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FROM GOVERNANCE TO DIGITISATION: INTERNAL AUDITING, DIGITAL TRANSFORMATION CAPABILITY, AND ACCOUNTING DIGITISATION IN BANKS LISTED ON THE PALESTINE EXCHANGE

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Abstract: *This paper presents original academic research on listed banks on the Palestine Exchange (PEX) and develops a conceptual-empirical framework to explain how internal audit supports the full process of accounting digitalisation in these listed banks. This study challenges the traditional perception that internal audit functions only as a post-event compliance tool and instead positions it as a strategic governance mechanism for digital transformation. It clarifies that in the heavily regulated banking environment, digital accounting has dual attributes of technological upgrading and governance transformation, and it covers five core governance dimensions, including assurance, data quality, and others. Drawing on four foundational theories, including agency theory, this study proposes two functional paths through which internal audit impacts accounting digitalisation. The study adopts a quantitative explanatory research design, conducts analysis using partial least squares structural equation modelling (PLS-SEM) based on data from a cross-sectional survey distributed to qualified practitioners at PEX-listed banks, and finally sums up the dual research value of the work, providing support for bank boards of directors, audit committees, internal audit departments, and regulators in emerging markets.*

Keywords: Internal auditing; Digital transformation capability; Accounting digitisation; Corporate governance; Palestinian banks

1. Introduction

Digital transformation has become a core strategic priority for the banking industry. Its core driver is that it has reshaped the entire workflow of financial information, from generation and verification to use in formal decision-making. Currently, the digital transformation of bank accounting and auditing has adopted a wide set of tools, including ERP, cloud platforms, RPA, and artificial intelligence. Previous studies, such as those by Argento et al. (2025) and Hanelt et al. (2021), point out that this transformation will reshape business models and accountability mechanisms while also giving rise to four new types of governance challenges. The banking industry has always operated under strict regulatory constraints and places extremely high requirements on the reliability and confidentiality of its core financial information. As a result, this transformation has an especially notable impact on the industry.

This study argues that accounting digitisation can deliver five core values: improving processing speed, reducing human error, preserving complete audit trails, strengthening reporting standardisation, and supporting real-time management insights. However, these benefits are not automatically attainable, and the transformation will also create new risks, such as weak access controls and poor data migration quality. These issues cannot be categorised as merely technical problems; they require supporting

governance arrangements aligned with internal control, risk management, assurance, and compliance. A 2024 regional fintech study by Hendawi et al. also corroborates this core claim.

This paper argues that internal audit has unique advantages in supporting an institution's digital transformation. Its functions have expanded from the original post-hoc financial oversight and control to cover full-chain assurance and consulting services spanning information systems, governance processes, cybersecurity, and risk-oriented decision-making. Recent studies in auditing and accounting point out that digitalisation has increased the complexity of audit evidence, requiring practitioners to master entirely new skills and tools. Competency-focused accounting education research proposes that digital innovation and fintech must be embedded into the core of professional learning rather than treated as supplementary content. The core governance value of internal audit in the banking sector depends precisely on whether auditors can translate digital tools into reliable oversight and control mechanisms and accountable processes.

This study takes Palestine's banking industry as the core research context for its analysis of digital transformation. Local banks listed on the Palestine Exchange (PEX) need to optimise their digital service delivery and improve transparency, yet they are constrained by insufficient infrastructure and regulatory uncertainty. In 2024, Awwad et al. pointed out that the governance quality of local banks is correlated with their readiness for digital transformation. Existing research rarely explores the role of internal audit in accounting digitalisation, nor has it tested the mediating effect of digital transformation capabilities.

To fill this gap, this article focuses on PEX-listed banks. It constructs a research framework linking three core variables: internal audit, digital transformation capability, and accounting digitalisation, puts forward four core hypotheses, and integrates the dual perspectives of governance and capability. This study offers both incremental academic and practical value and supports banks in advancing accounting digitalisation and ensuring audit compliance.

2. Literature Review and Hypotheses Development

2.1 Accounting digitisation and digital transformation in banking

This paper first defines two core concepts: accounting digitalisation is an accounting scenario transformation driven by digital technologies, covering seven categories of professional accounting applications, including automated transaction recording; organisational digital transformation is an organisation-level transformation driven by digital technologies, covering eight transformation dimensions, including leadership. In the accounting field, the former is an important outcome of the latter.

