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EXPLORING ARTIFICIAL INTELLIGENCE APPLICATIONS IN ACCOUNTING PRACTICES AND THEIR IMPLICATIONS FOR FINANCIAL REPORTING QUALITY AND DECISION-MAKING RELIABILITY

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ABSTRACT
Artificial Intelligence (AI) is increasingly being incorporated into accounting and financial reporting, but the literature does not support treating adoption as an automatic guarantee of better outcomes. This study uses a qualitative narrative literature review to synthesize peer-reviewed studies and authoritative professional reports on AI applications in accounting, financial reporting quality, accounting information quality, internal control, and decision support. The review prioritizes literature published from 2018 to 2026 and retains earlier foundational studies where they are necessary to explain the theoretical framework. Literature was identified through targeted searches using combinations of the terms 'artificial intelligence', 'machine learning', 'generative AI', 'accounting', 'financial reporting', 'information quality', 'fraud detection', 'internal control', and 'decision making', and was selected for direct relevance, academic or institutional credibility, and substantive discussion of accounting outcomes. The synthesis indicates that AI is most consistently discussed as a means of expanding processing capacity, automating selected tasks, detecting anomalies, supporting predictive analysis, and assisting the interpretation of financial information. Evidence concerning financial reporting quality is more conditional: automation may be associated with fewer internal-control weaknesses, while recent studies also identify risks related to monitoring, data quality, explainability, bias, cybersecurity, and governance. The review therefore conceptualizes the relationship as AI-enabled accounting processes → accounting information quality → financial reporting and decision-support outcomes, moderated by organizational readiness and human oversight. The study contributes by integrating these three outcome domains rather than treating AI adoption, reporting quality, and decision support as separate topics.

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INTRODUCTION

Artificial intelligence is moving from an experimental technology to an increasingly important component of digital business processes. The World Economic Forum's Future of Jobs Report 2025, based on more than 1,000 employers representing over 14 million workers, reports that 86% of surveyed employers expect AI and information-processing technologies to transform their business by 2030, while AI and big data rank among the fastest-growing skill areas. In the accounting profession, ACCA similarly describes AI as reshaping finance and accounting work and emphasizes the need to address trust, skills, data, risk, controls, and responsible adoption. These developments provide a stronger basis for examining AI in accounting than the general observation that organizations are 'increasingly using AI' (ACCA, 2025).

Recent accounting literature shows that the research field is expanding rapidly, but it remains fragmented across automation, auditing, fraud detection, generative AI, financial reporting, and professional work (Almufadda & Almezeini, 2022; Murphy et al., 2024). Dong et al. (2024), for example, identify application, research-tool, and professional-implication themes in the emerging literature on ChatGPT and large language models in accounting and finance (Zhao & Wang, 2024). (Sanz Martín et al., 2026) synthesize 256 peer-reviewed studies across AI and advanced technologies in accounting and finance, highlighting technological applications together with transparency, skills, and regulatory challenges. (Yang & Zhou, 2025) provide firm-level evidence that AI adoption is associated with higher-quality corporate accounting information disclosure. At the same time, (Ashraf, 2025) shows that automation can be associated with fewer internal-control material weaknesses but also reports evidence that reduced monitoring can create costs when control failures occur. Together, these studies indicate that the AI–accounting relationship is neither a simple automation story nor a uniformly positive effect.

The gap addressed in this review is therefore narrower and more explicit than the claim that previous studies merely emphasize automation. Existing reviews commonly map technologies, application areas, or broad research trends, whereas this review organizes the literature around an outcome pathway connecting (1) AI-enabled accounting practices, (2) the quality of accounting and financial reporting information, and (3) the reliability of decisions based on that information. It also treats organizational readiness, explainability, governance, and human oversight as conditions that shape this pathway. The review consequently differs from prior broad reviews by integrating technology, information outcomes, and decision use in one analytical synthesis rather than reviewing each domain separately (Agostino et al., 2026; Dong et al., 2024; Gepp et al., 2018; Murphy et al., 2024; Sanz Martín et al., 2026).

