates technologies across all stages of auditing, which range from planning and risk assessment to evidence evaluation and reporting. Existing studies have demonstrated that digital audit tools can aid in improving data reliability, reducing audit lag, and supporting real-time oversight (DeSimone et al., 2020; Butké & Dagilienė, 2022). In the public sector, digital audit can support more transparent and accountable financial management by allowing auditors to process large volumes of data across various ministries and agencies (Eulerich et al., 2023). Meanwhile, successful adoption requires auditors to develop higher levels of digital competencies and confidence in managing complex datasets, which indicates a challenge that has often been highlighted in the existing literature (Yoon et al., 2015; Maldonado et al., 2020). Globally, several SAIs have institutionalised digital audit laboratories and innovation hubs to build such capacity. For example, the European Court of Auditors established ECALab, whereas the U.S. Government Accountability Office (GAO) created an Innovation Lab to experiment with AI and blockchain for audit analytics (U.S. Government Accountability Office, 2025). Similarly, in Asia, the Board of Audit and Inspection in Korea and the Auditor-General’s Office in Singapore have implemented the divisions of data analytics to more effectively support continuous auditing (IFAC, 2022), which demonstrates the strategic role played by digital audit in strengthening accountability through data-driven evidence.

### 3.4 Digital Audit Implementation in Malaysia

In Malaysia, the NAD has gradually adopted digital tools to contribute to higher degrees of audit efficiency. Particularly, the Digital Strategic Plan 2021–2025 identified four (4) strategic pillars, namely, (1) the integration of digital services and data, (2) strengthening ICT infrastructure and security, (3) ICT governance, and (4) capability development (NAD, 2022). Nonetheless, existing empirical research has indicated that digital audit readiness remains at an early stage (Mokhtar et al., 2024), owing to several key challenges, including inadequate infrastructure, limited AI training (with related courses scheduled only in 2025), and a lack of coherent change management strategies (Nik Man, 2024), with local studies also reflecting similar findings. For instance, O’Connor et al. (2025) highlighted the adaptive shift of Malaysia to digital and remote auditing amidst pandemic challenges, whereas Sudradjat et al. (2024) demonstrated that the digital competency and efficacy of auditors could profoundly contribute to a higher level of audit judgement quality. In essence, both studies above emphasised the importance of readiness, skills, and technology capabilities as key drivers for more effective digital audit implementation. In addition, Ismail et al. (2024) developed a model of digital audit readiness for public-sector auditors, yet also noted that readiness would not automatically translate into successful

implementation. Collectively, the above studies revealed that only having technology investment would be insufficient without corresponding organisational readiness, leadership commitment, and behavioural alignment.

The current literature has consistently exhibited that while digital transformation and digital audit can introduce substantial benefits, such as enhanced efficiency, data-driven decision-making, and real-time accountability, their effectiveness mainly depends on organisational readiness and human factors. In particular, in the Malaysian public sector, digital transformation efforts remain constrained by structural rigidity, capacity limitations, and uneven digital literacy, wherein existing empirical studies have uncovered that auditors' readiness for digital audit is scarce, with most focusing on technology adoption rather than the organisational and psychological dimensions of change. Therefore, the present study situated the readiness of auditors within the broader framework of organisational change and emphasised the interplay between antecedents, such as change valence, task knowledge, and resource availability, readiness to change, and outcomes, including collective work commitment, audit effectiveness, and public accountability. The following section will explore the theoretical foundations underpinning the above interaction by referring to Weiner's (2009) TORC and Allen and Meyer's (1990) TCM to develop an integrated model to have a deeper understanding of digital audit readiness in the public sector.

