



A Study on Ethical Implications, Trust, and Audit Reliability in AI Assisted Accounting: An Extended UTAUT Perspective in Emerging Economies

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Abstract

Purpose: This paper examines how ethical perception and trust shape the adoption and reliability of artificial intelligence systems in accounting and auditing, particularly within emerging economies. It extends the Unified Theory of Acceptance and Use of Technology (UTAUT) to incorporate ethical and trust-based dimensions that influence professional acceptance beyond functional factors.

Design/methodology/approach: A conceptual framework is proposed by integrating ethical perception and trust into the traditional UTAUT model. The framework highlights their moderating and mediating roles in linking performance expectancy, behavioural intention, and audit reliability. Insights from existing literature and theoretical reasoning support the development of this extended model.

Findings: The study argues that AI adoption in professional accounting contexts is both a technological and moral process. Ethical perception strengthens trust, and together they enhance responsible adoption, critical engagement, and audit reliability. The framework positions moral legitimacy and institutional trust as essential conditions for sustainable AI integration.

Practical implications: For practitioners and audit firms, embedding ethical design principles, algorithmic transparency, and human oversight in AI systems can foster greater trust and accountability. For regulators, establishing AI audit assurance frameworks and updating ethical codes can help manage risks associated with automation in professional judgment.

Social implications: The framework emphasises the need for ethical governance and professional readiness in emerging economies, where rapid technological adoption can outpace institutional safeguards. Promoting ethical AI awareness can strengthen confidence in technology and enhance the integrity of financial reporting.

Originality/value: This paper contributes to technology adoption literature by reconceptualising AI use in accounting as an ethically anchored process. It shifts the discussion from efficiency and usability to accountability, transparency, and professional trust, offering a foundation for future empirical studies in emerging markets.

Keywords: Artificial Intelligence in Accounting, Ethical Perception, Trust in AI, Audit Reliability, Technology Adoption (UTAUT Model)

1. Introduction

The accounting and auditing profession is experiencing a profound shift owing to the integration of artificial intelligence (AI) tools that automate data collection, analysis, and decision making (Laine et al., 2024). These technologies promise greater efficiency, real-time analytics, and enhanced fraud detection. Yet they also challenge long-held ethical principles such as professional scepticism, accountability, and independence (Hasnain & Khalid, 2025). The question is not merely whether AI can improve audit outcomes but whether its use aligns with the ethical expectations of professional accountants and stakeholders.

Emerging economies provide a particularly interesting context for this discussion. In many such regions, regulatory systems, professional standards, and digital infrastructures are still evolving (Permata Suyono et al., 2024). The uneven distribution of technological capabilities, data governance frameworks, and ethical guidelines complicates AI adoption. Therefore, understanding how auditors and accountants in these

settings perceive, trust, and use AI tools is crucial for ensuring reliable and ethically sound financial reporting. A compelling South Asian example comes from India, where the Comptroller and Auditor General (CAG) has integrated AI and machine learning into its audit systems. These tools have been instrumental in uncovering large numbers of fraudulent cases in state-level welfare and beneficiary schemes (The Economic Times, 2024). The CAG's official journal further explains that machine learning models are now being applied to classify transactions, identify correlations, and detect noncompliance in government accounts (Comptroller and Auditor General of India [CAG], 2024). In practice, algorithms trained on historical payment and beneficiary data can highlight anomalies such as duplicate records, improbable clustering of benefits, or suspicious deviations from typical disbursement trends. Human auditors then investigate these alerts more deeply, validating or rejecting them through evidence and field checks.

This example highlights how technological progress can sharpen ethical questions. When an AI system flags a legitimate case as suspicious, who bears responsibility for the decision that follows—the algorithm or the auditor? Can professionals override the system without compromising audit integrity? In regulatory contexts that are still evolving, questions of accountability and transparency become complex and sometimes contentious.

This paper conceptualizes these tensions through the lens of an extended Unified Theory of Acceptance and Use of Technology (UTAUT) model. Traditional technology adoption models often emphasize usability, perceived usefulness, or social influence, but they rarely consider the moral and trust-based dimensions of professional judgment (Hasnain & Khalid, 2025). By incorporating constructs such as ethical perception and trust, the extended UTAUT framework proposed here better reflects the realities of high-stakes decision-making environments in emerging economies.

Ultimately, the AI revolution in auditing is not only about building smarter machines; it is also about nurturing wiser humans. The future auditor may evolve into an “AI partner,” someone capable of questioning algorithms with the same scepticism once reserved for balance sheets. As one CAG auditor remarked after reconciling a batch of AI-generated anomalies, “AI doesn’t replace my scepticism; it reminds me why I need it.”

2. Literature Review

2.1 AI in Accounting and Auditing

Artificial intelligence is quietly rewriting the rules of accounting. What began as a handful of automation tools for data entry has evolved into a sophisticated ecosystem that manages everything from bookkeeping and fraud detection to predictive financial analysis (Alles & Gray, 2023). Today’s accounting software is not merely a calculator with better speed; it is an intelligent assistant that can spot inconsistencies, reconcile accounts, and forecast financial outcomes with a precision that once seemed impossible. For many firms, AI has become the silent partner that never sleeps, crunching numbers long after the lights in the office are out.