Accordingly, this study aims to synthesize how AI applications are used across accounting processes and how the literature explains their implications for financial reporting quality and decision-making reliability. The review specifically examines AI-enabled data processing, document interpretation, anomaly detection, predictive analytics, financial reporting, internal control, and decision support; identifies recurring mechanisms and boundary conditions; and clarifies the role of professional judgment. Its novelty lies in the integrated analytical chain linking technological application to information quality and then to decision use, while explicitly incorporating governance and human oversight as conditioning factors. This framing is intended to provide a more cautious and practically useful interpretation of AI adoption in accounting.

METHOD

This study employs a qualitative narrative literature review. The review design was selected because the objective is to interpret and integrate heterogeneous literature—including conceptual papers, empirical studies, systematic or scoping reviews, and authoritative professional reports—rather than estimate a pooled effect size. The object of analysis is the use of AI and related intelligent technologies in accounting practices, with particular attention to financial data processing, financial reporting, accounting information quality, anomaly and fraud detection, internal control, and decision support.

The literature search covered publications from 2018 to 2026, while earlier foundational works were retained when they were necessary to define the TOE framework, TAM, or established information-quality concepts (Appelbaum et al., 2017). Sources were drawn from peer-reviewed accounting, information-systems, auditing, and finance literature available through major scholarly databases and publisher platforms, supplemented by authoritative reports from professional and international organizations. The principal search concepts were combined in variants of the following search string: ('artificial intelligence' OR 'machine learning' OR 'generative AI' OR 'large language model' OR 'intelligent automation') AND

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('accounting' OR 'financial reporting' OR 'auditing' OR 'accounting information') AND ('information quality' OR 'decision making' OR 'internal control' OR 'fraud detection').

Sources were included when they (a) were peer-reviewed scholarly publications or authoritative professional/institutional reports; (b) directly addressed AI or intelligent automation in accounting, financial reporting, auditing, accounting information, internal control, or decision support; and (c) provided conceptual arguments, empirical evidence, or review findings relevant to at least one of the study's analytical dimensions. Sources were excluded when AI was only a research tool unrelated to accounting outcomes, when the publication did not contain substantive discussion of the focal phenomenon, or when it duplicated evidence already represented by a stronger source. This purposive selection is appropriate for a narrative review but does not claim exhaustive coverage or a PRISMA-style systematic review.

The theoretical framework is organized by assigning each perspective a distinct analytical role. TOE is used at the organizational level to explain technological compatibility, organizational readiness, and environmental or regulatory conditions that shape AI adoption. TAM is used at the individual-professional level to interpret perceived usefulness and ease of use as mechanisms affecting acceptance and meaningful use of AI. The information-quality perspective is used at the outcome level to evaluate whether AI-supported processes affect characteristics such as accuracy, relevance, timeliness, completeness, understandability, and reliability. The three perspectives therefore form a layered framework rather than a list of interchangeable theories.

Analysis followed four interpretive steps. First, relevant sources were mapped by publication type, accounting application, theoretical orientation, and outcome addressed. Second, findings were coded into recurring themes: process automation and augmentation, information processing, reporting quality, anomaly detection and internal control, decision support, professional-role transformation, and implementation risks. Third, converging and diverging findings were compared, with particular attention to evidence that qualified otherwise positive claims about AI. Fourth, the themes were integrated into an outcome pathway linking AI-enabled accounting practices with information quality and decision-support reliability, while identifying governance, data quality, organizational readiness, explainability, and human oversight as boundary conditions. Because this is a narrative review, the synthesis is interpretive and should not be read as a statistical estimate of causal effects.

RESULT AND DISCUSSION

Artificial Intelligence Applications in Accounting Practices

The literature synthesis indicates that AI in accounting is best understood as a portfolio of computational capabilities rather than a single technology. Machine learning, natural language processing, optical character recognition, predictive analytics, anomaly detection, generative AI, and explainable AI are discussed for different accounting tasks. RPA should be treated separately: it is primarily rules-based automation and can be combined with AI, but it is not inherently an AI technology (Ashraf, 2025; Harrast, 2020; Tiron-Tudor et al., 2024). The reviewed literature therefore supports distinguishing automation, intelligent prediction, language processing, and explainability rather than grouping all digital automation under the AI label.

