

LITERATURE STUDY ON THE IMPACT OF DIGITAL TRANSFORMATION ON COMPANY PERFORMANCE

Yohanes Susanto¹⁾, Eko Dwi Putra²⁾

¹⁾Faculty of Economics, Universitas Terbuka, Indonesia

²⁾Magister of Management, Faculty of Economics, Universitas Andalas, Indonesia

Corresponding author: 044498005@ecampus.ut.ac.id

Abstract

Digital transformation is a process of human and cultural interaction in adapting companies to new forms of organization and skills that are necessary to survive and remain relevant in the digital landscape. This literature study aims to examine the extent of the influence of digital transformation on company performance, using parameters such as the company's financial performance, customer satisfaction levels towards companies adopting digital technology, and changes in operational processes. The research method used is a literature review, comparing several journals that study the phenomenon of digital transformation. The research results indicate that digital transformation has a positive impact on company performance, as evidenced by improvements in financial performance and company revenue, operational efficiency through process innovation from analog to digital, and task or work efficiency. The improvement in company performance due to digital transformation is experienced by various types of companies, ranging from private sectors such as MSMEs, companies fully run by women, to state-owned enterprises.

Keywords: Company performance; improvements; digitalization; operational processes; digital transformation

Introduction

Technological developments always have an impact on the industrial world. A Chancellor from Germany, Angela Merkel, explained in 2014 that the industry is currently in the era of the Fourth Industrial Revolution. The Industry 4.0 era is a condition where industries are undergoing comprehensive transformation across all aspects of production through the integration of digital technology and the internet with conventional industries. Companies around the world are starting to shift and change their business models, adopting digital strategies in response to the spread of new digital technologies and the emergence of new disruptive threats. One of the reasons companies adopt digital technology and the internet is to gain a competitive advantage. Some potential benefits include increased sales or productivity, innovation in value creation, or new forms of interaction with customers.

Benjamin & Eliot (1993) define digital transformation as a process of human and cultural interaction in adapting companies to new organizational forms and skills necessary to survive and remain relevant in the digital landscape. Barry Libert (2016) defines digital transformation as changes based on digital technology, resulting in unique changes in business operations, business processes, and value creation. Vial (2019) defines digital transformation as a process of enhancing an entity by making significant changes to its properties through the combination of information technology, computing, communication, and connectivity. Naveen Kumar (2022) defines digital transformation as a process of using technology to improve customer engagement, enhance processes, and leverage people for better outcomes.

Based on the definitions provided by these experts, it can be concluded that digital transformation is a process of improving business entities by responding to changes occurring in their environment through the alignment of the culture of the people involved in the company, clear organizational structures, and detailed descriptions of tasks that employees must perform in each division. Digital transformation is not limited to a mere shift in technology but goes deeper to encompass organizational cultural changes. Digital transformation is an ongoing process of technology adoption that cannot be seen as a one-time project (Putra et al., 2021).

According to Rivai & Basri (2004), company performance is defined as the results of work achieved by individuals or groups within a company in accordance with their authority and responsibility in efforts to achieve company goals in a legal manner and in line with moral and ethical standards. Moerdiyanti

(2010) defines company performance as the outcome of a series of business processes involving the sacrifice of various resources and finances of the company.

Based on the definitions explained by the experts, it can be concluded that company performance is the result achieved by members within a company according to their authority and responsibility, involving the sacrifice of the company's resources and finances to achieve the company's goals in a legal and ethical manner.

One example of digital transformation phenomena in Indonesia is Gojek. Gojek is a company founded by Indonesians, a digital application-based company that achieved the status of the first unicorn and decacorn in Indonesia. Gojek successfully underwent a digital transformation with the launch of its Android and iOS applications on January 7, 2015. Thanks to this adoption of digital transformation, Gojek managed to change its business processes where passengers can quickly find drivers with the help of digital technology and the internet. Gojek's success as a technology-based company raises questions about how digital transformation impacts company performance, how significant the influence of digital transformation is, and the scope of digital transformation. Therefore, the main objective of this research is to determine whether digital transformation can positively impact company performance.