#### **4.0 Public Sector Auditing and the National Audit Department**

##### **4.1 Evolution of Public Sector Auditing in Malaysia**

Public-sector auditing in Malaysia has evolved concurrently with the political, economic, and administrative development of the nation. The audit function originated during the British colonial administration in the early 1900s, which primarily served to guarantee satisfactory degrees of financial compliance and safeguard colonial interests (Allen & Donnithorne, 1954). Accordingly, the establishment of audit offices in the Federated Malay States and the appointment of W.J.P. Hume as the first Auditor General in 1906 formalised the institutional foundation for governmental auditing (Mat Daud, 2007). Following independence in 1957, the enactment of the Audit Act 1957 signified a critical milestone, which transferred accountability from the colonial government to the Parliament, wherein the Act legally empowered the Auditor General to examine and certify public accounts to ensure the propriety and legality of public expenditures. Over time, amendments to the Audit Act, notably in 1978, 1982, and 2024, expanded the audit scope from financial compliance to performance and governance auditing, which reflected the commitment of the government to transparency and effective governance (Mat Daud, 2007; Audit Act Amendments, 2024). From the 1980s onwards, the auditing function in Malaysia commenced to incorporate broader assessments of economy, efficiency, and effectiveness, namely, the 3Es, which aligned with global trends promoted by the INTOSAI. In sum, the above reformations symbolised a key transition from transactional verification to value-for-money auditing, thereby positioning the audit function as an essential pillar of public-sector accountability.

##### **4.2 The Mandate and Function of the National Audit Department**

The NAD serves as the SAI in Malaysia, which is mandated under Article 105 of the Federal Constitution and governed by the Audit Act 1957. The core responsibility of the NAD is to conduct financial, compliance, and performance audits of all federal and state ministries, statutory bodies, and local authorities. Specifically, the Auditor General, who is appointed by the Yang di-Pertuan Agong upon the advice of the Prime Minister and after consultation with the Conference of Rulers, reports directly to the Parliament through the Public Accounts Committee (PAC), which guarantees the independence of the audit function from the executive branch of government. Under Section 5(1) of the Audit Act 1957, the main duties of the NAD include:

- i. Examining and certifying the financial statements of the Federation and states;
- ii. Auditing statutory bodies and government-linked companies receiving public funds; and
- iii. Reviewing the management and performance of public programmes to ensure sufficient compliance, efficiency, and accountability.

In addition to the above statutory functions, the NAD will conduct specialised audits, such as Corporate Governance Management Audits (CGMA) and follow-up audits, to assess corrective actions employed by different ministries and

agencies. Currently, the department oversees over 500 auditable entities, including 27 federal ministries, 13 state governments, and numerous local authorities (Buang, 2015). Concurrently, the independence and authority of the NAD are safeguarded by the Constitution, which stipulates that the Auditor General may not be removed from office except by the Federal Court and that remuneration cannot be altered to the officer's disadvantage during tenure, which are essential for maintaining the impartiality and credibility of public audits.

#### **4.3 Digital Transformation Initiatives of the National Audit Department**

By recognising the requirement to modernise audit processes, the NAD has progressively incorporated ICT into existing operations, with the Digital Strategic Plan 2021–2025 of the department seeking to attain four (4) main strategic goals, namely, incorporating audit data across various ministries via a centralised platform, guaranteeing stable and securing various technological systems, developing standards for digital audit processes, and improving the digital skills and literacy of auditors (NAD, 2022). The above strategic priorities are aligned with the broader MyDIGITAL Blueprint and 12<sup>th</sup> Malaysia Plan, which emphasise strengthening digital governance and improving public sector efficiency. Additionally, the department has begun incorporating data analytics and visualisation tools to help improve audit reporting and risk assessment. For example, the Auditor General's Dashboard was launched to increase transparency by offering public access to audit summaries and performance metrics (Mohamad Zam et al., 2021). Nonetheless, the impact of the dashboard was limited due to low user engagement and incomplete disclosure of follow-up actions, hence demonstrating the transition to digital auditing of the NAD as sluggish and fragmented, with existing studies also highlighting ongoing constraints in technological infrastructure, human capital, and organisational culture (Mokhtar et al., 2024; Nik Man, 2024; Syam et al., 2025). Accordingly, the postponement of AI-related training until 2025, namely, four (4) years after the introduction of the National AI Roadmap (MOSTI, 2021), has illustrated the gap between policy aspirations and institutional readiness, coupled with resource shortages and procedural rigidity.

