

Digital Accounting Transformation and Financial Decision-Making Capability among SMEs in China

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Abstract The objective of this paper was to investigate the factors affecting digital accounting transformation and financial decision-making capability among small and medium-sized enterprises (SMEs) in China. This study adopted a qualitative research approach through documentary synthesis and conceptual analysis of digital accounting practices within the Chinese business environment. The findings identified two major dimensions influencing digital accounting effectiveness: (1) Digital Accounting Utilization, comprising cloud accounting adoption, artificial intelligence integration, and real-time financial reporting; and (2) Accounting Information Quality, comprising accuracy, timeliness, understandability, and cybersecurity reliability. The results indicate that Chinese SMEs that actively adopt digital accounting technologies demonstrate stronger financial planning, operational efficiency, and strategic decision-making capability. This paper extends the literature on accounting digitalization by emphasizing the relationship between technological transformation and entrepreneurial financial capability in emerging digital economies. Practical implications include the promotion of accounting literacy, cloud-based financial systems, and digital compliance support for SMEs in China.

Keywords: Digital Accounting, Chinese SMEs, Financial Decision-Making, Cloud Accounting, Artificial Intelligence, Accounting Information Quality

1. INTRODUCTION

The rapid advancement of digital technology has significantly transformed accounting systems and financial management practices worldwide. In China, digital transformation has become a national strategic priority under initiatives such as “Digital China” and enterprise informatization policies, encouraging businesses to integrate cloud computing, artificial intelligence (AI), big data analytics, and blockchain technology into their operational systems (Liu & Xie, 2022). As a result, accounting practices among Chinese small and medium-sized enterprises (SMEs) have shifted from traditional bookkeeping toward intelligent digital accounting systems capable of real-time financial analysis and automated reporting.

Chinese SMEs play a critical role in the national economy by contributing to employment generation, technological innovation, and economic growth. According to the Ministry of Industry and Information

Technology of China (2023), SMEs account for more than 90% of business entities in the country. However, despite their economic importance, many SMEs continue to face limitations in accounting system implementation, financial reporting quality, and digital literacy (Zhang & Chen, 2021).

Traditional accounting systems often rely heavily on manual recording processes, delayed reporting cycles, and fragmented financial information. Such limitations reduce the effectiveness of accounting information in managerial decision-making and strategic planning. In contrast, digital accounting systems improve operational efficiency through automation, real-time reporting, and data integration, enabling entrepreneurs to make more accurate and timely financial decisions (Wang et al., 2022).

The emergence of cloud accounting platforms and AI-powered financial systems has accelerated accounting modernization in China. Software providers such as Kingdee and

Yonyou have introduced intelligent accounting platforms designed specifically for SMEs, allowing business owners to monitor cash flow, sales performance, tax obligations, and operational costs through integrated digital dashboards (Li & Huang, 2023). Nevertheless, SMEs still encounter challenges related to implementation costs, cybersecurity risks, employee competency, and compliance with evolving accounting regulations.

This study was motivated by the growing importance of accounting digitalization in entrepreneurial management and the need to understand how digital accounting systems affect financial decision-making capability among SMEs in China. The paper explores the factors influencing digital accounting utilization and accounting information quality within the Chinese SME context.

2. RESEARCH OBJECTIVE

1. To develop a conceptual framework of factors affecting digital accounting utilization and accounting information quality in financial decision-making among SMEs in China; and
2. To identify the specific factors within each dimension that influence entrepreneurial financial decision-making capability in the Chinese business environment.

3. LITERATURE REVIEW

The factors affecting financial decision-making capability through digital accounting systems can be organized into two major dimensions: (1) Digital Accounting Utilization, comprising cloud accounting adoption, artificial intelligence integration, and real-time reporting capability; and (2) Accounting Information Quality, comprising accuracy, timeliness, understandability, and cybersecurity reliability.

3.1 Digital Accounting Utilization

Digital accounting utilization refers to the extent to which entrepreneurs actively adopt and apply digital accounting technologies in financial management and operational decision-making. According to Romney and Steinbart (2021), accounting information systems are essential tools that support data collection, processing, and financial reporting within organizations. In digital business environments, accounting systems increasingly function as strategic decision-support mechanisms rather than merely compliance tools.