Methods

The method used in this research is a literature study, which is conducted by collecting secondary data in the form of previous research findings related to the topic, through reading, taking notes, and then processing the data to obtain the theoretical foundation for the topic being studied, uncovering relevant theories related to the research topic, and deepening the researcher's knowledge about the phenomenon and topic to be studied. The literature study is conducted following the systematic review procedure outlined by Gaur & Kumar (201). The initial stage involves determining the research topic. The next stage is defining the objectives and questions that the literature study aims to answer. The data used as journal references are journals published within the last 10 years.

Results and Discussions

Raza et al. (2020) state that the digitalization of logistics processes is part of the Industry 4.0 era, which is marked by five key technologies: Artificial Intelligence (AI), Internet of Things (IoT), Wearable Technology (WT), Advanced Robotics (AR), and 3D Printing (3DP). These five key technologies provide numerous benefits in the field of logistics, particularly from raw material processing as far as product delivery to consumers. This digital transformation is changing the market context for almost all businesses. Several important aspects that influence changes in the market context include consumer behavior, product innovation, and the re-engineering of existing products, business operation models, and the growth of outsourcing. The development of e-commerce has also had a significant impact on logistics. E-commerce trends in 2020 affected logistics services in several ways, including: (1) The increase in same-day delivery for consumers, particularly millennials who want their orders delivered the same day. (2) The implementation of technology and digital automation, such as the use of AI in logistics services, the use of chatbots for customer service, route optimization, geofencing technology, and driverless vehicles. Digitalization in the supply chain allows companies to meet customer demands, overcome supply-side challenges, and improve supply chain efficiency. With digitalization, Supply Chain 4.0 will become faster, more flexible, with smaller, more accurate, and more efficient deliveries.

Marwah (2022) conducted research on the steps taken by digital media companies in adopting digitalization. Digital media companies develop digital services by utilizing digital resources (infrastructure and platforms) and integrating them into digital content, web publishing, and digital video platforms (OTT). Furthermore, media companies implement digital growth strategies that include: (1) the development of business models for mobile applications and media sites, (2) expanding audience markets through digital marketplaces (mobile and platforms). These digital growth strategies are implemented to diversify the platform portfolio, resulting in market penetration through platforms and mobile applications as efforts to leverage digital technology.

The linear regression analysis results show that MNCs have an average revenue growth of 5.4%, which has a positive implication for the company's digitalization timing. SCM shows an average revenue growth of 5.9%, with a positive implication regarding digitalization timing, while VIVA experienced an average revenue growth of -10.37%, which has a negative implication for the digitalization timing. On the other hand, digital companies such as Netflix have an average revenue growth of 26.3%, which positively correlates with the company's digitalization timing, and technology companies like Alphabet Inc., with its YouTube service, recorded an average revenue growth of 29.6%, also showing a positive implication for the company's digitalization timing.

The results of the research conducted by Agus Kurniawan et al. (2021) at the Bank BJB branch offices, using the Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis method, show that digital transformation and innovation have a positive impact on the performance of Bank BJB. The performance measurement in this study used indicators such as profitability, customer retention, Return on Investment (ROI), and sales growth. The final results of the PLS-SEM calculation showed a value of 94.4%, meaning that digital transformation and substantial innovation can explain company performance. These findings are consistent with research by Henfridsson et al. (2018), Nambisan et al. (2017), and Nwankpa & Roumani (2016), which analyze how the unique nature of digital technology can foster innovation and entrepreneurship that differs from traditional analog industry processes.

In a study conducted by Fadhilah (2023) on Sharia cooperatives, which examined the impact of service digitalization on the financial performance of Sharia cooperatives, using financial performance data from ratios such as Return on Assets (ROA), Return on Equity (ROE), Operational Expense Ratio (OER), and Service Digitalization obtained from the Annual Financial Reports of Ar-Rahmah Cooperative and KSUAL-Firdaus from 2015-2020. The research method used simple regression analysis with SPSS for Windows version 25. The results of the study show that service digitalization significantly impacts the financial performance indicators, such as Return on Assets (ROA), Return on Equity (ROE), and Operational Expense Ratio (OER). The level of service digitalization maturity in Sharia cooperatives was found to have a more significant impact on their financial performance.

