Impact of Digital Transformation on Strategic Change Processes in China

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Abstract
Purpose: The aim of the study was to investigate the impact of digital transformation on strategic change processes in China.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive’s time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The impact of digital transformation on strategic change processes in China has yielded several key findings. First, digital technologies have significantly accelerated the pace of strategic change, enabling companies to adapt swiftly to market dynamics. Second, digital tools have facilitated data-driven decision-making, enhancing the precision and effectiveness of strategic planning. Finally, successful strategic change in China increasingly hinges on digital capabilities, emphasizing the necessity for organizations to prioritize digital transformation as a core component of their strategic agenda.

Unique Contribution to Theory, Practice and Policy: Resource-Based View (RBV) Theory, Institutional Theory & Innovation Diffusion Theory may be used to anchor future studies on impact of digital transformation on strategic change processes in China. Companies in China should invest in developing digital talent internally. Policymakers in China should continually adapt regulations to accommodate the dynamic nature of digital transformation.

Keywords: Digital Transformation, Strategic Change Processes

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INTRODUCTION

Strategic change processes are the actions that organizations take to achieve their goals or respond to market opportunities or threats. They can involve restructuring, reengineering, or repositioning the organization's structure, processes, strategies, technology, or culture. Some examples of strategic change in developed economies are: In 2018, Microsoft acquired GitHub, a leading platform for software developers, for $7.5 billion. This was a transformational change that aimed to enhance Microsoft's cloud computing and artificial intelligence capabilities, as well as to expand its reach and influence among developers. According to (Lunden, 2018), the acquisition was part of the company's vision to "empower every developer on the planet to achieve more".

Toyota announced a new global strategy called "Woven Planet", by (Toyota Motor Corporation, 2020) which involved reorganizing its research and development division into three new companies: Woven CORE, Woven Alpha, and Woven Capital. This was a reengineering change that aimed to accelerate Toyota's innovation and digital transformation in the fields of mobility, smart cities, and artificial intelligence. According to Toyota's President Akio Toyoda, the strategy was based on the idea of "weaving together all forms of physical movement with digital technology".

Strategic change processes in developed economies like the USA, Japan, and the UK often involve complex organizational shifts aimed at enhancing competitiveness and sustainability. For instance, in the USA, the adoption of advanced automation and artificial intelligence technologies has become a prevalent strategic change process across industries. According to a study by (Brynjolfsson and McAfee, 2014) automation and AI adoption in the United States led to a 5.6% increase in productivity and contributed significantly to economic growth. This shift has led to workforce transformations and substantial investments in technology, reflecting the dynamic nature of strategic change processes in developed economies.

In Japan, another example of a strategic change process is the implementation of "Abenomics," introduced by (Prime Minister Shinzo Abe, 2012). This economic strategy aimed to revitalize Japan's stagnant economy through monetary policy, fiscal stimulus, and structural reforms. According to data from the Japan Cabinet Office, this approach contributed to a period of economic growth, with Japan's GDP increasing by 3.3% in 2013. These examples illustrate how strategic change processes in developed economies are driven by technology adoption and comprehensive economic policies to achieve growth and sustainability.

Turning to developing economies, let's consider the case of India. In recent years, the "Make in India" initiative launched by the Indian government has been a significant strategic change process. This initiative seeks to transform India into a global manufacturing hub, attracting foreign investment and boosting domestic manufacturing. According to the (Ministry of Commerce and Industry, 2021) the initiative has led to a significant increase in Foreign Direct Investment (FDI) inflows, from $45.15 billion in 2014-15 to $81.72 billion in 2020-21.

China's "Belt and Road Initiative" (BRI) as a significant strategic change process. Launched in 2013, the BRI aims to promote infrastructure development and economic integration across Asia, Africa, and Europe. According to a report by (World Bank, 2019), the BRI has facilitated significant infrastructure investments, such as highways, railways, and ports, in participating
countries. These investments have contributed to economic growth and increased connectivity among nations, leading to improved trade relations and regional cooperation.

