

THE BEHAVIOURAL INTENTION OF AUDIT SOFTWARE ADOPTION AMONG MALAYSIAN AUDITORS: BARRIERS, PERCEIVED BENEFITS, AND THE MODERATING ROLE OF GROWTH MINDSET

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Abstract: *Digital technologies have changed the way the audit profession works through the adoption of Computer-Assisted Audit Tools and Techniques (CAATTs), including audit software. However, despite the benefits given by these technologies, the adoption rate of audit software among Malaysian auditors lags behind expected levels. This conceptual paper aims to explore the barriers and perceived benefits influencing audit software adoption among Malaysian auditors, and to introduce growth mindset as a moderating variable that may be able to strengthen auditor's willingness to adopt the audit technologies. Referring to the Unified Theory of Acceptance and Use of Technology (UTAUT), this study proposes a framework that links the four main constructs, performance expectancy, effort expectancy, social influence, and facilitating conditions in explaining the behavioural intention to adopt audit software. Introducing the growth mindset as a new variable into the model is considered the primary theoretical contribution, of which auditors with a growth mindset are more likely to be open to technological changes, willing to learn new skills, and capable of overcoming barriers to realize the benefits of adopting new audit technology. This proposed conceptual model, incorporating a psychological factor, will provide regulators, accounting firms, and professional bodies with better strategies to boost digital adoption in the Malaysian audit sector.*

Keywords: *Audit Software, UTAUT, Growth Mindset, Technology Adoption, Malaysian Auditors.*

Introduction

The auditing profession is experiencing significant transformations in auditing process related to the efficiency and effectiveness of carrying out the audit tasks using audit technology. Automation has changed the way auditors work through the adoption of Computer-Assisted Audit Tools and Techniques (CAATs), including audit software. The benefits of using the automated process enable auditors to analyse large volumes of transactional data, identify data irregularities, which in turn allows real-time analysis, leads to more comprehensive risk assessment, and improves the accuracy of audit conclusions as well as enhances overall audit effectiveness (Jayanti et al., 2025). However, despite their potential benefits, the adoption of latest technologies among Malaysian auditors remains limited and inconsistent (Hussain et al., 2025; MIA, 2025).

The Malaysian Institute of Accountants (MIA) and other regulatory bodies have long advocated for the digital transformation of the accounting and auditing profession. MIA's Digital Technology Blueprint (2018) emphasized that embracing technology is essential for maintaining relevance and competitiveness in the global market. Nonetheless, barriers such as cost constraints, lack of technical expertise, resistance to change, and inadequate training continue to hinder full adoption (Jackson & Allen, 2024). The discrepancy between awareness and actual implementation highlights a behavioural and cognitive gap among auditors, one that may be influenced by their individual mindset toward learning and adaptation.

The Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003) provides a comprehensive framework for explaining user intentions and behaviours in adopting new technologies. The model identifies four key determinants of technology adoption: performance expectancy, effort expectancy, social influence, and facilitating conditions. These factors have been widely validated across various technological contexts, including accounting and auditing (Mohd Faizal et al., 2022; Pratama & Komariyah, 2023). However, the UTAUT model primarily focuses on external and organizational factors, often overlooking internal psychological attributes that may affect auditors' willingness to adopt new tools. This is particularly relevant in the context of audit software adoption, where personal attitudes, self-belief, and openness to learning play crucial roles in determining behavioural intentions.

The growth mindset theory, introduced by Dweck (2006), posits that individuals who believe their abilities can be developed through effort, learning, and persistence are more likely to embrace challenges and adapt to change. In the auditing context, a growth-oriented auditor is expected to perceive technological change not as a threat but as an opportunity to enhance competence and performance.

This conceptual paper aims to address a key gap in technology adoption literature by arguing that the widely used UTAUT framework is insufficient in accounting for individual psychological differences in technology adoption (Garcia de Blanes Sebastian, 2022). To enhance the explanatory power of this model, the paper proposes extending the UTAUT framework by integrating Carol Dweck's growth mindset as a moderating construct. This study aims to identify and discuss the barriers and perceived benefits influencing audit software adoption among Malaysian auditors, to develop the enhanced conceptual model, and ultimately, to provide substantive theoretical and practical implications for policymakers, professional bodies, and audit practitioners to strengthen digital adoption strategies.

