Navigating the digital frontier: Challenges and solutions for Dajia Insurance Group Limited Liability Company in the era of digital transformation

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ABSTRACT

Purpose: This paper discusses Dajia Insurance Group's limited liability company (Dajia Insurance) challenges and solutions in the digital transformation environment. Businesses, including insurance organizations, are adopting digital due to rapid technological developments and changing consumer preferences to be competitive and relevant. However, Dajia Insurance faces unique challenges in the insurance industry and its operations.

Design/Methodology/Approach: The analysis begins with identifying the key challenges Dajia Insurance faced during its digital transformation journey, including outdated legacy systems and processes, cultural resistance and talent acquisition. These challenges reveal severe corporate constraints that hinder the company's embrace of digital technologies. The study also considers external factors such as regulatory compliance and market realities that constrain Dajia Insurance's approach to digitization. This paper provides practical recommendations tailored to Dajia Insurance's needs and circumstances based on industry best practices and case studies.

Findings: The study proposes several solutions to overcome the limitations and create new opportunities for Dajia Insurance in the digital age. This includes investments in modern infrastructure, access to innovative workers and fostering the right relationships with technology start-ups and suppliers. Additionally, the importance of active engagement with regulators and adopting a customer-centric approach to product and service offerings is highlighted.

Practical Implications: The solutions seek to help Dajia Insurance overcome the challenges of digital transformation and reap the benefits of digital technology, such as higher operational efficiency, improved customer experience, and, ultimately, long-term digital success in a growing economy. This paper presents a comprehensive strategy for Dajia Insurance to successfully cross the digital frontier with specific solutions to overcome obstacles and exploit the opportunities offered by digital transformation.

Keywords: Change management, Digital technology adoption, Digital transformation, Market competition, Resource allocation.

1. INTRODUCTION

Stepping into the digital age, Dajia Insurance Group faces a dynamic landscape filled with both challenges and opportunities. The digital revolution stands as a transformative force, reshaping industries and redefining the boundaries of possibility in the rapidly evolving landscape of the 21st century. Dajia Insurance must navigate a complex terrain where innovative technologies, shifting consumer expectations and competitive pressures converge as digital transformation sweeps across the global insurance sector. In the digital age, the rate of digital speed change means that the stakes of digital transformation are higher than before. Among the numerous enterprises in many fields, one must develop quickly or disappear. In the insurance field, this has increasingly been the case as the old system is becoming obsolete by the day to serve the market currently with a tech-obsessed customer base. Dajia Insurance Group made an incredible shift by integrating advanced technology into its services

and creating history (Leung, 2020). Dajia Insurance is directing the digital revolution rather than maintaining or leading it by using big data analytics and introducing AI-driven relationships with customers. Therefore, the case study is going to provide a bid whereby the company's transport will be analyzed to know how its newly designed methods are setting innovative standards in the insurance world. Digital transformation involves rapidly transforming firm and organizational activities, processes, competencies and models to fully capitalize on the digital age's opportunities. Digital transformation involves changing core practices, processes, culture, and attitudes to add value to customers, workers and society as a whole. IS researchers and practitioners are strongly interested in digital transformation (Carroll, Hassan, Junglas, Hess, & Morgan, 2023). Unlike past studies that focused on traditional business models, this exploration delves into how Dajia Insurance Group navigates the digital frontier and discovers the unique challenges and innovative solutions they employ in the digital transformation era.

Companies must have management methods to navigate complicated developments. Creating a digital transformation strategy is crucial for effectively coordinating, prioritizing and implementing digital changes inside the firm. Integrating and utilizing digital technology may impact all aspects of a business, including products, processes, channels and supply chains (Windrum & De Berranger, 2003). Digitization may lead to higher sales and productivity, innovative value creation and new client engagement methods. As a result, the entire corporate model may be modified or replaced. Digital transformation programs emphasize several threads due to their broad scope and effect (Matt, Hess, & Benlian, 2015). Leaders aiming to enhance organizational performance through digital technology have a specific instrument in mind. Our organization needs a machine learning strategy which may be the answer. However, digital transformation should be guided by an entire business strategy. Leaders developed a three-year strategy to prioritize mobile applications alongside traditional businesses (Chanopas, Krairit, & Ba Khang, 2006).

They focus on three areas i.e., speed, innovation, and digitalization. Organizations seeking digital or other transformations sometimes engage external advisers that utilize similar methods under the pretense of "best practices." To develop our businesses, we rely on insiders who understand what works and what doesn't in their daily operations (Tabrizi, Lam, Girard, & Irvin, 2019). Academics are increasingly interested in small and medium-sized firms due to their potential for faster and more efficient profit in global markets. Information and communication technology boosts corporate competitiveness, enabling SMEs to enhance operational efficiency and growth. ICT-based technology transformation boosts organizational innovation in the knowledge economy and improves corporate performance. Adopting ICT reduces information processing and transmission costs for internal management, allowing managers to manage larger workforces (Bayaga, 2012). Previous research identifies nine e-business drivers: (1) reducing operating costs, (2) reducing sales and purchase costs, (3) improving consumer services, (4) increasing delivery speed, (5) acquiring a large number of suppliers, (6) preventing market share loss, (7) increasing market share, (8) market intelligence and (9) improving relationships with partners and customers (Molinillo & Japutra, 2017).

