Financial Shared Service Centres (FSSC) Enabled by FinTech: A Study of the Financial Digital Transformation of Huawei

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Content

1. Introduction

As the industry evolves, it emphasises intelligent automation and human-machine collaboration while integrating sustainable and ethical values (Deliu and Olariu, 2024). The rapid development of financial technology (FinTech), the technology-driven financial innovation, has reshaped the way and structure of accounting services. FinTech drives digital transformation, enabling the accounting departments to redefine their core functions. It gives birth to the rapid rise of new financial organisations, the Financial Sharing Service Centre (FSSC) (Stoykova, Paskaleva and Stoykov, 2020). In this context, the integration of FinTech into the FSSC allows organizations to improve accounting efficiency, standardize financial processes, reduce costs, and improve the quality of decision-making.

This article points out that digital capabilities and human-machine collaboration play a key role in the accounting industry's response to technological innovation and adaptation to the complex business environment for value creation. The existing literature has discussed FSSC and FinTech separately, and few empirical studies have examined their cross-convergence in emerging markets. This study addresses a significant gap in the literature by focusing on Huawei's FSSC, as its operation is based on FinTech. Moreover, understanding how technological advances are reshaping the accounting process is essential for accountants, policymakers, and organisations who are seeking to remain competitive in the digital economy.

The research process of this paper is as follows: the relevant literature is screened by the PRISMA analysis, and a thematic literature review was written using "types of FinTech and the role of FSSC" as the defining keywords. Taking A-share listed companies on the Shanghai and Shenzhen Stock Exchange to analyse the current situation of FSSC construction in China and explaining why Huawei FSSC was chosen as an empirical object. Provide an overview of Huawei FSSC and its impact on the company's financial performance. Finally, the operation of the FSSC and the skills

required of the finance staff were discussed, and several suggestions for improvement were made.

2. Literature review

2.1. Methodology for literature review

The selected literature was analysed using a **thematic literature review** method. This approach allows for the extraction of key concepts, the identification of emerging patterns, and the synthesis of different findings from different studies. Thematic coding by Zotero and labelling were performed manually to classify the research results into major themes such as types of FinTech innovation and FSSC characteristics. This qualitative approach ensures that both convergence and divergence in the literature are critically captured, providing a nuanced understanding of the research topic. **PRISMA** was chosen for its effectiveness in minimizing bias, documenting inclusion and exclusion criteria, and ensuring comprehensive coverage of relevant studies (Liberati *et al.*, 2009). The identification phase involves using search strings from the academic database Web of Science and comprehensively uses grey literature (such as industry reports and third-party investigation reports) to supplement the existing research data. These databases were selected based on their extensive coverage and reputation for quality information systems and accounting literature publications. The screening process consists of reading the abstracts and excluding records not covered by the study, as shown in Figure 1. The eligibility phase involved reading the full text and recording why each article was included or excluded from the final synthesis. The results of this stage include 41 articles for qualitative analysis. The Boolean operation of screening is shown as follows:

> #TI=(FinTech AND financial report) OR #TI=(Financial technology AND financial report) OR #TS=(FinTech* quality characteristic*) OR #TS=(FinTech* accountant*) OR #TS=(FinTech* accountant*) OR #TS=(Digital* accountant role*) OR #TS=(FSSC) OR #TS=(SSC) OR #TS=(GSC) OR #TS=(AI)

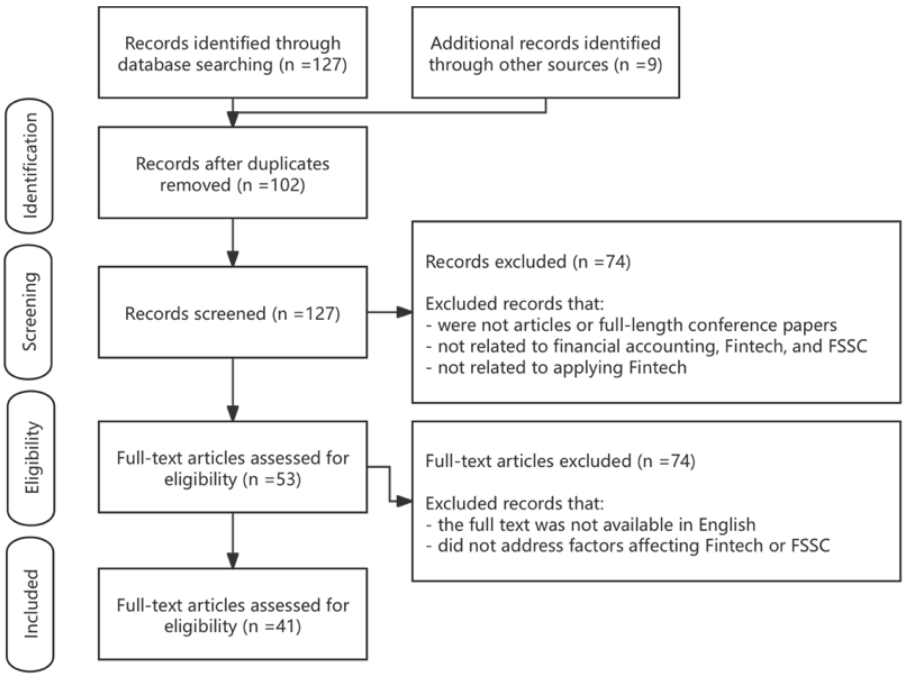

Figure 1 PRISMA flow diagram

2.2. Financial Shared Service Center (FSSC)

The importance of shared service centers (SSCs) in the private and public sectors has increased significantly in recent years. Annual surveys such as Deloitte show that the number of FSSCs implemented in business practices has more than doubled over the past decade, supporting their growing importance and announcing cost savings of 20% to 50% (Richter and Brühl, 2017; ACCA, 2022b, 2024). According to Bergeron (2003):

> **"Shared services are a collaborative strategy where a subset of existing business functions has a management structure designed to promote efficiency, value generation, cost savings and improved service for the parent company's internal customers."**

These services span multiple countries but are centrally managed by a unified process and technology platform, increasing scale and reducing costs (Fernandez and Aman, 2018). The unified software system and shared database can thoroughly analyze operational data and reporting information, quickly find problems, support accurate decision-making, and improve overall management efficiency (Rothwell, Herbert and Seal, 2011; Baker, 2015; Nazarova *et al.*, 2021). It essentially focuses on the efficiency,

cost and price of the service provided, the perceived expectations of SSCs are commonly high (Janssen and Joha, 2006; Schulz and Brenner, 2010; Colombo and Beuren, 2023).