In the world of auditing, this transformation runs even deeper. Advanced systems now use machine learning algorithms to scan vast datasets, identify transaction patterns, and detect subtle anomalies that may signal fraud or error (Vasarhelyi et al., 2023). An auditor once relied on sampling and intuition; now, the same professional works alongside an analytical engine that reviews entire populations of transactions in minutes. The auditor’s role is changing from mechanical verification to thoughtful interpretation. Instead of combing through endless ledgers, auditors spend more time examining the stories the data tells, validating the insights produced by AI, and translating them into judgments about financial health and compliance (Manheim et al., 2024).

Yet, the embrace of AI brings new questions that cut to the core of trust. These systems often operate with algorithms so complex that even their creators cannot fully explain how they reach certain conclusions. This opacity, coupled with potential data bias and limited explainability, introduces a new layer of uncertainty in audit reliability (Laine et al., 2024). If an AI tool flags a transaction as suspicious and the auditor cannot clearly understand why, who is ultimately accountable for the decision that follows? When machines begin to influence professional judgment, the line between human expertise and automated reasoning starts to blur.

The profession now faces a defining challenge. Efficiency and speed are no longer enough. Auditors and accountants must ensure that the insights produced by machines are transparent, fair, and ethically defensible. The conversation has moved beyond technology; it is now about responsibility. As firms integrate AI into their workflows, they must also build a culture of human oversight where professional scepticism, judgment, and ethics remain at the center.

AI can see patterns that humans might miss, but it cannot understand the meaning behind them. That task still belongs to the accountant, whose job is not just to record numbers but to interpret truth. The real test of AI in accounting will not be how much it can automate, but how wisely humans can use it to uphold the integrity of financial reporting.

2.2 Ethical Implications of AI Assisted Accounting

As artificial intelligence becomes an integral part of modern auditing, its ethical dimensions have come sharply into focus. Fairness, transparency, privacy, and accountability are no longer abstract principles but practical necessities guiding every decision made by algorithms and the humans who rely on them (Ethics Based Auditing, 2021). When AI systems begin to make or recommend financial judgments, their outputs may carry embedded biases or overlook context that a human professional would naturally consider (Hasnain & Khalid, 2025).

In developing economies, these risks are often magnified. Data is not always clean or complete, and governance systems may lack consistency, allowing algorithmic bias to grow unchecked. The result can be decisions that are efficient in form but flawed in fairness. Scholars therefore emphasize the idea of “ethics by design,” urging that moral reasoning, data integrity, and explainability should be built into accounting technologies from their inception (Köhler et al., 2022).

Professional bodies such as the International Federation of Accountants (IFAC) continue to call for clear ethical frameworks to ensure that humans remain in control of audit judgment (IFAC, 2023). Human oversight, according to IFAC, is the ultimate safeguard against errors that automation might miss. Yet, in many emerging markets, these frameworks remain aspirational. Without institutionalized safeguards, organizations risk placing too much trust in algorithms while neglecting accountability mechanisms.

A recent example from Uganda illustrates both the promise and the peril of AI-assisted auditing. The Uganda Revenue Authority has begun piloting machine learning systems to identify potentially fraudulent tax filings. While the technology has improved efficiency and detection rates, local auditors report instances where legitimate small businesses were wrongly flagged because the algorithm could not interpret incomplete or inconsistent data. In one case, a rural trader was subjected to an unnecessary audit that disrupted operations and caused reputational harm before the error was corrected by human review. Such incidents underline the importance of maintaining ethical and professional oversight even as technology advances (World Bank, 2023).

As AI continues to shape the auditing profession, the question is not only how to make machines more intelligent, but how to ensure they act in ways that remain aligned with human values and professional integrity. The future of trustworthy auditing will depend on designing systems that combine technological accuracy with moral awareness, ensuring that efficiency never comes at the expense of ethics.

2.3 Trust and AI Systems in Accounting

Trust has always been the foundation of accounting. Every audit opinion, every verified statement, and every disclosure depends on the belief that accountants and auditors act with integrity, independence, and fairness. For generations, this trust was built through human expertise and professional scepticism. It was the quiet confidence that a trained mind had examined each figure with care, judgment, and a sense of ethical duty.

Today, that foundation is being reshaped by artificial intelligence. As AI systems enter the audit process, trust begins to migrate from human competence to technological reliability (Hamadeh et al., 2025). The new co-auditor is not a person who can explain a hunch or defend a decision. It is an intelligent system that reads patterns, flags anomalies, and predicts outcomes based purely on data. This shift forces the profession to reconsider what it truly means to trust in a world where machines participate in judgment.

Studies across business and behavioural science reveal that trust in AI depends on three powerful perceptions: transparency, predictability, and control (Mogaji et al., 2024). People trust technology when they can understand how it works, when they can anticipate its decisions, and when they know they can intervene if it goes wrong. When these elements are missing, even the most advanced AI struggles to gain acceptance. In auditing, this means that a perfectly accurate algorithm may still face resistance if auditors cannot see the logic behind its conclusions or if its decision-making remains hidden behind complex code.

