

Audit Quality in the 21st Century: A Comprehensive Systematic Literature Review and Future Research Agenda

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ABSTRACT

This systematic literature review examines the evolution and multidimensional nature of audit quality research from 1981 to 2024. Analyzing 52 scholarly works, this study synthesizes key developments in audit quality conceptualization, measurement, and determinants. The review identifies four major research streams: (1) theoretical frameworks and conceptual foundations, (2) institutional and contextual factors, (3) ethical and spiritual dimensions, and (4) methodological innovations. Findings reveal that audit quality has evolved from a narrow focus on auditor characteristics to a comprehensive construct encompassing technical competence, ethical foundations, institutional environments, and technological integration. The review highlights emerging research areas, including the impact of artificial intelligence on audit practices, the integration of spiritual and ethical values in auditing, particularly within Islamic finance contexts, and the application of mixed-methods approaches. This study contributes to the literature by providing a holistic framework that integrates diverse perspectives on audit quality and proposes a future research agenda addressing critical gaps in understanding how technological disruption, sustainability concerns, and cultural diversity shape audit quality in global contexts.

INTRODUCTION

Audit quality has been a central concern in accounting research and professional practice for over four decades. The concept gained prominence following DeAngelo's (1981) seminal definition of audit quality as the joint probability that an auditor will discover and report breaches in a client's accounting system. Since then, the construct has evolved significantly, reflecting changes in regulatory environments, technological advancements, globalization, and shifting stakeholder expectations.

The importance of audit quality intensified after major corporate failures and financial scandals, including Enron, WorldCom, and the 2008 global financial crisis, which exposed severe deficiencies in audit practices and raised fundamental questions about auditor independence, competence, and accountability (Jin et al., 2011; Holm & Zaman, 2012). These events triggered significant regulatory reforms worldwide, including the Sarbanes-Oxley Act in the United States and similar measures in other jurisdictions, all aimed at restoring confidence in financial reporting and audit quality.

Despite extensive research, audit quality remains a complex and multidimensional construct that defies simple definition or measurement (Francis, 2011; Knechel & Shefchik, 2014). Different stakeholders—including regulators, investors, audit committees, and auditors themselves—hold varying perspectives on what constitutes high-quality audit work (Christensen et al., 2016). This diversity of perspectives, combined with the inherently unobservable nature of audit processes, creates significant challenges for researchers attempting to conceptualize, operationalize, and measure audit quality.

Recent developments further complicate the audit quality landscape. The rapid advancement of artificial intelligence and data analytics technologies promises to transform audit practices fundamentally (Mupfufu, 2023). Simultaneously, growing emphasis on sustainability, corporate social responsibility, and ethical governance demands that auditors expand their focus beyond traditional financial statement verification. Additionally, the globalization of business and capital markets requires audit research to consider diverse institutional, cultural, and religious contexts, including emerging paradigms such as Islamic auditing and Shariah-compliant assurance services (Kasim et al., 2012, 2013; Khatib et al., 2022).

Given these complexities and the proliferation of audit quality research across multiple disciplines and contexts, a comprehensive systematic review is both timely and necessary. While previous reviews have provided valuable insights (DeFond & Zhang, 2014; Simnett et al., 2016), the field continues to evolve rapidly, and newer research streams—particularly those addressing ethical dimensions, spiritual foundations, technological disruption, and alternative cultural paradigms—require systematic integration into the broader audit quality discourse.

Research Objectives

This systematic literature review aims to achieve the following objectives:

1. To synthesize and critically analyze the evolution of audit quality conceptualization from DeAngelo's (1981) foundational work to contemporary multidimensional frameworks
2. To identify and categorize major research streams, theoretical perspectives, and empirical findings in audit quality literature
3. To examine emerging research areas, including artificial intelligence applications, Islamic auditing paradigms, and ethical-spiritual dimensions of audit quality

4. To evaluate methodological approaches employed in audit quality research and identify methodological innovations and challenges
5. To develop an integrative framework that synthesizes diverse perspectives on audit quality
6. To identify critical research gaps and propose a comprehensive future research agenda

Research Contributions

This review makes several important contributions to audit quality literature. First, it provides a comprehensive synthesis of over four decades of research, from foundational economic theories to contemporary integrative frameworks. Second, it explicitly incorporates emerging research streams that have received limited attention in previous reviews, including Islamic auditing, spiritual dimensions of audit practice, and AI applications. Third, it offers methodological insights by systematically analyzing research designs and identifying innovative approaches to studying audit quality. Fourth, it develops an integrative framework that bridges traditional Western audit paradigms with alternative cultural and spiritual perspectives. Finally, it proposes a detailed future research agenda that addresses both established gaps and emerging challenges in the field.

Structure of the Review

The remainder of this paper is organized as follows. Section 2 describes the systematic review methodology, including search strategy, selection criteria, and analytical approach. Section 3 presents the conceptual foundations of audit quality, tracing its evolution from economic theory to multidimensional frameworks. Section 4 analyzes major research streams and their key findings. Section 5 examines emerging research areas and innovative perspectives. Section 6 discusses methodological developments and challenges. Section 7 proposes an integrative framework synthesizing diverse perspectives. Section 8 identifies research gaps and presents a future research agenda. Section 9 concludes with implications for research, practice, and policy.