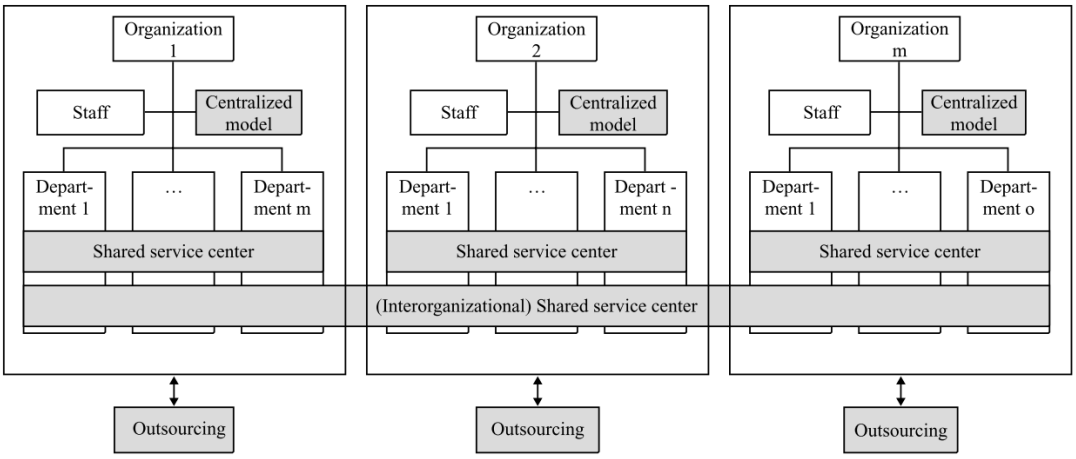

Figure 2 Centralized accounting mode (Janssen and Joha, 2006; Schulz and Brenner, 2010)

However, technological advances in the 21st century have accelerated to the point where even the most professional and strategic activities may be affected by recent advances such as AI (Bondarouk and Friebe, 2014; Ferreira and Janssen, 2023). SSCs are undergoing significant transformations due to the advancement of technologies (Lakshmi, Vijayakumar and Sricharan, 2019). To support modular shared services, process-aware information systems (PAISs) must be interoperable to reuse existing services and assemble them into new shared services (Plugge, Nikou and Janssen, 2022).

Scholars commonly view this area through a strategic lens, specifically, the assets and capabilities required to meet an intended goals. Critical factors for a successful implementation may be the struggle for the necessary collaboration between SSC and business units, a lack of standardization of tasks, power struggles (Kastberg, 2014), a lack of flexibility in staffing arrangements (Ramphal, 2013), and risks of ERP change (Schulz et al., 2010). Otherwise, examples of factors that facilitate successful SSCs in the long run are strong communication (Richter and Brühl, 2017), the ability to

reorganize processes continuously, and the development of best practices (Cooke, 2006).

The construction of the SSC is based on six key points. First of all, through process integration, the redundancy within the organization is eliminated, and the originally scattered and personalized support services are centrally managed to avoid repeated labor, so as to achieve synergy (Wang and Wang, 2007). Second, SSC focuses on supporting services, that is, non-core businesses, which are mainly divided into transactional processes (such as accounting, data center operations) and knowledge-based processes (such as financial analysis, application development), which are highly standardized and easy to automate. The latter is more professional (Goold, Pettifer and Young, 2001). Third, cost control is the core goal, and enterprises can save 25-30% of operating costs on average with the help of economies of scale (Schulz and Brenner, 2010). Fourthly, SSC adheres to internal customer service orientation, defines function, quality, price, and liability for breach of contract based on service quality standards, and gradually shifts from technology optimization to service output optimization, thus forming an internal "monopoly-like" service relationship (Bergeron, 2003). Fifthly, SSC adopts the external competitive benchmarking mechanism to evaluate its performance through market intelligence collection and pricing comparison to prove its competitiveness to internal customers and reasonably explain service differences (Schulz and Brenner, 2010). Finally, SSC has the characteristics of a semi-autonomous organization, which is still restricted by the parent company's governance structure while having independent management and decision-making power, so it needs to ensure that all its decisions are highly consistent with the strategy of the parent company (Bergeron, 2003).

Ferreira and Janssen (2022) used the **contingency theory and dynamic capabilities theory** in their article to explain the transformation of FSSC and the change in the demand for employees' capabilities. Driven by FinTech, SSCs are accelerating their technological transformation by leveraging automation and other advanced tools, thereby liberating the workforce from repetitive tasks and enabling

employees to focus on more specialized and strategic responsibilities. While the total number of staff required is decreasing, there is a higher demand for skills: critical thinking, collaboration, technical expertise and problem solving are becoming essential qualities, while innovation, team management and strategic thinking are core competencies for managers, especially as SSCs move towards taking on some of the ESG functions (Deloitte, 2023). Accountants not only need to master AI, but also need to understand its ethical and regulatory framework. Educational and regulatory bodies should enhance training on ethical awareness and technical norms to ensure that AI is used properly, transparently, and responsibly (Petruzzelli, Murgia and Parmentola, 2023). At the same time, continuous professional development is essential to adapt to rapid changes in technology and regulations (Imjai et al., 2025). However, as SSCs still rely on specialised talent to handle complex transactions, operational risks in the event of a brain drain cannot be ignored (ACCA, 2022a).

2.3. Financial Technology (FinTech)

According to a number of market research reports led by Deloitte, KPMG, and Accenture, cloud computing, big data, blockchain, automation process with optical character recognition (OCR), robotic process automation (RPA), and artificial intelligence (AI), are the most widely used five technologies (KPMG, 2013; Accenture, 2023; Chinese Academy of Fiscal Sciences, 2023; Deloitte, 2023; IMA, 2024).

2.3.1. Cloud computer

The adoption of cloud computing has accelerated the development of cloud accounting platforms, enabling real-time transaction recording, analysis, and automated reporting across any internet-connected device (Busulwa and Evans, 2021). According to Deloitte, 53% of FSSCs have established cloud computing services to enhance adaptability, flexibility, and cost-efficiency (Deloitte, 2022a).