Successive empirical studies have first noted that digital transformation can boost the operational efficiency of financial accounting and audit workflows. Later research found that digital accounting systems can strengthen corporate governance. Additional studies have confirmed that digital transformation implemented alongside robust governance can improve the quality of accounting information. These conclusions apply to the banking sector, where digital accounting systems can interface with core business systems, including payment platforms, customer systems, risk management modules, regulatory reporting systems, and audit evidence databases.

Although digital transformation has many advantages, it cannot improve accounting quality without sufficient governance during real-world implementation. Hamdy et al. (2025) propose that three types of barriers constrain digital transformation in the public sector in developing countries. This paper extends this research context to banks in emerging markets and argues that digital accounting projects must be fully equipped with the required software, hardware, and governance conditions. At the same time, internal audit must participate in the full lifecycle of such projects.

2.2 Internal auditing as a governance mechanism

Internal audit is a core governance mechanism in the banking sector. It provides independent and objective assurance for control, risk management, and governance processes, covering business areas including credit risk, operational risk, compliance, and anti-fraud. It draws on agency theory to reduce

information asymmetry among multiple stakeholders and applies institutional theory to respond to the expectations of regulators and other relevant stakeholders.

This paper advances the following core academic argument: Recent evidence confirms that governance mechanisms still retain core value for the quality of accounting reports and the implementation of accountability in emerging markets, and two recent studies in the same field strongly corroborate this judgment. Extending this analysis to the digital accounting environment, this paper further defines the new governance role internal audit must assume. Another relevant study offers supplementary evidence supporting the rationale for this functional expansion.

Internal auditing can therefore support accounting digitisation through four mechanisms. First, it assesses whether digital accounting applications are designed with adequate internal controls. Second, it evaluates whether data are complete, accurate, authorised and protected. Third, it advises management and audit committees on risks related to system implementation, data migration, cybersecurity and compliance reporting. Fourth, it encourages a culture of accountability that aligns innovation with control. Accordingly, a stronger internal audit function is expected to be associated with higher levels of accounting digitisation.

H1: Internal auditing has a positive effect on accounting digitisation in banks listed on the Palestine Exchange.

2.3 Internal auditing and digital transformation capability

Digital transformation capability refers to a bank's ability to plan, implement, integrate and govern digital technologies in a way that improves organisational processes and strategic outcomes. It includes digital strategy, leadership support, skilled personnel, integrated systems, data governance, cyber resilience, process redesign, and cross-functional collaboration. Dynamic capabilities theory is useful here because banks must sense technological opportunities and risks, seize appropriate digital initiatives and reconfigure resources to sustain transformation. The resource-based view also suggests that digital systems create value only when complementary organisational resources and capabilities support them.

Internal audit contributes to digital transformation capability by providing assurance and advisory input across the transformation cycle. At the planning stage, internal audit can assess whether digital projects are aligned with strategic goals and regulatory requirements. During implementation, it can review project governance, vendor risk, access rights, change management and data migration controls. After implementation, it can evaluate system effectiveness, control reliability, user compliance and auditability of digital evidence. Research on IT governance and AI in accounting and auditing supports the view that governance structures are essential for the successful integration of advanced technologies (Almaqtari, 2024). Likewise, Fang et al. (2025) show how digital transformation influences audit endeavour, whereas Gu et al. (2024) find that digital transformation supports audit quality.

This study adopts a competency analysis perspective to focus on banks' digital transformation, proposing that the transformation must be anchored in core humanistic dimensions. Audit and accounting practitioners need to possess four core competencies, including digital literacy. The study cites research by Leocadio et al. (2025) and Hamdan et al. (2026) to support the necessity of these requirements. Integrating professional certifications and digital capabilities within internal audit can strengthen the effectiveness of banks' transformation.

H2: Internal auditing has a positive effect on digital transformation capability in banks listed on the Palestine Exchange.

2.4 Digital transformation capability as a driver and mediator of accounting digitisation

This study proposes that digital transformation capability is the core organisational prerequisite for the banking industry to achieve accounting digitalisation. Banks with stronger capabilities can attain five accounting values, including system integration, process automation, and unified data, among others. They can also coordinate the four dimensions of systems, personnel, management and control, and

governance to deliver the value of technological investments. Fang et al. (2023) and Li et al. (2025) support this correlation, though environmental uncertainty and governance conditions constrain the strength of this effect.

Internal audit alone cannot independently drive the implementation of accounting process digitalisation. First, internal audit acts on the full-lifecycle governance environment of digital projects, builds the organisation's digital transformation capabilities through four elements: control awareness, risk assessment, technical governance, and management accountability, and then relies on five types of supporting conditions, including integrated systems, to deliver accounting digitalisation. This transmission logic aligns with the resource-based view and dynamic capabilities theory, which underpins the theoretical legitimacy of its mediating role.