In emerging economies, the challenge is even greater. Digital literacy levels vary widely, and the infrastructure needed to support AI adoption is often uneven (Ifada et al., 2025; Adel, 2024). Many accountants and auditors are cautious about integrating AI tools not because they

doubt the technology, but because they fear losing the moral and professional control that defines their work. There is an underlying anxiety about whether relying on a non-human system aligns with their responsibility to exercise judgment, integrity, and care (Schiff, Kelly and Camacho, 2024).

Ethical uncertainty reinforces this hesitation. Auditors are trained to interpret numbers through a moral lens, to question inconsistencies, and to understand the context behind financial behavior. Machines, however, cannot fully grasp intention or ethical nuance (Suyono et al., 2024). When an algorithm misinterprets a legitimate transaction as suspicious, or fails to detect a subtle case of misconduct, the question of accountability becomes blurred. Is the human auditor responsible, or does the fault lie with the system?

Trust in AI-assisted auditing is therefore both a technical and moral construct. It is not enough for the technology to perform well; it must also inspire confidence that its outputs are fair, explainable, and ethically grounded. Building such trust will require collaboration between technologists, auditors, and regulators to ensure that AI serves as an extension of professional judgment rather than a replacement for it.

Ultimately, trust in this new era will depend on the balance between human wisdom and machine intelligence. AI can analyze faster and deeper than any human, but only people can interpret meaning, exercise empathy, and uphold ethics. The future of credible auditing will belong to those who can combine the precision of algorithms with the conscience of the profession.

2.4 The UTAUT Model and Its Relevance

Understanding why professionals trust or resist artificial intelligence takes us into the heart of technology adoption theory. One of the most enduring frameworks in this field is the Unified Theory of Acceptance and Use of Technology, or UTAUT (Venkatesh et al., 2003). For years, it has helped scholars explain how people decide to use new tools. The framework suggests that individuals are guided by four main forces: how useful they believe a technology will be, how easy it is to use, how much social support exists for its adoption, and whether the surrounding environment makes its use practical.

This model has served well in understanding the spread of digital tools in workplaces, from banking systems to healthcare applications. Yet, in the accounting and auditing profession, it falls short of capturing something more profound. The use of technology in this space is not only about performance or convenience; it is about ethics, judgment, and the preservation of public trust. As Hamadeh et al. (2025) point out, when auditors decide whether to adopt AI-driven tools, they are not simply weighing efficiency—they are weighing integrity.

Recent research has begun to fill this gap. Scholars such as Kwahk and Park (2023) propose that models like UTAUT must evolve to include emotional and moral dimensions such as trust, perceived risk, and ethical perception. These factors acknowledge that professional

technology adoption is rarely neutral. For accountants, a decision to use AI is also a decision about reputation, transparency, and responsibility.

Ethical perception refers to the user's assessment of how fair, accountable, and transparent a system is. Trust represents the confidence placed in its reliability and moral soundness. These two ideas together reshape our understanding of why people adopt—or reject—AI. They remind us that the relationship between humans and machines is not just functional but deeply psychological and ethical.

Consider an audit firm implementing an AI-based fraud detection platform. The technology promises faster insights, yet the team hesitates. Some auditors worry that the system might flag legitimate transactions due to incomplete data or hidden biases. Others wonder whether clients will accept an AI-driven audit opinion with the same confidence as one guided by human judgment. Their decision is shaped not by the software's speed or accuracy, but by their perception of its fairness and by the trust they place in it.

By extending UTAUT to include trust and ethical perception, researchers offer a more realistic lens through which to view technology adoption in professions built on integrity. It is a reminder that progress in accounting will not be measured solely by how much automation is achieved, but by how responsibly it is embraced. The future of AI in auditing will belong to organizations that treat ethics and trust not as afterthoughts, but as design principles woven into every technological decision.

2.5 Audit Reliability in the Age of AI

At the center of every audit lies a single question: can we trust the evidence? Audit reliability is the measure of that trust. It reflects the degree to which an auditor's findings are consistent, verifiable, and free from bias (Alles et al., 2023). Reliable audits give stakeholders the confidence that financial statements tell the truth, not a version of it shaped by error or omission.

Artificial intelligence has entered this space with great promise. Its ability to process massive datasets, identify anomalies, and flag irregularities in real time has the potential to strengthen the reliability of audits. An AI system can see what human eyes might miss, scanning through millions of transactions to detect inconsistencies or patterns that could signal fraud. When used wisely, it acts as a powerful ally to the auditor, enhancing precision and speed (Manheim et al., 2024).

Yet, the same technology that can build confidence can also erode it. Reliability depends not only on what AI can do, but on how clearly its decisions can be understood. When algorithms deliver outputs that auditors cannot interpret or explain, the audit process loses its transparency and accountability. Numbers alone are not enough; they must be backed by reasoning that humans can comprehend. As Hasnain and Khalid (2025) note, professional scepticism—the cornerstone of auditing—can weaken when practitioners place too much faith in algorithmic recommendations. The danger is subtle: when auditors stop questioning the machine, the very

spirit of inquiry that defines their profession begins to fade.