Across the accounting process, the literature describes AI-enabled tools at several points. OCR and intelligent document processing can support extraction from invoices, receipts, contracts, and other documents; machine learning can support classification and pattern recognition; predictive analytics can support forecasting and risk analysis; anomaly detection can prioritize unusual transactions; and NLP or generative AI can assist with the interpretation and drafting of textual information (Gu et al., 2024; Zhao & Wang, 2024). These applications are better interpreted as forms of augmentation whose usefulness depends on data quality, workflow integration, and professional review (Cho et al., 2020; Dong et al., 2024).

Table 1. Major AI Applications in Accounting Practices

AI Technology	Main Accounting Application	Potential Contribution
Machine Learning	Classification, prediction, financial analysis	Pattern recognition and predictive accuracy

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AI Technology	Main Accounting Application	Potential Contribution
Natural Language Processing	Analysis of textual financial information and disclosures	Faster interpretation of unstructured information
Optical Character Recognition	Invoice and document processing	Reduced manual data entry
Robotic Process Automation (RPA)	Reconciliation and repetitive accounting procedures	Rule-based automation that can complement AI-enabled workflows; not inherently AI
Predictive Analytics	Forecasting and financial risk analysis	Forward-looking information
Anomaly Detection	Identification of unusual transactions	Early detection of errors and irregularities
Generative AI	Drafting, summarization, and analytical support	Faster information synthesis
Explainable AI	Interpretation of model outputs	Greater transparency and human understanding

Source: Literature Study, 2021-2026

The literature further suggests that value depends on where and how technology is embedded in accounting processes (Raisch & Krakowski, 2021). Recent reviews identify efficiency, reporting, fraud detection, auditing, and decision support as recurring application areas, while also emphasizing transparency, governance, skills, and regulatory adaptation (Abdo-Salloum & Chehade, 2026; Sanz Martín et al., 2026). From a TOE perspective, this means that technical capability alone is insufficient: compatibility with accounting systems, organizational readiness, professional competence, internal controls, cybersecurity, and the external regulatory environment jointly shape implementation outcomes.

TAM adds a different level of explanation. It is useful for interpreting because accounting professionals may accept or resist AI-supported tools based on perceived usefulness and ease of use. It should not, however, be used to explain organizational readiness or reporting quality directly. The information-quality perspective addresses the latter outcome by asking whether the information produced or supported by AI is accurate, relevant, timely, complete, understandable, and reliable. The framework therefore moves from adoption conditions (TOE), through professional use (TAM), to information outcomes (information quality).

AI and Financial Reporting Quality

The literature identifies a plausible association between AI-supported accounting processes and financial reporting quality, but the strength and direction of that association depend on the application and control environment. Financial reporting quality is commonly discussed in terms of accuracy, relevance, timeliness, reliability, comparability, and completeness. AI-enabled processing may support these attributes by increasing processing capacity, standardizing selected procedures, and identifying inconsistencies; however, these are potential mechanisms rather than universal effects.

Empirical evidence illustrates this conditional interpretation. (Ashraf, 2025) examines accounting automation—including machine learning, RPA, and AI—and reports that automation is associated with fewer internal-control material weaknesses. The study also finds that monitoring can decline after implementation and that subsequent control failures may be more material, indicating that automation does not eliminate the need for oversight. This evidence is more informative than a general statement that AI 'improves' reporting because it identifies both a potential benefit and an implementation risk. Complementary evidence from (Yang & Zhou, 2025), using firms listed on the Shenzhen Stock Exchange from 2014 to 2023, reports a positive association between AI adoption and corporate accounting information disclosure quality.

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The mechanism can be summarized as follows:

> AI-enabled accounting processes → improved data processing → improved control and error detection → higher-quality accounting information → improved financial reporting quality

The synthesis therefore supports a conditional mechanism: AI-enabled processing may contribute to financial reporting quality when the underlying data are fit for purpose, controls remain effective, and outputs are validated by knowledgeable professionals. Conversely, poor data, model bias, weak governance, cybersecurity failures, or overreliance on automated outputs can weaken the expected information-quality benefits. The literature consequently supports a 'potential contribution' interpretation rather than a deterministic causal claim.