This study proposes that digital transformation capability serves as the intermediary linking internal audit and accounting digitalisation. This pathway applies to PEX-listed banks and aligns with the five core requirements for the banking industry in emerging markets.

H3: Digital transformation capability has a positive effect on accounting digitisation in banks listed on the Palestine Exchange.

H4: Digital transformation capability mediates the relationship between internal auditing and accounting digitisation in banks listed on the Palestine Exchange.

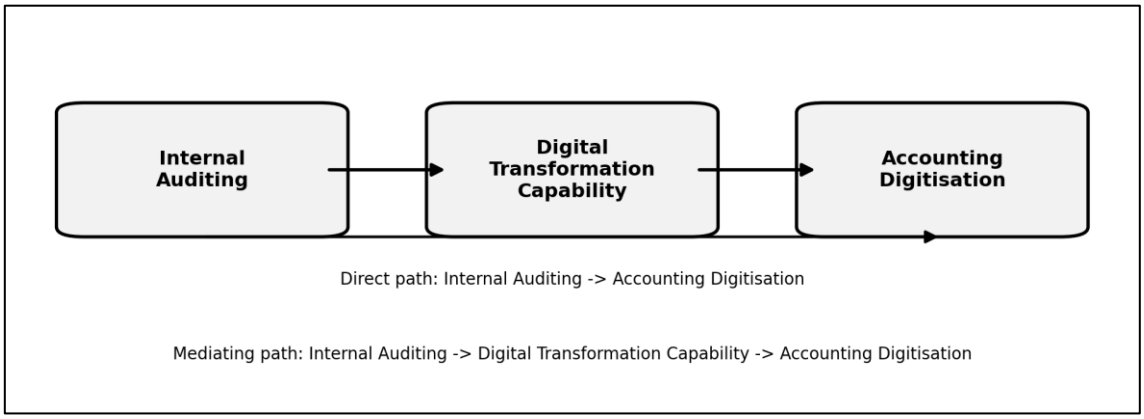

Figure 1. Proposed conceptual framework

Table 1. Proposed constructs and hypotheses

Construct / path	Operational meaning	Expected relationship	Theoretical basis
Internal auditing -> Accounting digitisation	Assurance, risk assessment, IT control review, compliance monitoring and advisory support for digitised accounting processes.	Positive (H1)	Agency theory; institutional theory
Internal auditing -> Digital transformation capability	Internal audit support for digital governance, readiness assessment, cyber-risk control and implementation monitoring.	Positive (H2)	Dynamic capabilities; IT governance
Digital transformation capability -> Accounting digitisation	Strategic digital capability, integrated systems, data governance, analytics readiness and digital	Positive (H3)	Resource-based view; dynamic capabilities

	reporting infrastructure.		
Mediation effect	Digital transformation capability explains how audit governance is converted into digitised accounting practices.	Indirect effect (H4)	Agency theory; dynamic capabilities

Source: Authors' development based on the reviewed literature.

3. Methodology

3.1 Research design

This study conducts an empirical analysis focused on digital bank governance. It adopts a quantitative explanatory research design paired with a cross-sectional survey, which aligns with the statistical testing requirements for latent variables, direct paths, and mediating relationships within this study's framework. The unit of analysis is certified practitioners of PEX-listed banks. This study integrates the positivist logic of hypothesis testing with pragmatism's practical, problem-oriented approach.

This paper presents phased research results, as the full empirical process has not yet been completed. We have established the conceptual framework, empirical framework, and analysis plan. Since core survey data have not been generated, statistical findings are not presented at this stage. Follow-up research will test the two functional pathways through which internal audit supports accounting digitalisation.

3.2 Population, sample and data collection

The target interviewee group comprises qualified practitioners employed by listed banks on the Palestine Exchange. This group covers 7 types of positions aligned with the core theme of this study, including internal auditors, accounting and finance managers, among others. These personnel generally possess the three categories of hands-on professional knowledge required to support this study.

This study adopts purposive sampling to ensure all respondents have relevant professional work experience. Data are collected through structured electronic questionnaires distributed via collaborating banks. Screening questions restrict eligible respondents to individuals employed at PEX-listed banks who work in internal audit and other compliance-related positions. The study also implements five core ethical norms for academic research, including informed consent.

3.3 Measurement of variables

The empirical questionnaire used in this study employs a 5-point Likert scale, with a scoring rule that 1 represents strongly disagree and 5 represents strongly agree. The core constructs of this study include internal audit, which covers 7 dimensions, as well as digital transformation capability and accounting digitalisation, each with 8 dimensions. All these dimensions conform to the instrument disclosure standards for empirical research in business studies.