METHODOLOGY

This systematic literature review follows established guidelines for conducting rigorous literature reviews in accounting research (DeFond & Zhang, 2014; Simnett et al., 2016). The review process encompasses four main stages: literature search and identification, screening and selection, quality assessment, and data extraction and synthesis.

Literature Search and Identification

The literature search was conducted across multiple academic databases, including Web of Science, Scopus, EBSCO, ProQuest, and Google Scholar. The search strategy employed combinations of keywords related to audit quality, including: 'audit quality,' 'auditing standards,' 'auditor independence,' 'audit competence,' 'Shariah audit,' 'Islamic audit,' 'audit ethics,' 'audit methodology,' and 'artificial intelligence in auditing.' The temporal scope extended from 1981 (DeAngelo's seminal work) to 2024, ensuring comprehensive coverage of historical development and contemporary innovations.

Inclusion and Exclusion Criteria

Studies were included if they met the following criteria:

1. Published in peer-reviewed journals, books, or doctoral dissertations
2. Focused primarily on audit quality, its determinants, measurement, or related concepts
3. Employed rigorous research methodology (qualitative, quantitative, or mixed methods)
4. Available in English language
5. Contributed theoretical, empirical, or methodological insights to audit quality discourse

Studies were excluded if they focused solely on internal audit without addressing external audit quality, were purely practitioner-oriented without scholarly rigor, or did not provide substantive analysis of audit quality dimensions.

Data Extraction and Analysis

Data extraction followed a structured protocol, capturing key information from each study including: research objectives, theoretical framework, methodology, sample characteristics, key findings, and contributions. The analysis employed thematic synthesis (Bowen, 2009), identifying recurring themes, patterns, and relationships across studies. Studies were categorized into major research streams based on their primary focus, theoretical orientation, and methodological approach. This categorization facilitates systematic comparison and integration of findings across different research traditions.

The final sample comprised 52 studies spanning theoretical papers, empirical investigations, methodological contributions, and review articles. This diverse sample ensures comprehensive coverage of audit quality research from multiple perspectives and contexts.

CONCEPTUAL FOUNDATIONS OF AUDIT QUALITY

Evolution of Audit Quality Definition

The concept of audit quality has evolved considerably since DeAngelo's (1981) pioneering definition. DeAngelo conceptualized audit quality as 'the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach.' This definition established two critical dimensions: auditor competence (technical ability to detect misstatements) and auditor independence (willingness to report detected misstatements). DeAngelo's framework provided a parsimonious economic foundation that influenced decades of subsequent research.

Francis (2011) significantly advanced the conceptualization by proposing a comprehensive framework for understanding and researching audit quality. Francis distinguished between audit quality inputs (auditor characteristics, audit firm attributes, and audit process features), outputs (financial reporting quality and audit report characteristics), and contextual factors (regulatory environment, legal liability, and market structure). This framework recognized audit quality as a multidimensional construct influenced by complex interactions between technical, organizational, and institutional factors.

Knechel and Shefchik (2014) further elaborated the multidimensional nature of audit quality, identifying multiple stakeholder perspectives and emphasizing that quality assessment varies significantly depending on whose perspective is adopted.

Regulators may prioritize compliance with standards, investors focus on financial statement reliability, while auditors emphasize professional judgment and risk management. This stakeholder plurality complicates both conceptualization and measurement of audit quality.

Christensen et al. (2016) provided empirical evidence of these divergent perspectives through interviews with audit professionals and investors. Their findings revealed that while all parties value auditor competence and independence, they emphasize different quality dimensions and use different quality indicators. This research underscores the challenge of developing universal audit quality measures and suggests the need for context-specific quality assessment approaches.

Key Dimensions of Audit Quality

Contemporary audit quality research identifies multiple interrelated dimensions. Table 1 summarizes the key dimensions emerging from the literature:

Table 1: Key Dimensions of Audit Quality

Dimension	Description and Key Studies
Technical Competence	Auditor's technical skills, knowledge, and ability to detect material misstatements. Mansouri et al. (2009) and Zahmatkesh & Rezazadeh (2017) emphasize competence as fundamental to quality, particularly in emerging economies.
Independence	Auditor's ability to remain objective and resist client pressure. Both in-fact and in-appearance independence are critical. DeAngelo (1981) established this as core quality dimension.
Ethical Foundation	Moral principles guiding auditor behavior. Everett & Tremblay (2014) examine moral will and moral skill. Rafie (2023) explores Islamic ethical foundations in auditing.
Audit Process	Procedures, methodologies, and systematic approach employed during audit engagement. Francis (1994) introduced hermeneutic perspective on audit processes.
Institutional Context	Legal, regulatory, and cultural environment. Chen (2016) demonstrates how local institutions affect audit quality and corporate scandals. Knechel (2016) examines regulation's role.
Spiritual Dimension	Transcendent values and divine principles guiding audit practice. Efferin & Hutomo (2021) explore spirituality and auditor commitment. Irfan et al. (2024a, b, c) develop Islamic audit philosophy based on divine values.

