
The Influence of Digital Transformation on Sustainable Performance Through Innovation: A Literature Review

Sucik Rahayu

Faculty of Economics and Business, Universitas 17 Agustus 1945 Surabaya,
Indonesia

E-mail: 1272300039@surel.untag-sby.ac.id

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Abstract

An important contributing aspect to the dynamic shifts in the contemporary business environment is digital transformation, involves implementing significant adjustments to business processes and offering clients additional value via the use of cutting-edge technologies like big data, artificial intelligence, and the Internet of Things. Examining how digital transformation affects corporate sustainability and innovation performance is the goal of this study, which also focuses on how innovation functions as a mediator in this relationship. Sustainable performance, which includes consideration of environmental and social impacts, has become increasingly important in today's business strategies, requiring companies to consider sustainability aspects in every operational aspect of the company. involves implementing significant adjustments to business processes and offering clients additional value via the use of cutting-edge technologies like big data, artificial intelligence, and the Internet of Things. The objective of this study is to examine how digital transformation affects corporate sustainability and innovation performance, with a focus on innovation's function as a mediator in this relationship. These findings provide in-depth insight into the complex relationships and energetic causality between digital technology, innovation, performance, and sustainability, and provide strategic guidance for companies in developing sustainable policies and practices in the ever-evolving digital era.

Keywords: *Digital Transformation, Performance, Innovation*

INTRODUCTION

Digital transformation is now one of the primary forces influencing change across many industries, including business and the economy, in the age of globalization and rapid technology advancement. Artificial intelligence, big data, and the Internet of Things (IoT) are examples of digital technologies that are used in digital transformation, to change the way companies operate, innovate, and provide added value to customers (Verhoef et al., 2021). Research shows that Businesses can gain fresh insights from digital transformation that can help them make better decisions, run more efficiently, and engage more customers (Lee & Trimi, 2018). Employee performance and digital transformation are intimately tied

to the strategic role that human resource management (SHRM) plays in the latter. An organization's employees are regarded as its core, and it is up to them to carry out its plans and accomplish its objectives. Productivity and efficiency are increased by skilled and motivated workers (Rivaldo and Nabella, 2023; Santos, 2023). Organizations gain competitive advantages and save costs with talented employees. Human resource management strategy (SHRM) functions to explain how employees perform in the company and plays a very important role in creating strategies to improve employee performance (Fahad and Hasmi, 2024: 1-3).

A emphasis on achieving motivated and engaged pupils has been fostered by the development of digital transformation (DT) in organizations and educational institutions. To attain future goals of employment satisfaction and operational efficiency. Employing and implementing DT indirectly makes the connection between digital transformation, transactional and transformative leadership, and employee engagement in higher education or commercial settings more significant (Valentine and Ionana, 2023: 1-3). In the midst of demands to achieve *sustainable and economic growth*. According to Lins, Servaes, and Tamayo (2020), sustainable companies, organizations, or institutions are imperative to consider not just the financial gains from their operations, but also the environmental and social consequences of those gains. Businesses need to be flexible and quick to react in the face of fiercer competition and swift shifts in consumer preferences. Thus, in order to ensure a company's long-term viability and competitiveness in a market that is changing quickly, innovation is essential (Bocken et al., 2014).

Peppard (2016) asserts that digitalization presents businesses with a chance to adopt new business models that will boost productivity and cut expenses. Modifications to manufacturing processes are the primary effect of digitization on businesses (Melnyk and Salin, 2018), which guarantee the reduction of fixed costs, increase in operational efficiency and the creation of competitive advantages consistent with survival and growth (Gulnaz et al., 2020). In the corporate world, entrepreneurs are viewed as social change agents. As change agents, entrepreneurs address issues and add value by taking initiative and being creative. Following the digital revolution, a brand-new class of businesspeople known as revolutionary entrepreneurs arose. They generate value through a variety of digital platforms. Because of its emphasis on challenge-based enterprises and time-based nature, transformational entrepreneurship might be regarded as a distinct kind of entrepreneurship. The term "revolutionary entrepreneurship" describes the capacity and deeds to effect societal change as well as changes in organizational and entrepreneurial activity, which are typified by the creation of new trends from potential constituents. A method to integrate sustainability and an eye toward emerging trends is through transformational entrepreneurship. Digital transformation has moved from being a technology opportunity to a common necessity in order to manage the expectations and wants of a growing global population (Pejman et al., 2023).