#### **4.4 Challenges and the Need for Readiness**

The digital transformation of the NAD is not merely a technological endeavour but also an organisational change process, which requires clear vision, strong leadership, and staff commitment. Past research on change management in the public sector emphasised that the success of digital initiatives depended heavily on the readiness of an organisation, which included its collective confidence, motivation, and capability to execute change (Weiner, 2009; Cinite et al., 2009). Focusing on the NAD, the limited availability of key resources, resistance to emerging technologies, and lower degrees of digital proficiency among auditors have also emerged as key barriers (Veerankutty et al., 2018), thus suggesting that organisational readiness extends beyond technical competence to psychological and cultural preparedness. Particularly, when employees believe their organisations are capable and committed to change, the employees are more inclined to exhibit higher levels of work engagement and accountability (Qureshi et al., 2021), whereas a lower level of perceived organisational readiness can lead to higher resistance and inefficiency, coupled with reduced audit quality (Ungku Mohd Zam et al., 2021). Thus, assessing and strengthening readiness among auditors is essential for ensuring that the digital transformation of the NAD can achieve its intended goals of improving audit effectiveness and public accountability.

Although the NAD possesses a strong legal mandate and strategic direction for digital transformation, existing institutional foundations are insufficient to guarantee successful digital audit implementation, as the transition towards digital auditing is highly contingent upon the willingness, confidence, and preparedness of auditors to adopt emerging technologies and develop relevant digital competencies. As such, the human factor becomes a critical determinant of the success of transformation, particularly when resistance to change and limited digital proficiency may substantially hinder implementation efforts. Therefore, beyond policies and technological investments, understanding the organisational and psychological readiness of auditors is essential for achieving sustainable digital audit transformation, which highlights the importance of organisational readiness for change. The following section will elaborate on the concept of organisational readiness for change by discussing theoretical foundations, determinants, and significance in digital audit implementation.

## 5.0 Organisational Readiness for Digital Audit

### 5.1 Concept of Organisational Readiness for Change

Digital transformation, particularly in the domain of public-sector audit, requires more than the acquisition of technology, which demands more holistic organisational readiness. Specifically, organisational readiness for change refers to the shared psychological and behavioural state within an organisation that reflects the commitment of organisational members to implement change and their confidence in successfully executing it (Weiner, 2009), which represents both a cognitive and motivational construct that encompasses the collective belief that change is necessary, desirable, and feasible (Armenakis & Harris, 2009; Holt et al., 2007). Contrary to individual readiness, which mainly concentrates on personal attitudes toward change, organisational readiness represents a group-level construct that reflects the overall alignment of beliefs, resources, and systems to support digital transformation (Shea et al., 2014). Accordingly, a higher level of organisational readiness can enhance the persistence and cooperation of organisational members during the process of change, whereas a lower degree of readiness will contribute to higher resistance, conflict, and implementation failure (Vakola, 2014). Additionally, in the context of digital audit implementation, readiness encapsulates the ability and willingness of an organisation to adopt digital tools, restructure audit workflows, and embrace alternative competencies, which necessitates the incorporation of technological infrastructure, leadership support, and employee engagement. As emphasised by Gong and Ribeire (2021), successful digital transformation depends on both 'hard' factors (systems, data, and technology) and 'soft' factors (culture, trust, and motivation). Hence, in the public sector, where hierarchical rigidity and bureaucratic procedures often prevail, organisational readiness will function as a critical bridge between technological potential and operational reality.