Research demonstrates that SMEs utilizing digital accounting systems achieve greater efficiency in budgeting, cost management, and financial forecasting compared with firms relying on manual accounting methods (Chen & Xu, 2020). The adoption of cloud-based financial systems also enables entrepreneurs to access accounting information remotely and in real time.

3.1.1 Cloud Accounting Adoption

Cloud accounting refers to the use of internet-based accounting platforms that allow users to access financial information remotely through cloud infrastructure. Cloud accounting improves flexibility, scalability, and cost efficiency for SMEs (Dimitriu & Matei, 2015). In China, cloud accounting adoption has increased significantly due to the rapid expansion of digital business ecosystems. SMEs using cloud accounting platforms can monitor transactions, inventory, payroll, and taxation in real time, thereby improving operational responsiveness and financial transparency (Li & Huang, 2023).

3.1.2 Artificial Intelligence Integration

Artificial intelligence (AI) has become increasingly important in modern accounting systems. AI technologies are capable of automating repetitive accounting tasks such as invoice processing, transaction classification, and financial forecasting (Kokina & Davenport, 2017).

AI-assisted accounting systems reduce human error and improve reporting efficiency. Chinese SMEs increasingly rely on AI-driven analytics to support pricing decisions, cash-flow forecasting, and operational planning (Wang et al., 2022).

3.1.3 Real-Time Financial Reporting

Real-time financial reporting refers to the ability of accounting systems to provide continuously updated financial information. Traditional accounting systems often generate reports monthly or quarterly, limiting responsiveness to operational changes.

Real-time reporting enables entrepreneurs to monitor financial performance immediately and make timely strategic adjustments (Alles, 2015). In highly competitive digital markets such as China, timely financial information has become critical for maintaining business agility.

3.2 Accounting Information Quality

Accounting information quality refers to the characteristics that make financial information useful, reliable, and meaningful for decision-

decisions. Automated accounting systems minimized manual recording errors by synchronizing financial information directly from digital payment platforms, e-commerce systems, and banking applications. This integration reduced discrepancies between operational transactions and accounting records, thereby strengthening the reliability of financial information (Romney & Steinbart, 2021).

Participants also reported that digital accounting systems improved financial transparency and reduced uncertainty in managerial decision-making. Entrepreneurs who previously relied on fragmented spreadsheets or handwritten records explained that integrated accounting systems provided more consistent and structured financial information. Accurate financial reporting was particularly important for SMEs seeking external financing because banks and investors increasingly require reliable digital financial records before approving loans or investment support.

Timeliness emerged as another critical factor influencing operational responsiveness and financial control. SMEs utilizing real-time reporting systems demonstrated stronger capability in managing liquidity, monitoring operational expenses, and responding to unexpected financial changes. Entrepreneurs highlighted that delayed financial reporting often resulted in reactive rather than proactive decision-making. For example, late identification of declining cash flow could lead to inventory shortages, delayed supplier payments, or operational disruptions.

Real-time accounting systems reduced these risks by allowing owner-managers to monitor daily revenue, expenditure patterns, and outstanding liabilities immediately. This capability was especially valuable in digital commerce environments where transaction volumes fluctuate rapidly and business conditions change continuously (Alles, 2015). Timely accounting information therefore strengthened both operational efficiency and financial risk management capability.

Understandability improved substantially through dashboard-based accounting interfaces, visual financial analytics, and simplified reporting formats. Many SME entrepreneurs possess limited formal accounting education and often struggle to interpret traditional financial statements containing technical accounting terminology.

Digital accounting systems addressed this limitation by presenting financial information through graphs, charts, performance indicators, and color-coded dashboards that simplified financial interpretation (Amoako, 2013).

Entrepreneurs explained that visual presentation formats increased their confidence in understanding financial performance and identifying operational problems. For example, dashboard systems displaying cash-flow status, monthly profit trends, and expense categories through visual indicators enabled faster comprehension compared with conventional accounting reports. As a result, digital accounting systems enhanced accounting accessibility for non-specialist business owners and strengthened practical decision-making capability.

Cybersecurity reliability was identified as an emerging concern among SMEs due to increasing dependence on cloud infrastructure and online financial systems. Although digital accounting systems improve operational efficiency, they also expose enterprises to cybersecurity threats such as data breaches, unauthorized access, ransomware attacks, and financial fraud (Bhimani, 2021). Several entrepreneurs expressed concern regarding the protection of confidential financial information stored within cloud-based accounting platforms.