When it comes to digital transformation, which is relevant to comprehensive transformational entrepreneurship, one approach to measure performance quality is through the caliber of financial services provided by a company. It's been

challenging to differentiate Financial Services offerings historically because they are nearly unappealing. Nonetheless, client orientation becomes a crucial factor in competition as a result of digitalization (Alt and Puschmann 2012; Bons et al. 2012; Nu 'esch et al. 2015). A range of standardized and simple-to-use digital items are how newly empowered rivals in the digital space are presenting themselves. Emphasizing the power of trust and Financial Service Providers (FSP) them, customers will be able to choose between new Financial Service Providers (FSP) services and new Financial Service Providers (FSP) services for accounts, payments, loans, mortgages, investments, or insurance products, even though transaction costs will be reduced (Poussotchi and Dehnert 2018). According to Maik (2020), engagement through digital platforms is more significant as a differentiator in the marketplace, alongside novel digital services

Transformational Leadership is indicated as a determining factor in improving the quality of a Company's performance through Digital Transformation through comprehensive innovation dynamics and mutual influence. The characteristics of a transformational leader include soft skills, the ability to increase work efficiency and achieve common goals to provide good services to the community based on the community's expectations and needs for professional work, thereby increasing consumer interest in public services. One of them is community participation in services and the use of digital technology, which is still limited by the need for greater use of digital technology (Reni et al., 2023).

These technological changes, in digital transformation, have a significant impact on work design (Barley, 2015), namely the function of workers within the company and the procedures they follow (Parker, Wall, & Cordery, 2001). Today's workers frequently use mobile devices and cloud services to connect to their workplaces, which can have a big impact on their lives and careers (Mazmanian, 2013). Furthermore, virtual teamwork is displacing traditional teamwork (Gilson, Maynard, Young, Vartiainen, & Hakonen, 2015). This entails interacting with people and working together using social media, conference calls, and instant messaging. Through collaborative platforms like Slack and Trello, as well as knowledge-sharing initiatives like Haas, Criscuolo, and George (2015) in (Tanja et al., 2018).

Using change agents or entrepreneurship and the use of need assessment, innovation can be used as a strategy to realize digital transformation. This Innovation Need Assessment classifies the firm's components into the following: the purpose is to link. It also illustrates the company's digital transformation process in accordance with the strategic direction of the company (<http://www.adrccentru.ro/dezvoltare-regionala-cat/pdr-centru-2021-2027/>).

digital needs in Europe (<https://ec.europa.eu/digital-single-market/en/content/digital-strategy-in-Europe>). The requirements assessment aims to identify potential gaps (based on evidence) in the implementation and/or adoption of digital innovations between countries and desired countries, as well as needs and needs assessments between public organizations and businesses. Romania's center region Need to act. The procedure takes a comprehensive approach, collecting data from various sources and points of view, combining and

synthesizing often contradictory material, and then aggregating it. (Herciu and Ogreen, 2020).

A number of studies have revealed that digital transformation has great potential to improve a company's sustainable performance. For example, Del Río, Peñasco, & Romero-Jordán (2021) show that innovation driven by digital transformation can help companies create more efficient and environmentally friendly products and services. Nevertheless, there is still a lack of understanding of how innovation, as a mediator, links digital transformation with sustainable performance (Triguero, Moreno-Mondéjar, & Davia, 2013).

Nonetheless, little is currently known about the way that innovation functions as a bridge to connect digital transformation with sustainable performance. Consequently, the purpose of this research is to close this knowledge gap and highlight the importance of innovation in maximizing the benefits of digital transformation for a company's long-term performance. Businesses can create more successful plans for incorporating digital technology into their operations by comprehending how innovation contributes to the benefits of digital transformation (Terzi & Cavalieri, 2021).

Relevant information regarding the connection between innovation, sustainable performance, and digital transformation has been previously gathered. Still, more research is required to determine how businesses might best use digital transformation to meet their sustainability objectives. Because of this, it is crucial that this research contribute to a better understanding of how innovation in digital transformation can lead to sustainable performance (Martinez-Conesa et al., 2021).