In emerging economies, these challenges are amplified by institutional and structural realities. Limited regulatory oversight, uneven data governance, and the absence of strong professional standards create what researchers call “institutional voids” (Suyono et al., 2024). In such contexts, the pressure to adopt technology quickly can outpace the capacity to regulate it effectively. A well-intentioned AI system, introduced without ethical guardrails or quality checks, might produce results that look precise but are fundamentally unreliable. The problem is not in the data processing itself, but in the blind trust placed in its outcomes.

For AI to truly enhance audit reliability, two invisible threads must hold it together: ethics and trust. Ethical perception ensures that AI operates within a framework of fairness, transparency, and accountability. Trust allows auditors to collaborate with technology without surrendering their professional judgment. When these two forces work in harmony, AI becomes more than a tool; it becomes a partner that strengthens the credibility of the entire audit process.

The future of auditing will not depend solely on advanced algorithms or faster data analytics. It will depend on how human judgment, ethical awareness, and technological intelligence come together to protect the one thing the profession cannot afford to lose—trust in the truth.

3. Conceptual Framework: Extending UTAUT for Ethical AI Adoption

3.1 Core UTAUT Constructs

The Unified Theory of Acceptance and Use of Technology (UTAUT) offers a valuable framework for understanding why individuals and organizations embrace or resist new technologies (Venkatesh et al., 2003). At its core, the model identifies four interrelated constructs that shape the decision to adopt technology: performance expectancy, effort expectancy, social influence, and facilitating conditions.

Performance expectancy: refers to the belief that using a particular technology will enhance job performance. In accounting, this construct is often visible when professionals recognize that digital tools can streamline processes, reduce human error, and improve the accuracy of financial analysis. For instance, auditors who see that artificial intelligence can analyze vast datasets in minutes may view it as a means to deliver more comprehensive and timely insights.

Effort expectancy: captures perceptions of how easy a system is to learn and use. In practice, accountants are more likely to adopt AI-enabled systems when they are intuitive, user-friendly, and compatible with existing workflows. A system that requires extensive training or disrupts established practices is likely to face resistance, regardless of its potential benefits.

Social influence: reflects the effect of professional peers, industry norms, and organizational culture on individual adoption decisions. When respected colleagues or senior

partners advocate for technology integration, it often legitimizes innovation and encourages others to follow suit. In accounting firms, this influence is particularly strong because professional credibility and conformity to industry standards play a significant role in decision-making.

Facilitating conditions: represent the technical, organizational, and infrastructural support that enables effective technology use. Even the most promising systems can fail if they are not supported by reliable hardware, training programs, or clear management policies. In many organizations, the success of AI adoption depends as much on leadership commitment and governance as on the technology itself.

Together, these four constructs create a holistic understanding of how professionals evaluate new technologies. In the accounting and auditing context, they explain not only the motivation to adopt AI-enabled tools but also the barriers that prevent successful implementation. By applying UTAUT, researchers and practitioners can better understand the psychological, social, and structural factors that shape technology use within the profession.

3.2 Introducing Ethical Perception

Ethical perception describes how users assess the moral character of artificial intelligence systems. It involves judgments about whether a system behaves in ways that are fair, transparent, and accountable. In the field of accounting and auditing, this perception often determines whether professionals view AI tools as reliable partners or as potential threats to ethical integrity. When accountants believe that an AI system has been designed with fairness, transparency, and professional responsibility in mind, they are more likely to adopt it with confidence and use it in a manner consistent with their ethical duties (Laine et al., 2024).

Ethical perception goes beyond technical capability. It reflects the degree to which users feel that technology aligns with their moral values and professional identity. An AI tool that explains its reasoning clearly, protects confidential data, and avoids biased judgments will naturally inspire greater trust among users. It reinforces the belief that technology can coexist with human accountability rather than replace it.

However, when a system is seen as ethically ambiguous, the opposite occurs. If users suspect that an algorithm may favor certain outcomes, misinterpret data, or expose sensitive information, their willingness to rely on it decreases. Even when the system performs efficiently, perceived ethical risk can outweigh perceived usefulness. Professionals may hesitate, fearing that reliance on such a system could compromise their independence or damage public confidence in their work.

Within the extended framework of technology adoption, ethical perception functions as a moderating factor between performance expectancy and behavioural intention. When accountants believe that AI tools operate ethically, the belief in their usefulness strengthens their intention to use them. On the other

hand, when ethical doubts persist, the perception of usefulness alone is not enough to encourage adoption. Ethical perception therefore plays a vital role in transforming technology acceptance from a purely functional choice into a moral and professional one. It reminds us that the true success of artificial intelligence in accounting depends not only on what it can achieve but also on how responsibly and transparently it does so.

3.3 Trust in AI Systems

Trust serves as both a bridge and a stabilizer in the relationship between humans and technology. It operates as a mediating as well as a moderating construct within the extended framework of technology adoption. As a mediator, trust connects ethical perception to behavioural intention. When users perceive an artificial intelligence system as ethical, transparent, and aligned with professional values, they begin to develop trust in it. This trust, in turn, strengthens their willingness to adopt and rely on the technology (Hamadeh et al., 2025). Trust therefore transforms ethical comfort into action, converting belief into behaviour.

