THE DIGITAL LEAP: STRATEGIC MANAGEMENT FOR DIGITAL TRANSFORMATION SUCCESS IN TRADITIONAL INDUSTRIES

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Abstract

Digital transformation in traditional industries is an important step to remain competitive in the modern era. The application of digital technology in business operations can increase efficiency and provide a better customer experience. However, many traditional companies face challenges in adopting new technologies and developing digital skills. This research aims to explore the role of strategic management in supporting the success of digital transformation in traditional industries. This research uses a qualitative approach, with data obtained from the results of relevant research and previous studies. The collected data will be analyzed to find significant patterns and relationships. The research results show that a clear digital vision and strategy are critical to guiding transformation. Effective leadership and good change management are also crucial in overcoming internal resistance. Implementing digital technologies, such as automation and analytics, can significantly improve operational efficiency. The development of digital skills and competencies through continuous training and external collaboration is essential to support this change. With a comprehensive approach, traditional companies can overcome the challenges of digital transformation and take advantage of the opportunities offered by new technologies.

Keywords: *Strategic Management, Digital Transformation, Traditional Industry.*

A. INTRODUCTION

The development of digital technology has changed the business landscape around the world. Amid the onslaught of technological innovation, digital transformation has become an urgent need for many companies. This phenomenon does not only apply to industries born from digital technology but also to traditional industries that have been known for their conventional processes and practices. Traditional industries, which include sectors such as manufacturing, agriculture, mining, and construction, face unique challenges in adapting to rapid and disruptive technological change (Miethlich et al., 2022). The shift towards digitalization in traditional industries is often not an easy choice. This is due to a variety of factors, including resistance to change, limited resources, and the need to maintain existing operations. However, competitive pressures and increasingly high customer

expectations are forcing the industry to reevaluate its business strategies and leverage digital technologies to improve efficiency, productivity, and service quality (Jones et al., 2021).

The success of digital transformation in traditional industries relies heavily on effective strategic management. Strategic management plays an important role in formulating a clear vision and direction for digital transformation, as well as ensuring that the entire organization is moving towards the same goal. Company leaders must be able to recognize the opportunities offered by digital technologies and formulate appropriate strategies to integrate these technologies into their business operations. This includes investing in digital infrastructure, developing employee digital skills, and creating an organizational culture that supports innovation and change (Imran et al., 2021).

In recent years, many traditional industries have begun to adopt technologies such as the Internet of Things (IoT), artificial intelligence (AI), big data, and automation to improve operational efficiency and reduce costs. For example, in the manufacturing sector, the application of IoT technology allows companies to monitor and control production processes in real-time, thereby increasing efficiency and reducing downtime. In the agricultural sector, digital technology is used to optimize the use of natural resources, increase crop yields, and reduce environmental impact. Likewise, in the mining and construction sectors, automation and the use of digital technology have helped improve work safety and productivity (Javaid et al., 2022).

However, the journey towards digital transformation is not easy. Many companies fail in their digital transformation efforts due to a lack of thorough strategic planning and a lack of support from all levels of the organization. Some companies also face difficulties in integrating new technology with existing systems, as well as in managing the cultural changes required to support digital transformation (Brunetti et al., 2020). Apart from that, another challenge faced by traditional industries in the digital transformation process is the lack of human resources who have digital skills. To overcome this, companies need to invest in employee training and development, as well as attracting new talent who have expertise in digital technology. The ability to manage and utilize data effectively is also a key factor in successful digital transformation. Data generated from various digital technologies can provide valuable insights for companies, but only if the data is analyzed and used in the right way (Nicolás-Agustín et al., 2022).

The government and various institutions also have an important role in driving digital transformation in traditional industries. Support in the form of regulations that support innovation, incentives for investment in digital technology, as well as training and education programs to develop digital skills among the workforce, are some examples of steps that can be taken to accelerate the digital transformation process (Chen et al., 2021). In a global context, countries that successfully carry out digital transformation in traditional industrial sectors can enjoy significant competitive advantages. They can not only increase efficiency and productivity but can also open up new market opportunities and create higher added value. Conversely, countries that fail to adapt to technological change risk falling behind in global competition and facing a decline in their economic competitiveness (Hai et al., 2021).

