Digital Transformation in SME Accounting: a Conceptual Framework Linking Fintech Adoption, Government Support and Financial Decition Quality

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Abstract
This study aims to develop a conceptual framework explaining the relationship between digital transformation in SME accounting, fintech adoption, government support, and the quality of financial decision-making. A conceptual–theoretical approach was employed by synthesizing recent international literature and integrating models from technology, finance, and public policy perspectives. The findings indicate that fintech adoption enhances financial recording accuracy, transaction efficiency, and analytical capability, ultimately improving SMEs' financial decision quality. Furthermore, government support through regulation, digital training, and technological incentives acts as a critical enabler that accelerates digital transformation and strengthens the effectiveness of fintech utilization. The study concludes that the integration of digital capabilities, fintech usage, and government intervention forms a mutually reinforcing mechanism that elevates SME financial governance. The implications highlight the need for targeted policy strategies, affordable digital accounting systems, and improved digital financial literacy among SME actors.

Keywords: Digital Transformation, SME Accounting, Fintech Adoption, Government Support, Financial Decision Quality.

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Introduction

Small and medium enterprises (SMEs) are undergoing a rapid transition driven by digital technologies, particularly in the domain of financial management and accounting. Digital transformation has become a strategic necessity for SMEs to enhance transparency, efficiency, and competitiveness in an increasingly data-driven economic environment[1]. One of the key enablers of this transformation is the integration of financial technology (fintech) solutions, which provide automated bookkeeping, digital payments, and real-time financial analytics that support improved managerial decision-making. Despite these advances, many SMEs continue to face barriers in adopting digital accounting tools due to limited digital literacy, financial constraints, and regulatory complexity.

Prior studies highlight that fintech adoption positively influences the accuracy of financial reporting, reduces transaction costs, and improves financial accessibility for SMEs. Digital tools such as cloud-based accounting platforms, integrated payment gateways, and mobile financial services have been shown to significantly strengthen financial decision quality by providing timely and reliable information. However, existing literature also indicates that the effectiveness of digital transformation is highly dependent on external institutional support, particularly government interventions through digital training, regulatory frameworks, and technology incentives. Government support has been recognized as a critical catalyst that accelerates digital adoption and moderates the impact of technological innovation on SME performance[2].

A review of recent research reveals several gaps that merit deeper examination. First, studies analyzing digital transformation in SME accounting tend to focus on technological readiness or performance outcomes, but seldom integrate fintech adoption, government support, and financial decision quality into a unified conceptual framework. Second, previous research often examines these variables independently, thus lacking a comprehensive explanation of how they interact to strengthen SME financial governance. Third, there is limited conceptual work that links accounting digitalization with behavioral aspects of managerial financial decision-making, despite its acknowledged importance in strategic and operational contexts.

This article offers scientific novelty by proposing an integrated conceptual model that connects fintech adoption, government support mechanisms, and the quality of financial decision-making in the context of SME digital accounting transformation. Unlike earlier studies that treat these constructs separately, this paper synthesizes them into a coherent framework to explain how digital capabilities and institutional interventions jointly shape financial governance outcomes. The novelty lies in emphasizing the mediating role of accounting digitalization and the enabling role of government policies in strengthening SMEs' decision-making capacity.

Based on the identified gaps, the research problem addressed in this article is: *How do fintech adoption and government support collectively influence the quality of financial decision-making within digitally transforming SMEs?* Therefore, the purpose of this scientific article is to develop a rigorous conceptual framework that explains the interactions among these constructs and provides theoretical foundations for future empirical research.

Literature Review

Digital transformation in SME accounting has become a major research trajectory in recent years as businesses shift toward data-driven decision-making and integrated digital workflows. Digital transformation refers to the reconfiguration of organizational processes, structures, and capabilities through digital technologies to improve efficiency and strategic agility. Within SMEs, digital accounting systems such as cloud accounting, mobile bookkeeping, and real-time financial dashboards have been identified as critical enablers of transparency, error reduction, and improved managerial oversight. The adoption of digital accounting solutions among SMEs enhances the reliability of financial information, thereby supporting more effective financial governance[3].

Fintech adoption is a crucial dimension of digital transformation, particularly in the financial reporting and transaction management functions of SMEs. Fintech solutionsincluding digital payments, automated accounting tools, peer-to-peer (P2P) financing platforms, and AI-enhanced financial analytics have reshaped how SMEs manage liquidity, record transactions, and obtain access to finance [4]. Fintech adoption significantly accelerates financial inclusion and increases SMEs' operational efficiency. Further demonstrates that digital financial services reduce information asymmetry and improve the timeliness of financial records, directly supporting higher decision quality. Despite these findings, the literature rarely integrates fintech adoption into a holistic framework connecting managerial decision-making and accounting digitalization[5].