At the same time, trust moderates the link between behavioural intention and actual use. Even when professionals express the intention to adopt AI, the level of trust they hold determines how effectively and confidently they use it in practice. In real audit environments, auditors who genuinely trust AI systems are more likely to explore their full potential, verify their insights, and integrate them into decision-making. Conversely, those who remain uncertain may limit usage or depend on the technology only for low-risk tasks.

In professional contexts, trust carries both technical and moral dimensions. It is not only the belief that a system will function accurately and consistently but also the assurance that its outcomes are fair, unbiased, and explainable (Mogaji et al., 2024). For accountants and auditors, this dual form of trust is essential. Without confidence in both the technical reliability and ethical integrity of AI systems, adoption remains fragile. Trust therefore becomes the foundation on which responsible and meaningful use of artificial intelligence in auditing can truly stand.

3.4 Audit Reliability as an Outcome Variable

Unlike most studies that apply the Unified Theory of Acceptance and Use of Technology, this framework extends beyond behavioral intention and system usage to introduce audit reliability as the ultimate outcome variable. Audit reliability refers to the degree to which audit evidence and conclusions are consistent, verifiable, and free from bias. It reflects the confidence that stakeholders place in the audit process and determines whether audit results meet professional standards of transparency and ethical soundness.

Within this extended framework, ethical perception and trust indirectly enhance audit reliability by shaping how auditors interact with artificial intelligence systems. When professionals trust AI and believe it operates according to ethical principles, they are more likely to use

it critically and responsibly. They do not rely on the system blindly but engage with its findings through careful evaluation, independent reasoning, and professional judgment. This active engagement transforms technology into a collaborative tool that supports, rather than replaces, human expertise. As a result, the overall reliability of audit conclusions is strengthened.

By introducing audit reliability as the final outcome, this framework connects technology adoption to the quality and credibility of professional outcomes. It moves beyond the question of whether auditors will use AI to focus instead on whether its use leads to better, more reliable audits. Studies have shown that explainability and transparency in AI systems are critical for sustaining confidence in audit processes (Kokina et al., 2021). Moreover, recent research in Jordan demonstrates that ethical and trustworthy AI practices enhance audit quality by improving objectivity, data consistency, and professional accountability (Pérez-Calderón, Alrahamneh, & Milanés Montero, 2025). Together, these insights confirm that ethical perception and trust are not peripheral concerns but essential factors that determine whether AI strengthens or weakens the integrity of auditing.

3.5 Implications for Emerging Economies

In many emerging economies, the adoption of artificial intelligence in auditing is advancing alongside the growth of ethical governance and institutional reform. The extended Unified Theory of Acceptance and Use of Technology framework provides valuable insight into this process. It shows that barriers to AI adoption are often rooted not only in technology or infrastructure but also in perceptions of fairness, integrity, and accountability. When auditors view AI systems as transparent and aligned with professional ethics, they are more likely to integrate them confidently. However, when they suspect that such systems may lack oversight, contain bias, or serve external interests, their willingness to use them declines, even when adoption is encouraged by organizations or regulators.

Empirical research supports this interpretation. Celestin (2024) observed that in several African economies, including Rwanda, accountants were willing to adopt AI tools only when governance and ethical oversight were visible and credible. Where transparency and accountability were lacking, adoption remained low. Papagiannidis, Mikalef, and Conboy (2025) also emphasized that responsible AI governance, supported by human review, traceable audit processes, and clear accountability mechanisms, builds long-term trust in digital systems. Similarly, Cheong (2024) found that explainability and openness in AI systems strengthen user confidence and professional acceptance. Ribeiro et al. (2025) further noted that strong ethical frameworks and governance principles transform AI from a source of professional doubt into an enabler of trust and credibility.

For emerging economies, the lesson is clear. Building awareness of ethical AI, providing training that helps professionals understand algorithmic reasoning, and embedding transparency in audit processes are essential steps toward sustainable adoption. When trust and ethics guide digital transformation, technology enhances not only efficiency but also integrity. This balance ensures that innovation supports the credibility and reliability of the auditing profession while preserving its moral foundation.

3.6 Conceptual Framework and Variables

The conceptual framework for this study integrates the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) with emerging constructs that reflect the ethical and professional dimensions of artificial intelligence use in accounting and auditing. UTAUT suggests that Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions jointly determine Behavioural Intention and subsequent Use Behaviour. However, applying this model to AI-assisted accounting systems requires an expansion that captures trust and ethical dimensions, both of which influence user adoption and the reliability of outcomes.

AI-assisted audit tools promise significant performance gains such as improved anomaly detection, enhanced fraud prediction, and greater analytical capacity (Kokina & Davenport, 2017). Yet their growing use has also introduced complex questions around ethics, transparency, and accountability, especially in emerging economies where institutional safeguards, data governance practices, and regulatory oversight are still developing (Laine, Suomala, & Partanen, 2024). This study therefore extends UTAUT by incorporating two additional variables—Ethical Perception and Trust in AI—as key determinants of the quality and reliability of AI-driven audit outcomes.