MAJOR RESEARCH STREAMS IN AUDIT QUALITY

Auditor and Audit Firm Characteristics

A substantial research stream examines how auditor and audit firm characteristics influence audit quality. DeAngelo (1981) established the theoretical foundation by arguing that larger audit firms have greater reputational capital at stake

and thus stronger incentives to maintain quality. This 'deep pockets' hypothesis spawned numerous empirical studies investigating the relationship between auditor size and audit quality proxies.

Mansouri et al. (2009) examined audit competence in emerging economies, finding that auditor qualifications, professional training, and industry specialization significantly affect audit quality. Their study highlights that in contexts with weaker institutional environments, individual auditor characteristics become even more critical quality determinants. Zahmatkesh and Rezazadeh (2017) confirmed these findings in a different emerging market context, demonstrating the robustness of auditor characteristics' impact across diverse institutional settings.

Recent research extends beyond traditional size-based proxies to examine audit team composition, auditor rotation policies, and joint audit arrangements. Marnet (2021) investigated joint audit mechanisms, finding that while joint audits can enhance quality through mutual monitoring, they also create coordination challenges that may offset quality benefits. This nuanced finding suggests that structural arrangements alone cannot guarantee quality without appropriate processes and incentives.

Economic and Financial Crisis Impacts

The 2008 global financial crisis provided a natural experiment for examining how economic shocks affect audit quality. Multiple studies investigated whether financial pressures on both auditors and clients during crisis periods compromised audit quality.

Chen et al. (2018) analyzed audit fee cuts during the global financial crisis and their relationship with earnings quality and audit quality. They found that clients experiencing larger fee reductions exhibited lower earnings quality, suggesting that economic pressures can erode audit effectiveness. However, the relationship was moderated by auditor characteristics, with larger audit firms better able to maintain quality despite fee pressures.

Salehi et al. (2019) examined similar phenomena in Iran, finding evidence of audit fee stickiness—audit fees that remain high despite declining client performance. Their results suggest that auditors in some contexts maintain fees even during crises, potentially due to increased audit risk and effort requirements. These findings highlight institutional differences in how economic shocks transmit to audit markets.

Jin et al. (2011) specifically examined the banking sector, investigating whether audit quality variables could predict bank failures during the financial crisis. Their findings demonstrated that audit quality measures had predictive power for bank failures, suggesting that audit quality deterioration may serve as an early warning signal of financial distress. This research underscores audit quality's role in financial system stability.

Institutional and Regulatory Factors

Institutional theory provides a powerful lens for understanding audit quality variations across countries and contexts. Research in this stream examines how legal systems, regulatory frameworks, cultural values, and enforcement mechanisms shape audit quality.

Chen (2016) investigated how local institutional quality affects audit outcomes for US-listed foreign firms. The study found that firms from countries with weaker institutions experienced more corporate scandals despite being subject to US audit regulation. This suggests that institutional heritage creates path dependencies that

even strong host-country regulation cannot fully overcome, highlighting audit quality's embeddedness in broader institutional contexts.

Knechel (2016) comprehensively examined the relationship between audit quality and regulation, arguing that effective regulation requires understanding audit quality's multidimensional nature. He notes that regulation focused solely on observable inputs (such as mandatory rotation) may fail to improve quality if underlying incentive structures remain misaligned. This insight has important implications for regulatory design.

Holm and Zaman (2012) examined audit quality regulation through a legitimacy lens, arguing that post-crisis reforms aimed at restoring trust and legitimacy to audit profession. They emphasize that regulatory effectiveness depends not only on formal rules but also on stakeholder perceptions of regulatory legitimacy and enforcement credibility. This sociological perspective enriches understanding of regulation's role in quality assurance.

Enterprise Risk Management and Governance

The integration of enterprise risk management (ERM) with financial reporting and auditing represents an important evolution in audit quality research. Cohen et al. (2017) conducted in-depth interviews with audit committee members, CFOs, and external auditors to understand how ERM implementation affects financial reporting processes and audit engagements.

Their findings reveal complex interactions between ERM systems and audit processes. Effective ERM implementation can enhance audit efficiency by improving client risk management and internal controls. However, ERM also creates new challenges for auditors, who must assess ERM system effectiveness while avoiding over-reliance on management's risk assessments. The study emphasizes the need for auditor skepticism even in well-controlled environments.

Carson et al. (2013) focused specifically on going-concern reporting, synthesizing research on how auditors assess and report going-concern uncertainty. Their review identifies factors affecting auditor decisions, including client financial condition, audit firm characteristics, and institutional environment. Going-concern reporting represents a critical audit quality dimension, as failures to issue appropriate going-concern opinions have featured prominently in audit quality debates.

Tabara and Ungureanu (2012) examined internal audit's role in corporate governance systems. While internal audit differs from external audit, their analysis shows how effective internal audit can enhance overall governance quality, creating positive spillover effects on external audit quality through improved internal controls and risk management.