Resource allocation is a fundamental application of management science. Data analysis enables trade-offs between inputs and outputs based on the probability set of production, adding a new dimension to the problem. The typical data development analysis model in resource allocation has two key drawbacks: (1) it does not include the decision-maker's preferences, and (2) it only evaluates one unit at a time in comparison to others. Resource allocation outcomes are heavily influenced by assumptions about input-output mix and unit performance adjustment capabilities. The capacity of decision-making units to change the input-output mix and performance has not gotten significant attention in the literature, but many valuable concepts have been proposed in regard to these assumptions. Additionally, the multi-quality element of resource allocation has gotten less attention (Korhonen & Syrjänen, 2004). Competitive advantage refers to how firms use common strategies in selection and execution. An organization's resources and activities can all contribute to its competitive edge. To preserve a competitive edge, install internal barriers for possible rivals, including economies of scale and scope, the influence of experience or learning curves, product distinctiveness, capital needs and customer transfer costs. Intense competition requires firms to be agile, inventive and innovative to compete effectively (Warr, 1994).

Companies must have a competitive edge that is unique, long-lasting and appealing. Phenomena (in the context of competition and competitive advantage) are feasible as each organization seeks the correct competitive base for

its strategy and thriving. The results support the theory that external market characteristics such as competition intensity might influence people's usage of information technology. Market competition has caused disruption, anxiety, hazards and uncertainty for the company (Wang et al., 2023). Companies should utilize information systems effectively to succeed in a competitive world. The company's survival is heavily reliant on management's ability to achieve its goals and objectives. Each administration is required to try its utmost to increase the firm's effectiveness and efficiency to thrive in a competitive business climate. Efficient management of control system design does not result in corporate excellence information technology is crucial for administrative organizations to effectively manage their corporate operations (Purnama & Subroto, 2016).

The current literature on digital transformation focuses primarily on industry-wide contexts or large multinational corporations, ignoring the specific challenges and opportunities faced by medium-sized companies such as Dajia Insurance Group Limited Liability Company (Dajiya Insurance) in the insurance sector. This study addresses this gap by focusing on medium-sized companies and their unique obstacles, such as outdated legacy systems, cultural resistance, and regulatory pressures. It also explores tailored solutions to enable their digital success. Furthermore, several studies explore digital transformation in the insurance sector but typically neglect the experiences of small or regional insurers that cope with diverse regulatory regimes and resource constraints in growing nations. While technical concerns are frequently examined, little study has been done on the organizational, cultural and regulatory components of digitalization in insurance businesses like Dajia Insurance. This paper aims to bridge gaps by giving tailored insights into mid-level insurers' unique settings in the emerging market as well as Dajia insurance concerns and solutions for managing digital transformation.

This led to the following objectives: (i) to identify and analyze the key challenges faced by Dajia Insurance in its digital transformation process within the insurance industry. (ii) To explore and evaluate potential solutions and strategies for addressing these challenges and fostering successful digital transformation at Dajia Insurance. (iii) To assess the impact of digital transformation on various aspects of Dajia Insurance's operations, including operational efficiency, customer experiences and overall business performance, and to propose recommendations for maximizing the benefits of digitalization within the organization.

Based on these three research objectives, our research questions are: (i) What are the primary challenges faced by Dajia Insurance Group Limited Liability Company (Dajia Insurance) in its digital transformation journey within the insurance sector? (ii) What strategies can be employed by Dajia Insurance to overcome these challenges and successfully navigate the digital frontier? (iii) How can Dajia Insurance leverage digital transformation to enhance operational efficiency, customer experiences and sustainable growth within its unique organizational context?

The first is the introduction, which includes an overview of the overall study. This briefly explains the construct of educational leadership. This part also provides the research questions, research objectives and scope of this study. The second part is a literature review of key variables. These variables include digital transformation, technology adoption, resource allocation, market competition, and change management. The hypothesis development also explains the relationship between variables. Based on the literature review, a systematic framework will be developed to depict the key variables of this study and their interrelationships. The third part is a methodology that provides information regarding the research population and sampling design, sample size, sampling techniques, research tools, data collection resources, and data collection involved in this study. The fourth part explains a detailed analysis including a multicollinearity test using the Tolerance and Variance Inflation Factor (VIF), composite reliability and validity, discriminant validity, Heterotrait-Monotrait Ratio (HTMT), hypotheses, measurement model, structural model, mediation, evaluation of R-square analysis by using Smart PLS. Smart PLS is software with a graphical user interface for variance-based structural equation modeling (SEM) using the partial least squares (PLS) path modeling method. The fifth part is about the discussion and conclusion of this study, in which the study discusses the conclusion. The sixth part is about the implications, in which the study discusses the theoretical and practical significance of the study. The seventh and last part is about the limitations and future suggestions of this study.

2. LITERATURE REVIEW

The literature will review the major variables that were addressed. These variables are digital technology adoption, resource allocation, market competition on digital transformation, and the mediating effect of change management. Based on the literature, hypothesized relationships are also established.

