Journal of Infrastructure, Policy and Development 2024, 8(8), 5909.
https://doi.org/10.24294/jipd.v8i8.5909

Article

Transforming Dajia Insurance Group Limited Liability Company: Assessing the landscape, addressing obstacles, and crafting strategies for digital success

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CITATION

Wu Y. (2024). Transforming Dajia Insurance Group Limited Liability Company: Assessing the landscape, addressing obstacles, and crafting strategies for digital success. Journal of Infrastructure, Policy and Development. 8(8): 5909. https://doi.org/10.24294/jipd.v8i8.5909

ARTICLE INFO

Received: 19 April 2024
Accepted: 12 June 2024
Available online: 23 August 2024

Abstract: Background: Dajia Insurance Group, a limited liability company, recognizes the need for digital transformation to remain relevant and competitive in the changing insurance industry. To be competitive and relevant, businesses including insurance organizations are adopting digital due to rapid technological developments and changing consumer preferences but Dajia Insurance has unique challenges in the insurance industry and its operations. **Purpose:** The analysis begins with the key challenges Dajia Insurance faced during its digital transformation journey, including outdated legacy systems and processes, cultural resistance, and talent acquisition.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 does not embrace digital technologies well. Dajia Insurance's approach to digitization is constrained by external factors including regulatory compliance and market realities. Achieving digital success requires a complex combination of technology, people and processes. This brief focuses on the consumer perspective and outlines ways to increase digital connectivity, streamline operations and personalize the provision of insurance. **Method:** The data was collected from the 200 different senior executives, employees across departments, customers, and external partners within Dajia Insurance Group Limited Liability Company (Dajia Insurance) ensuring a representative sample that captures the diversity of the city's workforce through smart PLS software was used to analyze the data. **Findings:** This study highlights the importance of collaboration and knowledge sharing within firms and throughout the technological ecosystem. Dajia insurance can benefit from strategic partnerships with educational institutions and industry bodies, acquire new knowledge and stay abreast of industry trends and developments. **Originality/implications:** This summary presents the digital transformation process with the unique challenges and capabilities of Dajia Insurance Group's limited liability company. Dajia Insurance aims to be at the forefront of digital insurance by implementing digital initiatives, overcoming barriers and developing an innovative culture.

Keywords: digital success; technological infrastructure; external collaboration; market competition; digital skills and training

1. Introduction

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, 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). 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 bigger workforces (Bayaga, 2012). Digitization may lead to higher sales and productivity, innovative value creation, and new client engagement methods. As a consequence, the entire corporate models may be modified or replaced! Digital transformation programs emphasize several threads due to their broad scope and effect (Matt et al., 2015).

To succeed in a competitive world, companies should utilize information systems effectively. 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 in order 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 and Subroto, 2016). 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 and Japutra, 2017). As technology evolves, organizations must meet increasingly exacting client needs. With the digital revolution, businesses have successfully explored inclusive methods to remain innovative and competitive. Some issues remain regarding our future actions and implementation of these adjustments. The role of workers and employers in the digitalization process has received emphasis. A successful digital twist requires adaptability in technical and operational changes. The workforce's age appears to effect outcomes. Agile methodologies, widely used in software development, are gaining popularity in production (Wolf et al., 2018).

Digital marketing is the process of "promoting products and services using digital technologies, primarily on the Internet, but also including mobile phones, display advertising, and any other digital medium" or "using digital distribution channels." Using computers, mobile phones, smart phones, or other digital gadgets" Digital platforms have transformed marketers' interactions with customers. The widespread usage of computers and mobile devices has led to a significant increase in digital advertising spending. The increasing concentration of advertising dollars demonstrates the effectiveness of digital marketing in reaching target markets and achieving growth goals like increased sales, brand awareness, customer engagement, lead generation, and reduced customer acquisition and support costs (Ritz et al., 2019). Companies must have a competitive edge that is unique, long-lasting, and appealing. Phenomena (context of competition and competitive advantage) are feasible as each organization seeks the correct competitive base for their 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). Collaborating with external parties can enhance firms' inventive capabilities. Corporate cooperation involves a strategic web. A strategic net or network

involves multiple parties, including external parties, to establish common aims and roles in economic cooperation. Collaboration with external parties improves the performance of new equipment through interactions with suppliers, consumers, competitors, and research organizations. Collaboration with these parties can boost your innovative talents (Trio Febriyantoro et al., 2023).

It includes analyzing the current state of the insurance industry, identifying key challenges and opportunities, addressing internal barriers to digital integration, and developing tailored strategies for digital success. The study aims to it will provide practical insights and theoretical implications for companies navigating digital transformation. While analytics can provide valuable insights in terms of early assessment, barrier identification, and strategic planning, how these efforts translate into tangible results over time is digital success consistency may not be the focus. Furthermore, analyzing the strategies developed by Dajia Insurance Group for evolving market conditions and technological developments and adapting to change can provide valuable lessons for other insurance companies with digital transformation journeys a similar for. By addressing this striking gap, the study can provide a more comprehensive understanding of the implications and consequences of digital transformation efforts in the insurance industry.

This led to objectives: (i) To assess the landscape of the insurance industry, including emerging trends, customer expectations, and competitive forces, to identify specific challenges and opportunities for Dajia Insurance Group's digital transformation. (ii) To examine the role of internal factors such as organizational culture, leadership support, and talent development in facilitating or hindering the effectiveness of digital transformation initiatives at Dajia Insurance Group. (iii) To develop strategic recommendations and frameworks tailored to Dajia Insurance Group's needs, focusing on the strategic integration of emerging technologies to enhance customer experiences, optimize operations, and achieve digital success within the insurance sector.