Table 2. Relationship Between AI Applications and Financial Reporting Quality

Financial Reporting Dimension	AI Contribution	Expected Effect
Accuracy	Automated processing and anomaly detection	May reduce processing errors when controls and data are adequate
Timeliness	Faster data processing and reporting	May support more timely financial information
Relevance	Predictive and analytical capabilities	May increase decision usefulness
Reliability	Consistency and automated validation	May support processing consistency
Completeness	Automated data aggregation	May expand information coverage
Comparability	Standardized processing procedures	May support reporting consistency
Transparency	Explainable AI and audit trails	May improve interpretability when XAI is effective

Source: Researcher's Data, 2026

Overall, the reviewed literature suggests that AI can be relevant to financial reporting quality through process consistency, anomaly identification, faster information processing, and analytical support. However, the evidence is heterogeneous and includes important countervailing risks. Financial reporting quality should therefore be treated as an outcome conditioned by the interaction between technology, data, controls, and professional judgment.

AI, Accounting Information Quality, and Decision-Making Reliability

A second recurring theme concerns the role of AI-supported information in organizational decision making. Accounting information contributes to planning, resource allocation, performance evaluation, risk management, investment, and financial control. The literature suggests that AI can expand the analytical capacity of accounting information systems by processing large datasets, identifying patterns, generating forecasts, and prioritizing anomalies. The relevant outcome is therefore not that AI 'makes decisions', but that AI may alter the information environment in which human decisions are made.

Studies of AI and accounting increasingly describe predictive analytics, machine learning, generative AI, and anomaly detection as decision-support capabilities. These tools can provide forecasts, pattern-based risk signals, extracted textual information, or summaries that decision makers can evaluate. The quality of the resulting decision support nevertheless depends on whether users understand the provenance, assumptions, uncertainty, and limitations of the outputs. Recent work on AI-enabled accounting and public-sector financial information similarly emphasizes that efficiency and analytical capacity must be considered alongside transparency, accountability, and governance (Agostino et al., 2026).

This relationship can be represented conceptually as:

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AI application → accounting information quality → decision-support quality → decision-making reliability.

The distinction between decision support and decision substitution is important. AI can augment information processing, but accounting decisions frequently require contextual interpretation, ethical judgment, knowledge of organizational objectives, and accountability. The literature therefore supports positioning AI as a decision-support mechanism rather than an unconditional replacement for professional judgment. This distinction also explains why explainability and human oversight recur across the reviewed studies.

Table 3. AI Contribution to Decision-Making Reliability

AI Capability	Accounting Information Generated	Decision-Making Implication
Predictive analytics	Forecasts and projections	Supports planning
Machine learning	Risk and performance patterns	Supports analytical evaluation
Anomaly detection	Irregular transaction alerts	Supports risk investigation
Automated reporting	Timely financial information	Supports rapid responses
NLP	Extracted information from textual sources	Supports broader information analysis
Generative AI	Summaries and analytical explanations	Supports information interpretation
Explainable AI	Interpretable model outputs	Supports informed human judgment

Source: Researcher's Data, 2026

From the information-quality perspective, decision usefulness depends on the characteristics of the information and on the user's ability to interpret it. AI may increase processing capacity and analytical depth, but reliability cannot be equated with computational accuracy alone. Decision makers also need sufficient transparency regarding data provenance, model assumptions, limitations, and uncertainty. Thus, the literature supports the pathway AI application → accounting information quality → decision-support quality, while decision-making reliability remains contingent on human evaluation and organizational context.

The Role of AI in Fraud Detection, Error Identification, and Internal Control

Anomaly detection, fraud-risk identification, and internal-control support from another recurring theme. AI-enabled analytical systems can examine large transaction populations and identify unusual patterns that merit investigation, whereas conventional procedures may rely more heavily on predefined rules or sampling. Evidence from machine-learning research and recent reviews indicates that these tools can support fraud-risk screening and audit attention, but the identification of an anomaly is not equivalent to proof of fraud (Abdo-Salloum & Chehade, 2026; Bao et al., 2020).

Explainable AI is particularly relevant in this context because accounting professionals need to understand why a transaction or pattern has been flagged. Recent systematic work on bias and ethics in AI auditing identifies transparency, accountability, fairness, and explainability as central concerns. The implication is that detection capability should be evaluated together with the ability of professionals to inspect, challenge, and document system outputs (Murikah et al., 2024).