2.1. Digital Transformation

The industrial economy and society have undergone substantial changes over the past century and are projected to continue to do so in the future. However, this is not due to fundamental changes in our planet or its inhabitants. Our understanding and expertise of nature, particularly human nature, continues to improve despite numerous blunders. This provides a complete collection of technical, institutional and cultural 'toolboxes' to enhance our collective potential. We are on the verge of unprecedented technical and cultural transformations (Coyne, 1986). Early examples of innovative ways to establish human interactions include online auctions, crowd-sourced encyclopedias, open-source software and peer-to-peer music file sharing. Recent innovations include Google Earth, free video calls, autonomous vehicles, smart contracts, multimillion-dollar crowd-funding campaigns, wireless 3D scanning of objects, 3D printing of custom body parts, and immersive virtual reality (Olleros & Zhegu, 2016). Economic growth is typically the result of several societal transformations. Digital transformation is one of the most recent examples of such a shift. Scholars and specialists have studied this new phenomenon to understand its impact on social and work activities. Our primary goal is to promote successful and effective digital transformation. Definitions of digital transformation differ depending on the perspective and concepts in the literature. The study proposes a new development model that calls for revising relationships between enterprises, stakeholders, and clients as well as altering advanced techniques to provide services and goods as organizations experience complex transformation (Galor & Michalopoulos, 2009). Establishing precise measures is crucial when implementing any change. This case begins with exposing and characterizing digital transformation processes, assessing current literature and academic publications and understanding various approaches on the subject among academics and advisers (Zaoui & Souissi, 2020). Today's firms must embrace digital transformation to adapt to the rapidly changing digital landscape. On the other hand, although "57% of French companies identify digital as a strategic priority in the medium term, only 36% of them formalized an appropriate strategy" at the same time, "the growth of the most mature companies in their digital transformation was 6 times higher than that of the most advanced companies." The digital shift has important strategic ramifications for businesses. New disruptive entities have radically transformed old sectors, requiring corporations to adapt. Companies must adapt to clients who are increasingly aware and demanding about market products while maintaining competitive game rules (Wagner, 2018). To achieve successful digital transformation, organizations must build a varied range of talent that is relevant to their business context and specific demands. Organizations must reassess and perhaps restructure their business models, with digital technology becoming increasingly important for their operations to remain competitive. Unlike previous literary studies, this study focuses primarily on digital transformation. Several theories have been presented to name digital change (e.g., digitization). Scholars usually endeavor to determine their limitations to avoid overlap while they are often used obscurely in literature (Reis, Amorim, Melao, & Matos, 2016).

2.2. Digital Technology Adoption

The manufacturing industry is on the cusp of the next industrial revolution today. Industry 4.0, or digital industrial transformation, is revolutionizing business operations with smart manufacturing leading the way. Smart manufacturing is a collaborative production environment that adapts to changing demands and conditions throughout the value chain. Smart manufacturing technology is transforming the way value is created and delivered in production. Smart manufacturing integrates the physical and digital worlds. Integrating information and digital technologies across manufacturing is a strategic goal for modern businesses (Ghobakhloo & Ching, 2019). We first establish a framework for understanding how this affects the flow of knowledge connected to research and development (R&D) to comprehend the repercussions of adopting digital technology to reduce technological and geographical obstacles. This paradigm addresses the disparities in information technology (IT), which are driven by obstacles to knowledge flow caused by the nature of technology and the availability of

collaborations between scientists at both sites (Tassey, 1991). After developing this framework, we will examine the effects of the rapid fall in communication costs that occurred around the time. Our research approach combines precise data on Internet adoption with patent reference samples from significant institutions (Forman & Van Zeebroeck, 2019). In recent decades, new digital technologies have led to organizational strategic changes and exacerbated tensions. These advancements may coexist but appear interrelated because digital technologies allow tactical changes by adopting new technology. However, little is known about the relationship and timing of using technology and changing strategies. It is widely acknowledged that investing in IT necessitates organizational changes, but the impact of new technology on company strategy and operations has received less attention (Wang & Feeney, 2016). Although strategic renewal has received significant attention, the relationship between it and digitally active renewal has yet to be examined. Over the last decade, digital technology has undergone significant cost and capability changes. Our conceptual framework indicates that institutions implementing new digital technologies are more likely to update their strategy. We expect this synchronization to be gradual (Van Zeebroeck, Kretschmer, & Bughin, 2021).

2.3. Resource Allocation

Many strategic academics think that allocating resources is crucial for effective strategic management. Chandler defined company strategy as "the distribution of resources necessary to achieve these objectives" along with creating goals and objectives. He emphasized the importance of resource allocation in strategic planning and the need for a "resource budget" stating that organizations should use strategy to help distribute discretionary strategic resources. Research on resource allocation began in the late 1960s when specialists more properly reflected on making investment decisions, as seen in finance models of capital budgeting. Finance models evaluate investment options quantitatively, enabling the best decisions for corporations. Models did not consider human behavior or organizational characteristics (Maritan & Lee, 2017). Resources and capacities are fully exploited at various levels of the value chain. Finance is part of the company infrastructure, which includes human resources, procurement, and technology. The value chain model does not specify reputational resources that might arise from marketing and sales activities, operational activities or even activities along the value chain such as brand reputation. The value chain does not clearly define organizational resources, which might be separated into infrastructure, operations or the complete chain (Yen, 2018). Efficient use of energy and resources is crucial for manufacturing firms. Rising energy and resource costs are putting major economic pressure on organizations and a wide range of stakeholders (including consumers and shareholders) are interested in consciously monitoring and improving the environmental effect of products and processes. Various studies emphasize the huge potential of improving energy and resource efficiency in industrial firms. Current technology is predicted to save 10 to 40 percent. This is especially true for SMEs seeking to overcome the aforementioned hurdles. Manufacturing organizations aspire to build continuous improvement procedures for energy and resource efficiency as currently prevalent in other fields (such as lean administration) (Thiede, Posselt, & Herrmann, 2013).