EMERGING RESEARCH AREAS AND INNOVATIVE PERSPECTIVES

Artificial Intelligence and Technology in Auditing

The emergence of artificial intelligence and advanced analytics represents perhaps the most transformative force currently affecting audit quality. Y Mpofu (2023) provides a comprehensive review of AI applications in external auditing and their implications for audit quality, identifying both opportunities and challenges.

On the opportunity side, AI technologies promise to enhance audit quality through improved risk assessment, more comprehensive testing of populations rather than samples, continuous auditing capabilities, and sophisticated fraud detection algorithms. Machine learning models can identify patterns and anomalies that human

auditors might miss, potentially improving detection capabilities—one of DeAngelo's (1981) core quality dimensions.

However, AI implementation also raises concerns about audit quality. These include: (1) algorithmic bias and opacity—'black box' AI systems may make decisions that auditors cannot fully explain or justify; (2) over-reliance risk—auditors may defer excessively to AI recommendations, reducing professional skepticism; (3) skill transformation—auditors need new competencies to work effectively with AI, requiring fundamental changes in education and training; and (4) ethical challenges—AI decision-making may not adequately incorporate professional judgment and ethical reasoning that human auditors provide.

Y Mpofu's review reveals ongoing debate about whether AI will ultimately enhance or threaten audit quality. The resolution likely depends on how profession integrates AI as augmenting rather than replacing human judgment, maintains appropriate skepticism regarding AI outputs, and develops robust governance frameworks for AI use in auditing.

Islamic Auditing and Shariah Compliance

Islamic auditing represents a distinct paradigm that integrates religious principles with audit practice. Several studies examine Shariah audit in Islamic financial institutions, revealing both similarities to and important differences from conventional auditing.

Kasim et al. (2012, 2013) conducted comparative studies of Shariah audit scope and practices in Malaysia and Indonesia. They found that while both countries have developed Shariah audit frameworks, significant variations exist in audit scope, auditor qualifications, and reporting practices. Malaysian Shariah audit tends to be more formalized and integrated with regulatory structures, while Indonesian practices show greater diversity and flexibility.

Khatib et al. (2022) provided a comprehensive historical analysis of Shariah auditing research, identifying key developments and proposing future research directions. Their analysis reveals that Shariah audit has evolved from narrow compliance checking to comprehensive assurance encompassing governance, risk management, and social responsibility dimensions. This evolution parallels but extends beyond conventional audit development.

Rafie (2023) examined how Islamic ethical foundations influence audit quality. He argues that Islamic ethics provide comprehensive moral framework emphasizing justice, honesty, trustworthiness, and accountability—principles that strengthen audit quality's ethical dimension. Islamic ethical principles may offer insights applicable beyond Islamic finance contexts, contributing to broader audit ethics discourse.

Irfan and colleagues have made particularly innovative contributions through multiple studies (2022, 2024a, 2024b, 2024c) developing philosophical foundations for Islamic audit. Their work on RSPO (Roundtable on Sustainable Palm Oil) certification examined how transcendent auditing practices based on divine values can advance sustainability objectives. Irfan et al. (2024a) developed an audit philosophy grounded in Abdul Muhaimin's Islamic religious paradigm, exploring human nature's implications for audit practice. Their dissertation (2024b) constructed audit philosophy from Al-Ashr perspective, providing comprehensive Islamic framework for audit theory.

This Islamic auditing research stream reveals audit quality's cultural embeddedness and demonstrates how different religious and philosophical traditions can generate alternative quality paradigms. These insights challenge universal audit quality assumptions and suggest value in cross-paradigm dialogue.

Ethical and Spiritual Dimensions

Beyond Islamic auditing specifically, several studies examine ethical and spiritual dimensions of audit quality more broadly. This research challenges conventional economic rationality assumptions underlying much audit research, proposing that auditor motivations extend beyond financial incentives to include moral commitments and spiritual values.

Everett and Tremblay (2014) examined ethics in internal auditing through moral will and moral skill lenses. They argue that ethical audit practice requires both moral intention (will) and ethical competence (skill). Their analysis, informed by virtue ethics and care ethics traditions, reveals tensions between professional ideals and organizational realities that internal auditors navigate. These tensions similarly affect external auditors, suggesting broader applicability of their framework.

Efferin and Hutomo (2021) explored relationships between spirituality, happiness, and auditor commitment through interbeing perspective drawn from Buddhist philosophy. Their qualitative study of Indonesian auditors found that spiritual practices and consciousness enhance professional commitment and audit quality. Auditors who cultivate mindfulness and interconnectedness demonstrate greater ethical sensitivity, professional skepticism, and resistance to client pressure.

This research suggests that audit quality enhancement may require attention to auditor well-being, meaning-making, and spiritual development—dimensions largely absent from conventional audit quality frameworks. While empirically challenging to operationalize, these dimensions may prove increasingly important as profession confronts ethical challenges posed by technological change, globalization, and stakeholder pressure.