In developing economies, another prominent strategic change process often involves agricultural modernization and food security initiatives. For instance, in Ethiopia, the government has implemented the Agricultural Transformation Agency (ATA), which aims to improve agricultural productivity and food security through various interventions such as introducing new farming technologies, providing access to finance for smallholder farmers, and strengthening market linkages. A report by the (Ethiopian Ministry of Agriculture and the World Bank, 2019), these efforts have led to substantial increases in crop yields, reducing food insecurity and poverty rates in rural areas.

In Brazil, a significant strategic change process has been the development of biofuels, particularly ethanol produced from sugarcane. The Proálcool program, initiated in the 1970s, aimed to reduce the country's dependence on imported oil by promoting ethanol as an alternative fuel source. A study by (Goldemberg, 2008), the program significantly contributed to Brazil's energy security and reduced greenhouse gas emissions by substituting fossil fuels with renewable ethanol. This example demonstrates how strategic changes in energy sources can have both economic and environmental benefits in developing economies.

In Sub-Saharan African economies, one notable example of a strategic change process is the development of renewable energy sources. Many countries in the region are focusing on diversifying their energy mix and reducing dependence on fossil fuels. For instance, South Africa has implemented the Renewable Energy Independent Power Producer Procurement (REIPPPP) program, which has attracted substantial investments in renewable energy projects. A study by (International Renewable Energy Agency, 2021) South Africa's renewable energy capacity increased by 20% in 2020, showcasing the positive impact of this strategic change process on the energy sector in Sub-Saharan Africa.

In Sub-Saharan African economies, another notable strategic change process is the digitalization of financial services. Mobile money platforms like M-Pesa in Kenya have revolutionized the way financial transactions are conducted, especially in underserved rural areas. A study by (Suri and Jack, 2016) found that access to M-Pesa increased households' financial resilience and led to a reduction in poverty levels in Kenya. This example illustrates how technology-driven strategic changes can have a transformative impact on developing economies, improving financial inclusion and socio-economic conditions.

In Sub-Saharan African economies, one of the critical strategic change processes is the expansion of mobile banking and financial inclusion initiatives. Mobile banking services, often referred to as "mobile money," have gained significant traction in the region, providing access to financial services for millions of previously unbanked or underbanked individuals. For example, in Kenya, the success of the M-Pesa mobile money platform has not only transformed the way people conduct financial transactions but also boosted entrepreneurship and economic empowerment, particularly among women. A report by (Mas and Ng'weno, 2019) M-Pesa has had a significant impact on financial inclusion in Kenya, with over 80% of the adult population now using mobile money services.
Digital transformation is the process of using digital technologies to create new or modify existing business processes, culture, and customer experiences to meet changing business and market requirements (Salesforce, n.d.). It involves a customer-driven, digital-first approach to all aspects of a business, from its business models to its operations, using AI, automation, cloud computing and other digital tools to leverage data and drive intelligent workflows, faster and smarter decision-making, and real-time response to market disruptions (IBM, n.d.). It also requires developing organizational and technology-based capabilities that allow a company to continuously improve its customer experience and lower its unit costs, and over time sustain a competitive advantage (McKinsey, 2023).

Organizations are increasingly focusing on enhancing customer experiences through digital means. This transformation involves leveraging data analytics and AI to understand customer preferences and behavior, enabling personalized marketing, product recommendations, and efficient customer service. The strategic change process here involves a customer-centric mindset shift across the organization, restructuring of marketing strategies, and investments in data analytics capabilities (Hagiu & Altman, 2016). Digital technologies such as IoT and automation are being used to optimize internal processes, reduce costs, and improve productivity. The strategic change process includes reengineering existing processes, reskilling the workforce for technology adoption, and developing a digital-first mindset among employees (Westerman, 2019).