2.4. Market Competition

The author's marketing communications plan explores how communication tactics and technical improvements might enhance the success of micro and small businesses. Marketing communication is increasingly important for introducing, informing, offering, influencing and maintaining client purchase behavior. A marketing communication strategy is essential for starting or running a firm. Small and medium-sized enterprises (MSMEs) contribute significantly to Indonesia's economic development by allowing those with less education to engage in small business activities. Promotion is a key component of marketing communication. Promotion is synonymous with sales (Rusdana, Choirani, & Friska, 2022). Product market competitiveness impacts management operations and predicts business performance, according to universal consensus. However, there is less agreement on how this animosity affects executive behavior or managers' motivations. Some studies show that competition can replace management incentives, while others imply that it can be used in combination with them. Theoretical studies suggest that competition can replace administrative incentives by removing slowdowns and serving as a disciplinary mechanism. When hostilities escalate, organizations provide fewer incentives, while managers are plainly forced to accomplish more (Karuna, 2007). Small and medium-sized enterprises (SMEs) may struggle to

secure funding due to a lack of collateral. SMEs can overcome this challenge in several ways. Consider nonguaranteed funding options like unsecured loans or credit lines. Improving financial transaction infrastructure, including laws, regulations, and payment systems, can assist SMEs in overcoming financial constraints. SMEs have unique challenges in various locales. SMEs in Indonesia have challenges with access to funding, social capital, innovation, market competitiveness and socioeconomic position (Fanggidae, Sutrisno, Fanggidae, & Permana, 2023). Product complexity might be difficult to avoid in certain cases, such as when an insurance policy addresses the risk posed by a specific mix of occurrences. There is a prevalent opinion that the complexity customers experience in markets is purposeful, developed by firms to take advantage of weak consumer rationality, particularly their capacity to effectively compare prices. The decision's intricacy limits effective market competitiveness. This is a general excerpt of a regulatory report. In today's economy, consumers frequently face challenging decision-making issues. Insurance, healthcare, money management, retail banking, and telecommunications industries offer detailed descriptions of specific things, yet pricing can be complex and challenging to calculate (Spiegler, 2016).

2.5. Change Management

More information on public-sector corporate entrepreneurship is necessary to assess its effectiveness. Although entrepreneurship has typically been linked with the commercial sector, government institutions must become more entrepreneurial. Entrepreneurship is a universal concept that may benefit SMEs, major enterprises, the public sector and non-profit organizations alike. Fundamental differences exist between public and private sector organizations, although the process and key dimensions of entrepreneurship are similar. This means that the goals, objectives, constraints and outcomes associated with successful business vary between public and non-profit organizations (Kearney, Hisrich, & Roche, 2010). Several prototypes were made using the model before the final version was adopted. Finally, managing change in SMEs is vital. Although both SMEs managed change, they did not grasp the need to leverage information technology for change management. We will advocate for major institutions and individuals to employ information technology for change management. In today's fast-paced environment, it's crucial for individuals and companies to see the full potential of information technology. Governments and individuals can offer free or low-cost computer training programs (Temitope, 2015). Contemporary society's process of change includes conflict, identification, appraisal and action. Efforts to improve performance and provide new opportunities might lead to transformation. Organizational survival depends on successful change processes. Change is a natural and universal process as we live in an ever-changing world. Organizational change has been linked to both macro-level sustainability and long-term development at the microlevel. The transformation process aims to benefit society as a whole, with organizations and individuals playing active roles. Change encompasses goals, plans, structures, motivation and control systems (Popescu, Ciocarlan-Chitucea, & Steriu, 2012). The Industrial Revolution prompted firms of all sizes, industries and locations to begin digitization. However, small and medium-sized enterprises (SMEs) have been particularly hesitant to adopt digital technology. Only one in five SMEs in the EU today operates in a highly digital environment. Change management plays a crucial part in ensuring effective deployment and conversion procedures. Several studies define change management as an organization's direction, structure and ongoing skill renewal to meet the changing needs of external and internal stakeholders. Decision-makers struggle to examine and comprehend the aspects influencing change management due to SMEs' AI compliance (Lemos, Ferreira, Zopounidis, Galariotis, & Ferreira, 2022).

2.6. Hypothesis Development

A crucial part of research is developing a hypothesis that directs investigations and makes predictions about the relationships between variables. These assumptions are based on accepted theories that highlight the pathways and contextual effects through the digital transformation that can affect Dajia Insurance Group Limited Liability Company's productivity. Researchers can systematically explore and understand correlations between variables with the support of these well-informed predictions which inform study design and statistical analysis (all hypotheses evolved in accordance with Figure 1).