As a key driver of digital transformation, cloud computing simplifies corporate IT management while supporting accounting value creation through its efficiency, security and collaboration capabilities. First, the multi-terminal collaboration capability

breaks through the limitations of time and space, achieving remote and efficient collaboration (Salin *et al.*, 2024). Secondly, the service provider is responsible for system maintenance so that users do not need to invest additional resources for management, thus reducing IT operation and maintenance costs (Moll and Yigitbasioglu, 2019). Subscription-based models offer flexible access to analytics and other value-added services, particularly benefiting SMEs (Ferry *et al.*, 2013). The platform's standardized architecture overcomes the integration challenges of traditional ERP systems and supports cross-regional management (Gill, 2011). Additionally, its open API ecosystem enables the integration of financial and operational functions, with real-time data enhancing agile decision-making (Yigitbasioglu, Green and Cheung, 2023). More importantly, cloud platforms will continue adapting to technological advances and regulatory changes, ensuring businesses remain on a compliant and cutting-edge digital foundation (Busulwa and Evans, 2021).

However, it still faces challenges in terms of data security, compliance and implementation costs. According to McKinsey's research, 75% of enterprises that use big data save less than 1% of their costs, raising questions about their cost-effectiveness (Court, 2015). For industries that handle sensitive financial information, concerns about cloud data breaches could hinder full adoption. Future research should further explore the trade-off between cloud efficiency and data governance, especially in the context of cross-country shared services.

2.3.2. Big data

Big data, as an information asset with high capacity and multi-modal characteristics, drives the innovation of accounting paradigms by integrating structured data, such as transaction records and unstructured data, such as the behaviour trajectories of website cookie users (Bhimani and Willcocks, 2014). This shift requires accountants to move beyond traditional roles and engage in data interpretation, storytelling, and strategic insight to reduce misjudgments (Al-Htaybat and Von Alberti-Alhtaybat, 2017). Although many accounting tasks are difficult to fully automate in the short term,

accountants have the ability to handle structured data in a problem-oriented manner and can also integrate unstructured data to propose feasible strategies (Richins *et al.*, 2017; Kornberger *et al.*, 2024). However, it should also be noted that big data results are usually only correlation rather than causality (Davenport, 2013).

To truly realize the value of big data requires not only technical capabilities but also the tacit knowledge of managers and the coordination of systems. Meanwhile, the cognitive bias of accountants in interpreting data has also become a research focus (Bhimani and Willcocks, 2014; Cavélius, Endenich and Zicari, 2020). In addition, big data influences the internal operations of organizations and is being used by professional institutions to reshape the perception of the accounting profession in the outside world. For instance, KPMG and EY have utilized social platforms to carry out "boundary work" and "discourse construction" (Suddaby, Saxton and Gunz, 2015; Pantea *et al.*, 2024).

More research is needed to help businesses understand how to avoid or minimize such risks. How can accountants participate in interpreting and presenting big data and ensure that the information adds value to business decisions (Mauro *et al.*, 2018; Moll and Yigitbasioglu, 2019).

2.3.3. Blockchain

Blockchain has moved into practical application, with more FSSCs adopting it for identity authentication, transaction verification, reconciliation, clearing and fund settlement (Deloitte, 2022a; Gilmour, Pandey and Goldbarsht, 2025). As a decentralized ledger, blockchain enhances data transparency, integrity, and security through tamper-resistant structures and consensus mechanisms (Roszkowska, 2021; Thottoli, 2024). Its consensus mechanism ensures that all nodes maintain a consistent ledger that cannot be altered once a transaction has been verified (Treleaven, Brown and Yang, 2017; Han *et al.*, 2023). Smart contracts automate executing code embedded in the blockchain agreements and significantly reduce contracting and payment costs (Maguire *et al.*, 2017; Al-Matari *et al.*, 2022). In accounting, blockchain supports “triple-entry bookkeeping,” attaching cryptographic signatures to transactions,

and embedding audit documents such as invoices and inventories into the blockchain system, enabling reliable records and real-time auditing when combined with Internet of Things technology (IoT) (Dai and Vasarhelyi, 2017; Psaila, 2018; Gilmour, Pandey and Goldbarsht, 2025). As a result, blockchain is expected to reshape accounting information systems, internal controls, and reporting frameworks, while reducing transaction and verification costs (Iansiti and Lakhani, 2017).

However, there are still some risks. Private key mismanagement can lead to irreversible asset loss, and the pseudonymous nature of the blockchain enables illicit activities such as money laundering. Moreover, the legal status of smart contracts remains ambiguous in many jurisdictions (Berke, 2017; Zhuk, 2025). Mitigating these risks requires a multi-pronged approach: secure key management, full-chain monitoring systems, and legislative development to ensure a balance between innovation and control.

2.3.4. Automation Process

With accelerating digital transformation, automation technologies, including the integration of optical character recognition (OCR), robotic process automation (RPA), and artificial intelligence (AI), are fundamentally reshaping accounting and finance processes (Ruissalo, 2018). OCR converts unstructured data into machine-readable formats, serving as high-quality input for AI (Deloitte, 2022b). AI, leveraging machine learning and natural language processing, enhances data recognition and decision support (Sutton, Holt and Arnold, 2016; Hu and Li, 2023; Lazaroiu *et al.*, 2024). Large firms like EY and Deloitte apply OCR and AI to high-frequency tasks, significantly improving efficiency (Zhou, 2017). RPA, as the key execution tool, automates repetitive tasks such as voucher entry and report generation based on OCR and AI outputs, enhancing the operational efficiency of FSSCs (Aguirre and Rodriguez, 2017; Fernandez and Aman, 2018; Bu, Jeong and Koh, 2022). RPA is easy to deploy, employees can independently configure the process to automate operations in a short period of time (Willcocks, Lacity and Craig, 2017). According to Deloitte, 72% of

FSSCs have adopted RPA to drive end-to-end process reengineering, saving labour costs and freeing up more value-added service capacity (Deloitte, 2022a).

Although RPA brings efficiency improvement, it is also accompanied by the lack of technical cognition of accountants (Krumwiede, 2017; Cooper *et al.*, 2019). AI's "black box" nature and data bias, especially in ESG-related contexts, may compromise fairness and transparency (Jensen *et al.*, 2010; Deliu and Olariu, 2024). Consequently, accountants are shifting from "data entry" to "data managers" and "AI monitor," requiring new competencies in data governance and ethical oversight (Anderson and Anderson, 2011; Wilson, Daugherty and Morini-Bianzino, 2017). To avoid professional deskilling and loss of judgment capacity, organizations must establish robust human-machine collaboration frameworks (Spence *et al.*, 2017).