Literature Review and Conceptual Framework

Technology Adoption in the Auditing Profession

The auditing profession is experiencing significant changes in term of the growing complexity of business transactions and availability of massive datasets and sophisticated analytical tools, requiring the auditors to adopt new, high-tech auditing software. This digital shift is driven by the necessity for higher audit quality, increased efficiency, and the need to analyse 100% of transactions rather than relying on sampling (Huang et al., 2022). While the use of technologies like CAATTs is rapidly becoming essential for survival in large auditing firms, the transition is not seamless. The successful adoption of these technologies' hinges not only on their technical superiority but also on the individual auditor's willingness and ability to embrace such change.

MIA's Digital Technology Blueprint (2018) stipulates a digitally competent audit workforce, emphasizing technology as a key enabler for audit quality, transparency, and competitiveness. Nonetheless, previous studies indicate that adoption barriers such as cost, resistance to change, and limited technical training continue to hinder full integration of audit software into daily practice (Jackson & Allen, 2024; Wan Ahmad & Zakaria, 2024). Hence, understanding the psychological and behavioural factors underlying technology adoption among auditors remains an urgent research priority.

The Unified Theory of Acceptance and Use of Technology (UTAUT)

To explain individual differences in technology adoption, the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) provides a robust framework. It integrates elements from eight earlier models, including the Theory of Reasoned Action, Technology Acceptance Model (TAM), and Innovation Diffusion Theory. UTAUT posits four key determinants of technology acceptance: performance expectancy, effort expectancy, social influence, and facilitating conditions. These factors influence behavioural intention and usage behaviour, moderated by variables such as age, gender, experience, and voluntariness.

In auditing contexts, UTAUT has been widely applied to study digital adoption (Alsarayrah & Ali, 2025; Fulop et al., 2022; Handoko & Chu, 2021). Performance expectancy reflects the extent to which auditors believe that audit software will improve their job performance. Effort expectancy refers to the perceived ease of use of the technology. Social influence captures the perceived pressure from colleagues, superiors, and regulatory expectations to adopt digital tools. Facilitating conditions represent the availability of technical and organizational support for technology use. Together, these constructs explain much of the variance in auditors' intentions to adopt audit software.

However, the UTAUT model's limitation lies in its primarily cognitive-behavioural orientation. It assumes that technology acceptance is rational and externally driven but tends to understate internal psychological drivers, such as personal mindset, intrinsic motivation, and adaptability to change (Lee et al., 2025; Yoo et al., 2012). This gap provides theoretical justification to integrate growth mindset theory as an additional moderating construct.

Barriers and Perceived Benefits of Audit Software Adoption

Empirical studies consistently highlight both barriers and benefits influencing the use of audit technology. On the benefit side, audit software enables real-time risk assessment, data visualization, improved audit documentation, and enhanced fraud detection capabilities (Jayanti

et al., 2025). It allows auditors to shift from procedural testing to analytical and judgment-based evaluation, supporting value-added auditing (Hussain et al., 2025).

Conversely, barriers often include lack of training, perceived complexity, high licensing costs, cybersecurity risks, and the inertia of traditional practices (Jackson & Allen, 2024; MIA, 2025). Many auditors, especially in small and medium practices (SMPs), rely on conventional spreadsheet-based audits due to limited technological exposure and constrained resources (Ali & Mouritsen, 2025). These obstacles reflect not only structural and organizational factors but also individual differences in cognitive adaptability and openness to change.

Such individual differences can be better understood through mindset theory, particularly Dweck's (2006) growth mindset, which differentiates between individuals who believe intelligence and abilities are fixed versus those who view them as improvable through effort and learning.