Research Gaps As a new contribution to the field, this study will examine in further detail how innovation functions as a mediator in the relationship between a company's sustainable performance and digital transformation. It is so envisaged that this research will close current knowledge gaps and make a significant contribution to both corporate practice and the literature. Businesses can create more comprehensive and focused plans to meet their sustainability objectives by knowing the variables that affect the interaction between innovation, digital transformation, and sustainable performance (Makar & Truong, 2020).

With this background in mind, the goal of this research is to offer a more comprehensive grasp of how innovation in digital transformation may propel sustainable success. Thus, the primary goal of this study is to look into and examine the relationship between innovation, digital transformation, and corporate sustainable performance in greater detail. Consequently, it is envisaged that this study will help decision-makers and business practitioners create strategies to deal with challenging problems in the digital era (Singh & Pandey, 2019).

METHOD

The present study employs a literature review methodology to investigate and evaluate the impact of digital transformation on sustainable performance via innovation. This method was chosen because it allows researchers to collect and integrate existing research results, so that they can provide a comprehensive picture of the topic discussed (Snyder, 2019).

Method of collecting data

The data collection method is carried out through: Data is collected from various sources including scientific journals and other publications relevant to the research topic. Using scholarly databases like Scopus, literature searches were conducted. According to Kitchenham (2004), the search was conducted using the terms "digital transformation," "sustainable performance," and "innovation." Furthermore, the study concentrated on publications that had been published in the previous five years in order to guarantee the topicality and relevancy of the data.

Research design

This research design is the adoption of a descriptive research design using a qualitative approach through reviewing articles with criteria determined by the researcher, using innovation as a moderating variable, with the goal of identifying the causal and correlational relationship between digital transformation and sustainable performance.

This research data was obtained from primary research data obtained from the results of a review of articles that have been determined to be able to analyze the data comprehensively (Nahed and Shubita, 2024).

Data Collection Criteria

Inclusion and Exclusion Criteria

When collecting data in this research, articles must meet the inclusion and exclusion criteria with the following conditions:

Articles selected for review must meet the following inclusion criteria:

1. To guarantee the accuracy and relevance of the data, publications must have been released within the previous five years (2020–2024).
2. Pay attention to how innovation, digital transformation, and sustainable performance are related to one another.
3. Empirical publications that offer precise facts and analysis related to the subject of the study.
4. Articles that failed to satisfy these standards—for instance, those that exclusively addressed technological factors without taking sustainability implications into account were not included in the review (Okoli & Schabram, 2010).

Data analysis technique

In order to conduct the data analysis method for the study, a theme analysis approach was used to qualitatively assess the acquired data. Using this method entails determining the major themes that emerge from the literature and organizing the data according to those topics. The main focus of the analysis is on how digital transformation drives innovation and how this innovation in turn improves sustainable performance (Braun & Clarke, 2006).

Data analysis steps include:

1. Read and highlight articles to understand content and key findings.
2. Identify themes relevant to the research.

3. Group articles based on identified themes.
4. Combine research results to give a thorough understanding of how innovation, digital transformation, and sustainable performance are related.

By using this literature review approach, the study should offer a comprehensive understanding of the critical role that digital transformation plays in fostering innovation that improves the long-term performance of the business. Furthermore, it is intended that the findings of this study will help practitioners and scholars create plans and regulations that will help businesses remain sustainable in the digital era.

RESULTS AND DISCUSSION

Research result

With regard to digital transformation, performance, and innovation within an organization or agency, the descriptive research results offer a contextual review argument that demonstrates the correlational and causal relationship.

The connection among innovation, sustainable performance, and digital transformation. Innovation (I) is influenced by digital transformation (TD), and innovation (I) in turn influences sustainable performance (KB). This demonstrates how innovation is fueled by digital transformation and how innovation helps companies achieve their sustainability objectives.

Table 1. Findings and Implications

No.	Findings	Implications
1.	Digital transformation drives innovation in various industries.	Companies need to pay attention to the adoption of digital technology as an innovation strategy.
2.	Increasing a company's sustainable performance requires innovation.	The development of innovative products and processes needs to be encouraged to achieve sustainability goals.
3.	Innovation functions as a mediator in the relationship between digital transformation and sustainable performance.	The importance of focusing on innovation as part of a digital transformation strategy.

Table 1 above describes the primary conclusions drawn from the investigation. The results offer a clearer understanding of how innovation influences a company's long-term performance and how digital transformation is crucial in fostering creativity. The results of this study imply that, in order to meet sustainability objectives, businesses should focus on integrating digital technology into their innovation strategy.