Based on these three research objectives, our research questions are: (i) what are the specific challenges and opportunities faced by Dajia Insurance Group Limited Liability Company in its digital transformation journey within the insurance sector? (ii) How do internal factors such as organizational culture, leadership support, and talent development influence the effectiveness of digital transformation initiatives at Dajia Insurance Group? (iii) What strategic approaches can Dajia Insurance Group adopt to integrate emerging technologies such as artificial intelligence, block-chain, and data analytics into its digital transformation strategy, with the aim of enhancing customer experiences and operational efficiency?

2. Literature review

The major variables that were addressed will be reviewed in the literature. These variables are technological infrastructure, external collaboration, market competition on digital success and the respectively mediating effect of digital skills and training. Based on the literature hypothesized relationships are also established.

2.1. Digital success

The literature on information systems highlights the significant impact of communication technology on company performance. It is especially vital to explore the impact of information and communication technology on individuals, society, and organizations in various circumstances, places, and social boundaries. Previous studies have mostly concentrated on the work of information and communication technologies in large firms, but significant research has also been undertaken on the integration and influence of these technologies in small and medium-sized businesses.

Economic growth is typically the result of several societal transformations. Digital transformation is one of the most recent examples of such 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 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 advance techniques to provide services and goods, as organizations experience complex transformation (Galor and Michalopoulos, 2011). To achieve successful digital transformation, organizations must build a varied range of talent that is relevant to their business context and specific demands. To remain competitive, organizations must reassess and perhaps restructure their business models, with digital technology becoming increasingly important for their operations. Unlike previous literary studies, this study focuses primarily on digital transformation. Several theories have been presented to name digital change (e.g., digitization). While they are often used obscurely in literature, scholars usually endeavor to determine their limitations to avoid overlap (Reis et al., 2016).

Little research has been conducted to examine the impact of information and communication technologies on the overall success of SMEs. Small and medium-sized enterprises (SMEs) play a crucial role in the stability and growth of emerging countries. Our research intends to examine the factors that lead to the success of SMEs in Myanmar, with an emphasis on the impact of ICT as a technical component. We employ the technology-organization-environment paradigm to categorize SMEs' success elements into three categories: technology, organization, and environment. We examine the impact of these components on SME successes (Bala and Feng, 2019). 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 and Souissi, 2020).

2.2. Technological infrastructure

Unnecessary knowledge sharing during technology production and use has a significant impact on technical infrastructure in IT businesses. This method has been illustrated through examples of computer and integrated circuit sectors, where needless sharing of information has affected technological advancement and industry structure. These examples have broad implications for understanding horizontal market structure and infrastructure's impact on competition policy. The study

examines how infrastructure affects vertical market structures, with a focus on interface compatibility requirements (Steinmueller, 1996). The study examined the work quality of common technologies used in developing market applications (innovations). A common technology serves as a 'proof of concept', decreasing technical risk enough to justify R&D efforts. Infra-technology is part of various semi-public technologies. This includes research tools, scientific and engineering data, interface standards, quality control methodologies, and more. They provide diverse technical infrastructure, utilizing different types at various levels of economic activity. Infrared technologies are commonly applied as industrial standards (Tassey, 2008).

In recent decades, new digital technologies have led to organizational strategic changes and exacerbated tensions. These advancements may coexist, but they appear to be interrelated, not least because digital technologies allow for tactical changes through the adoption of new technology. However, little is known about the relationship and timing of using technology and changing strategies. While it is widely acknowledged that investing in IT necessitates organizational changes, the impact of new technology on company strategy and operations has received less attention (Wang and 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 seen 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 et al., 2023).

2.3. External collaboration

Over the past two decades, there has been a systematic and fundamental transformation in how firms participate in innovative activities. Companies of all sizes have considerably increased their use of external networks. Globalization allows organizations to leverage foreign resources to reduce innovation time, costs, and risks, while also increasing operational flexibility. Inter-firm and cross-border competition has intensified, posing new hazards for technology enterprises. Coalitions have benefited SMEs by leveraging their resilience and inventiveness, which large corporations' value. However, larger businesses' use of external networks has enhanced their flexibility, removing one of the fundamental benefits SMEs have earned when competing with larger firms (Narula, 2004). 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 micro-level. 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 et al., 2012). Most countries' economy relies heavily on small and medium-sized businesses. However, they are frequently described as having low resources, informal strategies, and flexible structures, diminishing their resilience and facing rising competition. According to

network theory, markets connect consumers, suppliers, and competitors through social and professional interactions. Our review sample demonstrates that SMEs' innovation is influenced by personal and professional interactions, in addition to firm-level characteristics. Several studies have demonstrated that external interactions have a significant impact on the creativity of SMEs by recognizing opportunities for learning and obtaining information and lowering opportunistic behavior (Zahoor and Al-Tabbaa, 2020). 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 operate 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. Due to SMEs' AI compliance, decision-makers struggle to examine and comprehend the aspects influencing change management (Lemos et al., 2022).

2.4. Market competition

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 utilized 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). 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 are 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).

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, and offering, influencing, and maintaining client purchase behavior. A marketing communication strategy is essential for starting or running a firm. 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 et al., 2022). Small and medium-sized enterprises (SMEs) may struggle to secure funding due to a lack of collateral. SMEs can overcome this challenge with several ways.

Consider non-guaranteed funding options, like unsecured loans or credit lines. Improving financial transaction infrastructure, including laws, regulations, and payment systems, can assist SMEs overcome 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 et al., 2023).