The literature can therefore be organized into three control stages: detection, investigation, and response. At detection, AI identifies unusual transactions or patterns; at investigation, analytical tools help prioritize and examine the underlying factors; and at response, accountants or auditors determine whether correction, additional verification, escalation, or no action is appropriate. This sequence preserves human accountability while allowing technology to expand the scale of review.

Table 4. AI-Based Internal Control Mechanism

Stage	Conventional Approach	AI-Supported Approach
Detection	Rule-based checking	Pattern and anomaly detection

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Transaction review	Sampling	Large-scale data analysis
Risk identification	Historical indicators	Predictive risk analytics
Investigation	Manual examination	Automated prioritization
Explanation	Professional interpretation	XAI-supported interpretation
Response	Manual follow-up	AI-supported risk prioritization

Source: Researcher's Data, 2026

These findings reinforce the augmentation perspective. An AI system may identify an unusual transaction, but the accounting professional remains responsible for interpreting its context and determining the appropriate response. Automation can therefore support internal control without transferring accountability for accounting judgments to the system.

AI and the Transformation of the Accounting Professional's Role

The literature also indicates that AI changes the composition of accounting work. Routine activities such as data entry, reconciliation, classification, and basic information retrieval may become more automated or AI-assisted, creating greater demand for analytical interpretation, communication, risk assessment, professional skepticism, and technology governance. ACCA's 2025 AI Monitor similarly emphasizes that the profession must bridge technical capabilities with business needs and responsible adoption, while the World Economic Forum identifies AI and big data as among the fastest-growing skill areas (ACCA, 2025; World Economic Forum, 2025).

This transformation does not imply that accounting expertise becomes less important. Rather, technical accounting knowledge increasingly needs to be combined with data literacy, AI literacy, analytical capabilities, critical evaluation, and an understanding of technology-related risks. The literature therefore frames professional transformation as a shift from predominantly routine processing toward a hybrid role combining accounting judgment with digital and analytical capabilities.

Table 5. Transformation of Accounting Roles

Traditional Accounting Orientation	AI-Enabled Accounting Orientation
Manual data processing	Automated data processing
Routine transaction recording	Analytical review
Historical reporting	Predictive and forward-looking analysis
Rule-based checking	Intelligent anomaly detection
Manual reconciliation	Automated reconciliation
Information preparation	Information interpretation
Routine reporting	Strategic decision support
Primarily accounting expertise	Accounting + digital and analytical competencies

Source: Researcher's Data, 2026

TAM is relevant specifically at this professional-use level. Perceived usefulness and ease of use can influence whether accountants meaningfully incorporate AI into their workflows. However, adoption is also affected by organizational readiness and external conditions, which are better captured by TOE. This distinction prevents the theoretical framework from treating individual acceptance and organizational adoption as the same phenomenon.

Challenges and Risks in AI-Enabled Accounting

The literature identifies several conditions that limit or qualify the contribution of AI. Data quality is the first. AI systems depend on the quality, completeness, consistency, and representativeness of data; poor inputs can therefore generate misleading classifications, predictions, or recommendations. The second condition is explainability and algorithmic bias. High-performing models may still be difficult to interpret, creating problems for review, documentation, and auditability. The third is governance and accountability: responsibility can be distributed among developers, accountants, managers, auditors, and system administrators, making clear control ownership essential.

Cybersecurity and regulatory uncertainty are additional concerns. Accounting systems process commercially sensitive information, so AI integration can create new exposure to unauthorized access, manipulation, or inappropriate disclosure. Regulatory expectations are also evolving, particularly for explainability, data protection, model risk, and

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professional accountability. Recent professional and academic literature consequently treats responsible governance as a core implementation condition rather than a peripheral issue (ACCA, 2025; Agostino et al., 2026).

Finally, excessive automation can produce automation bias, skill erosion, or reduced monitoring if users over-trust system outputs. (Ashraf, 2025) evidence is particularly relevant because it demonstrates that automation may coincide with fewer internal-control weaknesses while also reducing monitoring and increasing the potential materiality of later failures. The literature therefore favors human-in-the-loop arrangements in which AI supports, rather than replaces, professional evaluation.