2.4. Gaps in the existing literature

Although a growing body of literature has investigated the implementation and benefits of FSSCs, the current academic focus remains predominantly centered on organizations in Western developed economies, particularly multinational corporations (MNCs) operating in environments with advanced digital infrastructure and mature regulatory frameworks (Richter and Brühl, 2017; Deloitte, 2023). This geographic and institutional concentration has led to a series of notable research gaps in the FSSC domain. Specifically, the current literature seldom deals with:

1. **Comparative institutional analysis:** In non-Western countries, the impact of different regulatory regimes, business practices, and organisational hierarchies on the FSSC has still not been analysed and tested. These institutional differences can profoundly affect the integration and functionality of shared services, but the relevant discussions remain blank in the existing literature.
2. **Digital transformation effectiveness in emerging markets:** While digital transformation has become one of the central topics in Western FSSC research, its practical effectiveness in emerging or non-Western settings has

not been fully quantified. Especially in the context of imperfect technological infrastructure, there is still a lack of systematic research and data support on the specific impact of technologies such as RPA, AI and blockchain on corporate financial performance and operational cost savings.

3. **Capacity building driven by FinTech:** In the context of the rapid development of FinTech, the critical capabilities, judgment and talent strategies required by emerging economies to facilitate FSSC transformation have emerged as an important but neglected theoretical gap. These regions generally face practical challenges such as insufficient talent supply, lagging education systems and complex institutional environments. It is urgent to develop capacity evolution models and adaptation mechanisms to localize best practices effectively.

By examining these underexplored areas, this study seeks to expand the theoretical and practical understanding of FSSC beyond the traditional Western-centric paradigm, thereby providing new insights into building FSSC in a rapidly changing global financial landscape.

3. Research Methodology

Based on the industry observation of FSSC in China's A-share market, this paper identified Huawei as the case object, adopted the exploratory single-case study method, and explored the results through multi-source data and triangular analysis.

3.1. Methods of research

In terms of research methodology, this study adopts a **single case study** approach. It mainly focuses on the construction and operation of the FSSC of Huawei Technologies Co., Ltd., while drawing on industry-wide observations of FSSC construction of A-share listed companies in China. Case studies can be classified as exploratory, explanatory or descriptive (Yin, 2018). This study aims to shed light on how FSSC can facilitate the digital transformation and optimise financial performance under the empowerment of FinTech, using an **exploratory case study** design that aims to reveal patterns and mechanisms rather than test preset hypotheses.

As the research object, Huawei's FSSC is highly representative among enterprises undergoing digital transformation. Its standardization, centralization and automation of internal financial processes fully reflect the effect of financial sharing in large enterprises. China's A-share market is the second-largest stock market in the world, with more than 5,000 listed companies, which is of benchmark significance for emerging market research and covers multiple first-level industries, reflecting China's dual-track economic structure of "world factory + digital economy". Although FinTech serves as the technological backdrop, this study focuses on specific embedded application scenarios within FSSCs, such as Robotic Process Automation (RPA) for reimbursement processes and Optical Character Recognition (OCR) for bill recognition. The emphasis is placed on operationalizing these technologies within the FSSC framework and its impact on financial performance rather than on the technical mechanisms themselves.

Data was collected from multiple sources, including:

1. **A-share stock data[1] from the Shanghai and Shenzhen Stock Exchanges** (for industry and company location information)
2. **Annual reports issued by various companies, media reports, and an interactive platform for investor relations of listed companies - E-interaction[2]** (manually screening whether the FSSC of each company has been established or is under construction with OCR and Excel)
3. **Huawei's annual financial reports, industry white papers, research reports of third-party institutions, and offline meetings[3] hosted by digital transformation partners** (collect Huawei's financial performance

[1] The information about China's A-shares and industry comes from the CSMAR database. Accessed at: https://data.csmar.com

[2] The Shanghai and Shenzhen Stock exchanges use Internet technology to provide a communication platform for investors and listed companies. Investors can ask questions to all listed companies, and listed companies will respond directly. Accessed at: https://irm.cninfo.com.cn & https://sns.sseinfo.com/index.do

[3] Conference name: ACCA Chengdu-Chongqing Twin Cities Economic Circle International Finance Talent Conference: Through the cycle, achieve sustainable growth. Chengdu, March 6, 2025. Accessed at: https://mp.weixin.qq.com/s/B7mA2Gq7PuqpBbRDXCX_mQ

data and understand the development history and operation process of FSSC)

A combination of **qualitative content analysis and quantitative data analysis** is used to extract information related to FSSC construction systematically, iteratively review publicly available documents, and employ manual topic coding to identify duplicate data. **Visual analysis** of data related to financial efficiency, financial expenses, etc. **Triangulation** of multiple data sources was used to improve the validity and reliability of the findings.

All data used in this study were **publicly available** through legitimate sources, ensuring ethical standards in data use. The study strictly focuses on organizational information and does not involve personal or sensitive data. As a result, issues related to confidentiality and informed consent are minimized. Ethical guidelines were followed throughout the study.

The use of a single case study may limit the generality of the findings. While generality has been improved through rich contextual descriptions and data triangulation efforts, making these insights potentially universally applicable to all emerging market businesses. Future research could employ comparative studies across industries and countries to validate and extend the conclusions reached.

3.2. Reasons for selecting Huawei for the case study

A total of 1,059 Chinese A-share companies have carried out information dissemination and feedback on FSSCs, of which 945 companies have established or are in the process of establishing FSSCs. Figure 3 shows the computer, communications, and electronic equipment manufacturing industries and the software and information technology services industries leading the way, highlighting the core position of the digital economy. Electrical machinery, automobile manufacturing, pharmaceuticals, and other high-end manufacturing sectors followed, confirming the role of the manufacturing pillar.