### 5.2 Relevance of Readiness in Digital Audit Transformation

In the digital audit context, readiness will determine whether auditors and their institutions can shift from traditional manual approaches to embracing data-driven audit techniques, as digital audit requires auditors to navigate more complex datasets, utilise analytical software, and interpret AI-generated insights, which are tasks that demand digital skills, technical skills, and cognitive adaptability (Issa et al., 2016; Kokina & Davenport, 2017; Ismail et al., 2025). Hence, without adequate degrees of readiness, auditors may experience more technological anxiety, distrust in digital tools, and reluctance to change established practices. Moreover, public-sector auditing has a unique set of challenges related to readiness, with bureaucratic structures often delaying decision-making, resource allocation being tightly controlled, and the workforce potentially being accustomed to stable and rule-bound procedures (Michelotto & Joia, 2024), which demonstrates that readiness-building is a strategic imperative. In a similar vein, existing studies in developing countries have revealed that the failure of digital audit initiatives is not owing to inadequate technology, but rather due to limited human and organisational preparedness (Limani et al., 2019; Afroze & Aulad, 2020). In the context of the Malaysian NAD, readiness issues are also evident in terms of limited training, resource shortages, and resistance to different audit systems (Nik Man, 2024).

### 5.3 Relationships Between Readiness, Commitment, and Outcomes

Organisational readiness does not operate in isolation, but rather interacts with behavioural and performance outcomes. According to the current empirical studies, it has been indicated that a high level of organisational readiness can contribute to higher employee commitment, which will subsequently drive effectiveness and accountability (Madsen et al., 2006; Zappalà et al., 2019). In the NAD context, the readiness of the institution to adopt digital systems can help strengthen the collective work commitment of auditors, namely, a shared sense of responsibility and emotional attachment to the stipulated organisational goals (Allen & Meyer, 1990). When auditors perceive that the NAD is prepared and capable of digital transformation, the auditors are more predisposed to align personal efforts with institutional objectives, thus leading to more efficient audit practices and improved public accountability (Nasrabadi & Arbabian, 2015; Lestari et al., 2020). Conversely, when the level of readiness is low, auditors may exhibit minimal engagement, which will subsequently contribute to reduced performance (Jaya et al., 2024). As such, organisational readiness acts as a precursor not only to effective digital implementation but also to stronger professional commitment and institutional trustworthiness through the embodiment of both psychological commitment and practical capability, thereby guaranteeing that technological innovations are supported by a motivated and competent workforce. Accordingly, the main factors influencing readiness

are change valence, task knowledge, and resource availability, which collectively determine the extent to which digital audit initiatives can be embedded and sustained within audit institutions, including the NAD.

## 6.0 Theoretical Foundations and Conceptual Framework Development

### 6.1 Theory of Organisational Readiness for Change (TORC)

The TORC, which was introduced by Weiner (2009), provides a holistic explanation of how collective psychological states can influence organisational capacity to implement change by positing that readiness is a shared and emergent property, and it exists not within individual employees, but rather within the collective belief system of organisational members. According to Weiner (2009), readiness is determined by two (2) key constructs, namely, change commitment and change efficacy, in which the former refers to the collective determination or resolve to pursue change, representing the motivational aspect of readiness and reflecting whether members prefer to implement change. Meanwhile, change efficacy is denoted as the collective belief in the capability of an organisation to execute the change effectively, which embodies the cognitive and confidence-based components and reflects whether members believe that they can implement change. In addition, both components interact dynamically, wherein a higher change commitment without efficacy may result in enthusiasm without execution, whereas higher efficacy without commitment will lead to technical capacity, yet lower motivation. Therefore, readiness requires both a strong desire to change and confidence in the ability to execute change (Weiner, 2009; Shea et al., 2014). Weiner (2009) further identified three (3) primary antecedents influencing readiness, namely, change valence (the perceived value of the change), task knowledge (understanding of what should be performed), and resource availability (the perceived adequacy of time, funding, and expertise). When the above antecedents are favourable, organisational members tend to develop shared perceptions that support readiness, which can subsequently enhance change-related effort and outcomes of the change initiative. Similarly, numerous empirical studies have validated the above relationships across different sectors, including healthcare, education, and the public service (Holt et al., 2007; Cinite et al., 2009; Zappalà et al., 2019). In the digital audit context, Weiner's (2009) theory provided a pertinent perspective for examining the transformation journey of the NAD, wherein the readiness of the department to implement digital audit depends not only on its access to digital infrastructure but also on the collective motivation and perceived capability of auditors to employ relevant tools effectively. Thus, the TORC captures the organisational psychology underlying digital transformation and explains the reasons that certain institutions embrace change successfully, whereas others stagnate, despite similar technological resources.