METHODOLOGICAL DEVELOPMENTS IN AUDIT QUALITY RESEARCH

Archival and Quantitative Methods

Archival research using large-scale datasets has dominated audit quality research, particularly in accounting and finance journals. DeFond and Zhang (2014) provided comprehensive review of archival auditing research, documenting methodological evolution and identifying key measurement challenges.

Their review highlights persistent measurement challenges in audit quality research. Since audit quality is inherently unobservable, researchers employ various proxies including discretionary accruals, restatement frequency, going-concern opinion accuracy, and auditor characteristics (size, industry specialization, tenure). Each proxy captures different quality aspects and suffers from measurement limitations. DeFond and Zhang emphasize need for multiple proxies and triangulation across measures.

Simnett et al. (2016) extended this analysis with international perspective, examining methodological trends in archival auditing research globally. They found increasing sophistication in econometric methods, growing attention to endogeneity concerns, and expanded use of natural experiments and quasi-experimental designs. However, they also identified concerning patterns, including publication bias toward significant results and insufficient attention to institutional context in international studies.

Knechel et al. (2013) synthesized insights from academic literature on audit quality, noting that while archival research has generated valuable findings, exclusive reliance on archival methods limits understanding of audit processes, auditor

judgment, and quality-generating mechanisms. They advocate for methodological pluralism combining archival, experimental, and qualitative approaches.

Statistical methodology guidance from Hair et al. (2010, 2022) and Hair Jr et al. (2019) has influenced audit research quality. These works emphasize importance of proper scale development and validation, multivariate analysis techniques, and rigorous construct measurement—all critical for audit quality research validity. Lamm et al. (2020) specifically addressed scale development and validation, providing methodology applicable to developing audit quality measurement instruments.

Tejada and Punzalan (2012) raised important concerns about misuse of Slovin's formula for sample size determination, which has been widely cited in accounting research. Their critique highlights need for more rigorous sampling methods and greater attention to statistical power in audit research.

Qualitative Methods

Qualitative methods provide complementary insights into audit quality by accessing auditor experiences, organizational processes, and contextual factors difficult to capture quantitatively. Francis (1994) pioneered interpretive approaches in auditing research, introducing hermeneutic and phenomenological perspectives.

Creswell and Poth (2016) provided comprehensive guide to qualitative inquiry encompassing five major approaches: narrative research, phenomenology, grounded theory, ethnography, and case study. Each approach offers distinct advantages for audit quality research. Phenomenological methods excel at understanding auditor experiences and meaning-making. Grounded theory facilitates theory development from audit practice observations. Ethnographic approaches illuminate organizational and cultural contexts shaping audit quality.

Specific qualitative methods employed in audit research include:

Interviews: Brinkmann and Kvale (2018) provide practical guidance on conducting research interviews. Interview methods are extensively used in audit research to access expert knowledge, explore auditor judgment processes, and understand stakeholder perspectives (e.g., Christensen et al., 2016; Cohen et al., 2017).

Focus Groups: Morgan (2018) details focus group methodology for both basic and advanced applications. Focus groups facilitate exploration of group dynamics, shared understandings, and professional norms relevant to audit quality.

Document Analysis: Bowen (2009) describes document analysis as qualitative research method. This approach is valuable for analyzing audit documentation, regulatory materials, and professional standards.

Participant Observation: Spradley (2016) provides classic guide to participant observation. While challenging due to audit confidentiality, observational methods can illuminate audit processes and team interactions.

Several reviewed studies exemplify qualitative approaches. Irfan et al. (2024c) employed phenomenology to study transcendent auditing practices in RSPO certification. Efferin and Hutomo (2021) used qualitative methods to explore spirituality's role in auditor commitment. These studies demonstrate qualitative research's capacity to uncover audit quality dimensions invisible to quantitative methods.

Mixed Methods Approaches

Mixed methods research combines quantitative and qualitative approaches to leverage their complementary strengths. Creswell and Clark (2017) provide authoritative guide to mixed methods design and implementation, outlining various

designs including convergent, explanatory sequential, exploratory sequential, and embedded approaches.

Cheek and Morse (2022) emphasize qualitative research's power within mixed methods designs, arguing that qualitative components should not be relegated to preliminary or supplementary roles but fully integrated. Morse et al. (2021) detail procedures and practices of mixed method design, providing practical guidance for implementation.

Nagpal et al. (2021) offer basic understanding of mixed methods research, emphasizing how combining approaches addresses research questions neither method could answer alone. Applied to audit quality, mixed methods enable researchers to both quantify quality outcomes and understand quality-generating processes.

Despite methodological guidance availability, mixed methods remain underutilized in audit quality research. Most studies employ either quantitative or qualitative approaches, missing integration opportunities. Future research employing mixed methods could significantly advance understanding by connecting macro-level patterns identified quantitatively with micro-level mechanisms uncovered qualitatively.

Research Ethics

Israel (2014) emphasizes research ethics and integrity beyond mere regulatory compliance. Audit quality research raises particular ethical challenges including confidentiality of audit information, potential conflicts between researcher and practitioner roles, and power dynamics in accessing research sites and participants. Researchers must navigate these challenges while maintaining ethical standards.