2.5. Digital skills and training

Digital skills enable firms to maximize ICT opportunities, improve efficiency, explore new business models, and establish new businesses. The term 'digital skills' refers to a broad range of high-level professional talents that go beyond technical skills. It covers major organizational competencies such as market and subject matter skills, strategic and operational management skills, and soft' management talents. Small and medium-sized enterprises (SMEs) are encouraged to develop digital skills to support entrepreneurship, innovation, job creation, and global competitiveness (DI digital et al., n.d.). Telework was more prevalent among white-collar workers. Even when firms supply more digitized products and services or purchase more cloud computing services, there is still significant difference between larger organizations and SMEs. Even among the EU's frontrunners, businesses continue to embrace essential digital technology at a slower rate, according to multiple academics. Inadequate digital abilities impede future development opportunities. Knowledge encompasses established notions, facts, statistics, theories, and assumptions. Skill refers to the capacity to apply knowledge and produce results. Attitudes are behaviors that shape our reactions to thoughts, people, and situations. Furthermore, digital competence is recognized as one of the eight essential competences (Rajahonka et al., 2023). Information technology has significantly altered the operations of micro, little, and medium-sized firms (MSMEs), impacting both marketing strategy and inventory management. Digital commerce has opened up new prospects for MSMEs, such as greater operational efficiency and worldwide market access. However, mounting challenges cannot be disregarded. MSMEs must acquire new skills to manage systems, interpret data, and adapt to rapid changes in the business environment while implementing digital technology. These new talents are important to ensure the success and sustainability of enterprises in the digital age. Digital skills in human resources are crucial for implementing digital business strategies in micro, mid, and medium-sized firms (Kraugusteeliana et al., 2024).

2.6. Hypothesis development

A crucial part of research is developing a hypothesis, which 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 digital success can affect Dajia Insurance Group Limited Liability Company 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**).

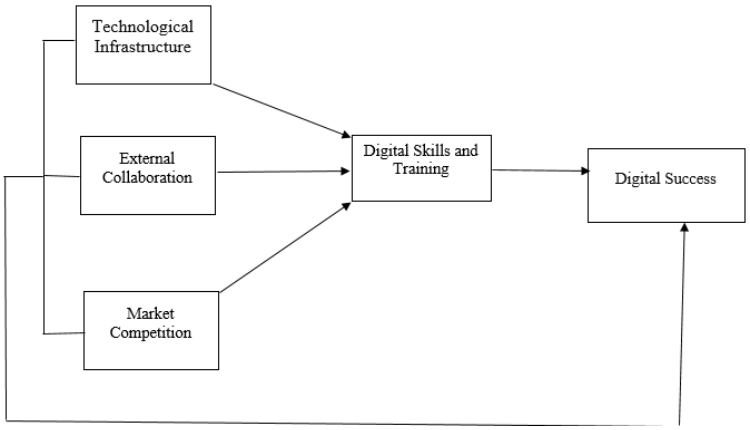

Figure 1. Conceptual model.

2.6.1. The effect of technological infrastructure, external collaboration, market competition on digital success

The cost of imitation varies amongst firms based on their resources, including time and money. The cost and benefits of technological innovation differ amongst organizations based on their IT platform's distinct features. While a company's infrastructure might enhance business processes, competitors' infrastructure can hinder their ability to quickly replicate breakthroughs, reducing the advantage of the first mover. This combination of traits is defined as almost basic structure, "flexibility" (Duncan, 1995). This new infrastructure is founded on knowledge that extends beyond the bounds of particular firms and is motivated by evident efforts to produce distribution through the revelation of public knowledge or, more bluntly, the release of unneeded knowledge resulting from enterprise commercial activity. Knowledge-based infrastructure, including physical infrastructure, generates both private and social advantages. The use of knowledge requires competency, business enterprise abilities, and ability in adopting and absorbing knowledge to produce new or improve existing equipment and industrial processes (Steinmueller, 1996).

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). Economic growth has altered throughout time, affecting the necessary variables. Following 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 few empirical evidence available globally. Our research aims to assess the impact of globalization on digital technology transfer and adoption (Skare and Riberio Soriano, 2021).

H1: There is an association among technological infrastructure on digital success.

H2: There is an association among external collaboration on digital success.

H3: There is an association among market competition on digital success.

H4: There is an association among digital skills and training on digital success.

2.6.2. The effect of technological infrastructure, external collaboration, market competition on digital skills and training

ITI aims to refer to the 'IT infrastructure' of telecommunications, computers, software, and data that are integrated and networked so that all sorts of information may be routed over the network and the process can be reconfigured by the user with speed and ease. Perspective. Operating a 'same less' infrastructure is less expensive than autonomous, divisional infrastructure as it requires less manual or complex computer-based intervention. Former academics characterize ITI as a set of broad, physical IT resources that serve as the foundation for commercial applications. "A firm's infrastructure can make strategic progress in the business process, while competitors' infrastructure can cause their innovation to fail to copy quickly, reducing the advantage of the first mover" (Lewis and Byrd, 2003). IT has become the industry standard for public transaction operations, playing 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).

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 et al., 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 and Ching, 2019).

H5: There is an association among technological infrastructure on digital skills and training.

H6: There is an association among external collaboration on digital skills and training.

H7: There is an association among market competition on digital skills and training.

2.6.3. Digital skills and training as a mediator

Technology infrastructure refers to research, engineering, and technical competence available to private industries. Knowledge might be personal, institutional, or convenient. Technology infrastructure encompasses general and basic technologies, technical information, and research and testing facilities. It also includes information on strategic planning and market development, joint industry-government planning and cooperation forums, and intellectual property rights assignment (Tassey,

1991). To thrive in this dynamic environment, SMEs must consistently offer new things that consumer's desire. However, the product's life cycle will be shorter, making it more difficult to generate acceptable returns on investment per project. Small and medium-sized businesses face the challenge of balancing speed and innovation, which can strain finite resources. Lack of staff makes it difficult to commit to a single project. Small and medium-sized businesses have limited management skills, complexity, technological depth, and breadth Their marketing and production skills are limited, and they are often less organized (Kessler et al., 2007).