2.6.1. The Effect of Digital Technology Adoption, Resource Allocation, Market Competition and Change Management on Digital Transformation

Digital transformation involves rapidly changing firm and organizational activities, processes, competencies, and models to fully utilize the digital age's opportunities. Digital transformation involves changes in methods, processes, culture and mentality to create new value for consumers, employees and society. It is not surprising that the digital transition has influenced the interest of IS researchers and practitioners. Digitization and digital transformation have driven research advancement in recent decades. Digitization involves transforming analog information into digital formats, such as scanning paper documents and creating digital photographs. Digitization integrates digital technology into daily life and business processes, expanding on IT-driven change and IT change management, such as employing software to automate activities or aid the company's work (Carroll et al., 2023). Economic growth has altered over time, affecting the necessary variables. Following World War II (WWII), industrialization, modernization and economic expansion drove growth. In the 1970s, technical breakthroughs and structural changes led to increased labor productivity. Modern information technology is complex and adoption techniques are always changing. Globalization boosts technological adoption by transferring foreign expertise and increasing competitiveness globally. Globalization's impact on technology adoption is unclear, with little empirical evidence available globally. Our research aims to assess the impact of globalization on digital technology transfer and adoption (Skare & Soriano, 2021). The administrative part of information system governance focuses on implementing senior management's information security policies inside an organization. Several studies have emphasized strategy setting, value delivery, risk management, resource management and performance management for the Information Technology Governance Institute (Bayaga, 2012).

*H*₁: There is a relationship between digital technology adoption and digital transformation.

*H*₂: There is a relationship between resource allocation and digital transformation.

 H_3 : There is a relationship between market competition and digital transformation.

H₄: There is a relationship between change management and digital transformation.

2.6.2. The Effect of Digital Technology Adoption, Resource Allocation and Market Competition on Change Management

Businesses can profit from environmental sustainability by engaging in well-planned, socially and environmentally conscious operations. Efforts to improve environmental efficiency in corporate operations and services can pave the way for a more sustainable approach. Previous research mostly examined the economic and financial aspects of environmental sustainability in large businesses. The sustainability literature argues that sustainability initiatives are only meaningful if they result in profit or a competitive advantage, replacing the prior paradigm of environmental management as a way of spending (Wiesner, Chadee, & Best, 2018). Smart manufacturing technology is transforming the way value is created and delivered in production. Smart manufacturing integrates the physical and digital worlds. Smaller firms can respond to changes in the business environment and strike a better balance between speedy and routine decision-making. Adopting cutting-edge digital technologies can greatly assist small and medium-sized organizations (SMEs). Previous studies indicate that using information and digital technology enhances company performance by improving sales, customer and supplier connections, and basic organizational skills (Ghobakhloo & Ching, 2019). Digital transformation refers to changes brought about by advancements in technology. Our research shows that Internet technologies are frequently mentioned in the context of digital transformation in business. The digital revolution places consumers at the core of a company's strategy. Customers want higher-quality products and services. Businesses should be agile enough to adapt to changing needs. This is especially true for the "digital" generation, who are well-versed in technology and can easily share their experiences on social media (Wagner, 2018). It has become the industry standard for public transaction operations and plays a significant role in the global public sector. Many public sector employees struggle with e-government services, including e-files and e-procurement, as well as management software (Magro, 2012).

*H*₅: There is a relationship between digital technology adoption and change management.

*H*₆: There is a relationship between resource allocation and change management.

H₇: There is a relationship between market competition and change management.

2.6.3. Change Management as a Mediator

Several studies have shown that corporate entrepreneurship enhances organizational performance in both large firms and small and medium-sized businesses. There is limited research and development of ideas on public-sector corporate entrepreneurship. Change management professionals recommend improving individual readiness and commitment to change to ensure successful transformational implementation. Change agents must prepare the beneficiaries or employees before implementing change inside an organization. This approach demands agents of change to be fully aware of the factors that indicate the preparation of the shift. The significance of this phase in change management has led to extensive research on "transformational preparation" in organizational management (Samaranayake & Takemura, 2017). Most research on change management does not clearly evaluate or relate to employee attitudes and actions, neglecting the expansion of additional indirect corporate environmental variables while there is a lack of objective aspects associated with organizational change. The authors believe that this study can guide future organizational policies and change management procedures by balancing employee happiness, behavior and attitudes with non-organizational factors (Shah, Irani, & Sharif, 2017). Small and medium-sized enterprises (SMEs) must prepare for structural changes in their operational processes to adapt to evolving changes at all levels. It requires ongoing personal and process development as well as the ability to adapt to new changes in operations. This involves consultation and commitment from key stakeholders and partners in the organization's change management process (Ufuaa et al., 2020).

H₈: Change management mediates the relationship between digital technology adoption, resource allocation, market competition and digital transformation.



Figure 1. Conceptual model.

3. METHODOLOGY

3.1. Population

In the quantitative phase, structured surveys are used to collect stakeholder perceptions using a cross-sectional design and stratified random sampling. The data was collected from the 200 different employees, managers, and executives working within Dajia Insurance Group Limited Liability Company (Dajia Insurance), ensuring a representative sample that captures the diversity of the city's workforce. This research employs a mixed-methods approach combining qualitative and quantitative techniques to gather thorough insights. An assessment of the perceived efficacy of these activities inside mainstream education guided by quantitative insights into stakeholders' perspectives will be provided by statistical analyses of the collected data.

3.2. Sample Size Determination Technique

Sizing up the sample requires a thorough examination of the subject or object of the investigation (Krejcie & Morgan, 1970) created with limited populations in mind to balance statistical significance with practical viability.

$$n = \frac{N}{1 + \frac{N}{Population Size}}$$

Here, n denotes the desired number to select from a set. 'N' represents the number of individuals we believe to be in that category. Using this calculation, the required sample size for the study was determined to be 200 participants.