In another study conducted on women-owned businesses by Popović et al. (2019), the findings from statistical analysis showed a significant level of digital transformation within the sample studied, confirming the hypothesis that digital transformation has a positive impact on company performance. Notably, the level of customer satisfaction, which is a key driver of profitability, did not show significant differences between businesses that had undergone digital transformation for less than two years and those that had been in the process for more than two years. This can be explained by the lack of substantial progress in moving through the various stages of digital transformation, as many initiatives do not provide direct benefits to consumers or are not visible to them, thus not resulting in significant changes in satisfaction levels. Furthermore, more than 76% of companies used e-Government services, 51.5% were able to accept e-invoices, 73.9% used accounting software, and 63.1% processed e-invoices. In contrast, only a small portion of companies leveraged digital technology to better meet the needs of modern consumers. Only 31.8% succeeded in adapting their business models to consumer demands (such as offering free basic products or rental options), while 45.5% reported that digitalization had created additional benefits for consumers, such as easier product access and more options. These findings suggest that in the future, companies need to focus more on consumer needs, aiming to use digital technology more productively to improve relationships with consumers and create an optimal digital experience.

Wang et al. (2022) conducted research on manufacturing companies in China, using an unbalanced panel of communication companies listed on the A-share market in China from 2007 to 2020. The study shows that digital transformation improves the performance of manufacturing companies. These findings remain consistent after using a dynamic panel regression model, an instrumental variable approach to address endogeneity issues, and a series of robustness tests. The heterogeneity analysis results show that the positive effect of digital transformation on manufacturing company performance is stronger in state-owned companies and in regions that are more market-oriented compared to other companies. The channel effect test, based on a mediation effect model, found that there is a partial mediation effect of low-cost empowerment and increased innovation investment between digital transformation and manufacturing company performance. In addition, there is a transmission channel through which digital transformation enhances manufacturing company performance by influencing performance, specifically from digital transformation to low-cost empowerment or innovation empowerment, and ultimately to improved manufacturing company performance.

Pristiwaningsih et al. (2024), through their research, state that digital technology is a valuable, rare, and difficult-to-replicate resource that can improve the operational capabilities and competitiveness of small companies in an increasingly digital market. These findings provide insights that can be applied by small-scale manufacturers considering digital transformation. Focus on automation, the Internet of Things (IoT), and data analytics should be prioritized as they offer the highest return on investment in operational efficiency. Digital technology providers need to understand the unique needs and challenges faced by small-scale manufacturers. Providing more affordable, customizable, and user-friendly solutions can accelerate digital adoption in this sector. This research shows a clear and significant relationship between the adoption of digital technology and operational efficiency in small-scale manufacturing industries. By focusing on technologies such as automation, IoT, and data analytics, small manufacturers can achieve significant improvements in production speed, cost reduction, and quality. However, barriers such as

financial limitations and skills gaps remain obstacles to wider adoption. By addressing the specific challenges faced by these companies, policymakers and industry leaders can promote further digitalization, enhancing competitiveness and sustainability in the manufacturing sector. The findings of this study offer important insights for manufacturers, policymakers, and technology providers who wish to optimize the benefits of digital transformation in the manufacturing sector.

The results of the research conducted by Eryc (2022) on MSMEs in Batam aimed to evaluate the extent to which MSMEs in Batam implemented digitalization during the COVID-19 pandemic. The findings of this study align with previous research by Nwankpa & Roumani (2016). This study aims to confirm the mediating role of digital transformation in the relationship between Information Technology (IT) capabilities and company performance in Batam during the pandemic context. Previous research had confirmed the significant positive impact of IT capabilities on the mediator digital transformation and company performance. The findings of this study also show that IT capabilities have a significant impact on company performance, both directly and indirectly through the role of digital transformation. With the abundance of available digital technologies and the opportunity to utilize IT infrastructure such as IT business scope, proactive attitudes towards IT, cloud storage, social media, mobile platform applications, and big data, MSMEs can improve their performance through the integration of digital technologies among tools, people, and processes.