Some studies argue that training is essential for innovation since it helps identify and solve problems, as well as take responsibility for product or service quality. Manager education is essential for maintaining the necessary knowledge and expertise for product innovation in small enterprises. Scholars suggest that managers should obtain a technical understanding of approaches for technological innovation. SMEs can expand the scope of radical innovation by exhibiting technical know-how, market and economic competence, legal and contractual experience, and partnership management understanding (Zahoor and Al-Tabbaa, 2020). 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 (Ufua et al., 2020).

H8: Digital skills and training mediates the relationship among technological infrastructure, external collaboration, market competition and digital success.

3. Methodology

In the quantitative phase, the data was collected from the 200 different senior executives, employees across departments, customers, and external partners within Dajia Insurance Group Limited Liability Company (Dajia Insurance) ensuring a representative sample that captures the diversity of the city's workforce. The research employs a mixed-methods approach, combining qualitative and quantitative techniques, in order to gather thorough insights. An essential component of the research is choosing the appropriate sample size. So, either statistics or a general rule of thumb might be used to calculate the sample size. The desirable sample size for the analysis would also be at least 10–20 times larger than the study's variable count. Random sampling was employed to ensure that equal portions were covered. A meticulously altered questionnaire from past studies was used to get the data for physically interview. This survey comprised Likert-scale items graded from 1 to 5, as well as open-ended and closed-ended questions. An effective structural equation modeling (SEM) software program called Smart PLS 3.0 was utilized in the investigation. 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 all appropriate.

4. Measure

The digital success affects Dajia Insurance Group Limited Liability Company productivity used in the study were evaluated using a scale that was modified from (Karen et al., 2018), technological infrastructure (Weiss and Birnbaum, 1989), external collaboration (Suh and Kim, 2012), market competition (Fanggidae et al., 2023), digital skills and training (Drydakis, 2022).

5. Results

The table shows that Cronbach's alpha was high, meaning the tool used in this study is reliable and consistent. **Table 1** has those details. The digital success affects Dajia Insurance Group Limited Liability Company measure shows Cronbach's Alpha score of digital skills and training 0.751, digital success 0.796, external collaboration 0.702, market competition 0.792 and technological infrastructure 0.722 are at good scales. These results show that these scales are good for checking digital transformation affects Dajia Insurance Group Limited Liability Company.

Table 1. Cronbach alpha.

	Cronbach's alpha
Digital skills and training	0.751
Digital success	0.696
External collaboration	0.702
Market competition	0.792
Technological infrastructure	0.722

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: digital skills and training (CR = 0.836), digital success (CR = 0.805), external collaboration (CR = 0.807), market competition (CR = 0.858) and technological infrastructure (CR = 0.819). These numbers are way past the recommended limit of 0.70, showing strong agreement and trustworthiness in measuring tools. The average amount that was pulled out (AVE) values also show the matching strength of these parts. Digital skills and training show an AVE of 0.508. This means that 50.8% of the changes in what we see comes from the real idea behind it. Digital success shows AVE of 0.455, which means that about 45.5% of the changes are linked to the main thing being measured. External collaboration is also included with an average of 0.456 which means 45.6%, market competition shows AVE 0.553, which means 55.3%, and technological infrastructure shows AVE 0.479 which means 47.9%. 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 make sure the internal consistency and reliability of these constructs are good.

Table 2. Validity and reliability confirmation.

	CR	AVE
Digital skills and training	0.836	0.508
Digital success	0.805	0.455
External collaboration	0.807	0.456
Market competition	0.858	0.553
Technological infrastructure	0.819	0.479

Table 3 gives the results of Confirmatory Factor Analysis (CFA) for the measured items. It shows how much each thing relates to their different builds by looking at factor loadings. The digital skills and training measure is shown by 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 success includes 5 parts. Its factor scores are between 0.575 and 0.801. The external collaboration is shown with 5 things and the connection between them vary from 0.568 to 0.766. The market competition includes 5 things, with factor ratings from 0.522 to 0.829. The technological infrastructure includes 5 things, with factor ratings from 0.615 to 0.729. These calculations show that the model is reliable, meaning 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.

Table 3. Confirmatory factor analysis.

Variables	Items	Loading
Digital skills and training	DST1	0.527
	DST2	0.711
	DST3	0.785
	DST4	0.762
	DST5	0.750
Digital success	DS1	0.645
	DS2	0.669
	DS3	0.766
	DS4	0.709
	DS5	0.568
External collaboration	EC1	0.657
	EC2	0.676
	EC3	0.729
	EC4	0.692
	EC5	0.615
Market competition	MC1	0.522
	MC2	0.776
	MC3	0.773
	MC4	0.829
	MC5	0.779

Table 3. (*Continued*).

Variables	Items	Loading
	TI1	0.592
	TI2	0.801
Technological infrastructure	TI3	0.733
	TI4	0.732
	TI5	0.575

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 lines. The big numbers (in bold) show the square root of 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 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. Likewise, the connections between variables pairs have found to be 0.713, 0.675, 0.675, 0.744 and 0.692 which shows that they're unique with only a little bit of shared variation rather than their own measured properties. These results strongly support 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.