### 6.2 Three-Component Model (TCM) of Organisational Commitment

Although readiness can explain why organisations will initiate change, commitment explains how members can sustain effort and engagement during the process. In particular, Allen and Meyer's (1990) TCM offers a behavioural and emotional complement to the readiness construct by delineating the three (3) dimensions of employee commitment:

- i. **Affective Commitment:** The emotional attachment to, identification with, and involvement in the organisation. Employees with strong affective commitment remain owing to personal preferences.
- ii. **Continuance Commitment:** The awareness of the costs associated with leaving the organisation, and employees stay as they are required to.
- iii. **Normative Commitment:** A sense of obligation to remain with and support the organisation, and employees stay as they feel they ought to

The above multidimensional view of commitment recognises that organisational behaviour is driven by diverse motivational foundations, including emotional, calculative, and moral (Allen & Meyer, 1996). Prior empirical evidence demonstrated that affective commitment was most strongly associated with positive work behaviours, innovation, and performance, whereas continuance commitment could lead to passive compliance, and normative commitment would sustain ethical responsibility (Meyer et al., 2002; Jaya et al., 2024). In the public sector, particularly in institutions such as the NAD, commitment can lead to broader implications. Specifically, auditors' commitment reflects not only loyalty to organisations but also adherence to professional ethics and accountability to the public. Existing studies have also uncovered that committed auditors tend to uphold independence, apply judgment consistently, and engage proactively in the processes of reformation (Lestari et al., 2020; Nasrabadi & Arbabian, 2015). Therefore, fostering stronger affective

and normative commitment among auditors is vital for the successful institutionalisation of digital audit practices. In sum, incorporating Weiner’s (2009) TORC and Allen and Meyer’s (1990) TCM assisted the current study in formulating a holistic theoretical framework for understanding the human and organisational dynamics of digital audit readiness, which was grounded in the premise that readiness would act as an antecedent to commitment, and commitment would mediate the relationship between readiness and performance outcomes (Holt et al., 2007; Qureshi et al., 2021), thereby allowing a deeper understanding of how readiness would translate into tangible organisational outcomes through the mediating influence of commitment.

### 6.3 Conceptual Framework of Auditors’ Readiness for Digital Audit

To examine the digital audit implementation by the NAD in Malaysia, the present study proposed a conceptual model that linked the antecedents of organisational readiness, namely, change valence, task knowledge, and resource availability, with readiness measures, collective work commitment, and outcomes (Weiner, 2009):

- i. **Change Valence:** When auditors perceive digital audit as valuable and beneficial to their work, they are more inclined to commit to its implementation (Bilgiç & Camgöz Akdağ, 2023).
- ii. **Task Knowledge:** Understanding the tasks and processes involved in digital audit can enhance self-efficacy and readiness (Salijeni et al., 2019).
- iii. **Resource Availability:** Adequate infrastructure, training, and leadership support can help reinforce confidence in the organisational capacity to change (Otia & Bracci, 2022).