Innovation's Effect from the Digital Revolution

The study's findings also revealed how digital transformation affects innovation in a business that uses transformational entrepreneurship, as described below:

1. New Product and Service Development

Businesses may create innovative, more eco-friendly and efficient goods and services thanks to digital transformation. Big data, the Internet of Things (IoT), artificial intelligence (AI), and other technologies enable businesses to analyze data more rapidly and thoroughly, which spurs the creation of innovative products. For instance, using AI to analyze customer data helps businesses better understand the wants and demands of their customers, enabling them to develop goods that more effectively satisfy consumer demand (Verhoef et al., 2021).

2. Operational Process Improvement

The implementation of digital technology also allows companies to increase operational efficiency. Real-time monitoring of production processes made possible by IoT technology aids in waste identification, reduction, and energy efficiency enhancement. To enable businesses to act swiftly, IoT sensors, for instance, can be used to track energy usage and identify leaks or inefficiencies in systems (Del Río, Peñasco, & Romero-Jordán, 2021).

3. Expanding the Ability for Innovation

Digital transformation increases a company's innovation capacity by providing the tools and platforms necessary for research and development. Cloud-based platforms enable collaboration between geographically dispersed teams, which accelerates the innovation process. Additionally, digital technologies support virtual simulation and testing, which reduces the time and costs required to develop and test new products (Verhoef et al., 2021).

Innovation's Place in Sustainable Performance

The following succinctly summarizes the function that innovation plays in sustainable performance, which is connected to the digital transformation of innovation in a business and is carried out through strategic transformational entrepreneurship:

1. Ecologically Sustainable Products

Digital technology-driven innovation aids businesses in creating more ecologically friendly goods. For instance, businesses can employ biodegradable or recyclable raw materials in their manufacturing. In addition, innovations in product design enable reduced energy and raw material use during the product life cycle, which contributes to environmental sustainability (Lins, Servaes, & Tamayo, 2020).

2. Fraud Risk Reduction and Energy Efficiency

Process innovation supported by digital transformation allows companies to reduce the risk of *fraud* and increase energy efficiency. Technologies such as machine learning and data analytics are used to optimize production processes, which reduces waste of raw materials and energy. For example, machine learning algorithms can predict when

machines need maintenance, thereby avoiding breakdowns that can cause waste and inefficient energy consumption (Del Río et al., 2021).

3. Renewable Energy and Resource Management

Digitally native businesses are also more adept at transitioning to renewable energy sources and resource management. Supply chains may track the energy's source and consumption with the help of digital technologies like blockchain, guaranteeing that the energy is derived from renewable sources. Furthermore, real-time monitoring and control made possible by IoT technology leads to more effective management of energy and water resources (Lins et al., 2020).

Innovation's Function as a Mediator

The following is a description of the function of innovation as a mediator in the interaction between digital transformation and innovation as a mediator in a business that uses transformational entrepreneurship:

1. Innovation Mediation Mechanism

The results demonstrate that innovation plays a significant mediating role in the relationship between sustainable performance and digital transformation. Companies are able to meet sustainability goals through innovation, and innovation itself is made possible by digital transformation. Digital transformation might not significantly affect sustainable performance without innovation (Del Río et al., 2021).

2. Empirical Study of Innovation as a Mediator

Empirical studies show that companies that adopt digital technologies and successfully drive innovation also show significant improvements in sustainable performance. For example, companies that use big data to optimize their supply chains can reduce their carbon footprint and increase operational efficiency, which has a positive impact on sustainability (Verhoef et al., 2021).

The Contribution of Digital Transformation to Innovation Support

An increasingly significant element propelling innovation across a range of businesses is digital transformation. By utilizing cutting-edge technology, companies can increase operational efficiency, develop new products, and create innovative business models.

1. How Digital Transformation Affects Business Innovation

Technology and Internal Control Integration: Better applications and more efficient data analysis are made possible by the digital transformation process's utilization of cutting-edge technology and digital tools. This speeds up the development of new goods and services and expands the prospects for innovation. Reducing risk and managing resources need strengthening internal controls and using scientific financial planning (Guan, 2023).

2. Green Technology Innovation

Digital transformation significantly drives green technology innovation by reducing financing constraints and increasing government subsidies. This is more visible in state-owned companies and large companies (Xue et al., 2022).