The digital leap in traditional industries is a complex journey that requires long-term commitment and strategy. With the right strategic management, companies can overcome existing challenges and utilize digital technology to achieve success. This research aims to examine various management strategies that can be used to support digital transformation in traditional industries, as well as identify key factors that determine success in this process.

B. LITERATURE REVIEW

1. Digital Transformation

Digital transformation is a process of change caused by the use of digital technology to create new ways that can improve the quality of the previous process. The digital transformation process covers various aspects of life, including the business world. As business actors, companies are required to be able to adapt to existing technological developments, this is done so that the company can continue to demonstrate its existence or even so that the company can develop further by taking advantage of the opportunities available from the presence of this technology (Gong & Ribiere, 2021).

Digital transformation is a process of utilizing digital technology such as cloud computing, mobile computing, and virtualization technology where all system components in an organization are integrated. Apart from that, digital transformation can also be interpreted as the result of a combination of business and digital innovation which has an impact in the form of changes in structure, values, processes, positions, and ecosystems within and outside an organization's environment. Digital transformation is needed to develop business in the era of digitalization where organizations and society are very dependent on data and technology, so digital transformation is expected to increase operational efficiency and provide more value to customers (Saarikko et al., 2020).

According to Westernman and Bonnet, Digital Transformation is a change in an organization that involves structure, people, processes, and strategies using business models and technology to improve the quality of performance. From Westernman's understanding, it can be concluded that digital transformation is a process of change by utilizing and combining resources and technology to improve the quality of performance (Bresciani et al., 2021).

According to Fitzgerald, digital transformation is the deep-rooted use of digital-based technology to improve the quality of performance to make it easier for the company to achieve its goals. Digital transformation brings new challenges for organizations. Babych said that digital transformation is a major change in daily activities to take maximum advantage of opportunities by considering future changes (Mathivanan et al., 2021).

There are three main aspects in the digital transformation process, namely people, technology, and business. Humans are the most important aspect because humans are the ones who move and control technology. Humans have skills in managing technology. The next aspect is technology. The role of technology in digital transformation is to be a supporting tool for the digital transformation process (Nadkarni & Prügl, 2021).

2. Strategic Management

Strategic management is a plan that is prepared and managed by taking into account various aspects with the aim that the influence of the plan can have a positive impact on the organization in the long term. One of the focuses of studies in strategic management is to provide a long-term impact on the application of strategic concepts to companies. Or sustainable, including in terms of stable profits. Stable profits are influenced by sales stability which continues to experience constant growth (Barbosa et al., 2020).

According to George A. Steiner and John B. Miner, Strategic management is a term used to identify the formulation of top company policies/strategies and their implementation in public and private organizations. In general, the scope of strategic management is very broad, both from an internal and external perspective (Axelsson & Höglund, 2023). However, in general, the scope of strategic management studies moves based on the understanding below, namely:

a. Review and analyze the impact of implementing strategic management internally in the company, especially on sustainable improvements.
b. Placing strategic management construction as the basis of the company's foundation in deciding every decision, especially decisions related to profit and company expansion. This means that the focus of work in achieving both sides refers to strategic management construction.
c. Making strategic management science a basis for thinking in building various plans including production, marketing, personnel, and financial plans.

The concept of strategic management is used to build sustainable businesses. And that is one way of understanding the environment, especially the industrial environment, correctly and well.

In several growing companies, especially large companies, the framework for planning strategy is a formal long-term planning process and this is a process that varies from company to company but is increasingly interrelated so that it cannot possibly be separated from the overall strategic management process. As a result, strategic planning is a new way of managing. According to Sondang P. Siagian, Strategic management is a series of fundamental decisions and actions made by top management and implemented by all levels of an organization to achieve the organization's goals (Linden, 2021).

Nowadays the term strategy is used by all types of organizations and the main ideas contained in the original meaning are still maintained, only the application is adapted to the type of organization that applies it, because in the real sense top management is indeed involved in a form of "warfare". In formulating a strategy, top management must pay attention to various critical factors (Hillmann & Guenther, 2021).