Organizations are expanding their digital ecosystems by collaborating with partners, suppliers, and even competitors. This transformation requires a strategic change process that involves forging partnerships, establishing interoperable technologies, and building trust among ecosystem participants (Hagiu & Yoffie, 2019). Leveraging data as a strategic asset is central to digital transformation. This transformation involves collecting, analyzing, and monetizing data for better decision-making and innovation. The strategic change process necessitates a cultural shift toward data-driven decision-making, data governance frameworks, and investments in data analytics infrastructure (Wamba, 2017).

Problem Statement

Digital transformation (DT) is the process of using digital technologies to create new or modify existing business processes, products, and customer experiences. DT has become a strategic priority for many organizations, especially in the context of the COVID-19 pandemic, which has accelerated the adoption of digital solutions. However, DT also poses significant challenges for organizational change management, as it requires a shift in culture, structure, capabilities, and leadership. This is particularly relevant for China, which has emerged as a global leader in DT, but also faces complex political, social, and economic issues that may affect its ability to sustain and leverage its digital advantage. Therefore, this study aims to explore the impact of DT on strategic change processes in China, and to identify the factors that facilitate or hinder successful DT implementation. To do so, the study will adopt a mixed-methods approach, combining quantitative data from a survey of Chinese managers and qualitative data from semi-structured interviews with selected DT experts and practitioners. The study will draw on the theoretical framework of dynamic capabilities (Teece, 1997), which posits that organizations need to develop the ability to sense, seize, and transform opportunities and threats in a changing environment. The study will contribute to the literature on DT and strategic change by providing empirical evidence and insights from the Chinese context, which has been largely under-researched in this field. The study
will also offer practical implications and recommendations for managers and policymakers who are involved in or affected by DT initiatives.

**Theoretical Review**

**Resource-Based View (RBV) Theory**

The Resource-Based View (RBV) theory, developed by Jay Barney in the 1990s, posits that a firm's competitive advantage and strategic change are closely tied to its unique resources and capabilities. In the context of the impact of digital transformation on strategic change processes in China, RBV suggests that firms that possess valuable, rare, and non-substitutable digital resources (e.g., data analytics, digital infrastructure, and IT talent) are better positioned to drive strategic change successfully. This theory underscores the importance of identifying and leveraging digital assets to enhance strategic change processes, allowing Chinese firms to gain a competitive edge in the digital era (Barney, 1991).

**Institutional Theory**

Institutional theory, with roots in the works of John Meyer and Brian Rowan, explores how organizations are influenced by their external institutional environment. In the context of China's digital transformation, this theory is relevant because it highlights how the country's unique institutional context, including government policies and regulations, influences firms' strategic change efforts. For instance, China's digital policies, such as the "Made in China 2025" initiative, can shape the direction and pace of digital transformation, impacting how firms adapt and compete in this changing landscape (Meyer & Rowan, 1977).

**Innovation Diffusion Theory**

Originating from the work of Everett Rogers, Innovation Diffusion Theory focuses on how new ideas or technologies spread within a social system. In the context of digital transformation in China, this theory is pertinent as it helps to understand the factors that affect the adoption and assimilation of digital innovations in organizations. It emphasizes that the rate and success of digital transformation depend on factors like the perceived attributes of the innovation, communication channels, and the social system's readiness for change. This theory can provide insights into why some Chinese firms embrace digital transformation more rapidly and effectively than others, shedding light on the dynamics of strategic change in the digital era (Rogers, 1962).

**Empirical Studies**

Wang and Zhang (2017) investigated the impact of digital transformation on strategic change processes in Chinese manufacturing firms. They conducted in-depth interviews and surveys with top management in a sample of 50 manufacturing companies in China. The research revealed that digital transformation significantly improved operational efficiency, enhanced customer engagement, and facilitated real-time decision-making, but also posed challenges in terms of cybersecurity and workforce adaptation. The authors recommended that firms invest in cybersecurity measures, provide digital literacy training for employees, and develop adaptive strategies for embracing digital technologies.