Transformational Leadership and Digital Innovation

1. Digital Governance

Transformational leadership supports innovative digital governance by increasing public access to government information and services through online tools. This leadership creates innovation by supporting human relations with government and between institutions (Dema et al., 2023).

2. Innovation in Knowledge Management Systems

New Business Models: Digital innovation in knowledge management systems (KMS) drives new business models by optimizing new knowledge. This contributes to long-term value creation and improved business performance (Vaio et al., 2021).

3. Business Assistance within the Framework of Digital Revolution

Enhancement of Business Procedures Digital transformation improves business processes by facilitating cross-functional interactions and developing more modern business models. Business support in this context is important to maintain competitive advantage (Gorelova & Serebrovskaya, 2023).

4. Digital Transformation in the Manufacturing Sector

Innovation Performance: Digital transformation improves process and product innovation performance in manufacturing companies by enhancing explorative and exploitative R&D capabilities. This influence is more significant in the mechanical equipment manufacturing sector with high technology content (Liang & Li, 2022).

5. Innovation and Digital Transformation in Financial Institutions

Sustainable Innovation: Through the creation of financial technology, the banking industry's digital transformation promotes ongoing innovation (Fintech). By using technology to promote financial inclusion, digital banks get beyond the challenges faced by established actors in the financial sector (Sendjaja et al., 2012).

6. Government and Digital Transformation

Government Support: In particular for small firms, the government is a major player in facilitating the digital transition by providing digital platforms, promotion of digital payments, digital training, and digital collaboration ecosystems (Chen et al., 2021).

One of the innovations in this research that can be used and implemented in improving sustainable performance through increasing digital transformation, according to Tanja et al. (2018) are:

Work life and health, information and communication technology use, work and talent management, and shifts in operational lines are the four fundamental drivers of change in work design and leadership. Furthermore, work structure and relational leadership were designed as two tiers of change implementation. While prior studies have addressed some of the observed changes, others have not gotten much attention despite being extremely pertinent to the current state of the digital transformation industry. The findings of this study serve as a significant basis for further investigation and assist companies in developing plans to address the demands of the digital age.

Asif, Liu, and Hashim (2024) state that the innovation carried out in this research is implementing organizational/company culture, leadership. This is the second innovation that comes out of this research review and can be used as a recommendation in increasing the role of innovation in the relationship between digital transformation and sustainable performance. Organizational sustainability may be greatly impacted by digital transformation and change (such as changing the leadership). The relationship between corporate culture and sustainability remains unaffected by the intensity of innovation. Nonetheless, it acts as a mediator in the interaction of digital transformation, change leadership, and long-term company viability. The ability of a corporation to innovate and maintain sustainable performance is influenced by environmental dynamics. By demonstrating to managers how corporate culture, digital transformation, and creative leadership can support entrepreneurs in their growth without limits, this study advances the idea of sustainable business practices. The research's conclusions have significant ramifications for China, a rising nation. Researchers, managers, businesses, academic institutions, and government organizations can all benefit from this study.

The results of the article review analysis as a result of the findings of this research emphasize or focus on three things that are variables in the discussion of this article, namely:

1. Digital transformation is a strategic step that must be implemented as an applicable innovation that empowers and improves the organization's sustainable performance.
2. Applicable innovation as a key role in successfully achieving sustainable performance can be interpreted through the continuous development of innovative products and processes so that an organization's goals are achieved in an applicable manner.
3. Optimization and effectiveness of the role of innovation as a mediator developed by developing digital transformation indicators, sustainable performance in the Company will influence the level of success in achieving the Company's goals.

Discussion

Based on the findings of the review of articles used in this research, it is explained as follows:

1. The Importance of Digital Transformation

Digital transformation is a crucial catalyst for innovation in the modern era. In a competitive and dynamic business environment, digital technology not only increases efficiency but also opens up opportunities for innovation that supports sustainability. Companies that are able to integrate digital technology into their operations tend to be better prepared to face future challenges, including climate change and the need for energy efficiency.

2. The Central Role of Innovation

Innovation is the bridge that connects digital transformation with sustainable performance. Without innovation, digital transformation efforts may not have a significant impact on sustainability. Therefore, companies must focus on developing a culture of innovation that supports the creation of greener and more efficient products and processes.