Ethical Perception refers to how users evaluate whether AI systems operate within acceptable moral and professional boundaries, considering principles such as transparency, fairness, privacy, and accountability (Floridi & Cowls, 2022). Accountants' ethical judgments strongly influence their willingness to adopt AI, particularly when algorithmic decision-making might compromise independence or professional scepticism. Within this framework, Ethical Perception functions as a moderator that shapes the strength of the relationship between Performance Expectancy and Behavioural Intention. Even when an AI tool is seen as highly useful, professionals in emerging economies may hesitate to adopt it if they perceive ethical ambiguities or potential threats to their professional autonomy ("Ethical Considerations in the Use of AI for Auditing," 2022).

Trust in AI, defined as the confidence users have that AI systems will perform accurately, consistently, and in accordance with professional standards, serves as a mediating construct between Ethical Perception and both Behavioural Intention and Audit Reliability (Glikson & Woolley, 2020). Research on human-AI

interaction indicates that trust is shaped by both perceived technical competence and ethical assurance mechanisms such as explainability, accountability frameworks, and transparent data practices (Longoni, Bonezzi, & Morewedge, 2019). High ethical perception strengthens trust, which in turn enhances both the intention to use AI systems and the actual adoption behaviour, ultimately improving Audit Reliability.

Audit Reliability, the outcome variable, represents the perceived dependability, objectivity, and professional soundness of audits conducted with AI assistance. It reflects whether AI contributes to or detracts from audit credibility in practical settings. In environments where ethical governance and trust are weak, even widespread adoption may not lead to reliable audit outcomes (Zhang et al., 2023). Conversely, when AI is implemented ethically, transparently, and with adequate oversight, the collaboration between human judgment and machine intelligence can significantly enhance audit reliability (Kokina et al., 2021).

The proposed framework therefore suggests that Ethical Perception and Trust act as crucial connectors between technological acceptance and professional reliability in accounting. This relationship is particularly significant in emerging economies, where responsible AI integration can close capacity gaps while also preventing potential ethical and systemic risks.

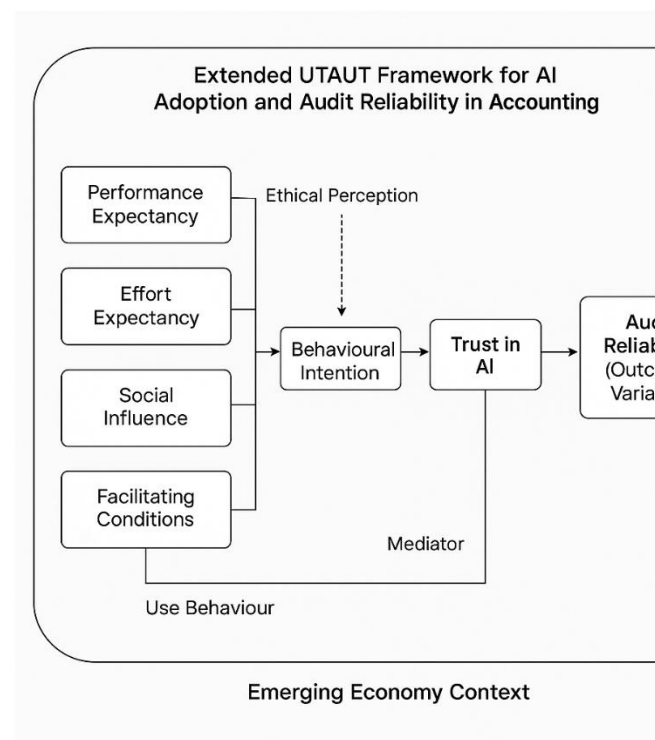


Figure 1. Extended UTAUT Framework for AI Adoption and Audit Reliability in Accounting (Author's model made using Open AI)

4. Discussion and Implications

This conceptual framework provides both **theoretical** and **practical** implications for scholars, regulators, and practitioners.

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4.1 Theoretical Contributions

This paper extends the Unified Theory of Acceptance and Use of Technology into the sphere of professional services, where ethical reasoning and reliability are central to practice. By integrating ethical perception and trust, the study reframes the adoption of artificial intelligence as not only a technological decision but also a moral and institutional one. The proposed model positions ethical assurance, or the belief that AI operates within socially accepted and professionally sound boundaries, as a necessary condition for sustained and responsible adoption.

The framework challenges the long-standing assumption that technology acceptance depends primarily on perceived usefulness or ease of use. In accounting and auditing, adoption is not simply a matter of efficiency or convenience; it also involves legitimacy, accountability, and integrity. This study argues that ethical perception and trust are central determinants that govern whether AI systems can be adopted responsibly. Future empirical research should therefore view these constructs as essential to understanding technology use in highly regulated professions such as accounting. By doing so, scholars can move beyond functional interpretations and explore the deeper moral and institutional dimensions of digital transformation in professional settings.