The above antecedents profoundly shape how organisational members assess both their motivation (change commitment) and capability (change efficacy) to perform a change (Weiner, 2009). After readiness has been established, it will influence the development of collective work commitment among auditors, in which a higher degree of readiness will foster affective commitment (emotional attachment to the change), normative commitment (sense of duty to support it), and, to a lesser extent, continuance commitment (recognition of costs of non-compliance). Similarly, existing empirical studies support the above linkage, wherein readiness predicts positive work attitudes and organisational identification (Holt et al., 2007; Qureshi et al., 2021). Subsequently, collective work commitment influences the outcome of the audit, which includes audit effectiveness and public accountability. In summary, the conceptual framework, as visualised in Figure 2, connected the antecedents, namely, change valence, task knowledge, and resource availability, with organisational readiness, collective work commitment, and change outcomes in digital audit implementation by the Malaysian NAD, which highlighted how motivation, capability, and organisational support could enhance readiness and work commitment, ultimately leading to improved audit quality, effectiveness, and accountability in the process of digital transformation.

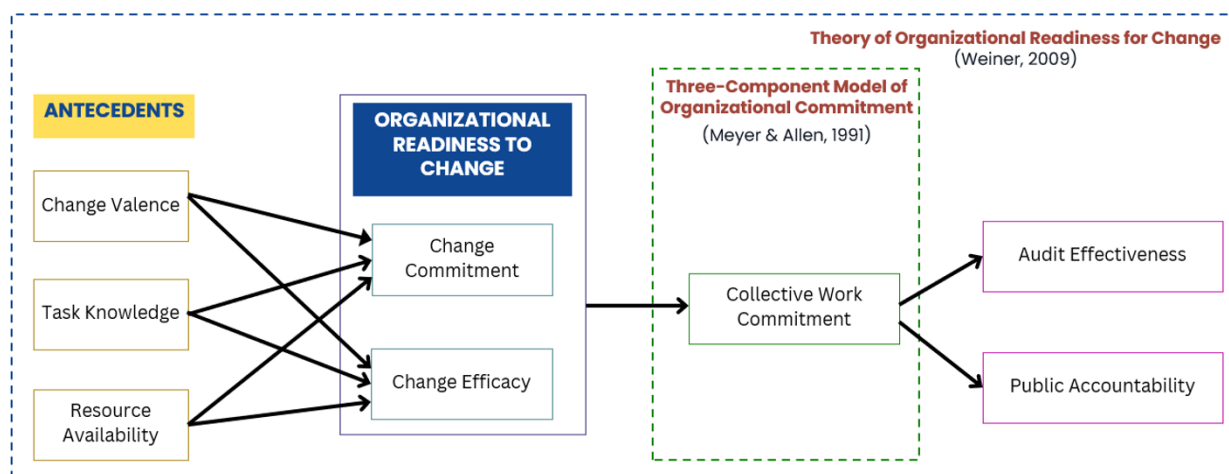


Figure 2: The Conceptual Framework

## 7.0 Research Gaps, Directions for Future Research, and Implications of the Integrated Model

Although digital transformation has been widely examined across various industries, the current body of knowledge on digital audit readiness, particularly within public-sector contexts, remains limited and fragmented, as existing studies have predominantly emphasised the technological and procedural aspects of audit digitalisation, such as tool adoption, data analytical integration, and automation, rather than the human and organisational dimensions that will determine the success of implementation (Salijeni et al., 2019; Butké & Dagilienė, 2022). In addition, there is a conceptual gap in linking technological innovation to organisational behavior, wherein although existing models, such as the technology acceptance model (TAM) and the unified theory of acceptance and use of technology (UTAUT), have frequently been used to explain individual technology adoption, the above models cannot adequately capture the collective psychological readiness required for the digital transformation across all levels of the organisation (Venkatesh et al., 2012; Gong & Ribeiro, 2021). As such, the TORC (Weiner, 2009) can help bridge the above gap by focusing on shared beliefs, motivation, and confidence, yet its application in public-sector auditing remains sparse. There is also an empirical gap in existing studies that have examined the interrelationships between readiness, commitment, and performance outcomes, in which prior research on digital transformation in auditing was often limited to identifying the determinants of adoption (Ismail et al., 2024) without extending analysis to how readiness would influence the behavioural commitment and audit quality of auditors. Consequently, the mechanisms through which readiness will translate into improved accountability remain underexplored. Additionally, most empirical evidence on digital audit readiness originates from Western audit institutions, wherein resource sufficiency, digital infrastructure, and governance maturity are relatively more advanced (Eulerich et al., 2023; IFAC, 2022). In contrast, developing countries, such as Malaysia, have frequently encountered unique challenges, including bureaucratic rigidity, limited funding, and uneven digital competency, that shape organisational readiness differently. Thus, testing and refining existing theories within the Malaysian NAD context can offer opportunities to contextualise and extend the current theoretical frameworks.