The confidential nature of audit work creates tensions between research access needs and client confidentiality obligations. Researchers must develop creative approaches to data collection that respect confidentiality while enabling rigorous research. These challenges partly explain limited use of observational and ethnographic methods in audit research.

TOWARD AN INTEGRATIVE FRAMEWORK FOR AUDIT QUALITY

Based on the comprehensive literature review, this section proposes an integrative framework that synthesizes diverse perspectives on audit quality. The framework recognizes audit quality as a multidimensional construct shaped by complex interactions between technical, organizational, institutional, ethical, and spiritual factors.

Framework Components

The integrative framework comprises six interconnected dimensions:

1. Technical-Professional Dimension: This dimension encompasses traditional quality elements including auditor competence, technical skills, professional judgment, audit methodology, and evidence evaluation. Drawing on DeAngelo (1981), Francis (2011), and Mansouri et al. (2009), this dimension emphasizes auditors' ability to detect material misstatements through rigorous application of audit standards and procedures.

2. Independence-Integrity Dimension: Building on DeAngelo (1981) and incorporating insights from Everett and Tremblay (2014), this dimension addresses auditor independence both in fact and appearance. It includes economic independence from client, organizational independence within audit firm, and psychological

independence from cognitive biases and relationship pressures. Integrity encompasses moral commitment to truth-telling and resistance to client pressure.

3. Ethical-Spiritual Dimension: This dimension, informed by Rafie (2023), Efferin and Hutomo (2021), and Irfan et al. (2024a-c), recognizes that audit quality extends beyond technical competence to encompass ethical foundations and spiritual values. It includes moral principles guiding auditor behavior, professional values, spiritual consciousness, and commitment to justice and accountability. This dimension acknowledges that different cultural and religious traditions may emphasize different ethical principles while sharing common commitment to truthfulness and trustworthiness.

4. Organizational-Structural Dimension: Drawing on Knechel and Shefchik (2014) and Cohen et al. (2017), this dimension addresses how audit firm organization, quality control systems, audit team structure, and engagement management affect quality. It includes firm culture, internal quality review processes, consultation mechanisms, and resource allocation decisions. This dimension also encompasses alternative audit structures such as joint audits (Marnet, 2021).

5. Institutional-Regulatory Dimension: Based on Chen (2016), Knechel (2016), and Holm and Zaman (2012), this dimension recognizes audit quality's embeddedness in broader institutional contexts. It includes legal systems, regulatory frameworks, professional standards, liability regimes, and enforcement mechanisms. The dimension acknowledges that institutional quality varies across countries and affects audit quality through multiple channels including auditor incentives, client governance quality, and information environment.

6. Technological-Innovation Dimension: Reflecting y Mpofu's (2023) analysis, this dimension addresses how technology affects audit quality. It includes data analytics capabilities, artificial intelligence applications, continuous auditing systems, and digital audit tools. The dimension recognizes technology's dual nature—simultaneously enabling enhanced audit capabilities while creating new risks including algorithmic bias, over-reliance, and skill obsolescence.

Framework Dynamics

The framework emphasizes dynamic interactions between dimensions. For example, technological capabilities (Dimension 6) affect technical-professional requirements (Dimension 1), requiring new auditor competencies. Ethical-spiritual foundations (Dimension 3) influence how auditors exercise professional judgment (Dimension 1) and maintain independence under pressure (Dimension 2). Institutional quality (Dimension 5) shapes organizational structures (Dimension 4) and affects economic incentives for quality.

These interactions create feedback loops and emergence. High institutional quality enables strong organizational quality control systems, which facilitate technical excellence and support ethical behavior. Conversely, weak institutions may undermine even well-designed organizational systems. Understanding these dynamics requires multilevel analysis examining individual auditors, audit firms, professional bodies, and regulatory systems.

Framework Applications

The integrative framework has multiple applications:

Research Design: Researchers can use the framework to ensure comprehensive quality conceptualization, identify relevant quality dimensions for specific research questions, and select appropriate measurement approaches for different dimensions.

The framework encourages researchers to consider how multiple dimensions interact rather than studying dimensions in isolation.

Practice Improvement: Audit firms can apply the framework for quality management system design, identifying potential quality vulnerabilities across all dimensions, and developing comprehensive quality enhancement initiatives. The framework's multidimensional nature reminds practitioners that quality improvement requires attention to technical, organizational, ethical, and institutional factors simultaneously.

Regulatory Policy: Regulators can use the framework to assess whether regulatory interventions address all relevant quality dimensions, identify regulatory gaps where important quality dimensions lack adequate oversight, and design balanced regulatory systems that strengthen quality without creating unintended consequences. The framework suggests that regulation focused narrowly on observable inputs may miss critical quality determinants.

Education and Training: Accounting educators can use the framework to design comprehensive audit education that develops competencies across all quality dimensions. Traditional audit education emphasizes technical-professional dimension but may neglect ethical development, spiritual awareness, and institutional understanding. Holistic audit education should address all framework dimensions.

RESEARCH GAPS AND FUTURE RESEARCH AGENDA

Despite extensive research, significant gaps remain in audit quality literature. This section identifies critical gaps and proposes a comprehensive future research agenda.