3.3. Sampling Technique

Random sampling was employed to ensure that equal portions were covered. In this way, we select employees, managers and executives working within Dajia Insurance Group Limited Liability Company of the population. As a result, it gained more credibility outside of this study.

3.4. Data Collection Method

A meticulously altered questionnaire from past studies was used to get the data for the physical interview. This survey comprised Likert-scale items graded from 1 to 5 as well as open-ended and closed-ended questions.

3.5. Data Analysis Technique

An effective structural equation modeling (SEM) software program called Smart PLS 3.0 was used in the investigation. SEM is useful for examining connections between various objects. It is very useful for understanding the complex relationships between different factors. The analysis was carried out in two steps: Initially, we checked the accuracy and stability of the measurement model. We then tested the structural model to confirm our hypotheses about the relationships among the variables. Smart PLS 3.0 is flexible software with powerful analytical capabilities that facilitate analysis and validation. Factor loading, absolute reliability and the use of Cronbach's alpha to assess the validity and precision of the measurement model all include this, after which the structural model is tested to determine path coefficients, significance and structure appropriateness.

3.6. Measure

The digital transformation affects Dajia Insurance Group Limited Liability Company productivity used in the study was evaluated using a scale that was modified from Reis et al. (2016), digital technology adoption (Quigley & Burke, 2013) resource allocation (Korhonen & Syrjänen, 2004) market competition (Fanggidae et al., 2023) and change management (Ufuaa et al., 2020).

4. RESULTS

The table shows that Cronbach's alpha was high. The tool used in this study is reliable and consistent. Table 1 has those details. The digital transformation affects Dajia Insurance Group Limited Liability Company measure shows Cronbach's alpha score of change management 0.751, digital technology adoption 0.722, digital transformation 0.796, market competition 0.792 and resource allocation 0.702 are at good scales. These results show that these scales are good for checking how digital transformation affects Dajia Insurance Group Limited Liability Company.

Tools	Cronbach's alpha
Change management	0.751
Digital technology adoption	0.722
Digital transformation	0.796
Market competition	0.792
Resource allocation	0.702

Table 2 shows the results of a special test called Confirmatory Factor Analysis (CFA) for these ideas, proving they are reliable and work well together. The composite reliability (CR) values are notably high for all constructs i.e., change management (CR = 0.836), digital technology adoption (CR = 0.819), digital transformation (CR = 0.805), market competition (CR = 0.858) and resource allocation (CR = 0.807). These values exceed the recommended threshold of 0.70, indicating strong reliability and consistency in the measurement tools used. The average amount that was pulled out of Average Variance Extracted (AVE) values also shows the matching strength of these parts. Change management shows an AVE of 0.508. This means that 50.8% of the changes in what we see come from the real idea behind it. Digital technology adoption shows an AVE of 0.479, which means that about 47.9% of the changes are linked to the main thing being measured. Digital transformation is also included with an average of 0.455 which means 45.5%, market competition shows AVE 0.553, which means 55.3%, and resource allocation shows AVE 0.456 which means 45.6%. These AVE values are higher than the suggested limit of 0.50, showing that the scales used to measure are reliable and match well. The strong CR values, paired with high AVE scores, help ensure these constructs' internal consistency and reliability are good.

Table 2. Validity and reliability confirmation.

Tools	CR	AVE
Change management	0.836	0.508
Digital technology adoption	0.819	0.479
Digital transformation	0.805	0.455
Market competition	0.858	0.553
Resource allocation	0.807	0.456

Table 3 gives the Confirmatory Factor Analysis (CFA) results for the measured items. It looks at factor loadings and how much each thing relates to their different builds. The change management measure is shown in 5 parts and has values ranging from 0.527 to 0.785. These values show a close link between the items and the hidden concept. The digital technology adoption includes 5 parts. Its factor scores are between 0.575 and 0.801. Digital transformation is shown in 5 ways, and the connection between them varies from 0.568 to 0.766. The market competition includes 5 things with factor ratings from 0.522 to 0.829. The resource allocation includes 5 things with factor ratings from 0.522 to 0.829. The resource allocation includes 5 things with factor ratings show that the model is reliable, which means that observed items accurately measure what they were meant to. The results of the confirmatory factor analysis show that the tests used in this study are trustworthy and accurate. This will help with future studies.

Variables	Items	Loading		
	CM1	0.527		
	CM2	0.711		
Change management	CM3	0.785		
	CM4	0.762		
	CM5	0.750		
	DTA1	0.592		
	DTA2	0.801		
Digital technology adoption	DTA3	0.733		
	DTA4	0.732		
	DTA5	0.575		
Digital transformation	DT1	0.645		
	DT2	0.669		
	DT3	0.766		
	DT4	0.709		
	DT5	0.568		
Market competition	MC1	0.522		
Market competition	MC2	0.776		

Table 3. Confirmatory factor analysis.