In terms of theoretical and methodological gaps, the incorporation of Weiner's (2009) TORC with Allen and Meyer's (1990) TCM in the current study was novel in the audit digitalisation literature, although there was an absence of empirical validation of the above integrated model, as a majority of prior studies regarded readiness as a unidimensional construct, which neglected the dynamic interaction with commitment and performance outcomes, hence highlighting the need for multilevel and longitudinal research to capture temporal changes in readiness and commitment during digital transformation. Future researchers can expand the scope of digital audit readiness beyond technical adoption to include behavioural, cultural, and ethical dimensions, while appraising how organisational justice, ethical climate, and leadership communication can mediate the linkage between readiness, commitment, and performance. Furthermore, comparative studies across SAIs in Southeast Asia can further enrich the current understanding of how regional governance structures will influence organisational readiness. Practically, the integrated model developed in this paper could function as a diagnostic tool for audit institutions, wherein the NAD and other SAIs could utilise the model to assess different levels of readiness, identify relevant barriers, and design targeted interventions, such as capacity-building programmes, leadership workshops, and change management strategies. Moreover, embedding readiness assessment into digital audit policy frameworks can help guarantee that transformation efforts are human-centred, inclusive, and sustainable. In terms of the proposed conceptual model, the incorporation of the TORC and TCM contributed to several important implications, in which the proposed model advanced the existing literature on digital audit by combining the change readiness theory and organisational behavioural theory that rarely intersect in public-sector studies, thereby offering a deeper understanding of how psychological and institutional factors would jointly influence technological transformation. Future empirical studies are also encouraged to employ and validate the proposed conceptual framework to provide further evidence and enhance its generalisability.

In terms of practical implications, the model can guide the leadership of the NAD in diagnosing readiness gaps, designing interventions (training, communication, resource allocation), and fostering commitment among auditors. By recognising the dual role played by readiness and commitment, the NAD can manage both technical and behavioural aspects of digitalisation. Specifically, the resource availability component of the proposed framework is particularly relevant in addressing the current capability gaps within the digital transformation efforts of the NAD, as although the NAD has initiated several digitalisation strategies, the postponement of AI-related training indicates that institutional readiness remains constrained by existing limitations in specialised digital competencies and training preparedness. Therefore, resource availability should be perceived not only in terms of technological infrastructure and financial support, but also in the provision of continuous professional development, AI-related training, and organisational learning opportunities

for auditors, which requires strengthening the above resources to further increase the self-assurance, change efficacy, and preparedness of auditors to more effectively implement digital audit practices. For policymakers, the model reflects the importance of human-centred digital transformation strategies, wherein developing only digital infrastructure is insufficient, as there is also a need to cultivate readiness and commitment among auditors to ensure more sustainable outcomes of the reformation. In conclusion, the current integrated framework not only enriched the current theoretical discourse but also offered practical guidance for relevant institutions, including the NAD, which sought to navigate the complex process of digital audit implementation. Concurrently, the Malaysian government has laid a robust foundation for the smooth and effective implementation of its digital transformation agenda, particularly within public-sector auditing. As a result, the proposed conceptual framework provided a structured pathway to enhance the level of readiness for the effective implementation of digital audits, thereby contributing to the overall success of the digital transformation agenda of the government.

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