Growth Mindset and Technology Adoption

The growth mindset concept, introduced by Dweck (2006), asserts that individuals who believe their capabilities can be developed through dedication and learning are more likely to embrace challenges, persist despite difficulties, and respond positively to feedback. In contrast, those with a fixed mindset perceive abilities as innate and unchangeable, often avoiding new challenges that may expose their limitations.

In the auditing context, a growth mindset can play a significant role in technology adoption. Auditors with a growth mindset tend to approach digital transformation as an opportunity for professional growth rather than as a threat to competence. They are more inclined to acquire new digital skills, engage in continuous learning, and adapt their audit methodologies to align with technological advancements (Jackson & Allen, 2024).

Recent behavioural accounting research supports this psychological perspective, showing that growth-oriented professionals exhibit higher adaptability to digital innovation and greater resilience in coping with uncertainty (Garcia de Blanes Sebastian, 2022). Thus, integrating growth mindset into technology adoption models such as UTAUT enhances explanatory depth by accounting for the internal motivational dimension of digital acceptance.

Integrating Growth Mindset into the UTAUT Framework

While the UTAUT model effectively captures external determinants of technology use, its explanatory power may be limited without considering psychological moderators. Hence, this paper proposes an extended UTAUT-Growth Mindset Model to explain audit software adoption among Malaysian auditors.

In the proposed model (see Figure 1), the four UTAUT constructs, performance expectancy, effort expectancy, social influence, and facilitating conditions, directly influence auditors' behavioural intention to adopt audit software. The growth mindset moderates these relationships by strengthening the positive influence of the UTAUT factors. Specifically, auditors with a stronger growth mindset are expected to perceive higher performance benefits, experience less difficulty, and exhibit greater openness to social and institutional encouragement.

The conceptualization assumes that auditors' growth mindset enhances their willingness to learn, experiment, and overcome implementation barriers, thus facilitating the overall likelihood of technology adoption. This theoretical integration provides a new psychological dimension to UTAUT and contributes to understanding how internal beliefs shape external behavioural responses.

Development of Hypotheses

Based on the literature synthesis and proposed framework, the following hypotheses are formulated:

Summary of Hypotheses
H1: Performance expectancy positively influences auditors' behavioral intention to adopt audit software.
H2: Effort expectancy positively influences auditors' behavioral intention to adopt audit software.
H3: Social influence positively influences auditors' behavioral intention to adopt audit software.
H4: Facilitating conditions positively influence auditors' behavioral intention to adopt audit software.
H5: Growth mindset moderates the relationship between performance expectancy and behavioral intention.
H6: Growth mindset moderates the relationship between effort expectancy and behavioral intention.
H7: Growth mindset moderates the relationship between social influence and behavioral intention.
H8: Growth mindset moderates the relationship between facilitating conditions and behavioral intention.

Proposed Conceptual Model

Figure 1 illustrates the proposed conceptual model integrating UTAUT and growth mindset. The figure depicts the direct relationships of the four UTAUT constructs with behavioural intention and the moderating influence of growth mindset on these relationships.