Table 6. Challenges in AI Implementation for Accounting

Challenge	Potential Consequence	Required Response
Poor data quality	Unreliable AI output	Data governance and validation
Algorithmic bias	Distorted analysis	Bias testing and model monitoring
Lack of explainability	Difficulty in verification	Explainable AI
Cybersecurity risks	Data exposure or manipulation	Security controls
Regulatory uncertainty	Compliance difficulties	Governance and regulatory alignment
Skill gaps	Ineffective implementation	AI and data literacy training
Organizational resistance	Low adoption	Change management
Excessive automation	Reduced professional oversight	Human-in-the-loop mechanisms

Source: Researcher's Data, 2026

These challenges fit the TOE framework at the organizational level. Technological readiness must be accompanied by organizational structures, skills, governance, controls, and environmental or regulatory support. TAM helps explain user-level acceptance, while the information-quality perspective evaluates whether implementation ultimately produces information that is sufficiently accurate, relevant, timely, understandable, complete, and reliable for its intended use.

Integrated Discussion: AI, Financial Reporting Quality, and Decision-Making Reliability

The integrated synthesis indicates that the relationship between AI and accounting outcomes is better represented as a conditional pathway than as a direct technological effect. AI-enabled capabilities can alter accounting processes through automation, classification, information extraction, predictive analysis, anomaly detection, and language-based assistance. These changes may affect accounting information characteristics, which in turn shape the usefulness of financial reporting and decision support. The strength of each link depends on data quality, system design, professional competence, organizational readiness, governance, and human oversight.

Table 7. Integrated Research Findings

Research Dimension	Literature Synthesis	Main Implication
AI applications	AI is increasingly embedded in accounting processes	Accounting processes become more data-driven
Process efficiency	Automation may reduce repetitive manual activities	Greater processing efficiency
Financial reporting	Literature links AI with potential support for accuracy, timeliness, and control	Potential improvement in reporting quality
Fraud and anomaly detection	AI can analyze large transaction volumes	Stronger monitoring capabilities
Information quality	AI can expand processing and analytical capacity	More useful accounting information
Decision support	Predictive and analytical tools support evaluation	Potentially better-informed decision processes
Professional role	Routine tasks shift toward analytical work	Greater emphasis on professional judgment
Explainability	XAI improves interpretability of AI outputs	Potentially greater transparency

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Governance	Human oversight remains necessary	Responsible AI implementation
Organizational readiness	Skills and infrastructure affect adoption	AI-related benefits depend on implementation conditions

Source: Researcher's Data, 2026

The integrated findings can consequently be expressed through the following conceptual relationship:

Artificial Intelligence Applications in Accounting
↓
Automation + Data Analytics + Anomaly Detection + Predictive Analytics
↓
Improved Accounting Information Processing
↓
Financial Reporting Quality
↓
Reliable and Timely Accounting Information
↓
Decision-Making Reliability

This pathway should not be interpreted as a deterministic causal model because the present study is a narrative literature review rather than primary empirical testing. It is a conceptual synthesis of recurring relationships and boundary conditions across heterogeneous studies. The evidence includes both positive associations and cautionary findings, particularly concerning monitoring, explainability, bias, cybersecurity, and governance (Agostino et al., 2026; Ashraf, 2025).

The theoretical perspectives now have distinct functions. TOE explains the organizational conditions under which AI can be adopted and sustained; TAM explains how accounting professionals perceive and use AI-supported tools; and the information-quality perspective evaluates the quality and decision usefulness of the resulting information. The combined framework therefore links context, use, and outcome without implying that any one theory independently explains the entire AI–accounting relationship.

The central interpretation emerging from the literature is that AI may contribute to accounting outcomes through an interconnected sequence: intelligent or automated processing can expand processing capacity; stronger processing can support information-quality attributes; and more useful information can provide a stronger basis for human decision making. These potential benefits remain conditional on data quality, transparency, professional competence, internal controls, governance, cybersecurity, and appropriate human oversight. This conditional interpretation is consistent with recent reviews that simultaneously identify opportunities and risks in AI-enabled accounting and financial reporting (Abdo-Salloum & Chehade, 2026; Sanz Martín et al., 2026).