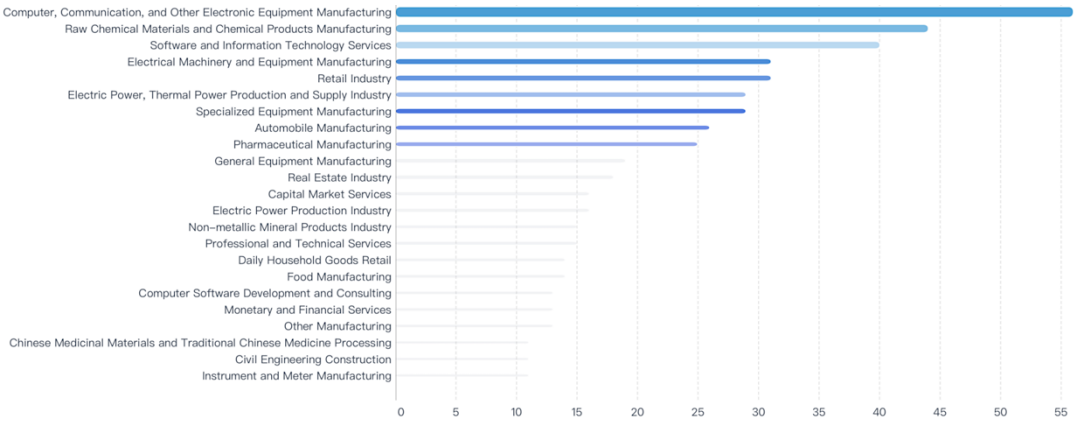

Figure 3 Industry distribution of FSSC[4]

Regionally, the eastern and southern coastal areas of China, especially the Yangtze River Delta, the Pearl River Delta and the Beijing-Tianjin-Hebei region, have become the most intensive FSSC regions by virtue of their economic base, policy support and industrial agglomeration advantages (Zhao *et al.*, 2022; Long, Liu and Zhong, 2024), as shown in Figure 4.

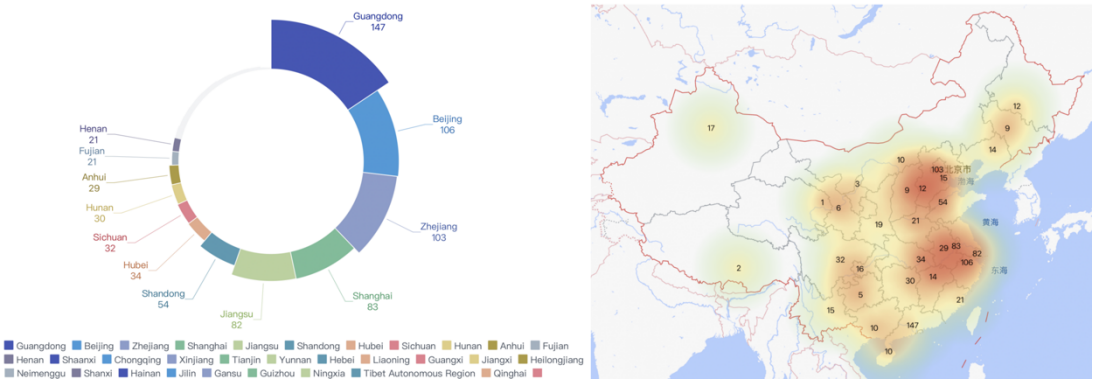

Figure 4 Distribution of FSSC provinces and heatmap[5]

Huawei was selected as the case object based on strict case **selection criteria**:

- The company must have an established and mature FSSC that operates across multiple business units and has achieved a refactoring of traditional financial processes.

[4] Only industries with more than 10 FSSCs are selected for presentation in the bar chart, while those with more than 25 FSSCs are highlighted.

[5] Figures 3 and 4 are analyzed from data types 1 and 2 mentioned in 3.1 methods of research. Image originally created by the author of this article using visualisation tools Power BI. All data sources are presented in the Methods section above

- The company should be representative of its industry's adoption of a FinTech approach to lead high-level digital transformation.
- The companies must publicly disclose adequate financial and operating data.
- The company should operate in an emerging market environment to match the research context.

Huawei's businesses include high-end manufacturing, information and communications technology (ICT), and global service networks. Its FSSC center manages domestic regional units and coordinates overseas subsidiaries' financial management, providing a good background for exploring organizational complexity, institutional adaptability and technological convergence (Li, 2023; Yang, 2024; Huawei, 2025). Based in Shenzhen, Huawei also benefits from a strong digital ecosystem and policy support. As a large multinational with a complex structure, it represents an ideal model for studying FSSCs in emerging markets—both academically and practically significant (Chen, 2022).

4. Findings

4.1. The construction process of Huawei's FSSC

Huawei’s transformation began in 1996 with the adoption of an ERP system that replaced manual processes and established a unified global accounting framework. By 1998, Huawei had pioneered the "four unifications" project in China to coordinate financial systems, processes, monitoring and coding to eliminate regional disparities (Huang, 2019). This work was expanded globally in 2002 to unify accounting policies and work processes across subsidiaries.

A key shift occurred in 2005-2006 when Huawei established six regional FSSCs, see Figure 5. The FSSC acted as an independent organisation to provide high-quality, cost-effective, and consistent financial services to branches worldwide, forming a global pattern of centralised account management. Huawei's FSSC underwent eight

years of continuous updating and improvement, culminating in the formation of a more solid system in 2014 (see Figure 6).

Figure 5 Basic structure of Huawei FSSC (Su, 2024)

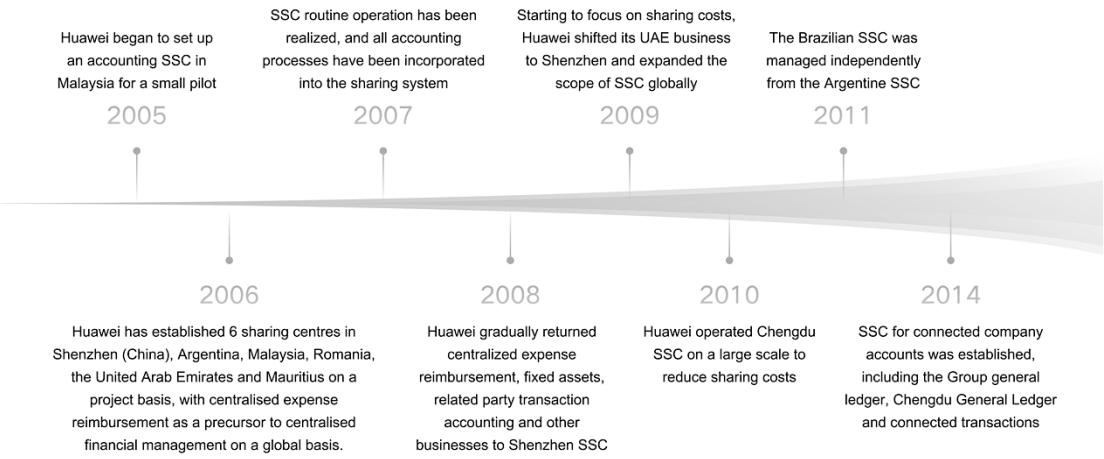

Figure 6 Construction process of Huawei FSSC[6]

In 2007, Huawei cooperated with IBM to carry out integrated financial services reform (IFS), which connected FSSC with the business chain through an intelligent platform, as shown in Figure 7 (Wu et al., 2020). IFS projects introduce risk control, optimize capital allocation, break down sector barriers, and form a cohesive financial ecosystem.