The research by Sahrul et al. (2023) shows that the higher the utilization of e-commerce, the better the business performance. E-commerce capabilities are equipped with various features to facilitate business owners in obtaining information, saving operational costs, conducting transactions, and improving services, making the business more effective and efficient. Digital transformation has a significantly positive impact on business performance. MSMEs can easily access information about internet traffic, market demand, and other useful information that serves as a tool to help MSMEs make better business decisions. Concrete evidence of how digital transformation helped MSMEs during the pandemic includes cost savings, fast information, market expansion, and performance flow optimization. The results of this study are also consistent with the Resource-Based View (RBV) Theory, which emphasizes the ability to create uniqueness through effective resources to improve long-term performance success. Based on RBV theory, MSMEs need to develop their capacity, in this case, through e-commerce and social media. MSMEs' ability to adopt the latest digital technologies extensively can transform their ability to run their businesses, which will lead to improved sustainable performance.

Findings from the research conducted by Fauziyyah (2022) in the field of corporate accounting reveal that digitalization not only impacts management accounting in the management and reporting of a company's or organization's internal conditions, but also has a broader impact. Digital transformation in management accounting becomes crucial if a company or organization wants to progress. In practice, digitalization enables management accounting to be conducted in a more environmentally friendly (paperless), integrated, and fast manner through technology, real-time reporting, the utilization of big data, cloud computing, blockchain, and Artificial Intelligence (AI). Digitalization has brought many conveniences and advancements in the management accounting process, although accountants still need to remain prudent and solution-oriented in facing emerging challenges. Professionals and academics are required to master relevant skills for the future to compete in their careers and prepare themselves. These skills include the development of critical thinking and problem-solving, mastery of technology, adaptability, flexibility, interpersonal interaction, awareness, and the desire to continue learning. The solution to the educational challenges for future accountants lies not only in technology but also in the willingness and ability of educators to continue learning and innovating, creating a learning environment that meets the needs of the current generation and the times. Through the implementation of smart education designed to meet the needs of the digital generation, future accountants will be better equipped to adapt and prepared to face digitalization. Accountants also play an important proactive role in running the business of the company, and thus need to collaborate with employees from other functions, especially with IT experts related to digitalization and other issues.

Conclusions

Digitalization, as a form of digital transformation, changes the market context for almost all businesses. From the research results that have been collected and analyzed, it can be concluded that digital transformation has a positive impact on company performance. Technological development helps human work, one example being in the field of accounting. Accounting is an important part of a company as it serves as a review of the company's development, especially for banking companies, both public and private banks.

The scope of technology's influence within companies is vast, and the implications of research related to digital transformation include making business processes more streamlined, helping companies respond to the market more quickly, and improving customer satisfaction. It would be a missed opportunity if companies do not effectively utilize technology and carry out digital transformation, particularly in terms of digital technology, which can become a valuable, rare, and difficult-to-replicate resource that enhances operational capabilities and competitiveness in an increasingly digital market.

For future research, a recommendation would be to investigate the effects of digital transformation by examining all divisions within the company to obtain more detailed data regarding the extent of the impact of digital transformation on each part of the company.

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Authors' Bibliography

Yohanes Susanto (First Author). Yohanes Susanto was born in Jakarta, Indonesia on June 03, 1996. He still an Undergraduate in Management from Universitas Terbuka. His research interest primarily focus on digital transformation impact on company performance.

Eko Dwi Putra (Corresponding Author). Eko Dwi Putra was born in Padang, Indonesia on June 30, 1988. He holds a Master's degree (S2) in Management from Universitas Andalas, where he graduated with cum laude honors. His research interests primarily focus on capital market, corporate governance, and sustainability practices in the context of the Indonesian economy.