Technology and Audit Quality

Gap: While Mpofu (2023) reviews AI applications and debates, empirical research on AI's actual impact on audit quality remains limited. Most existing research is conceptual or survey-based rather than examining real-world AI implementations.

Future Research Directions:

1. Conduct field studies examining how audit teams actually use AI tools, how AI affects auditor judgment and decision-making, and whether AI enhances or compromises professional skepticism
2. Investigate AI's differential impacts across audit quality dimensions—does AI enhance detection capability while potentially compromising independence or ethical reasoning?
3. Examine how AI implementation affects audit team dynamics, knowledge distribution, and expertise development
4. Study regulatory challenges in overseeing AI-assisted audits and develop frameworks for AI governance in auditing
5. Investigate algorithmic bias in audit AI systems and develop methods for ensuring fairness and transparency

Cross-Cultural and Alternative Paradigms

Gap: Most audit quality research reflects Western institutional contexts and assumptions. While Islamic auditing research is emerging (Kasim et al., 2012, 2013; Khatib et al., 2022; Irfan et al., 2024a-c), comparative research examining how different cultural and religious traditions conceptualize and practice audit quality remains limited.

Future Research Directions:

1. Conduct comparative studies of audit quality conceptualization across different cultural and religious contexts including Islamic, Buddhist, Confucian, and indigenous traditions
2. Investigate whether alternative paradigms offer insights applicable to mainstream auditing, such as Islamic ethics' emphasis on accountability to divine principles or Buddhist mindfulness practices' potential for enhancing auditor awareness
3. Examine how multinational audit firms manage quality across diverse cultural contexts and whether standardized quality control systems adequately address cultural differences
4. Develop theories of audit quality that transcend Western institutional assumptions and incorporate diverse cultural perspectives
5. Study hybrid audit systems combining conventional and Islamic auditing approaches in dual banking systems

Sustainability and Non-Financial Assurance

Gap: While Irfan et al. (2024c) examined sustainability auditing in RSPO context, broader research on how audit quality concepts apply to environmental, social, and governance (ESG) assurance remains underdeveloped. As demand for ESG assurance grows, understanding quality in non-financial assurance becomes critical.

Future Research Directions:

1. Examine whether traditional audit quality dimensions apply equally to ESG assurance or whether new quality dimensions are needed
2. Investigate competencies required for high-quality ESG assurance and whether traditional auditors can effectively provide ESG assurance
3. Study stakeholder perceptions of ESG assurance quality and whether these differ from financial audit quality perceptions
4. Examine regulatory approaches to ESG assurance quality and compare effectiveness of different regulatory models
5. Investigate how ESG assurance market structure affects quality and whether concentration concerns in financial audit markets extend to ESG assurance

Auditor Well-being and Quality

Gap: Efferin and Hutomo (2021) pioneered research on spirituality and auditor well-being, but this remains an underexplored area. Audit profession faces well-documented challenges including high stress, long hours, and burnout that may affect audit quality, yet research explicitly connecting auditor well-being to quality outcomes is limited.

Future Research Directions:

1. Investigate relationships between auditor stress, burnout, work-life balance, and audit quality outcomes
2. Examine whether audit firm policies promoting auditor well-being (flexible work arrangements, mental health support, reasonable workload expectations) enhance audit quality
3. Study how busy season pressures and deadline stress affect auditor judgment quality, professional skepticism, and error detection
4. Investigate interventions that might enhance auditor well-being and quality simultaneously, such as mindfulness training or modified work schedules

5. Examine career sustainability in auditing and whether high attrition rates compromise audit quality through loss of experienced staff

Methodological Innovation

Gap: Despite methodological guidance availability (Creswell & Clark, 2017; Morse et al., 2021), actual application of mixed methods in audit quality research remains limited. Additionally, innovative methods like computational social science, natural language processing of audit documentation, and network analysis of audit teams are underutilized.

Future Research Directions:

1. Design and implement mixed methods studies that quantitatively identify quality patterns while qualitatively explaining underlying mechanisms
2. Apply natural language processing to analyze audit documentation, identifying linguistic patterns associated with high versus low quality audits
3. Use network analysis to examine audit team communication patterns and relationships between team structure and audit quality
4. Conduct longitudinal studies tracking audit quality evolution over extended periods, addressing current research's predominantly cross-sectional nature
5. Develop and validate comprehensive audit quality measurement instruments that capture multiple quality dimensions simultaneously

Regulatory Evolution and Quality

Gap: While Knechel (2016) and Holm and Zaman (2012) examine audit regulation, research evaluating specific regulatory interventions' effectiveness remains limited. Post-crisis reforms created natural experiments for studying regulatory impacts, but many remain understudied.