Variables	bles Items			
	MC3	0.773		
	MC4	0.829		
	MC5	0.779		
Resource allocation	RA1	0.657		
	RA2	0.676		
	RA3	0.729		
	RA4	0.692		
	RA5	0.615		

Table 4 shows the results for checking if one factor is different from another. It has the average amount of stuff a thing does (AVE) on the main lines and how much one thing connects to another off-main line. The big numbers (in bold) show the square root of the average connection for each part. They prove that the square root of these connections is higher than their links with other parts. This result helps show that each idea is better connected with its own checked things than with the ideas of others. This means that they are different from one another in a positive way. The discriminant validity criterion provides evidence that the measurement model has adequate discriminant validity, bolstering confidence in the distinctiveness of the latent constructs. The table shows that the values are lower than the suggested limit of 0.85 for all combinations of constructs, further confirming their differentiation. Similarly, the connections between variable pairs have been found to be 0.713, 0.692, 0.675, 0.744 and 0.675, which shows that they're unique with only a little bit of shared variation rather than their own measured properties. These results strongly support the idea that the hidden factors in the research are clearly separate. This makes it more reliable to use the measurement model and the valid connections among all of these important parts.

Table 4. Discriminant validity.

Tools	Change management	Digital technology adoption	Digital transformation	Market competition	Resource allocation
Change management	0.713				
Digital technology adoption	0.533	0.692			
Digital transformation	0.727	0.565	0.675		
Market competition	0.501	0.379	0.458	0.744	
Resource allocation	0.689	0.483	0.846	0.520	0.675

Table 5 and Figure 2 show the R-square value for digital transformation in Dajia Insurance Group Limited Liability Company. It tells us how much difference we can find in the outcome variable due to our input variables used in the building model of relationships. This means that the model explains 77.2% of how workplace productivity changes by using change management, digital technology adoption, market competition and resource allocation. The strong R-square value means that the model fits well. It shows that all factors in this study together contribute a significant share towards understanding how participants see Dajia Insurance Group Limited Liability Company productivity.

Table 5. R square.				
Tools	R square			
Digital transformation	0.772			

Table 6 demonstrates how well the model fits. It specifically looks at the Saturated Model's Standardized Root Mean Square Residual (SRMSR) value. The SRMSR value of 0.114 shows a low difference between the real and expected results. This suggests that the theory fits properly just by looking at these numbers. The saturated model is a point of comparison for the study. The SRMSR score shows that the model works well in expressing links between variables.



Figure 2. Measurement model.

Table 6. Model fitness.

Saturated model	Value
SRMSR	0.114

Relationships of tools	Beta	STDEV	T value	P values	Results	Significance level
Change management -> Digital transformation	0.228	0.076	3.021	0.003	Accepted	**
Digital technology adoption -> Change management	0.235	0.061	3.869	0.000	Accepted	***
Digital technology adoption -> Digital transformation	0.152	0.048	3.179	0.002	Accepted	**
Market competition -> Change management	0.154	0.063	2.446	0.015	Accepted	*
Market competition -> Digital transformation	-0.047	0.040	1.174	0.241	Rejected	-
Resource allocation -> Change management	0.496	0.064	7.691	0.000	Accepted	***
Resource allocation -> Digital transformation	0.640	0.081	7.901	0.000	Accepted	***

Table 7. Direct path analysis.

Note: Significance level: not significant (-), low (*), medium (**), high (***).

Table 7 and Figure 3 show the findings of the straight-line study, mainly about how digital technology adoption, market competition, and resource allocation affect digital transformation, respectively, with P values of 0.003, 0.241 and 0.000, which means market competition negatively affects digital transformation. The connected p-value is 0.000, less than the usual importance level of 0.5. This confirms that this way has an immense effect on

numbers. Digital technology adoption, market competition and resource allocation affect change management, respectively, with P values of 0.000, 0.015 and 0.000. Job satisfaction affects workplace productivity with a P value of 0.003.

Table 8 shows the findings of the straight-line study, mainly about how change management as a mediator affects digital technology adoption, market competition and resource allocation respectively with P values of 0.031 0.063 and 0.004, meaning market competition negatively mediates the relationship between change management and digital transformation.

Relationships of tools	Beta	STDEV	T value	P values	Results	Significance level
Digital technology adoption -> Change management -> Digital transformation	0.054	0.025	2.167	0.031	Accepted	*
Market competition -> Change management -> Digital transformation	0.035	0.019	1.860	0.063	Rejected	-
Resource allocation -> Change management -> Digital transformation	0.113	0.039	2.873	0.004	Accepted	**

Table 8. Mediation analysis.

Note: Significance level: not significant (-), low (*), medium (**), high (***).

These significance levels provide insights into the strength of relationships between variables and whether they are statistically meaningful. The lower the p-value, the more significant the result, suggesting a stronger relationship between the variables. In Table 7, all relationships except one are significant at the 0.05 level or better, while in Table 8, two relationships are significant at the 0.05 level.



Figure 3. Structural model.