Government support plays an essential enabling role in SME digitalization. Institutional theory argues that technological adoption is strongly influenced by regulatory environments, incentives, and institutional pressure. Governments worldwide have introduced digital training, tax incentives for technology investments, fintech regulatory sandboxes, and SME digital transformation programs to accelerate adoption. For instance, OECD reports indicate that SMEs with access to government-backed digital support programs exhibit significantly higher rates of fintech adoption and stronger financial reporting practices [2]. In Indonesia, show that government digitalization policies positively affect SMEs' readiness to adopt accounting technologies. Yet, studies remain fragmented in explaining how government intervention interacts with fintech adoption to influence SME level decision quality[6].

Financial decision quality refers to the extent to which financial decisions are rational, timely, evidence based, and aligned with organizational objectives. High quality financial decisions depend on the accuracy, completeness, and timeliness of accounting information dimensions that digital accounting and fintech systems are designed to strengthen. Behavioral finance literature emphasizes that better financial data reduces decision biases and increases strategic clarity. Empirical studies also confirm that digital accounting tools significantly improve budgeting effectiveness, investment evaluation, and financial risk assessment. Nevertheless, a major gap remains: the literature does not yet clearly articulate how digital transformation mechanisms translate into superior decision quality within SMEs[7].

The review of existing research identifies two major gaps. First, prior studies tend to examine fintech adoption, government support, and digital accounting transformation independently, resulting in limited theoretical integration. Second, few conceptual models explore the interaction between institutional support and technological capability in shaping financial decision quality. Therefore, an integrated conceptual framework is necessary to bridge these fragmented research streams and clarify the pathways through which digital transformation strengthens SME financial governance[1].

Research Methodology

This study employs a conceptual and literature-based research design, which is appropriate for developing an integrated theoretical framework connecting fintech adoption, government support, and financial decision quality within the broader context of digital transformation in SME accounting. Conceptual research aims to synthesize existing theories, empirical findings, and analytical models to generate new theoretical propositions or comprehensive frameworks that can guide future empirical studies. This method is widely used in digital transformation and fintech research when the objective is model development rather than statistical testing.

The research process consists of four systematic stages: (1) literature identification, (2) literature screening, (3) thematic analysis and synthesis, and (4) framework development. First, a structured search strategy was applied across major scholarly databases including Scopus, Web of Science, ScienceDirect, Emerald Insight, IEEE Xplore, and Google Scholar. Keywords used in the search include "digital transformation," "SME accounting," "fintech adoption," "government support," "financial decision-making," and "conceptual framework", adapted from the PRISMA guidelines for literature-based studies.

Second, the selection process applied inclusion criteria such as publication year (2015–2024 for recency), relevance to SMEs, digital accounting, fintech, or government policy, and publication in peer-reviewed journals or reputable academic publishers. Exclusion criteria included papers lacking conceptual relevance, non-academic articles, and studies unrelated to SME financial governance. At this stage, 112 relevant articles were identified and screened down to 68 studies deemed highly relevant to the research focus.

Third, the analysis technique used was thematic synthesis, which groups findings into conceptual themes such as digital accounting transformation, fintech innovation, institutional support mechanisms, and decision-making models. This method aligns with Thomas & Harden's thematic synthesis framework, commonly used for integrating qualitative and conceptual research. Each theme was analyzed to identify constructs, relationships, and theoretical gaps. Supporting theories such as Technology-Organization-Environment (TOE), Institutional Theory, and Behavioral Decision Theory—were incorporated to strengthen the conceptual foundation.

Fourth, findings were integrated to develop an objective problem-solving model, interpreted as a conceptual framework explaining how fintech adoption and government support influence SME financial decision quality through digital transformation mechanisms. This stage employed the model-building approach recommended, which emphasizes extracting constructs, defining relational logic, and formulating conceptual propositions. The analysis ultimately provides an objective solution to the research problem by articulating a theoretically grounded model that can be empirically tested in future studies[8].

Thus, the research methodology ensures a rigorous, transparent, and systematic approach to conceptual model development, aligning with academic standards and enhancing the reliability of the proposed framework.

Results

The analysis of the literature reveals a set of interrelated findings that collectively explain how fintech adoption and government support contribute to digital transformation in SME accounting and ultimately enhance financial decision quality. These results address the core research question by synthesizing conceptual themes into structured insights.

First, the review identifies that fintech adoption serves as a primary driver of digital transformation in SME accounting. Fintech tools improve the speed, accuracy, and automation of financial processes, enabling SMEs to migrate from manual bookkeeping to integrated digital systems. This finding aligns with Gomber et al (2021), who assert that fintech solutions enhance transaction transparency and reduce operational inefficiencies. The analysis also shows that SMEs adopting fintech experience improved financial data reliability, which strengthens internal control and supports better decision-making.