The phased construction of Huawei's FSSC system, from the initial ERP adoption to the launch of the global FSSC, demonstrates a systematic approach that integrates financial standardization and centralization. Significantly improved the consistency of

[6] Figures 6-7 are summarized by the author based on the information presented on Huawei's website and publications. Accessed at: https://www.huawei.com/en/publications

financial reporting and internal control of its international operations. This evolution indicates strategic alignment between financial management practices and the firm's global expansion strategy.

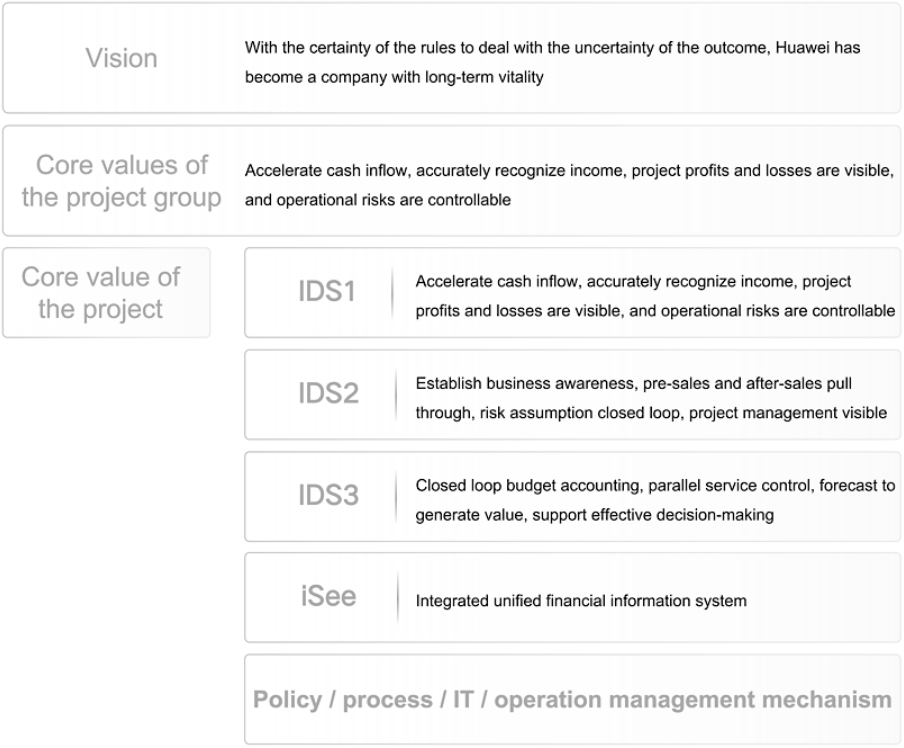

Figure 7 Huawei integrated financial services reform panorama

4.2. New steps with FinTech

In 2014, Huawei launched data reform and established a unified data management system to strengthen budget control, tax compliance, financial reporting quality and overseas risk management. This effort marks the foundation for embedding technology-driven processes into its finance function.

By 2017, Huawei officially launched financial digital transformation, aiming to achieve real-time business monitoring, automatic self-inspection, and dynamic reporting. Digital operations realize the visualization of financial processes and promote real-time analysis and decision-making (Huang, 2019).

At the heart of this transformation is the development of a globally unified ERP platform powered by Huawei Cloud. The platform seamlessly integrates multiple subsystems,

including procurement (" Ebuy "), financial accounting, bank-enterprise connectivity, customer relationship management (CRM), and e-filing. The ERP system breaks down the islands of information. It enables end-to-end centralized management, ensuring that transaction data can automatically generate accounting vouchers and perform standard financial processes such as invoice matching, asset depreciation, and accounts receivable settlement with minimal human intervention.

In addition, Huawei makes extensive use of FinTech tools, shown in Table 2:

FinTech Tools Applied	Impact on Huawei's FSSC
ERP + Cloud Computing	Integrated finance, procurement, banking, and CRM systems globally. Supported real-time data sharing, standardized operations, and centralized financial control.
OCR	Automated the digitization of financial documents, reduced manual entry errors, and improved the speed and accuracy of transaction processing.
RPA	Streamlined routine accounting tasks such as voucher posting, invoice matching, and reconciliation, enhancing efficiency and reducing operational costs.
Big Data	Enabled predictive financial forecasting and performance analysis, supporting data-driven decision-making and strategic financial planning.
RFID, Electronic Signatures and Smart Contract	Strengthened asset tracking and document authentication, improving auditability, operational transparency, and compliance.

Table 1 FinTech tools adopted by Huawei FSSC

By leveraging financial big data, Huawei's FSSC has evolved from merely reporting historical performance to proactively generating predictive insights for future operations (Zong and Wang, 2020). Through the systematic application of FinTech

innovation, Huawei Financial Service Center transformed from a traditional supporting function to a digitally integrated and intelligent driving platform, which improved operational efficiency and strategic financial management.

4.3. Financial Performance

Based on Huawei's annual financial reports, Table 2 summarizes the company's main financial indicators from 2008 to 2024, and the trend of these indicators is shown in Figure 8. Overall, Huawei has a significant growth in operating profit, working capital, cash and cash equivalents, and improved financial stability and operating capacity.