Next, Alex Miller emphasized the five main characteristics of strategic management, namely;

a. Strategic management integrates various functions within the organization.
b. Strategic management is oriented towards overall organizational goals.
c. Strategic management considers the interests of various bettors (stakeholders).
d. Strategic management deals with various time horizons.

e. Strategic management deals with efficiency and effectiveness (Foris et al., 2020).

From the several definitions of strategic management mentioned above, there is one important thing that can be concluded, namely that strategic management consists of 3 processes, namely.

a. Determination of strategy, which includes developing long-term missions and goals, identifying opportunities and threats from outside as well as the strengths and weaknesses of the company or organization, developing strategic alternatives, and determining appropriate strategies to be adopted (Fuertes et al., 2020).
b. Implementation of strategy, including determining annual operational targets, company or organizational policies, motivating employees, and allocating resources so that the established strategy can be implemented (Chowdhury et al., 2023).
c. Strategic evaluation or control includes efforts to monitor all results of strategy creation and implementation, including measuring individual and company performance and taking corrective steps if necessary (Mio et al., 2022).

C. METHOD

This research will be carried out using a qualitative approach. Through this approach, research data will be obtained from various valid sources, such as research results and previous studies that are relevant to the topic of digital transformation in traditional industries. A qualitative approach allows researchers to explore various aspects of strategic management, digital technology implementation, and the development of digital skills and competencies in depth. When research data has been successfully collected, the next step is to process the data so that research results can be found. The data processing process will involve in-depth analysis to identify significant patterns, themes, and relationships between various factors involved in digital transformation. Thus, it is hoped that the research results can provide practical guidance for traditional companies in formulating digital strategies, implementing technology, and developing employee skills to achieve competitive advantage in the digital era.

D. RESULT AND DISCUSSION

1. Challenges of Digital Transformation in Traditional Industries

Digital transformation in traditional industries faces complex and multi-layered challenges, which often hinder companies' efforts to adapt to the digital era. One of the main challenges is resistance to change, which arises not only from employees but also from management. Cultural and psychological factors play a large role in this resistance. Many employees feel comfortable with the ways of working they are familiar with and are reluctant to try new methods involving digital technology (Pfaff et al., 2023). There is fear of losing their jobs to automation, as well as concerns that they do not have the necessary skills to operate in the new work environment. On the other hand, management is often skeptical of change because they are concerned about the risks associated with investing in new technology, as

well as uncertainty about return on investment (ROI) that may not be immediately apparent.

Overcoming resistance to change requires a careful and comprehensive strategy. One approach is through effective and transparent communication. Management needs to explain the benefits of digital transformation not only for the company as a whole but also for individual employees. This can include increased efficiency, career development opportunities, and a more dynamic work environment. Additionally, involving employees in the change process from the start can help reduce fear and give them a sense of ownership of the changes underway. Training and skills development are also key to this strategy. By giving employees access to relevant training, companies can equip them with the skills needed to succeed in a digital work environment.

Resource limitations are another significant challenge in digital transformation in traditional industries. Financial constraints often prevent companies from investing in needed digital technology. Traditional industries, especially those operating on thin profit margins, may not have sufficient budgets to implement advanced technology solutions. Apart from that, lack of access to adequate technology and digital infrastructure is also a barrier. Many companies operate in remote locations or areas with limited technological infrastructure, making it difficult for them to adopt digital technology effectively.

To overcome resource constraints, companies need to adopt creative and efficient approaches. One way is to prioritize technology investments that have the greatest impact on efficiency and productivity. Companies can start with small pilot projects that can be expanded gradually as ROI increases. In addition, collaboration with external parties such as technology vendors, governments, and financial institutions can help overcome financial limitations and technology access. Government programs that provide incentives or subsidies for the adoption of digital technology can also be utilized to support digital transformation.

Integrating legacy systems with new technology is a technical challenge that is often complex and time-consuming. Many traditional industries still rely on legacy systems that have existed for years, even decades. Connecting these legacy systems with modern digital solutions is not easy due to differences in technology architecture, communication protocols, and data used. These difficulties can result in significant downtime, operational disruptions, and data security risks. Therefore, companies need to carry out careful and strategic planning in the integration process.