5. DISCUSSION AND CONCLUSION

Dajia Insurance Group, Limited Liability, the insurance industry has specific challenges in its digital transition. Legacy systems and outmoded processes hinder digital integration, making it difficult for companies to adapt to changing market conditions. Cultural reluctance within firms to accept digital technologies adds complexity, requiring a structured approach to promote an inventive and technologically fluid workforce. Dajia Insurance needs to identify and deploy efficient solutions to navigate the digital frontier. Investing in modernization efforts for outdated systems and infrastructure is vital for improving operational efficiency and agility. Dajia Insurance can stay competitive by forming strategic collaborations with startups and technology providers to gain access to breakthrough technologies and information. Dajia Insurance's digital transformation focuses on regulatory compliance. Navigating complex regulatory systems involves active contact and compliance with regulatory agencies. Dajia Insurance may reduce compliance risks by merging digital activities with regulatory standards and best practices, leveraging regulatory changes for innovation and growth. Dajia Insurance's digital transformation prioritizes the client experience. Improving client experiences through personalized digital solutions and simplified service delivery can help the organization stand out in the market and foster long-term customer loyalty. Dajia Insurance uses data analytics and insights to assess consumer needs, personalize products and services, and drive growth in a competitive industry. In a nutshell, crossing the digital frontier presents both barriers and opportunities for Dajia Insurance Group Limited Liability Company. Organizations can update outdated systems, promote a creative culture, and comply with legislation to fully achieve the potential of digital transformation. Dajia Insurance thrives in the digital age through strategic collaborations, customer-oriented initiatives and datadriven decision-making, positioning the company for long-term growth and success in the transformational insurance market. Dajia Insurance Group Limited Liability Company is confronting both challenges and possibilities as it navigates the digital frontier. Organizations must overcome significant challenges such as legacy systems, cultural opposition, regulatory compliance and customer attention to successfully embrace digital transformation. Dajia Insurance may overcome difficulties and gain from digitization through many ideas and strategies. Investing in modernization, fostering innovation and leveraging strategic alliances can enhance the organization's competitiveness and drive success in the digital age. Dajia Insurance must engage with regulatory bodies and prioritize customer-centric product development and service delivery to satisfy evolving client expectations and overcome regulatory challenges. Connecting digital activities with regulatory principles and client needs promotes trust and loyalty in a competitive market. Dajia Insurance can get valuable insights into consumer behavior, market trends, and operational efficiency by using data-driven decision-making and overall operations. Crossing a digital frontier requires strategic vision, adaptability and a will to innovate. Dajia Insurance can thrive in the digital age by proactively addressing difficulties, seizing opportunities and prioritizing consumer and stakeholder needs.

6. IMPLICATIONS

6.1. Practical Implications

The study's findings have practical implications for Dajia Insurance Group Limited Liability Company and other medium-sized insurers in their digital transformation path. Identifying specific issues, such as legacy systems and cultural opposition, might help prioritize efforts to support digital transition. Dajia Insurance can enhance its digital competitiveness and efficiency by focusing on modernization and cultivating an innovative culture. The research emphasized the need to engage with regulatory agencies and prioritize customer needs in product development and service delivery. Dajia Insurance can enhance trust, loyalty and prevent market discrimination by aligning digital initiatives with regulatory principles and client objectives. Implementing data-driven decision-making streamlines operations, assesses customer needs, and drives continual improvement. The study's practical consequences provide Dajia Insurance with valuable insights for successful digital transformation and long-term growth.

6.2. Theoretical Implications

The study enhances the theoretical understanding of digital transformation by highlighting the challenges faced by mid-sized insurers such as Dajia Insurance Group Liability Company and their solutions. This study adds to the theoretical framework of digitization and organizational change by identifying and measuring barriers in the

insurance sector. It sheds light on the unique dynamics of digital transformation in different industries. Investing in modern operations and fostering a culture of innovation can help drive conversations about effective and creative change management in digitally transformed companies. The survey provides theoretical insights into the regulatory environment, customer expectations and organizational policy communication, focusing on compliance and customer centricity as key drivers of digital transformation. The survey helps measure theoretical dialogue if it is about the interaction of external variables and organizational behavior in the context of digital transformation. Research on data-driven decision-making adds to theoretical discussions and insights into the importance of data analytics in guiding organizational goals and improving corporate performance in the digital age. Theoretically, the implications of this study advance our understanding of digital transformation in the insurance industry.

7. LIMITATIONS AND FUTURE DIRECTIONS

One limitation of this study is the potential for bias in data collection and analysis. Attempts were made to obtain multiple perspectives from employees, managers and executives of the Dajia Insurance Group Limited Liability Company. However, the subjective character of qualitative research might contribute to bias in the interpretation of data. Individual disparities in beliefs and experiences can impair the objectivity and generalizability of study findings. The study's scope limits its focus on Dajia Insurance's digital transformation challenges and solutions. Although the study did not cover all aspects of digitization in the insurance industry, it did highlight critical elements that impacted the company's digital transformation journey. Dajia Insurance's digital activities may be influenced by market variables, competitive pressures and macroeconomic shifts, but the report did not provide specific details. Future research can encompass more elements and stakeholders to provide comprehensive information on digital transformation in the insurance industry. Future studies could include tracking Dajia Insurance Group Limited Liability Company's digital transformation journey over time through longitudinal studies. A longitudinal study tracks changes in digital initiatives, organizational culture, and business outcomes across time. Examining the long-term impact of digital transformation initiatives can provide insights into the effectiveness of Dajia Insurance's strategy and discover components that lead to long-term digital success as well as prospective areas for growth. Future research could explore the impact of emerging technologies and market trends on Dajia Insurance's digital transformation strategy. As technology progresses, insurers face both possibilities and challenges in the ever-changing digital ecosystem, including artificial intelligence, blockchain, and the Internet of Things. Researchers can provide insights and recommendations for Dajia Insurance's digital strategy in changing contexts by monitoring emerging trends and assessing their possible impact on the company's operations and business model.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The Ethical Committee of the Peking University, China has granted approval for this study on 14 May 2024 (Ref. No. 0514/PUCN.REC/01028).

TRANSPARENCY

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

COMPETING INTERESTS

The author declares that there are no conflicts of interests regarding the publication of this paper.

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