Year	Operating profit (¥ in million)	Working capital (¥ in million)	Cash and cash equivalents (¥ in million)
2008	17,076	25,921	21,017
2009	22,241	43,286	29,232
2010	30,676	60,899	41,501
2011	18,582	56,681	57,192
2012	20,658	63,837	67,180
2013	29,128	75,180	73,399
2014	34,205	78,566	78,048
2015	45,786	89,019	110,561
2016	47,515	116,231	123,047
2017	56,384	118,503	175,347
2018	73,287	170,864	184,106
2019	77,835	257,638	170,684
2020	72,501	299,062	172,898
2021	121,412	376,923	128,395
2022	42,216	344,938	147,269
2023	104,401	421,662	192,903
2024	79,361	319,178	146,265

Table 2 Major financial indicators of Huawei from 2008 to 2024[7]

[7] All financial data came from Huawei annua report accessed from corporate website: https://www.huawei.com/cn/annual-report

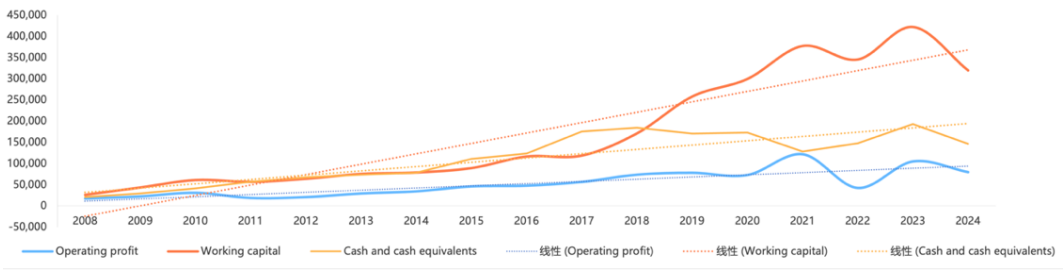

Figure 8 Trend of each indicator (Huawei, 2025b)

Operating profit grew steadily between 2008 and 2014 with the initial deployment of the FSSC framework. Huawei's profitability and liquidity expanded even faster between 2015 and 2019, impacted by the broader FinTech drive to automate financial processes. After 2020, although external challenges brought some volatility, the company's financial fundamentals remained strong.

As shown in Figure 8, Huawei's operating profit increased from ¥17,076 million in 2008 to ¥79,361 million in 2024, while its working capital increased from ¥25,921 million to ¥319,178 million. Cash reserves were similarly expanded, supporting enhanced short-term solvency and operational flexibility.

In addition, Figure 9 shows that Huawei's financial expenses continued to decline from 2008 to 2021. The company began to achieve net financial gains after 2014, in line with the maturity of the FSSC infrastructure and the integration of automated financial systems. The reduction in financing costs indicates an increase in capital efficiency, which may be related to the economies of scale and standardization of processes achieved by digital transformation.

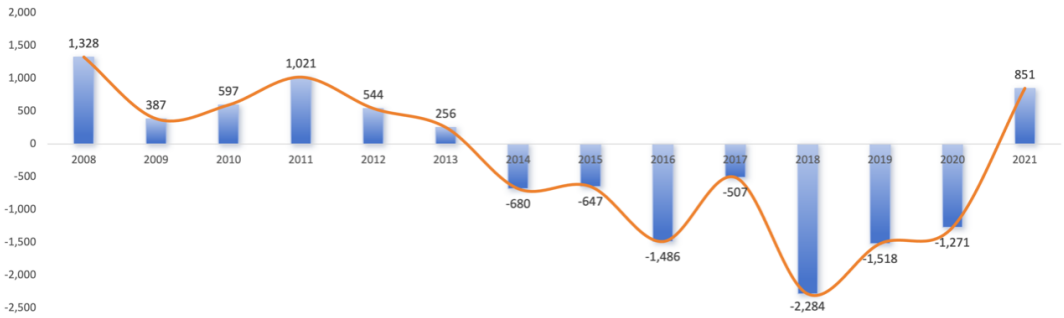

Figure 9 Financial expenses of Huawei from 2008 to 2021[8]

[8] As Huawei started a new round of digital transformation after the gradual end of the epidemic in 2021, financial expenses were greatly affected, which were excluded from this analysis.

The positive trend of Huawei's financial indicators demonstrates the role of digital transformation of FSSC supported by FinTech in improving profitability, liquidity and cost control.

5. Discussion

5.1. The success of FSSC at the statistic level

FSSC achieves efficiency improvement, cost reduction and competitiveness enhancement. All the major financial indicators of Huawei increased significantly in 2013, and the range was significantly higher than that of the previous year. This is not only because Huawei's financial sharing platform played its scale effect, saved costs and increased profits, but also because with the help of the FSSC, Huawei's financial internal control and management became more scientific, which helped Huawei reduce the loss of nearly $1 billion. The impact on financial performance is extremely prominent. The decline in operating profit in 2021-2022 was mainly due to the post-pandemic economic conditions, the crackdown in the US and the international economic situation; However, there has been a marked recovery in 2023. By strengthening the control over key value chain links such as production, research and development, and sales, Huawei has effectively improved the quality of products and customer satisfaction. With the deep integration of industry and finance under the financial sharing model, the company has also achieved continuous improvements in product quality and service awareness, ensuring that its multiple products maintain a leading position in the industry.

FSSC helps Huawei achieve process unification and management optimization. FSSC provides Huawei with a set of effective financial management systems and tools, realising the sharing of financial resources among business departments, reducing unnecessary work, improving work efficiency, and reducing financial costs. Unify the financial process of each business unit to avoid cost increases caused by different habits and standards of each department. In this way, it can better realize the digitalization of financial management, so as to better improve financial efficiency and

reduce financial costs. Through the above analysis, the following conclusions can be drawn. In 2005, at the beginning of Huawei's establishment of the FSSC, some financial performance was not immediately improved, however, after the FSSC was fully completed, financial costs were significantly reduced. It shows that the operation of the FSSC plays a role in scale economy effect, improves the efficiency of business processing, reduces the operating cost of enterprises, speeds up the pace of the integration of enterprise industry and finance, and improves the internal control environment of enterprises, which plays a positive role in improving the operation efficiency of enterprises.

Intelligent FSSC realizes efficient settlement and comprehensive control. Huawei's accounting fully uses the time difference advantage of the FSSC and realizes a 7×24-hour revolving checkout mechanism worldwide. Under the same data platform and settlement rules, the FSSC relays the checkout operation, thus greatly reducing the checkout time. The system will automatically mobilize checkout data 24 hours a day, seamlessly connect to more than 170 systems and be capable of processing 40 million rows of data per hour. Huawei's FSSC regularly settles bills and can obtain operational data of more than 130 representative offices in a timely and efficient manner. The intelligent document processing system developed and designed by Huawei independently, based on OCR, RPA, AI and other financial technologies, takes an average of 6 seconds from order delivery and verification to labelling and sorting, with an accuracy rate of 99.97% (Fu, 2019; Li, 2023). Establishing the self-service expense (SSE) platform and implementing "pay first, review later" has shortened the accounting processing time to an average of 2.6 days. 75% reduction in the cost of processing individual invoices, and the audit adjustment rate is 0.01%. Since implementing internal financial reporting control in 2014, FSSC has monitored $7.8 billion of front-end non-compliance data and avoided capital losses of $945 million. Now, Huawei can publish business reports in five days, viewed from a computer or mobile phone anywhere and anytime (Shi, 2017). Huawei deeply integrates cutting-edge technologies such as big data, cloud computing, AI, and

blockchain to build an intelligent financial shared service platform. Through its capabilities in resource integration and intelligent process reengineering, the platform achieves end-to-end cost optimization, operational efficiency, and compliance assurance. Huawei's FSSC represents the best level in the industry.