Approaches to mitigating risk during the integration process include conducting a thorough analysis of existing systems and new technology requirements. This involves assessing the capabilities and limitations of legacy systems as well as identifying critical integration points. The use of middleware or integration platforms can help bridge the gap between old and new systems. Additionally, a phased approach to data and system migration can reduce the risk of operational disruption. A clear transition stage, with a detailed roadmap, is essential to ensure that each step in the integration process is carried out carefully and coordinated. Involving cross-functional teams, including IT, operations, and management, in integration planning and execution can also ensure that all technical and operational aspects are well considered.

By facing these challenges head-on and strategically, traditional industries can pave the way to successful digital transformation. Effective strategic management, good communication, employee training, and optimal use of resources are the keys to overcoming resistance, resource limitations, and system integration difficulties. Successful digital transformation will not only increase efficiency and productivity but will also provide a significant competitive advantage in an increasingly digital marketplace.

2. The Role of Strategic Management in Digital Transformation

Strategic management plays a crucial role in the success of digital transformation in companies, especially in formulating a clear and measurable digital vision and strategy. A clear vision is the main foundation that provides direction and purpose for all transformation efforts. Without a well-defined vision, companies risk losing focus and direction in their digital journey (Fischer et al., 2020). Therefore, the first step in developing a digital strategy is to formulate a vision that is specific, realistic, and measurable. This vision should describe how the company sees itself in the future after implementing digital technology, including expected changes in operations, interactions with customers, and position in the market.

Once the vision is set, the next step is to develop an effective digital strategy. This strategy should include an in-depth analysis of the company's internal and external environment, including strengths and weaknesses, as well as existing opportunities and threats. This process usually begins by conducting a digital audit to assess the readiness of existing technology and infrastructure. Based on the findings from this audit, the company can then identify areas that require improvement or investment. In addition, a digital strategy must include a detailed implementation plan, including the stages to be followed, the resources needed, and the time needed to achieve each stage. Companies also need to establish key performance indicators (KPIs) to measure the progress and success of digital strategies.

Effective communication of the digital vision and strategy to the entire organization is a critical next step. Management must ensure that all employees, from the highest level to the lowest, understand the digital vision and strategy that has been formulated. This communication must not only be clear and consistent, but it must also inspire and motivate employees to support the transformation effort. Using multiple communication channels, such as in-person meetings, email, company intranet, and internal social media, can help spread messages more effectively. In addition, involving employees in the strategy planning and implementation process can increase their sense of ownership and commitment to change.

The role of leadership in guiding digital transformation cannot be ignored. Strong and visionary leadership is essential to lead change and overcome challenges that arise during the transformation process. Leaders must be able to inspire and motivate teams, as well as provide clear direction and support them in facing uncertainty. Effective leadership also involves making fast and appropriate decisions, especially in the face of rapid changes in the digital world. Decision-making methods that support innovation and change, such as agile approaches, can help companies become more responsive to market and technological dynamics.

Building cross-functional teams to lead digital initiatives is also a key element in strategic management. These teams typically consist of individuals with a variety of skills and backgrounds, including IT, marketing, operations, and human resources. This cross-functional collaboration is important to ensure that all aspects of the business are considered in the digital strategy and that the initiatives are implemented in a coordinated and effective manner. Cross-functional teams can also drive innovation by combining diverse perspectives and ideas.

Managing organizational change and adaptation is another challenge that must be faced in digital transformation. Major changes in an organization's way of working and culture often create resistance and discomfort. Therefore, management needs to develop effective strategies to manage these changes. One approach is to create a company culture that supports innovation and flexibility. This can be achieved by promoting values such as the courage to try new things, learning from failure, and cooperation between teams. In addition, developing employee skills and competencies through continuous training and development is essential to ensure that they are ready to face digital challenges. Well-designed training programs can help employees develop the technical and non-technical skills needed to succeed in a digital work environment.