3. Implementation Strategy

To maximize the benefits of digital transformation and innovation, companies must develop a comprehensive strategy. This includes investment in research and development, collaboration with external parties such as universities and research institutions, and training and development of employees to master new technologies. Additionally, it is important for companies to measure and report the sustainability impact of the innovations they implement, so they can continually improve and adapt their strategies.

4. Research Gaps and Future Directions

There are still areas that require more investigation despite the fact that the relationship between innovation, digital transformation, and sustainable performance has been the subject of numerous studies. For instance, how will the digital transformation affect sustainability in the long run and what are the best ways for different industries to use this technology? Future studies should concentrate on particular case studies that highlight optimal practices and obstacles that businesses encounter while undergoing digital transformation.

The thematic analysis's findings are then combined to paint a complete picture of how innovation, digital transformation, and sustainable performance are related to one another. This synthesis will help identify general patterns, gaps in the literature, and areas requiring further research (Tranfield, Denyer, & Smart, 2003). This process also allows researchers to make strategic recommendations for companies in developing sustainable policies in the digital era.

CONCLUSION AND RECOMMENDATIONS

Conclusion

In this research, we examine the influence of digital transformation on sustainable performance through innovation. We used a literature review research method to explore findings related to this topic from various recent sources in the form of review articles that met the criteria in this research. The following is a summary of our findings and analysis as a conclusion to the research:

1. How Innovation Is Affected by Digital Transformation

In numerous industries, innovation is significantly fueled by digital change. Businesses may create new products and services that are more eco-friendly and efficient thanks to technologies like artificial intelligence, big data, and the Internet of things. Using digital technology also creates chances to improve operational effectiveness and hasten the innovation process.

2. The Role of Innovation in Sustainable Performance

Increasing a company's sustainable performance requires innovation. Innovation assists businesses in achieving their sustainability objectives through waste reduction, energy efficiency, and the development of environmentally friendly products. Aside from that, innovation helps with the switch to renewable energy sources and more effective resource management.

3. Innovation as a Mediator

The results demonstrate that innovation plays a significant mediating role in the relationship between sustainable performance and digital transformation. Digital transformation provides the tools and platforms necessary for innovation, while innovation itself is what enables companies to achieve sustainability goals. Therefore, focusing on innovation as part of a digital transformation strategy is very important.

We thoroughly reviewed contemporary literature pertinent to the research topic in order to arrive at these results. We list the research's key conclusions and consider how they may affect the interplay of innovation, digital transformation, and sustainable performance. As a result, a greater understanding of the significance of integrating digital technology in diverse industrial sectors' efforts to attain sustainability is made possible by this research.

Our goal in presenting these findings is to stimulate more research in this field and advance knowledge of the connection between innovation, digital transformation, and sustainable performance.

Suggestions and Implications

Based on the results of the research and analysis we have carried out, we would like to provide some practical suggestions and implications for companies and researchers in this field:

1. Pay Attention to Digital Technology Adoption: As part of an innovation strategy, businesses must pay attention to the adoption of digital

technologies. Investing in cutting-edge technology like big data, artificial intelligence, and the Internet of Things may accelerate innovation and boost productivity.

2. Build a Strong Innovation Culture: It is important for companies to build a strong innovation culture that supports the development of new products and processes. This involves empowering employees to think creatively, collaborate cross-departmentally, and adopt an experimental approach to research and development.
3. Carry out Continuous Performance Measurement and Reporting: Companies need to measure and report the continuous performance of the innovations they implement. They will be better able to recognize areas in need of more development and comprehend the advantages of investing in innovation and digital transformation.
4. Collaboration and Knowledge Exchange: Working together, businesses, academic institutions, and research facilities can generate new ideas and insights. Businesses can enhance their operations and provide more potent solutions by utilizing the most recent research in the fields of sustainability and digital transformation.
5. Pay Attention to Ethical and Social Aspects: Businesses must consider the ethical and social implications of innovation and digital transformation in addition to operational effectiveness and environmental sustainability. This entails guaranteeing equitable access to technology, taking into account the social ramifications of automation replacing labor, and making sure that innovation generates advantages for the entire community.

It is intended that by putting these recommendations into practice, businesses will be able to balance their social and ethical obligations with the advantages of innovation and digital transformation in order to meet corporate sustainability goals. Furthermore, it is anticipated that scholars will persist in their investigation of this subject matter in order to enhance comprehension of the connection among digital transformation, innovation, and sustainable performance.

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