	Digital skills and training	Digital success	External collaboration	Market competition	Technological infrastructure
Digital skills and training	**0.713**				
Digital success	0.727	**0.675**			
External collaboration	0.689	0.846	**0.675**		
Market competition	0.501	0.458	0.520	**0.744**	
Technological infrastructure	0.533	0.565	0.483	0.379	**0.692**

Table 5 and **Figure 2** show the *R*-square value for digital success in Dajia Insurance Group Limited Liability Company. It tells us how much difference we can find in the outcome variable thanks 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 bring a big share towards understanding how participants see Dajia Insurance Group Limited Liability Company productivity.

Table 5. *R* square.

	***R* square**
Digital success	0.772

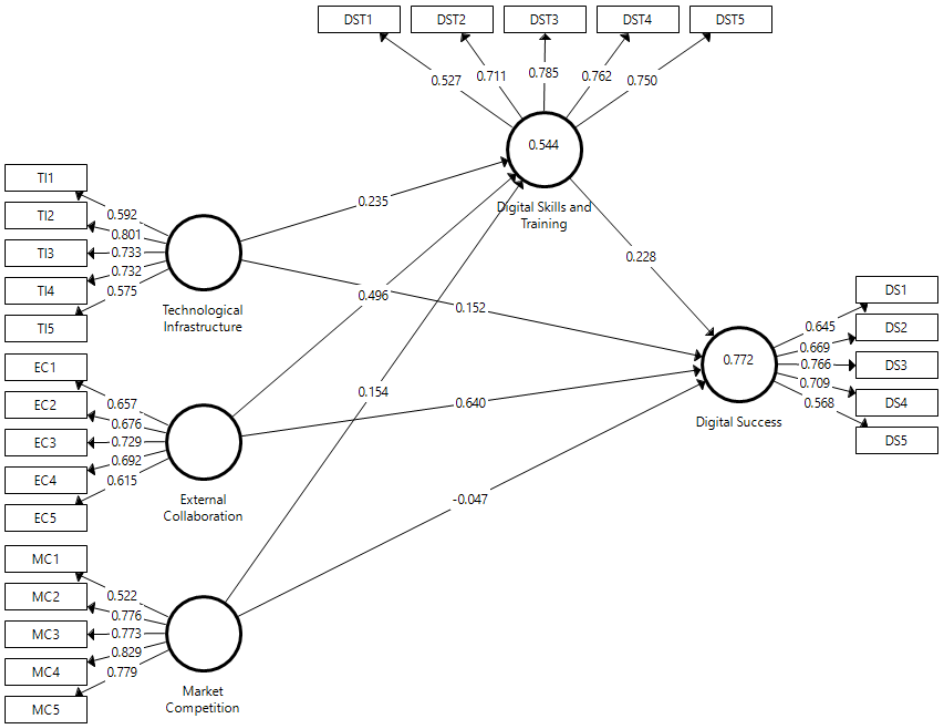

Figure 2. Measurement model.

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

Table 6. Model fitness.

	Saturated model
SRMR	0.114

Table 7 and **Figure 3** show the findings of the straight line study, mainly about how external collaboration, market competition, technological infrastructure affect digital success respectively with *P* value of 0.000, 0.255 and 0.001 which means market competition affect negatively digital transformation. The connected *p*-value is 0.000, which is less than the usual importance level of 0.5. This confirms that this way has a big effect in numbers. External collaboration, market competition, technological infrastructure affects digital skills and training respectively with *P* value of 0.000, 0.016 and 0.000. Digital skills and training affect workplace productivity with *P* value of 0.004.

Table 7. Direct path analysis.

	Beta	STDEV	*T* value	*P* values	Results
Digital skills and training → digital success	0.228	0.079	2.892	0.004	Accepted
External collaboration → digital skills and training	0.496	0.065	7.577	0.000	Accepted
External collaboration → digital success	0.640	0.083	7.681	0.000	Accepted
Market competition → digital skills and training	0.154	0.064	2.415	0.016	Accepted
Market competition → digital success	−0.047	0.041	1.139	0.255	Rejected
Technological infrastructure → digital skills and training	0.235	0.061	3.873	0.000	Accepted
Technological infrastructure → digital success	0.152	0.047	3.259	0.001	Accepted