In this context, the role of employee training and development becomes very important. Management must ensure that employees have access to resources and training opportunities that enable them to continue learning and developing. This includes formal training, such as courses and certifications, as well as informal learning, such as mentoring and collaborative projects. By providing adequate support, companies can help employees adapt to change and feel more confident in facing digital challenges.

Overall, the role of strategic management in digital transformation involves various interrelated aspects and requires an integrated approach. Formulating a clear digital vision and strategy, leading effectively, managing organizational change, and developing employee skills are important steps that must be taken to ensure the success of digital transformation. With the right approach, companies can overcome existing challenges and take advantage of the opportunities offered by digital technology to achieve competitive advantage in an increasingly digital marketplace.

3. Implementation of Digital Technology in Business Processes

The implementation of digital technology in business processes has become one of the main drivers of transformation in various industries. One of the main aspects of this implementation is automation which significantly increases operational efficiency and productivity. Automation allows companies to reduce dependence on manual processes that are time-consuming and prone to human error (Baiyere et al., 2020). By using technology such as robotic process automation (RPA), companies can automate repetitive tasks such as data entry, transaction processing, and inventory management. The direct impact of this automation is increased operational speed and accuracy, which in turn can reduce operational costs and increase profitability.

The technologies that can be applied to automate business processes are very diverse. Apart from RPA, there are also technologies such as artificial intelligence (AI) and machine learning that can be used to automate more complex and data-driven

processes. For example, AI can be used for predictive data analysis that helps in strategic decision-making, while machine learning can be used to develop algorithms that automatically improve processes based on historical data. However, implementing automation also faces challenges, including resistance from employees worried about losing their jobs, as well as the need to integrate new systems with existing infrastructure. To overcome these challenges, companies need to adopt an inclusive change management approach, provide adequate training to employees, and ensure that new systems are designed to integrate seamlessly with existing systems.

The use of data and analytics is also an important component in the implementation of digital technology. Data is a valuable asset that can provide deep insights for a company if managed and analyzed properly. Key benefits of data and analytics in business decision-making include the ability to identify market trends, understand customer behavior, and optimize business operations. The approach to collecting, analyzing, and using data effectively involves several key steps. First, companies must have a reliable system for collecting data from various sources, including internal and external data. Once the data is collected, the next step is to clean and validate the data to ensure quality and accuracy.

Data analysis requires sophisticated analytical capabilities, which can be achieved using analytical tools such as business intelligence (BI) tools and big data platforms. With this capability, companies can perform descriptive analysis to understand what happened, diagnostic analysis to find out why it happened, predictive analysis to estimate what might happen in the future, and prescriptive analysis to determine what actions to take. Developing analytical capabilities within an organization requires investment in employee training, as well as hiring experienced data experts. Additionally, a data-driven culture must be established in the organization, where decisions are based on solid data analysis and not just on intuition or experience.

Customization and personalization of services are other aspects of digital technology implementation that can provide significant added value to companies. Digital technology allows companies to offer products and services tailored to customers' individual needs and preferences. For example, by using data analytics and AI, companies can predict customer needs and offer personally relevant product recommendations. Improving customer experience through personalization not only increases customer satisfaction but can also increase customer loyalty and company revenue.

Techniques for integrating customer feedback in business processes involve the use of digital tools and platforms such as customer relationship management (CRM) systems, online surveys, and social media. Feedback collected from these various channels can be analyzed to identify trends and patterns that can be used to improve products and services. For example, sentiment analysis can help companies understand how customers feel about their products and identify areas that need improvement. By leveraging digital technology, companies can quickly respond to customer feedback and make necessary adjustments to meet their expectations.

Overall, implementing digital technology in business processes requires a structured and strategic approach. Automation, use of data and analytics, and

customization and personalization of services are the three main pillars that can help companies achieve successful digital transformation. However, companies must also be prepared to face the challenges that arise during this process and develop effective strategies to overcome these obstacles. With the right approach, digital technology can bring significant and positive changes to the way companies operate, interact with customers, and compete in the marketplace.