To adapt the three constructs of internal audit quality, digital capability, and accounting digitalisation into questionnaire items suited to Palestine's banking sector, we first invited academic experts and banking practitioners to evaluate the items' clarity, relevance, and applicability. We then conducted a pre-test to refine the wording of the items, verify the time required to complete the questionnaire, and assess its reliability. This set of procedures confirms the need for this workflow and lays the foundation for the study's rationale.

3.4 Data analysis

This study uses Partial Least Squares Structural Equation Modelling (PLS-SEM) for quantitative analysis. This method fits this study's research setting, which features multiple latent variables, multi-indicator mediation paths, a prediction-oriented research orientation, and a medium-sized sample. The study first screens the dataset for missing values and outliers, then tests for common method bias through questionnaire design and collinearity diagnostics.

This study strictly adheres to the general standard procedures for quantitative empirical research, and carries out three core tests in sequence: first, it evaluates the measurement model using reliability, validity, and discriminant validity; next, it tests the structural model using path coefficients and goodness-of-fit parameters; and finally, it uses the bootstrap method to test the mediating effect linking the digitalization of internal audit to the digitalization of accounting. This clearly anchored analytical framework ensures the study's replicability.

4. Discussion and Expected Contributions

Existing studies generally regard technological investment as the core driver of bank accounting digitalisation. This study proposes an original analytical framework, arguing that governance quality serves as the core support for this digitalisation, that internal audit can prevent and control four types of digital risks, and that all relevant content will be elaborated one by one in subsequent sections of this paper.

This study integrates four complementary theories to build an analytical framework for the banking sector. Principal-agent theory explains the motivation for audits to reduce information asymmetry; the resource-based view explains the capability prerequisites of digital accounting systems; dynamic capabilities theory explains the logic of banks' digital transformation; and institutional theory explains banks' motivation to respond to governance pressures. This framework provides a coherent basis for testing the mechanism through which internal audit affects accounting digitalisation via two pathways.

Most existing studies on digital transformation, accounting information quality, and audit digitisation cover only developed economies. This study takes PEX-listed banks in emerging markets—banks that must balance constraints related to infrastructure, regulation, security, and talent—as its research sample. The analytical framework constructed in this study can provide evidence-based guidance for such underrepresented research contexts.

The practical contributions of this study cover four types of entities in the financial sector: bank boards of directors and audit committees, internal audit departments, finance and accounting managers, and regulatory agencies and professional associations. These contributions respectively support boards of directors and supervisory boards to assess the independence, digital capabilities, and information system access rights of internal audit functions; enable internal audit departments to expand their audit plans to cover five major digital scenarios; help finance and accounting managers align accounting digitalisation projects with compliance requirements; and support regulators in formulating industry training, guidelines, and governance rules. The regional applicability of these contributions is corroborated by the 2024 study by Hendawi et al. and the 2025 study by Ineizeh et al.: the former confirms that fintech, underpinned by governance readiness, can improve bank performance, while the latter finds that governance mechanisms remain critical to upholding financial reporting discipline.

5. Conclusion, Recommendations and Limitations

This study targets listed banks on the Palestine Exchange and develops a research framework that links internal audit, digital transformation capabilities, and accounting digitalisation. It proposes that internal audit can drive accounting digitalisation through two pathways: a direct governance pathway centred on audit assurance and internal control, and an indirect pathway that first builds transformation capabilities, such as automation, before implementing them in practice.

This study puts forward four clear requirements for the digital transformation of corporate accounting: the internal audit department must intervene at the transformation planning stage, rather than only participating after the transformation is fully implemented; internal audit staff must develop five core competencies including data analysis; the audit committee must regularly obtain relevant risk assurance reports; and cross-functional teams composed of members from the finance, IT, risk, and internal audit functions must collaborate to ensure the efficiency, compliance, and auditability of related processes.

This study has three core limitations: First, it adopts a cross-sectional research design, which cannot fully capture the long-term evolution of digital transformation capabilities; second, the self-reported data collected via questionnaires may be subject to bias; third, the sample only covers PEX-listed banks, which limits the generalizability of the study's conclusions. Future research can conduct longitudinal studies and incorporate mediating variables and moderating variables to expand the research dimensions.

Although previous related studies still have limitations, this paper lays a conceptual and methodological foundation for research on digital accounting governance in emerging banking markets and argues that internal audit should serve as a strategic partner, and that relevant innovations must be matched with audit management, control, and accountability mechanisms.

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