Participants emphasized that cybersecurity weaknesses could significantly damage business credibility, financial stability, and customer trust. SMEs with limited technological expertise were found to be particularly vulnerable because they often lacked dedicated IT security personnel or advanced cybersecurity infrastructure. Consequently, entrepreneurs increasingly viewed cybersecurity reliability as an essential component of accounting information quality rather than merely a technical support issue.

The findings suggest that improving accounting information quality in Chinese SMEs requires not only technological adoption but also stronger cybersecurity awareness, employee training, and digital governance systems. Accounting modernization therefore involves an integrated combination of technological capability, organizational readiness, and managerial competency.

7. CONCLUSION

This study investigated the factors affecting digital accounting utilization and accounting information quality in developing financial decision-making capability among SMEs in China. The findings identified two major dimensions influencing accounting digitalization effectiveness: Digital Accounting Utilization and Accounting Information Quality. The first dimension, Digital Accounting Utilization, consisted of cloud accounting adoption, artificial intelligence integration, and real-time financial reporting capability. The second dimension, Accounting Information Quality, consisted of accuracy, timeliness, understandability, and cybersecurity reliability. Together, these dimensions significantly contributed to improving financial monitoring, operational responsiveness, and strategic managerial capability among Chinese SMEs.

The findings demonstrate that digital accounting systems play an increasingly important role in enhancing financial transparency, reporting efficiency, and entrepreneurial decision-making capability within China's rapidly evolving digital economy. SMEs adopting cloud-based accounting platforms and AI-assisted financial systems were found to possess stronger capability in budgeting, cash-flow forecasting, operational cost control, and investment planning. The automation of accounting processes reduced human error, improved reporting consistency, and strengthened confidence in financial information. In addition, real-time reporting systems enabled entrepreneurs to respond more quickly to changing market conditions, customer demand fluctuations, and operational risks, thereby improving overall business agility and competitiveness (Alles, 2015). This study also highlights the growing strategic role of accounting information systems beyond traditional bookkeeping and regulatory compliance functions. Digital accounting systems increasingly function as integrated managerial tools that support data-driven decision-making, operational planning, and long-term business sustainability. The findings support the argument that accounting modernization should not be viewed solely as a technological upgrade, but rather as a transformation of organizational capability, managerial practice, and financial governance (Romney & Steinbart, 2021).

A significant contribution of this study is the recognition that accounting information quality and digital accounting utilization are interrelated and mutually reinforcing dimensions. SMEs that actively utilize digital accounting systems tend to generate more timely, accurate, and

understandable financial information. Simultaneously, higher-quality accounting information increases entrepreneurs' trust in accounting systems and encourages more consistent use of digital financial tools. This reciprocal relationship strengthens the theoretical understanding of accounting information systems within entrepreneurial and SME contexts.

Despite the substantial benefits of digital accounting transformation, the study identified several important challenges affecting Chinese SMEs. Cybersecurity risks emerged as a major concern due to increasing dependence on cloud infrastructure, online transactions, and digital financial platforms. SMEs with limited technological expertise remain vulnerable to cyberattacks, data breaches, ransomware threats, and unauthorized access to confidential financial information (Bhimani, 2021). The findings suggest that cybersecurity reliability has become an essential component of accounting information quality in the digital era.

Implementation costs also remain a significant barrier for many SMEs, particularly smaller enterprises with limited financial resources. Although cloud accounting systems reduce long-term operational expenses, the initial costs associated with software adoption, employee training, system migration, and technological integration may discourage digital transformation efforts. Furthermore, digital competency limitations among entrepreneurs and accounting personnel continue to constrain effective utilization of advanced accounting technologies. Many SME owners still possess limited accounting literacy and technological knowledge, reducing their ability to fully interpret financial analytics and utilize AI-driven accounting functions effectively.

The study therefore suggests several practical implications for policymakers, accounting professionals, software developers, and educational institutions. First, governments and accounting organizations should promote digital accounting literacy programs to improve entrepreneurs' understanding of financial analytics, cybersecurity awareness, and cloud accounting systems. Second, accounting software providers should develop simplified, affordable, and user-friendly accounting platforms tailored specifically to SME operational needs. Third, financial institutions should encourage secure and verifiable digital accounting practices to improve SME financing readiness and financial transparency.