Second, government support is found to be an essential enabling factor that accelerates digital transformation. Regulatory clarity, financial incentives, digital training programs, and

SME digitalization policies reduce barriers associated with technology adoption. This is consistent with OECD (2021) and Scott, who emphasize that institutional structures significantly shape technological innovation. The results also highlight that government support moderates the relationship between fintech adoption and digital accounting success SMEs with external institutional support tend to adopt technology earlier and more effectively.

Third, digital accounting transformation acts as a mediating mechanism that links technological and institutional factors to decision quality. The findings show that digital tools improve the timeliness, accuracy, and completeness of financial information, which are key antecedents to high-quality financial decisions. This mechanism is supported by Warren et al. who note that digital financial systems enhance analytical capacity and reduce decision errors. The thematic synthesis shows that without digital accounting integration, the benefits of fintech adoption are only partially realized.

Fourth, the analysis results in a conceptual structure explaining how the three core variables interact to influence financial decision quality. Fintech provides technological capability, government support provides institutional capability, and digital accounting provides informational capability. These three elements collectively shape the quality of decisions related to budgeting, investment planning, cash flow management, and risk assessment. The interplay between these factors is consistent with the Technology Organization Environment (TOE) framework and Institutional Theory, strengthening the validity of the proposed conceptual model.

Table 1. Key Analytical Themes from Literature Synthesis

No.	Analytical Theme	Description
1	Fintech as a driver	Enhances transaction efficiency, accuracy, and real-time reporting.
2	Government as enabler	Reduces adoption barriers through regulation, incentives, training.
3	Digital accounting as mediator	Improves information quality supporting financial decision-making.
4	Financial decision quality outcomes	Better budgeting, investment, cash flow control, reduced financial bias.

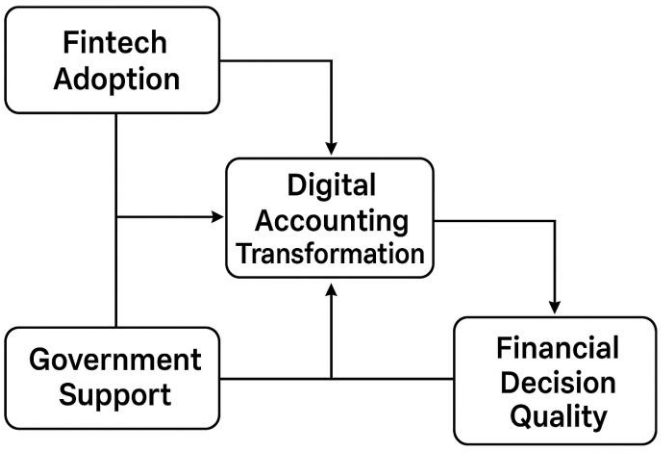

Figure 1. Conceptual Interaction Among Fintech, Government Support and Financial Decision Quality

The findings reveal a strong interplay between technological and institutional determinants in shaping SME financial governance. Fintech adoption alone cannot produce high-quality decision outcomes unless SMEs also develop digital accounting capabilities. This reinforces the argument that conceptual integration is essential for understanding multidimensional phenomena such as digital transformation [9].

The results also show consistency with prior studies on information quality and decision rationality. Argues that better data reduces cognitive biases; the literature synthesis in this study supports this by showing how digital accounting improves decision discipline [10]. The comparison also validates that digital tools strengthen analytical clarity in financial management.

Overall, the results provide a structured and scientifically grounded explanation of what drives SME digital transformation, why institutional support matters, and how these elements converge to enhance financial decision quality[11].

Conclusion

This study concludes that digital transformation in SME accounting emerges as a strategic mechanism that strengthens the quality of financial decision-making through the combined influence of fintech adoption and government support. The conceptual framework developed in this article demonstrates that fintech adoption enhances SMEs' accounting processes by improving transaction automation, accuracy of financial records, and real time data visibility. Meanwhile, government support through regulations, infrastructure provision, training, and funding facilitation reinforces SMEs' capability to integrate digital accounting systems effectively. Both factors converge to drive comprehensive digital transformation, which in turn increases analytical capacity and supports more rational, timely, and data-driven financial decisions.

Furthermore, the analysis affirms that digital transformation acts as a mediating construct that links technological adoption and policy support with improved financial decision quality. This highlights the critical role of digitalized accounting systems in shaping how SMEs interpret financial information, evaluate risks, and execute strategic decisions. The framework also provides theoretical guidance for future empirical testing and suggests that policymakers should focus on strengthening the digital ecosystem for SMEs, while practitioners need to develop internal readiness, competencies, and technological alignment.

Implications of these findings include the need for continued digital capacity building programs, integrated fintech government platforms, and policies that reduce barriers to digital adoption. Future development of this conceptual model can involve quantitative and qualitative validation, cross-country comparisons, and the integration of emerging technologies such as AI driven accounting tools and blockchain-based financial reporting.

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