4. Develop Digital Skills and Competencies

Developing digital skills and competencies in the era of digital transformation is a crucial step for companies that want to remain competitive and innovative. One of the main components in developing digital skills is through structured and ongoing employee training and development programs. Effective training programs are designed to improve employees' technical and non-technical skills, such as understanding the latest technology, and data analysis skills, as well as soft skills such as adaptability and critical thinking abilities (Schneider & Kokshagina, 2021). Identification of training needs begins with an assessment of existing skills and those needed to achieve business goals. This assessment can be done through surveys, interviews, or competency assessments. Once training needs are identified, companies can design appropriate training curricula and choose the most effective methods, such as in-house training, online courses, or external workshops.

Measuring the effectiveness of training is an important next step to ensure that investments in skills development produce the desired results. This evaluation can be carried out through various methods, including assessments before and after training, feedback from training participants, as well as measuring employee performance after participating in the training program. Key performance indicators (KPIs) such as increased productivity, efficiency, and quality of work can provide insight into the real impact of the training. Additionally, initiatives to promote continuous learning are essential in creating a culture of learning in organizations. This can be done by providing ongoing access to learning resources, such as digital libraries, subscriptions to e-learning platforms, as well as support for attending conferences and seminars.

Attracting and retaining digital talent is a challenge amidst intense competition for professionals with high-tech skills. Strategies for attracting digital talent involve a variety of approaches, including building a company image that is innovative and attractive to potential employees. Effective recruitment campaigns, partnerships with universities and educational institutions, and structured internship programs can help attract talented young talent. In addition, companies must provide an engaging and supportive work environment, with a culture that encourages innovation and creativity.

Retaining employees with high digital skills requires a more holistic approach. Employees with high digital skills are often looking for new challenges and opportunities for growth. Therefore, companies need to provide interesting and clear career paths for them. This can include opportunities to work on innovative projects, opportunities to learn and develop through advanced training, and recognition and reward for their contributions. Work flexibility, such as the option to work remotely or flexible working hours, is also an important factor in retaining digital talent. By

creating a supportive and challenging work environment, companies can increase employee retention and ensure that they remain motivated and engaged.

Collaboration with external parties also plays an important role in developing digital skills and competencies. Partnerships with educational institutions and technology training providers can provide access to resources and expertise that may not be available internally. For example, companies can work with universities to develop curricula that are relevant to industry needs or offer internship programs that give students practical experience. In addition, collaboration with startups and technology companies can open up opportunities for joint innovation and knowledge transfer. Startups often bring new perspectives and advanced technologies that can be integrated into a company's operations.

The benefits of an inclusive and collaborative digital ecosystem are enormous. This ecosystem enables a faster exchange of ideas and knowledge, as well as access to resources and a wider network. Through collaboration with various stakeholders, including governments, the business community, and non-profit organizations, companies can drive innovation and digital skills-building more effectively. Initiatives such as hackathons, innovation competitions, and research collaborations can help create new solutions and accelerate the adoption of digital technologies.

Overall, developing digital skills and competencies requires a comprehensive and sustainable approach. Structured training programs, strategies for attracting and retaining talent, and collaboration with external parties are key elements that must be integrated into the company's strategy. By focusing on developing digital skills and competencies, companies can build a workforce that is ready to face future challenges and take advantage of the opportunities offered by digital transformation. Through the right approach, companies can not only improve operational performance and efficiency but also create an innovative and attractive work environment for digital talent.

E. CONCLUSION

Digital transformation in traditional industries is a strategic step that requires a comprehensive and integrated approach. Strategic management plays an important role in formulating a clear digital vision and strategy, as well as in leading change and making decisions that support innovation. Effective leadership, managing organizational change, and developing a company culture that supports innovation are key elements to ensure successful digital transformation. The implementation of digital technologies in business processes, such as automation, use of data and analytics, and service customization, can bring significant improvements in operational efficiency and customer experience. However, the success of digital transformation also depends heavily on the development of digital skills and competencies within the organization. Structured training programs, strategies for attracting and retaining digital talent, and collaboration with external parties are important factors that must be considered. With a comprehensive and sustainable approach, companies can overcome existing challenges and take advantage of opportunities from digital technology to achieve competitive advantage in an increasingly dynamic market.

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