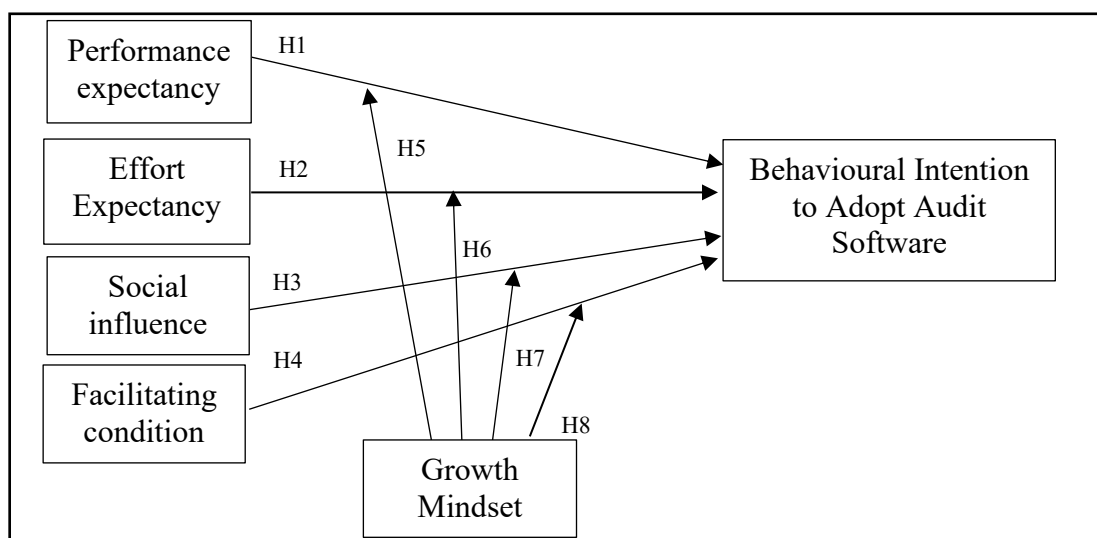


Figure 1: Proposed Model

Source: Venkatesh et al. (2003); Dweck (2006)

Methodological and Theoretical Implications

Methodological Implications

Although this paper is conceptual, it provides a foundation for future empirical testing of the proposed UTAUT-Growth Mindset framework. The model can be operationalized through a quantitative, cross-sectional survey design targeting external and internal auditors in Malaysia, including practitioners from both Big Four and small-to-medium audit firms. The unit of analysis should be the individual auditor, as the adoption decision and mindset characteristics are inherently personal.

A structured questionnaire could be developed focusing on Malaysian auditors, using validated UTAUT items (Venkatesh et al., 2003) and growth mindset measures (Dweck, 2006). Constructs can be measured using a Likert scale, and data analysed using PLS-SEM to test direct and moderating effects (Hair et al., 2022). This approach allows the assessment of how growth mindset influences the relationships between UTAUT factors and behavioural intention to adopt audit software.

Theoretical Implications

Integrating growth mindset into the UTAUT framework offers three main theoretical contributions. First, it extends UTAUT by introducing a psychological dimension that explains individual adaptability beyond cognitive evaluations such as usefulness or ease of use. Second, it enhances explanatory power by addressing individual differences in openness to learning and change, factors critical in a profession undergoing digital transformation. Third, it contributes to behavioural auditing theory by positioning growth mindset as a driver of continuous learning and technological adaptability, aligning with MIA's Digital Technology Blueprint (2018) and IFAC's (International Federation of Accountants) emphasis on future-ready auditors (Davies, 2022). This integration helps bridge the cognitive-motivational gap in technology adoption literature and strengthens understanding of how psychological beliefs influence behavioural intentions in professional contexts.

Practical Implications

Practically, the proposed model emphasizes the importance of fostering a growth mindset to enhance technology adoption among auditors. Audit firms and regulators should integrate mindset development into training programs, promote a supportive culture that values learning and innovation, and provide targeted assistance to smaller firms through affordable tools and structured training. These efforts can reduce resistance, build digital readiness, and accelerate the digital transformation of Malaysia's auditing profession.

Conclusion and Future Research Directions

This conceptual paper argues that a UTAUT-based model extended with growth mindset offers a promising roadmap for explaining and accelerating audit software adoption among Malaysian auditors. Performance expectancy, facilitating conditions, social influence, perceived benefits, effort expectancy, and perceived barriers remain central determinants—but auditors' dispositional orientation toward learning (growth mindset) can substantially shape how these determinants translate into intention and use. Practically, firms and regulators should invest in both technical infrastructure and psychological/learning supports to realize the benefits of audit technologies while safeguarding audit quality.

Future empirical work should (1) validate the proposed hypotheses in Malaysian and comparative settings using robust sampling across firm sizes; (2) test the efficacy of growth mindset interventions in randomized designs; and (3) develop KPIs and monitoring frameworks that align technology adoption with audit quality outcomes. As audit technology evolves rapidly (AI, generative models, real-time analytics), combining acceptance theory with psychological resilience constructs will help auditing practitioners adapt responsibly and effectively.

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