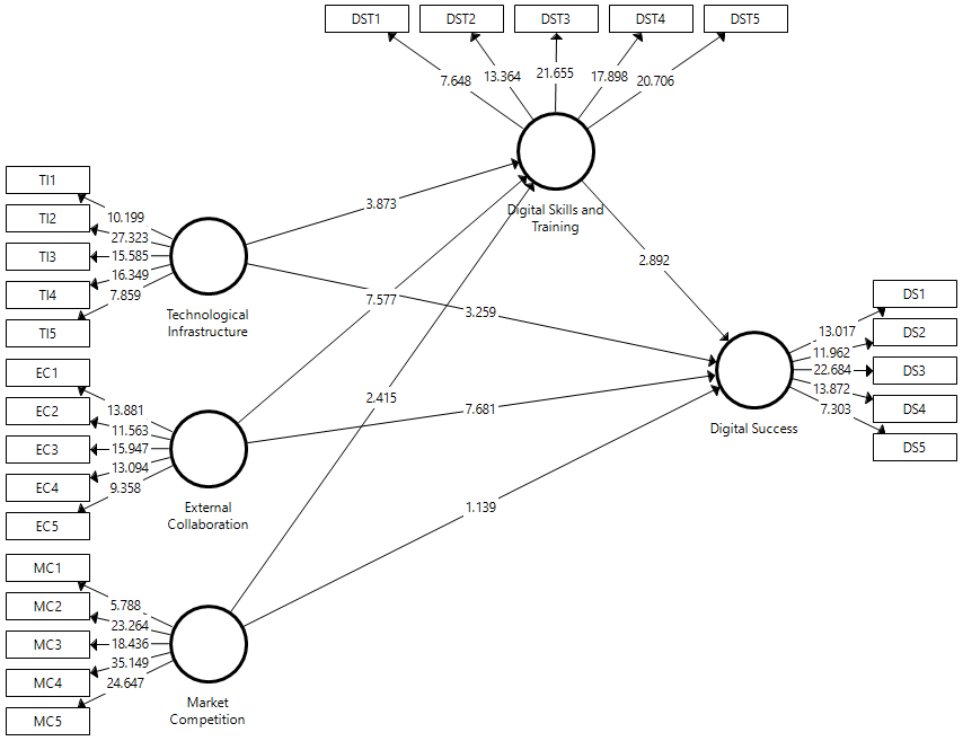

Figure 3. Structural model.

Table 8 shows the findings of the straight line study, mainly about how digital skills and training as mediator affect external collaboration, market competition, technological infrastructure respectively with *P* value of 0.005 0.060 and 0.039, which means market competition negatively mediates the relationship between digital skills and training and digital success.

Table 8. Mediation analysis.

	Beta	STDEV	*T* value	*P* values	Results
External collaboration → digital skills and training → digital success	0.113	0.040	2.797	0.005	Accepted
Market competition → digital skills and training → digital success	0.035	0.019	1.885	0.060	Rejected
Technological infrastructure → digital skills and training → digital success	0.054	0.026	2.072	0.039	Accepted

6. Discussion and conclusion

Then, it will present reform discussions pertaining to the limited liability

company of Dajia Insurance Group by first diagnosing the condition of the insurance industry. The fields of interest are competitive trends and consumer behavior, as well as trends and preferences, in relation to digitalization. To that extent, Dajia Insurance Group acquires comprehensive analysis insight into the concern as well as opportunity towards the digital world complications. Consequently, this paper established that the effective implementation of Dajia Insurance Group strategies is hinged upon further barriers often linked to digital transformations. In order to face such issues, the project should start to implement several preventive strategies, like change management and organizational talent management plans. It is therefore clear that to create future digital successes the realigning of customer experience, investment, and emerging technologies are all necessary. It is for this reason that Dajia Insurance Group recognises the need to embrace emerging technologies like the use of Artificial Intelligence in its operations, use of block-chain, and data analytics among others. Overall, through this technology, a business can optimize its functions, enhance its ability to make decisions, and also offer more services to customers in a value-added manner. It proves the necessity of consistent management culture and leaders' unambiguousness in the process of digitalization. To address rapidly development in the nature of the digital landscape, the Dajia Insurance Group has put effort to establish a modern digital cultural. The major issue in this area is what strategies need to be adopted to ensure proper communication and leadership as the organizational goals are being synchronized with those of digital transformation. The success of Dajia Insurance Group in line with the trend of digital transformation is highly dependent on the magnitude of achievement of strategic goals. It can be suggested that organizations should not underestimate the great opportunity of digital success in the highly competitive context considering the analysis of the issue and development of the corresponding individual strategies and solutions.

Digital thinking has become a major factor of business decisions and organizational changes hence the transformation strategy of Dajia Insurance Group Limited Liability Company can be attributed to the company's strategic response to some of the challenges and opportunities offered by this facet of the modern world. The activities which have been initiated by the organization for digital transformation has been getting valuable information from this analysis of the insurance market. The major challenges of integrating digital pensions involve legacy systems and institutional skepticism, as noted by Dajia Insurance Group. The Director General of Dajia Insurance Group has begun overcoming internal challenges, and is spearheading culture change to lay the foundations for superior digitization. Promoting talents' personnel training and the implementation of specific trends in the global market, such as AI and block-chain, will help the company to improve its performance and feel comfortable in the new conditions. Business-sustenance and technological change require proper stewardship and organizational communication to ensure that organizational goals and schemes are achieving digital transformation goals and plans. Hence, Dajia Insurance Group prioritizes customer-oriented measures on digital platforms to implement value-added services for success. The company wants to also be a customer-focused organization, in that it will offer tailor-made solutions according to the customer's specifications and, to achieve this goal, the company will leverage the power of data analysis and artificial intelligence. That explains why

success in digital transformation for Dajia Insurance Group can be seen through the realization of a coherent digital experience with the reputation of efficiency as a promising insurance market develops.

7. Implications

Thus, the Chinese insurance company Dajia Insurance Group's experience on the transformation of a limited liability company provides applicable recommendations for insurance industry companies experiencing the process of digital transformation. First, review the technological context and outline key opportunities and threats connected to increasingly digitalized work. Breaking down silos and institutionalizing effective digital platforms and adopting information technology are important components of DT. To win the digital space and inculcate sustainable personality, a success plan must consider the incorporation of AI and block-chain among other innovations to boost customer experience and prompt operations. Leadership and communication are also vital in change processes within digital management to encourage people to stay committed and champion change of ideas. Businesses should be strategic in their planning and be more customer-oriented in moving toward the new strategic acquisition culture in order to succeed in the new digital environment. Having analyzed the state of technologies, the importance of environmental assessment theories is to gain valuable insights into new development trends and competitive forces related to digital facilities. Developing digital success strategies means to integrate information, originated in known successful technologies' models of innovation. An organizational strategy can use concepts from these models, and informs organizations about innovative technologies and business process issues. Leadership principles relate to digital concepts supporting change initiation enabling corporate endeavors prioritized transformational leadership principles. Conveniently, integrating of these frameworks offers organizations the way how to manage the challenges and benefits of digital transformation process in digital ecosystem.