4.2 Practical Implications

For practitioners and audit firms, the framework offers a clear message: responsible AI adoption begins with ethical design. Firms should embed principles of fairness, transparency, and accountability at every stage of AI system development. Algorithmic decision-making must be explainable and subject to human review so that professionals understand how conclusions are reached. Building this level of transparency strengthens trust not only among auditors but also among clients and regulators.

The human element remains equally important. Training programs should encourage professionals to question AI outputs rather than accept them without scrutiny. Auditors need to cultivate digital scepticism, balancing algorithmic insights with their own professional judgment. This kind of human oversight ensures that technology enhances rather than replaces professional reasoning.

Regulators in emerging economies also have a crucial role. They must update ethical standards, auditing guidelines, and professional codes to accommodate AI-enabled practices. Institutions such as the International Federation of Accountants, the Institute of Chartered Accountants of India, and national accounting boards can establish AI audit assurance frameworks that clearly define the responsibilities of both human and algorithmic agents. Such initiatives help maintain accountability while promoting innovation within safe and ethical boundaries.

4.3 Policy Implications for Emerging Economies

Emerging economies face a complex challenge in advancing technological innovation while preserving ethical governance. Limited resources, weak data protection laws, and insufficient audit oversight can increase the risk of ethical lapses. Policymakers should therefore prioritise the development of AI ethics codes for accounting that set standards for data quality, bias control, and model transparency. These guidelines will ensure that technology contributes to trust and professional reliability rather than undermining them. International collaboration can strengthen these efforts. Partnerships with global regulatory bodies and professional associations can help harmonise ethical standards while allowing flexibility to address local cultural and institutional contexts. Shared learning from established economies can guide emerging markets in designing transparent and context-sensitive AI governance frameworks.

Education is equally vital. Integrating ethical AI principles into accounting curricula will prepare future professionals for hybrid audit environments where human judgment and machine intelligence work together. Without such interventions, emerging economies risk creating a compliance gap in which the pace of AI adoption exceeds the maturity of ethical governance. A proactive policy approach that combines education, collaboration, and accountability can ensure that technological innovation enhances both credibility and public trust in the profession.

5. Conclusion

Artificial intelligence in accounting presents a striking paradox for emerging economies. It promises sharper insights, faster analysis, and more reliable audits, yet it also brings profound questions about ethics, accountability, and trust. The balance between innovation and integrity has never been more delicate. This paper argued that extending the Unified Theory of Acceptance and Use of Technology to include ethical perception and trust offers a richer and more realistic understanding of AI adoption in accounting. By linking these constructs to audit reliability, the model reframes adoption as an act of moral legitimacy and institutional trust rather than a simple response to technological convenience. In this view, responsible adoption becomes not only a strategic choice but also an ethical one. For AI to truly enhance the reliability of audits, it must first earn the confidence of those who use it. That confidence depends on transparent algorithms, strong ethical governance, and a culture within firms that values human oversight as much as technical precision. Future research can put this framework to the test through empirical studies involving auditors and accounting professionals in emerging economies, exploring how cultural and institutional contexts shape adoption behaviour.

The future of accounting will not be defined by machines that replace human judgment but by systems that strengthen it. When technology and ethics evolve together, AI becomes more than a tool of efficiency; it

becomes a partner in integrity that one that can uphold the very trust on which the profession stands.

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References

1. Adel, N. (2024). The impact of digital literacy and technology adoption on financial inclusion in Africa, Asia, and Latin America. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0302627>
2. Alles, M., & Gray, G. L. (2023). Artificial intelligence and audit reliability: Challenges for professional scepticism. *International Journal of Accounting Information Systems*, 52, 100642.
3. Celestin, M. (2024). Adopting AI in emerging markets: Challenges and opportunities in the accounting sector (Conference paper). *Indo American Journal of Multidisciplinary Research and Review*. Retrieved from https://www.researchgate.net/publication/390179035_ADOPTING_AI_IN_EMERGING_MARKETS_CHALLENGES_AND_OPPORTUNITIES_IN_THE_ACCOUNTING_SECTOR
4. Cheong, B. C. (2024). Transparency and accountability in artificial intelligence systems: Safeguarding wellbeing in the age of algorithmic decision-making. *Frontiers in Human Dynamics*, 6, 1421273. <https://www.frontiersin.org/articles/10.3389/fhumd.2024.1421273/full>
5. Comptroller and Auditor General of India (CAG). (2024, July). Application of machine learning in auditing. *The Comptroller and Auditor General Journal*. Retrieved October 17, 2025, from https://cag.gov.in/uploads/journal/journal-en-july-2024/application_machine_learning.html
6. Ethics Based Auditing. (2021). *Minds and Machines*, 31(4), 699–722.
7. Ethical Considerations in the Use of AI for Auditing: Balancing Innovation and Integrity. (2022). *European Journal of Accounting, Auditing and Finance Research*, 10(12). https://ejajournals.org/ejaaf/vol10_issue12_2022/ethical_considerations_in_the_use_of_ai_for_auditing_balancing_innovation_and_integrity/
8. Floridi, L., & Cows, J. (2022). A Unified Framework of Five Principles for AI in Society. *Harvard Data Science Review*. <https://hdsr.mitpress.mit.edu/pub/10jsh9d1/release/5>.