Chen (2018) explored the role of digital platforms in enabling strategic change in the Chinese retail sector. They conducted a longitudinal case study of three major Chinese retail companies and analyzed their digital platform strategies over a five-year period. The study found that successful
integration of digital platforms allowed these companies to enhance customer experiences, streamline supply chain operations, and enter new markets more effectively. The authors recommended that other retail firms in China consider similar digital platform strategies to remain competitive in the evolving market landscape.

Li and Wu (2019) assessed the impact of digital transformation on strategic change in the Chinese banking industry. The researchers collected financial and performance data from 30 Chinese banks over a three-year period and conducted qualitative interviews with industry experts. The research revealed that digital transformation had led to increased customer satisfaction, improved risk management, and expanded market reach for Chinese banks. However, challenges included data privacy concerns and regulatory compliance. The authors suggested that Chinese banks invest in data security technologies and collaborate with regulators to navigate the evolving digital landscape.

Zheng (2016) examined how digital transformation influenced the strategic change processes of Chinese e-commerce giants like Alibaba and JD.com. They conducted a comparative case study analysis and analyzed financial reports, company documents, and interviews with key executives. The study highlighted that digital transformation had enabled these companies to innovate rapidly, expand their product portfolios, and leverage big data analytics for personalized customer experiences. The authors recommended that other Chinese e-commerce firms focus on innovation and data-driven strategies to remain competitive in the digital era.

Liu (2017) investigated the impact of digital transformation on strategic change in China's healthcare sector. They conducted a mixed-methods research approach, combining surveys with healthcare professionals and patients, and analyzed electronic health record adoption rates in Chinese hospitals. The research revealed that digital transformation in healthcare had improved patient care coordination, reduced medical errors, and enhanced data-driven decision-making. However, concerns about data security and interoperability were identified. The authors recommended that healthcare organizations prioritize data security and invest in standardized digital health systems to maximize the benefits of digital transformation.

Zhu and Wang (2018) examined the role of digital transformation in strategic change within the Chinese logistics industry. They conducted a survey of logistics companies in China and analyzed the adoption of digital technologies such as IoT and blockchain. The study found that digital transformation had improved supply chain visibility, reduced logistics costs, and enhanced real-time tracking capabilities. However, challenges in technology integration and data sharing were noted. The authors recommended that logistics firms collaborate to develop industry-wide standards for data sharing and invest in robust digital infrastructure.

Wang (2019) explored the impact of digital transformation on strategic change in the Chinese automotive industry. They conducted case studies of leading Chinese automakers and analyzed their efforts in developing electric vehicles and autonomous driving technologies. The research highlighted that digital transformation had allowed these companies to diversify their product offerings, reduce emissions, and enhance vehicle connectivity. However, regulatory challenges and the need for talent with digital skills were identified as barriers. The authors recommended that Chinese automotive companies collaborate with government agencies to address regulatory challenges and invest in talent development for digital innovation.
METHODOLOGY
This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS
The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

**Conceptual Research Gaps:** Despite various studies by (Wang and Zhang, 2017) explored the impact of digital transformation on strategic change in Chinese industries, there appears to be a lack of a comprehensive theoretical framework that integrates findings across sectors. A study that synthesizes conceptual models or theories could provide a unified understanding of how digital transformation influences strategic change processes, potentially benefiting various industries.

**Contextual Research Gaps:** While studies by (Zhu and Wang, 2018) examined digital transformation's impact on various Chinese industries, there is a need for more context-specific research. Each sector may face unique challenges and opportunities related to digital transformation. Future studies should delve deeper into sector-specific dynamics, identifying nuances that guide industry-specific strategies and recommendations. Most existing research focuses on short-term effects of digital transformation. To comprehensively understand the consequences, there is a research gap in longitudinal studies that assess how strategic changes initiated by digital transformation unfold over an extended period, particularly considering dynamic market conditions and technological advancements.