8. Limitations and future directions

Weaknesses of the study include potential biases in assessing insurance status and data identification. Despite many studies, human biases and biases can limit results. Furthermore, time and resource constraints may limit the scope of the study, causing it to overlook aspects of the digital transformation process or industry environment that could have a significant impact on Dajia's insurance business another issue is that the results of the study are filtered from Dajia back insurance team. While insights gained during a transition period are useful, they may not be directly relevant to various changing contexts or other insurance organizations facing challenges Furthermore, due to the dynamic nature of the digital ecosystem, learning methods and solutions can become obsolete due to technological advances and market changes. Therefore, caution should be exercised in generalizing the findings of this study to other organizations or industries without considering their specific context and context.

Future research could examine the long-term impact of digital transformation initiatives undertaken by Dajia Insurance Group's limited liability company.

Longitudinal research can examine a company's digital success, market dynamics, and competitiveness over time. Examining the impact of emerging technologies such as AI, block-chain, and data analytics could provide Dajia Insurance Group and other companies with opportunities and challenges in the future of insurance. Future directions may examine how regulatory changes and industry developments affect Dajia Insurance Group's digital transformation journey. Understanding the impact of external influences on a company's objectives and operations is increasingly important as the regulatory environment and technology improve. Analysis of the regulatory environment, industry trends and new trends can help Dajia Insurance Group identify future challenges and opportunities, helping the organization to adapt and be proactive in its digital transformation project.

Conflict of interest: The author declares no conflict of interest.

References

Bala, H., & Feng, X. (2019). Success of Small and Medium Enterprises in Myanmar: Role of Technological, Organizational, and Environmental Factors. Journal of Global Information Technology Management, 22(2), 100–119. https://doi.org/10.1080/1097198X.2019.1603511

Bayaga, A. (2012). Impact of information and communication technology (ICT) risk change management requirement on performance of small and Medium Enterprises (SMEs). Anthropologist, 14(4), 279–289. https://doi.org/10.1080/09720073.2012.11891249

DI digital, IVI(MU), & SME, P. (n.d.). About the Grand Coalition for Digital Jobs This document has been prepared by DI Digital (DI ITEK), IVI (MU), and PIN SME in the framework of the European Commission funded DIGITALJOBS project, which established the Secretariat of the Grand Coalition. Available online: https://digital.di.dk/SiteCollectionDocuments/Publikationer/DigitalskillsforSMEs.pdf (accessed on 17 March 2024).

Drydakis, N. (2022). Improving Entrepreneurs' Digital Skills and Firms' Digital Competencies through Business Apps Training: A Study of Small Firms. Sustainability (Switzerland), 14(8), 4417. https://doi.org/10.3390/su14084417

Duncan, N. B. (1995). Capturing flexibility of information technology infrastructure: A study of resource characteristics and their measure. Journal of Management Information Systems, 12(2), 37–57. https://doi.org/10.1080/07421222.1995.11518080

Fanggidae, H. C., Sutrisno, S., Fanggidae, F. O., & Permana, R. M. (2023). Effects of Social Capital, Financial Access, Innovation, Socioeconomic Status and Market Competition on the Growth of Small and Medium Enterprises in West Java Province. The ES Accounting and Finance, 1(02), 104–112. https://doi.org/10.58812/esaf.v1i02.69

Galor, O., & Michalopoulos, S. (2011). The Evolution of Entrepreneurial Spirit and the Process of Development. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.897495

Ghobakhloo, M., & Ching, N. T. (2019). Adoption of digital technologies of smart manufacturing in SMEs. Journal of Industrial Information Integration, 16, 100107. https://doi.org/10.1016/j.jii.2019.100107

Karuna, C. (2007). Industry product market competition and managerial incentives. Journal of Accounting and Economics, 43(2–3), 275–297. https://doi.org/10.1016/j.jacceco.2007.02.004

Kessler, E. H., Allocca, M. A., & Rahman, N. (2007). External Knowledge Accession and Innovation Speed in the Small and Medium Sized Enterprise (SME). Small Enterprise Research, 15(1), 1–21. https://doi.org/10.1080/13215906.2007.11005829

Kraugusteeliana, K., Sutrisno, S., & Syamsuri, S. (2024). Analysis of the interconnection between digital skills of human resources in smes and the success of digital business strategy implementation. MALCOM: Indonesian Journal of Machine Learning and Computer Science, 4(2), 601–606.

Lemos, S. I. C., Ferreira, F. A. F., Zopounidis, C., et al. (2022). Artificial intelligence and change management in small and medium-sized enterprises: an analysis of dynamics within adaptation initiatives. Annals of Operations Research. https://doi.org/10.1007/s10479-022-05159-4

Lewis, B. R., & Byrd, T. A. (2003). Development of a measure for the information technology infrastructure construct. European Journal of Information Systems, 12(2), 93–109. https://doi.org/10.1057/palgrave.ejis.3000449

Magro, M. J. (2012). A review of social media use in e-government. Administrative Sciences, 2(2), 148–161. https://doi.org/10.3390/admsci2020148

Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. Business and Information Systems Engineering, 57(5), 339–343. https://doi.org/10.1007/s12599-015-0401-5

Molinillo, S., & Japutra, A. (2017). Organizational adoption of digital information and technology: a theoretical review. Bottom Line, 30(1), 33–46. https://doi.org/10.1108/BL-01-2017-0002

Narula, R. (2004). R&D collaboration by SMEs: New opportunities and limitations in the face of globalisation. Technovation, 24(2), 153–161. https://doi.org/10.1016/S0166-4972(02)00045-7

Osmundsen, K., Iden, J., Bygstad, B. (2018). Digital Transformation: Drivers, Success, Factors. MCIS 2018 Proceedings, 37.