9. Glikson, E., & Woolley, A. W. (2020). *Human trust in artificial intelligence: Review of empirical research*. *Academy of Management Annals*, 14(2), 627–660.
10. Hamadeh, A., Salameh, M., & Dabbous, A. (2025). Auditors' intentions to use blockchain and AI technologies: The role of trust and ethics. *International Journal of Accounting and Finance*, 47(1), 78–95.
11. Hasnain, F., & Khalid, S. (2025). AI assisted auditing: Navigating ethical risks and professional standards. *Contemporary Management Studies Review*, 5(2), 22–39.
12. IFAC. (2023). *Ethical guidance for AI use in audit and assurance*. International Federation of Accountants.
13. Ifada, L. M., Mutoharoh, M., Indriastuti, M., & Indarti, K. (2025). *The digital frontier of accounting: Unraveling the impact of digital literacy and technology adoption*. *Jurnal Economia*, 21(1), 34–51. <https://doi.org/10.21831/economia.v21i1.68723>
14. Köhler, A., & Schaffner, J. (2022). Ethics by design: A framework for responsible AI in financial services. *Journal of Business Ethics*, 179(3), 611–627.
15. Kokina, J., & Davenport, T. (2017). *The emergence of artificial intelligence: How automation is changing auditing*. *Journal of Emerging Technologies in Accounting*.
16. Kokina, J., Mancha, R., & Pachamanova, D. (2021). *The role of artificial intelligence in the audit process: Enhancing reliability through explainability*. *International Journal of Accounting Information Systems*, 40, 100501. <https://doi.org/10.1016/j.accinf.2021.100501>
17. Kwahk, K. Y., & Park, D. H. (2023). Extending UTAUT: The roles of trust and ethical perception in AI adoption. *Computers in Human Behavior*, 141, 107698.
18. Laine, T., Suomala, P., & Partanen, V. (2024). Ethics based AI auditing: Conceptualizing ethical principles for trustworthy accounting technologies. *Accounting, Organizations and Society*, 112, 101518.
19. Longoni, C., Bonezzi, A., & Morewedge, C. K. (2019). *Resistance to medical artificial intelligence*. *Journal of Consumer Research*, 46(4), 629–650.
20. Manheim, K., Matzner, T., & Weller, A. (2024). Auditing AI: Legal, ethical, and technical perspectives. *Digital Society*, 2(1), 1–17.
21. Mogaji, E., Jain, V., & Kaur, H. (2024). More trust or more risk? User acceptance of artificial intelligence in professional settings. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 34(2), 223–241.
22. Papagiannidis, E., Mikalef, P., & Conboy, K. (2025). *Responsible artificial intelligence governance: A review and research framework*. *Journal of Strategic Information Systems*. Retrieved from <https://www.sintef.no/en/publications/publication/2339854/>
23. Pérez-Calderón, E., Alrahamneh, S. A., & Milanés Montero, P. (2025). *Impact of artificial intelligence on auditing: An evaluation from the profession in Jordan*. *Discover Sustainability*, 6, Article 251. <https://doi.org/10.1007/s43621-025-01058-3>
24. Permata Suyono, T., Rahman, A., & Wirawan, P. (2024). Artificial intelligence in auditing: Tools, applications, and challenges. *Review of Information Governance and Systems*, 12(3), 56–72.
25. Ribeiro, D., Rocha, T., Pinto, G., Cartaxo, B., Amaral, M., & Davila, N. (2025). *Toward effective AI governance: A review of principles*. *arXiv*. <https://arxiv.org/abs/2505.23417>
26. Schiff, D. S., Kelley, S., & Camacho Ibáñez, J. (2024). The emergence of artificial intelligence ethics auditing. *Big Data & Society*, 11(4). <https://doi.org/10.1177/20539517241299732>
27. Suyono, T., Ardiansyah, F., & Wibowo, A. (2024). Bias and ethics of AI systems applied in auditing: A systematic review. *Scientific African*, 16, e01226.
28. World Bank. (2023). *TaxTech: Leveraging digitalization to improve tax compliance and revenue mobilization* (Report No. P179405). World Bank. Retrieved from <https://documents1.worldbank.org/curated/en/099061225023042590/pdf/P179405-6877e00c-7f93-46b1-8d09-d72ad0afd311.pdf>
29. The Economic Times. (2024, August 23). *Revolutionizing auditing: CAG emphasizes AI/ML's role in detecting fraud and enhancing remote audits*. *ET Enterprise AI*. Retrieved October 17, 2025, from <https://enterpriseai.economictimes.indiatimes.com/news/industry/revolutionizing-auditing-cag-emphasizes-ai-mls-role-in-detecting-fraud-and-enhancing-remote-audits/124011119>
30. Vasarhelyi, M. A., Alles, M., & Kogan, A. (2023). Artificial intelligence and the transformation of auditing. *Accounting Horizons*, 37(1), 45–60.
31. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
32. Zhang, X., Wang, Y., & Yu, P. (2023). *Trust, transparency, and reliability in AI auditing systems*. *Journal of Accounting and Information Systems*.