Table 8. Propositions Emerging from the Literature Synthesis

Proposition	**Relationship Identified in Literature**	**Interpretation and Supporting Evidence**
PS1	AI-enabled processing → accounting process capacity	AI and intelligent automation can reduce selected repetitive activities and expand processing capacity, but RPA remains distinct from AI (Ashraf, 2025; Sanz Martín et al., 2026).
PS2	AI-enabled processing → accounting information quality	Machine learning, analytics, and document-processing tools may support consistency, timeliness, and analytical depth when data and controls are adequate (Cho et al., 2020; Yang & Zhou, 2025)
PS3	AI-enabled accounting → financial reporting quality	The literature provides conditional evidence that automation and AI adoption can be associated with reporting-quality outcomes; effects depend on controls and monitoring (Ashraf, 2025; Yang & Zhou, 2025)

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Proposition	Relationship Identified in Literature	Interpretation and Supporting Evidence
PS4	AI-enabled analytics → anomaly and fraud-risk detection	AI can support large-scale transaction screening and prioritization of unusual patterns, but flagged anomalies require professional investigation (Abdo-Salloum & Chehade, 2026; Bao et al., 2020)
PS5	Accounting information quality → decision support	More accurate, relevant, timely, and understandable accounting information provides a stronger basis for human decision processes; this is an information-quality interpretation rather than a causal estimate.
PS6	AI-enabled information → decision-support reliability	AI may strengthen decision support through prediction, pattern recognition, and information synthesis, while decision reliability remains contingent on user judgment and context (Agostino et al., 2026; Dong et al., 2024)
PS7	Explainability → professional oversight	Explainable outputs can facilitate human evaluation and accountability, particularly in anomaly detection, auditing, and financial decision contexts (Bias and ethics of AI systems applied in auditing, 2024).
PS8	Governance and readiness → sustainable AI use	Data governance, skills, controls, cybersecurity, regulation, and human oversight condition whether AI-related benefits can be sustained (ACCA, 2025; Agostino et al., 2026)

Source: Researcher's Data, 2026

Overall, the synthesis supports an integrated technological–informational–organizational perspective. AI should not be viewed merely as a replacement mechanism for manual accounting tasks, but as an enabling technology whose effects depend on how it is embedded in accounting processes and how professionals govern and interpret its outputs. The principal contribution of this review is therefore the integration of AI applications, information-quality outcomes, and decision use within one conditional pathway.

Limitations and Future Research

This study concludes that the literature indicates considerable potential for Artificial Intelligence to transform contemporary accounting practices, but the evidence does not justify treating AI adoption as an automatic source of improved outcomes. Across the reviewed literature, machine learning, NLP, intelligent document processing, predictive analytics, anomaly detection, generative AI, and related tools are discussed as mechanisms for expanding processing capacity, supporting analysis, and assisting selected accounting activities. RPA should be distinguished as rules-based automation that may complement AI but is not inherently an AI technology (Ashraf, 2025)

CONCLUSION

The literature further indicates that AI may contribute to financial reporting and accounting information quality through more consistent processing, anomaly identification, faster information handling, and analytical support. Empirical evidence is nevertheless conditional: reports fewer internal-control material weaknesses associated with automation but also identifies reduced monitoring and potentially more material failures, while report a positive association between AI adoption and corporate accounting information disclosure quality. These findings support a cautious interpretation in which AI can contribute to reporting outcomes when supported by appropriate data, controls, governance, and professional review.

The review therefore advances an integrated framework in which AI capabilities, accounting information quality, and professional judgment operate together. Organizations implementing AI in accounting should establish data governance, strengthen AI and analytical competencies, maintain explainable and auditable processes, and preserve effective human oversight. The main limitation is the narrative and heterogeneous nature of the evidence base, which prevents causal or pooled-effect conclusions. Future research should test the proposed pathway using longitudinal firm-level data, systematic

review protocols, and mixed-method investigations of AI use in accounting workflows, with explicit attention to explainability, internal-control strength, AI literacy, regulatory context, and differences across industries and firm sizes.

The study therefore emphasizes an integrated perspective in which AI capabilities, accounting information quality, and professional judgment operate together. Organizations seeking to implement AI in accounting should establish appropriate data governance, strengthen employees' AI and analytical competencies, implement transparent and explainable systems, and maintain effective internal control mechanisms. Future empirical research may further examine these relationships using quantitative or mixed-method approaches to validate the conceptual relationships identified through this literature-based study.

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