Popescu, D., Ciocârlan-Chitucea, A., Steriu, A., & State, C. (2012). Change management-condition of organizational sustainability in it&c small and medium-sized enterprises. Amfiteatru Economic, 14(32), 333–348.

Purnama, C., & Subroto, W. T. (2016). Competition intensity, uncertainty environmental on the use of information technology and its impact on business performance small and medium enterprises. International Review of Management and Marketing, 6(4), 984–992.

Rajahonka, M., Ollanketo, A., Saali, H., & Kiukas, A. M. (2023). Model for Digital Skills Training for SMEs. Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE, 2, 739–745. https://doi.org/10.34190/ecie.18.2.1735

Reis, J., Amorim, M., Melao, N., & Matos, P. (2016). Digital Transformation: A Literature Review and Guidelines for Future Digital Transformation: A Literature Review and Guidelines for Future Research. In: Proceedings of the 10th European Conference on Information Systems Management. pp. 20–28. https://doi.org/10.1007/978-3-319-77703-0

Ritz, W., Wolf, M., & McQuitty, S. (2019). Digital marketing adoption and success for small businesses: The application of the do-it-yourself and technology acceptance models. Journal of Research in Interactive Marketing, 13(2), 179–203. https://doi.org/10.1108/JRIM-04-2018-0062

Rusdana, N. R., Choirani, S. J., & Friska, A. S. (2022). Digital Marketing Communication Strategy for Micro, Small and Medium Enterprises (MSMEs) in Business Competition. International Journal of Research and Applied Technology, 2(1), 163–168. https://doi.org/10.34010/injuratech.v2i1.6913

Skare, M., & Riberio Soriano, D. (2021). How globalization is changing digital technology adoption: An international perspective. Journal of Innovation and Knowledge, 6(4), 222–233. https://doi.org/10.1016/j.jik.2021.04.001

Spiegler, R. (2016). Choice Complexity and Market Competition. Annual Review of Economics, 8, 1–25. https://doi.org/10.1146/annurev-economics-070615-115216

Steinmueller, W. E. (1996). Technological Infrastructure in Information Technology Industries. In: Technological Infrastructure Policy. Springer, Dordrecht. pp. 117–139. https://doi.org/10.1007/978-94-015-8739-6_5

Suh, Y., & Kim, M. S. (2012). Effects of SME collaboration on R&D in the service sector in open innovation. Innovation: Management, Policy and Practice, 14(3), 349–362. https://doi.org/10.5172/impp.2012.14.3.349

Tassey, G. (1991). The functions of technology infrastructure in a competitive economy. Research Policy, 20(4), 345–361. https://doi.org/10.1016/0048-7333(91)90094-7

Tassey, G. (2008). Modeling and measuring the economic roles of technology infrastructure. Economics of Innovation and New Technology, 17(7–8), 615–629. https://doi.org/10.1080/10438590701785439

Trio Febriyantoro, M., Zulkifli, Totok Suyoto, Y., et al. (2023). The Effect of Innovation Capability on Market Performance Mediated by External Collaboration on SMEs. KnE Social Sciences, 2023, 249–262. https://doi.org/10.18502/kss.v8i12.13675

Ufua, D., Osabohien, R., Imhonopi, D., et al. (2020). Change Management and Capacity Utilisation: A Critical Requirement for Business Sustainability among Small and Medium-Sized Enterprises (SMEs) in Nigeria. International Journal of Innovation, Creativity and Change, 14(10), 438–458.

Van Zeebroeck, N., Kretschmer, T., & Bughin, J. (2023). Digital “is” Strategy: The Role of Digital Technology Adoption in Strategy Renewal. IEEE Transactions on Engineering Management, 70(9), 3183–3197. https://doi.org/10.1109/TEM.2021.3079347

Wang, C. Y., Li, Y., Li, C., et al. (2023). A method for quantifying relative competitive advantage and the combined effect of co-invasion for two invasive plants. Plant Diversity, 45(3), 358–361. https://doi.org/10.1016/j.pld.2023.01.005

Wang, S., & Feeney, M. K. (2016). Determinants of Information and Communication Technology Adoption in Municipalities. American Review of Public Administration, 46(3), 292–313. https://doi.org/10.1177/0275074014553462

Warr, P. G. (1994). Comparative and competitive advantage. Asian-Pacific Economic Literature, 8(2), 1–14. https://doi.org/10.1111/j.1467-8411.1994.tb00091.x

Weiss, A. R., & Birnbaum, P. H. (1989). Technological Infrastructure and the Implementation of Technological Strategies. Management Science, 35(8), 1014–1026. https://doi.org/10.1287/mnsc.35.8.1014

Wiesner, R., Chadee, D., & Best, P. (2018). Managing Change Toward Environmental Sustainability: A Conceptual Model in Small and Medium Enterprises. Organization and Environment, 31(2), 152–177. https://doi.org/10.1177/1086026616689292

Wolf, M., Semm, A., & Erfurth, C. (2018). Digital transformation in companies—challenges and success factors. In: Communications in Computer and Information Science. Springer, Cham. https://doi.org/10.1007/978-3-319-93408-2_13

Zahoor, N., & Al-Tabbaa, O. (2020). Inter-organizational collaboration and SMEs' innovation: A systematic review and future research directions. Scandinavian Journal of Management, 36(2), 101109. https://doi.org/10.1016/j.scaman.2020.101109

Zaoui, F., & Souissi, N. (2020). Roadmap for digital transformation: A literature review. Procedia Computer Science, 175, 621–628. https://doi.org/10.1016/j.procs.2020.07.090