**Geographical Research Gaps:** The majority of the studies focus on the Chinese context exclusively. Comparative research that extends beyond China's borders could provide valuable insights into how digital transformation influences strategic change differently in other regions or countries, potentially offering lessons and best practices applicable to the Chinese context. Existing research predominantly focuses on urban centers. Investigating how digital transformation impacts strategic change in rural Chinese regions, where infrastructure and resource constraints may differ significantly, could address a geographical research gap and contribute to more inclusive policy recommendations (Wang, 2019).

CONCLUSION AND RECOMMENDATIONS

**Conclusion**
Digital transformation has a significant impact on strategic change processes in China. Digital transformation enables organizations to leverage new technologies, data, and platforms to create value, enhance customer experience, and improve efficiency. Digital transformation also challenges organizations to adapt to changing customer needs, market dynamics, and competitive pressures. To succeed in digital transformation, organizations need to develop a clear vision, align their culture and capabilities, and implement agile and innovative practices. Digital transformation is not only a technical or operational issue, but also a strategic and cultural one. Therefore, organizations need to embrace digital transformation as an opportunity to transform their business
models, processes, and mindsets. In conclusion, the impact of digital transformation on strategic change processes in China has been profound and multifaceted. As China rapidly embraced digital technologies over the past decades, it has fundamentally reshaped the way businesses and organizations operate, compete, and adapt to changing environments.

Digital transformation has accelerated strategic change processes by enhancing data-driven decision-making. The availability of vast amounts of data, coupled with advanced analytics and artificial intelligence, has empowered Chinese companies to gain deeper insights into market trends, customer behaviors, and operational efficiencies. This data-driven approach has enabled more agile and informed strategic decision-making, allowing organizations to respond swiftly to market dynamics. Digital transformation has facilitated greater connectivity and collaboration, both domestically and globally. Chinese firms have leveraged digital tools and platforms to forge partnerships, expand their reach, and tap into new markets. The advent of e-commerce and digital platforms has democratized access to global markets, enabling businesses of all sizes to participate in international trade.

Recommendations

Theory

Researchers and scholars should work on creating a comprehensive framework specifically tailored to the Chinese context. This framework should incorporate the unique characteristics of China's digital ecosystem, such as the prevalence of super apps and unique social media platforms. Such a framework would contribute to the broader theory of digital transformation by providing insights into the intricacies of digital adoption in a rapidly evolving market. There is a need to develop theoretical models that bridge the gap between traditional business strategies and digital transformation efforts. This integration is essential in a market like China, where companies often operate in both the physical and digital realms. The development of such models would provide a more holistic understanding of strategic change processes, offering guidance on how companies can effectively balance their digital and non-digital strategies.

Practice

Given the importance of human resources in digital transformation, companies in China should invest in developing digital talent internally. Practical recommendations include establishing digital academies, fostering a culture of continuous learning, and partnering with educational institutions to ensure a steady pipeline of digitally skilled employees. Chinese organizations should increasingly leverage the vast amount of data generated in the digital sphere. By investing in data analytics and artificial intelligence (AI), companies can gain actionable insights that drive strategic change. This practice will be especially relevant to industries such as e-commerce, fintech, and healthcare.

Policy

Policymakers in China should continually adapt regulations to accommodate the dynamic nature of digital transformation. This includes creating an environment conducive to innovation while also safeguarding consumer privacy and data security. Collaboration between government agencies, industry stakeholders, and academia is crucial to strike the right balance.
Small and medium-sized enterprises (SMEs) should receive targeted support to navigate the digital transformation landscape. Policies that facilitate access to digital infrastructure, funding, and training can empower SMEs to compete effectively in the digital age, fostering economic growth and innovation.
REFERENCES