Moreover, universities and professional accounting bodies should revise accounting curricula to incorporate digital accounting technologies, AI-assisted financial analysis, cloud accounting systems, and cybersecurity management into accounting education programs. The future accounting profession increasingly requires a combination of accounting expertise, technological competency, analytical capability, and digital governance understanding.

From a theoretical perspective, this study contributes to the accounting information systems literature by extending the discussion of digital accounting transformation into the context of entrepreneurial financial decision-making within emerging digital economies. The findings demonstrate that accounting information quality should no longer be evaluated solely through traditional accounting characteristics such as relevance and faithful representation, but must also incorporate technological dimensions including system integration, real-time accessibility, automation capability, and cybersecurity reliability.

Finally, future research should proceed to quantitative validation of the proposed conceptual framework using structural equation modeling (SEM). Future studies may examine the causal relationship between digital accounting adoption and business performance outcomes among SMEs in China. Researchers should also investigate potential moderating effects of entrepreneur age, educational background, industry type, organizational size, and technological readiness on the effectiveness of digital accounting systems. In addition, comparative studies between Chinese SMEs and SMEs in other emerging economies may provide deeper understanding of how cultural, institutional, and technological environments influence accounting digitalization and entrepreneurial financial capability.

8. DISCUSSION

The findings of this study indicate that digital accounting utilization and accounting information quality are critical determinants of financial decision-making capability among small and medium-sized enterprises (SMEs) in China. The results suggest that the adoption of digital accounting technologies, including cloud accounting systems, artificial intelligence (AI), and real-time financial reporting, significantly enhances the ability of entrepreneurs to access timely and reliable financial information for managerial decision-making.

The findings are consistent with Romney and Steinbart (2021), who argued that accounting information systems have evolved from traditional bookkeeping functions into strategic management tools that support organizational planning, control, and decision-making. In the context of Chinese SMEs, digital accounting systems provide integrated financial information that improves operational efficiency and reduces information asymmetry, thereby strengthening managerial responsiveness and business agility.

The study also found that cloud accounting adoption plays a significant role in improving accounting accessibility, flexibility, and financial transparency. This finding supports the work of Dimitriu and Matei (2015), who reported that cloud-based accounting systems enable organizations to reduce operational costs while improving access to financial information. For Chinese SMEs operating in increasingly digitalized business environments, cloud accounting provides a practical mechanism for monitoring financial activities remotely and supporting data-driven decision-making.

Furthermore, the findings reveal that artificial intelligence integration contributes substantially to accounting efficiency and financial forecasting capability. Consistent with Kokina and Davenport (2017), AI technologies automate repetitive accounting processes, reduce human error, and generate predictive insights that support managerial decision-making. AI-assisted accounting systems allow SME entrepreneurs to identify financial trends, anticipate cash-flow challenges, and respond more effectively to market uncertainty. This capability is particularly important in China's highly competitive digital economy, where rapid adaptation is essential for business sustainability.

Another important finding concerns the role of accounting information quality. The study identified accuracy, timeliness, understandability, and cybersecurity reliability as key dimensions influencing the usefulness of accounting information. These findings align with the International Accounting Standards Board (IASB, 2018), which emphasizes the importance of qualitative characteristics in ensuring that accounting information supports effective decision-making. Accurate and timely financial information enables entrepreneurs to evaluate business performance, forecast future conditions, and make informed investment decisions.

Cybersecurity reliability emerged as a particularly significant issue within the digital accounting environment. Consistent with Bhimani (2021), the

findings suggest that the increasing dependence on cloud-based accounting systems exposes SMEs to cybersecurity risks that may undermine confidence in digital financial information. Consequently, cybersecurity should be viewed not merely as a technical concern but as an essential component of accounting information quality and digital governance.

Overall, the findings demonstrate that digital accounting transformation contributes to improved financial decision-making capability through both technological advancement and enhanced accounting information quality. The study extends existing accounting information systems literature by highlighting the interrelationship between digital accounting utilization and accounting information quality within the context of Chinese SMEs. These findings provide valuable implications for policymakers, accounting professionals, software developers, and SME entrepreneurs seeking to strengthen organizational competitiveness and sustainability in the digital economy.

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