5.2. The success of FSSC at the theoretical level

Firstly, **according to the contingency theory**, organizations including FSSC are highly dependent on their internal and external environment 5/9/25 3:27:00 PM. In response to rapid global expansion, increasing business complexity and technological advances, Huawei realized that the traditional decentralized financial management model could no longer support its operational needs. Since the implementation of the ERP system in 1996, Huawei has standardized the financial process through the "Four Unification" project, launched a systematic reform, and promoted the organizational design to adapt to the changing business and technology environment constantly. As a key environmental variable, technology continues to drive the iterative upgrading of FSSC (Ferreira and Janssen, 2022). Huawei set up regional FSSC and jointly launched the Comprehensive Financial Services Reform (IFS) project with IBM in 2007, which demonstrated the emphasis on deep integration of technology and financial operations and reflected the contingency view that organizations must be flexible and adaptable to survive and remain competitive.

The **dynamic capability theory** further reveals the internal logic of the evolution of Huawei's FSSC strategy. Dynamic capability is defined as the ability to integrate, build and reshape internal and external resources to respond to environmental changes (Eisenhardt and Martin, 2000; Teece, 2007, 2009). Supported by FinTech, Huawei has continuously optimized the financial system architecture by introducing Huawei Cloud, ERP, e-buy system, bank-enterprise direct connection platform, etc. At the same time, the application of OCR, RPA, big data, smart contracts, and other intelligent technologies has greatly reduced manual intervention, improved efficiency and risk control capabilities, and strengthened the real-time accuracy of financial decisions.

It is important to note that Huawei does not see intelligence as a complete replacement for human labor, but rather a reimagining of human-machine collaboration. Standardized and procedural transactions are handled automatically by the system, while complex and non-standardized financial issues rely on human professional judgment. This strategy embodies the view about the adaptive evolution of human resources, emphasizing the irreplaceable role of people in the dynamic capability system (Teece, 2007). In the context of accelerating intelligence, Human Judgment remains the key to ensuring rational decision-making and compliance in organizations (Rautiainen *et al.*, 2024). Faced with scenarios such as cross-border taxation, complex compliance, and abnormal transaction screening, Huawei emphasizes the establishment of a manual review mechanism at key nodes to make up for the limitations of technical judgment and ensure the quality of decision-making and ethical standards. Roles such as “explainers” who interpret AI outcomes, “orchestrators” who align automation with business goals, and “trainers” who refine AI algorithms with human feedback are increasingly essential (Wilson and Daugherty, 2018). Employees in the intelligent FSSC must develop analytical thinking, interpretative judgment, and cross-domain communication skills to engage with machine-generated insights critically. Thus, the new FSSC is not a site of human displacement, but a platform for human elevation, where the ethical and cognitive of people are amplified by intelligent tools, rather than overshadowed.

In addition, Huawei has shifted from traditional manual financial management to highly digital and intelligent FSSC, which is in line with the transformation trend from organizational man to homo digitalis (Kotler, Pfoertsch and Sponholz, 2021). FSSC's internal business processes are highly dependent on intelligent systems, and the way employees interact has also shifted from traditional processes to real-time collaboration based on digital platforms, marking Huawei's deep response to the logic of the digital economy (Zhan and Jing, 2022).

Financial data further verified this transformation effect: from 2008 to 2024, Huawei's operating profit rose steadily, working capital improved, cash flow was healthy, and

financial expenses declined. This indicates that the FSSC strategy significantly improved scale effect and operational efficiency and confirms the positive correlation between technological adaptability and organizational performance.

At the same time, Huawei's requirements for financial talents have undergone profound changes. Traditional positions based on accounting processing are gradually replaced, and the demand for talents with a composite background in financial technology, data analysis, risk management and strategic insight is rising rapidly (Pham and Jackson, 2020; Carvalho and Almeida, 2022). This continuous optimisation of talent structure embodies constantly updating dynamic capabilities in the actual organisational practice (Eisenhardt and Martin, 2000), laying a solid foundation for Huawei's future global competition.

5.3. Limitations and future suggestions

This study relies heavily on public data, which often lacks granularity and may introduce bias, limiting the depth of analysis. External shocks, such as post-pandemic economic shifts and geopolitical tensions, have significantly impacted Huawei's performance, but their link to the FSSC performance remains underexplored.

Future research should integrate internal organizational metrics, such as training costs and process efficiency metrics, with public resources to gain deeper insights. In addition, quantitative models should be developed to isolate and assess the impact of macroeconomic and geopolitical factors on FSSC-driven financial outcomes.

6. Conclusion

Using Huawei Technologies Co., Ltd. as the research object, this paper explores the impact of FinTech driven FSSC transformation on corporate financial performance. By analyzing Huawei's FSSC construction, technology integration, and operational performance in detail, the study confirmed that the effective adoption of FinTech has significantly improved the efficiency, standardization, and strategic agility of financial operations.

The study succeeded in reaching its stated objectives. It shows how FinTech can be embedded in FSSC structures to streamline financial processes, reduce operational costs, and improve the quality of decision making. The results also reinforce theoretical frameworks such as contingency theory and dynamic capabilities theory, illustrating the key role of organizational adaptability and technological capabilities in achieving sustainable competitive advantage.

In terms of theoretical implications, the study in this paper helps to complement the limited literature linking FinTech applications directly to shared services transformation in an accounting context. From a practical perspective, it provides valuable insights for companies planning to build FSSC or financial digital transformation.

Nonetheless, the study recognizes its limitations, particularly in terms of focusing on one large enterprise FSSC and the changing nature of FinTech applications. Future research should be extended to multiple case studies in different industries and firm sizes to validate and generalize the conclusions reached. In addition, continuous technological developments require dynamic longitudinal studies to capture the ongoing impact of FinTech on shared service models.

In summary, this paper contributes to understanding the role of FSSC as a booster for financial digital transformation, emphasizing the need for companies to cultivate technology-oriented accounting talents, human-machine collaboration capabilities for strategic orientation to thrive in an increasingly digital and competitive global economy.

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