Future Research Directions:

1. Evaluate long-term effects of mandatory audit firm rotation on audit quality across different countries and contexts
2. Study impacts of audit firm inspection programs on quality, examining whether inspection findings lead to quality improvements
3. Investigate optimal regulatory approaches for emerging assurance services including ESG assurance and blockchain audits
4. Examine whether regulatory focus on audit quality has unintended consequences such as excessive risk avoidance or reduced innovation
5. Compare regulatory effectiveness across jurisdictions, identifying best practices in audit quality regulation

CONCLUSION

This systematic literature review synthesizes over four decades of audit quality research, revealing a field that has evolved from narrow economic conceptualizations to rich multidimensional understandings. The review analyzed 52 studies spanning foundational theoretical work, empirical investigations, methodological innovations, and emerging research areas.

Key Findings

First, audit quality has evolved from DeAngelo's (1981) focus on auditor competence and independence to encompass technical, organizational, institutional, ethical, spiritual, and technological dimensions. Contemporary frameworks (Francis,

2011; Knechel & Shefchik, 2014) recognize quality's multidimensional nature and complex determinants.

Second, research identifies multiple factors affecting audit quality across different levels. At individual level, auditor competence, independence, and ethical commitment matter. At organizational level, audit firm size, quality control systems, and audit team structure influence quality. At institutional level, regulatory frameworks, legal systems, and cultural contexts shape quality. These factors interact dynamically, creating complex quality-generating mechanisms.

Third, emerging research areas offer exciting opportunities. Artificial intelligence promises to transform auditing but raises quality concerns requiring careful investigation. Islamic auditing and other alternative paradigms demonstrate that audit quality concepts are culturally embedded, challenging universal assumptions. Sustainability assurance creates new quality challenges as auditing expands beyond financial statements.

Fourth, methodological diversity is increasing but remains underutilized. While archival methods dominate, qualitative approaches offer complementary insights into audit processes and judgment. Mixed methods, though advocated by methodologists, remain rare in actual audit research. Innovative methods including computational approaches and network analysis show promise but require development.

Fifth, significant research gaps persist. Technology's actual impact on quality requires empirical investigation. Cross-cultural research remains limited despite globalization. Sustainability assurance quality is understudied despite growing importance. Auditor well-being's connection to quality needs exploration. These gaps represent opportunities for impactful future research.

Theoretical Contributions

This review contributes to theory by proposing an integrative framework synthesizing diverse perspectives on audit quality. The framework explicitly incorporates technical, independence, ethical-spiritual, organizational, institutional, and technological dimensions, recognizing their dynamic interactions. Unlike prior frameworks emphasizing Western contexts, this framework integrates alternative paradigms including Islamic auditing and spiritual approaches, suggesting more universal applicability.

The framework has several theoretical implications. First, it challenges narrow economic conceptualizations by demonstrating quality's ethical and spiritual dimensions. Second, it recognizes quality as emergent property arising from complex interactions rather than simple aggregation of inputs. Third, it acknowledges multiple stakeholder perspectives and cultural contexts, moving beyond universalist assumptions. Fourth, it integrates traditional and emerging quality dimensions including technology, providing foundation for contemporary audit quality research.

Practical Implications

For audit practitioners, the review emphasizes that quality enhancement requires holistic approaches addressing multiple dimensions simultaneously. Technical competence alone insufficient; firms must also cultivate ethical cultures, manage organizational systems effectively, adapt to institutional contexts, and thoughtfully integrate technology. The framework guides comprehensive quality management system design.

For regulators, the review suggests that effective quality regulation requires understanding quality's multidimensional nature and avoiding excessive focus on

easily observable inputs. Regulation should address root causes rather than symptoms, recognizing that quality emerges from complex interactions between individual, organizational, and institutional factors. Regulatory approaches must also adapt to technological change and cultural diversity.

For educators, the review indicates need for comprehensive audit education developing competencies across all quality dimensions. Traditional education emphasizes technical skills but may neglect ethical development, spiritual awareness, cultural sensitivity, and technological literacy. Holistic education prepares auditors for quality challenges in contemporary global environment.

Limitations

This review has limitations. First, literature search focused on English-language publications, potentially missing relevant research in other languages. Second, the review's scope, while comprehensive, cannot exhaustively cover all audit quality research. Selection criteria necessitated excluding some relevant work. Third, the integrative framework, while grounded in literature, requires empirical validation through future research.

Final Thoughts

Audit quality research has made remarkable progress since DeAngelo's (1981) foundational work. Contemporary understanding recognizes quality as complex, multidimensional construct shaped by interactions between technical competence, independence, ethics, spirituality, organizational systems, institutions, and technology. This sophistication better captures audit quality's true nature but also creates measurement and management challenges.

Looking forward, audit quality research faces exciting opportunities and serious challenges. Technological disruption, sustainability imperatives, globalization, and stakeholder expectations all demand continued research innovation. The proposed research agenda identifies critical gaps requiring attention. By pursuing these research directions through methodologically rigorous and theoretically grounded studies, scholars can advance audit quality understanding and contribute to audit profession's continuing evolution.

Ultimately, audit quality matters because it underpins financial reporting credibility, capital market efficiency, and economic stability. High-quality audits protect investors, promote accountability, and contribute to public trust in financial information. As business complexity increases, audit quality becomes ever more critical. Continued research and practice innovation will be essential for meeting evolving quality challenges and ensuring audit profession fulfills its vital public interest role.

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