Jinnah Business Review
Jan 2025, Vol. **13**, No. 1, pp. 1-11

doi.org/10.53369/GWEU5450

Digital Transformation Strategy and e-Governance Sustainability: The Mediating Role of Sustainability-Oriented Innovation

A. Jalil*[1], K. F. Khawaja[2]

[1,2] *International Islamic University, Islamabad, Pakistan*

Abstract. Digital technologies are reshaping business paradigms and addressing sustainability challenges. In the context of developing countries, the sustainability of e-Governance projects remains an evolving field, with limited research exploring the intersection between sustainability and digital transformation. This study investigates the intervening role of sustainability-oriented innovation in the relationship between digital transformation strategies and e-Governance sustainability. Using a quantitative approach, including a survey of key stakeholders and structural equation modeling, the findings confirm that sustainability-oriented innovation significantly mediates this relationship. The study contributes to the literature by providing empirical evidence and theoretical insights into how digital transformation strategies can enhance e-Governance sustainability, offering both academic and practical implications for policymakers and practitioners.

Key words: Digital Transformation Strategy, Sustainability-Oriented Innovation, e-Governance Sustainability

1 Background of the Study

Every successful organization requires integration and use of digital technologies, which strives to provide the optimal performance in order to help the company achieve its strategic goals (Dai and Zhu, 2024; Korachi and Bounabat, 2020; Qing et al., 2022). Individuals, groups, enterprises, organizations, and governments can now benefit from faster and better communication, effective data storage, retrieval, and processing, and information exchange, thanks to the rise of information and communication technology. Many countries, both developed and developing, have been preoccupied with repositioning the public sector for effective and efficient service delivery (Nguyen et al., 2021). Electronic governance uses a variety of information technologies, to revolutionize government processes to improve effectiveness, efficiency, and service delivery while also promoting democracy (Mohammadi, 2023; Thakur et al., 2023).

Digital transformation strategy is the subsequent stage of digitalization, which is vital for digital economy as well as for improving the leadership of top management team (Singh et al., 2020). From the perspective of strategic practice, digital transformation strategy is neither an event Matt et al. (2015), nor the concluding stage of the strategy; however, it is composed of a

*Corresponding author.
Email: afsheen@iiu.edu.pk

series of decision-making activities (Dai and Zhu, 2024). For implementing digital transformation strategy, other three critical activities are included that are the use of digital technologies, changes in value creation and structural changes by (Hess et al., 2016). To achieve these objectives, businesses must take a "sustainability" approach, through sustainability oriented innovation promoting transformation in terms of an organization's culture, philosophy, and values (El Hilali et al., 2020; Trujillo and Puello, 2022). With the advancement of digital technologies, Lynch-Holmes (2021), findings indicated that digital transformation strategies has a substantial impact on government sustainability that points transforming people's mindset toward promoting community, health and environmental outcomes.

In recent years, digital transformation has become a critical focus for organizations seeking to enhance operational efficiency and competitiveness. However, understanding the multifaceted nature of Digital Transformation Strategy (DTS) requires more than a broad overview of the concept. This study narrows down the scope by focusing on three key variables that effectively represent DTS, namely technological infrastructure, organizational change management, and leadership support. These variables provide a structured framework to explore the drivers and outcomes of successful digital transformation initiatives. In addition, studies with the term digital transformation strategies are scarce in the digital government literature with respect to the developing countries; therefore, a clear view is required from future researchers to explore Dai and Zhu (2024); Ziadlou et al. (2021), the said gap by exploring the digital transformation strategy and its dimension, in context to the organizations. Further, structural changes in form of enriching human capital by hiring and training the employees who go through the digital transformation, needs to be studied as well (Thakur et al., 2023). Similarly, Janowski (2016) suggests studying the e-Governance sustainability under the said relationships as they are in scarcity of studies. Hence, today only few academic researches assessed the impact of digital transformation on e-Governance sustainability (Wang and Hu, 2024). El Hilali et al. (2020) warrant future researchers to investigate intervening variables such as innovation that may drive companies in their quest for sustainability during their digital transformation journeys.

Moreover, the digital transformation model of developing and developed countries is not the same, and it cannot be adopted as a plan (Mohammadi, 2023). Therefore, the aim of this research was to propose a framework for the digital transformation for government organization in developing countries. The study has helped in understand the digital transformation harvesting the tools to generate time and resource gains, strengthening business partnerships in the companies' efforts regarding sustainability by referring to the following research questions:

1. Does the digital transformation strategy have an impact on e-Governance sustainability?
2. Does digital transformation strategy influence the sustainability-oriented innovation?
3. Does sustainability-oriented innovation mediate the relationship between digital transformation strategy and e-Governance sustainability?

2 Literature Review

2.1 Technology Organization Environment (TOE) framework as Theoretical Foundation

Arpaci et al. (2012), designed an influential framework known as the technology- organization-environment (TOE) framework that has been utilized by organizational technology adoption

studies. Their framework emphases on higher level attributes which are the technological, organizational, and environmental contexts. The applicability of the TOE framework to digital transformation strategy and governance sustainability has not been addressed by previous studies. This study seeks to build upon the TOE framework as supporting foundation, with respect to the specific context of e-Governance sustainability. The framework posits that the decision to adopt new technologies is shaped by the characteristics of the technology itself, the organization's internal attributes, and the external environment in which the organization operates. This approach helps in examining how these factors interact and affect the adoption process. In the light of these suggestions, it anticipated that digital transformation strategy has provide with benefits such as profitability and response time improvement for sustainable e-governance. Each of these variables is discussed below.

2.2 Digital Transformation Strategy - (DTS)

Digital transformation is the next step of digitalization. The term "digital transformation" has been defined in a variety of ways, and no consensus has been reached (Dai and Zhu, 2024; Hess et al., 2016). According to Singh et al. (2020), digital transformation, in general, refers to the optimization and transformation of business procedures facilitated by strategically merging digital technology for optimal use. There are three key dimensions: technological use, changes in value generation and structural changes, (Matt et al., 2015). Adoption of new technologies has the potential to transform organizations' value-creating activities because they are implemented within the organizational structure and are often separate from traditional operations (Qing et al., 2022). Organizations that rely entirely on information technology to improve performance, in particular, can gain a competitive advantage. In general, digital technology-based value creation can alter traditional roles and interactions between businesses and stakeholders, such as transforming a transactional relationship into a value co-creation partnership (Udovita, 2020). Simultaneously, such a systematic as well as structural strategy allows for a consistent approach to other challenges, including as the productivity, procurement, and competitive consequences of digitization, as well as the accompanying executive action requirements (Mohammadi, 2023).

To frame hypotheses, we decided to focus on three dimensions related to digital transformation strategy, *Use of New Technologies, Value Creation and Structural Changes* are the three dimensions (Hess et al., 2016). It is necessary to make it strategic by focusing on transformative efforts that consider people, process, technology, and preparedness, as well as increasing e-competitiveness governances to ensure its long-term viability in a form of sustainable position (Nguyen et al., 2021). The adoption and maintenance of a strategic approach are critical in the transition of a bureaucratic government agency to a responsive agency, where strategies based on core competencies in a form of value creation is prudent. Governments will also be able to better utilize new applications and investigate what is involved in terms of training, capacity building, knowledge management, and resource planning (Dai and Zhu, 2024). Business leaders and managers, on the other hand, are at a crossroads in terms of how they might use digital transformation to enhance engagement with sustainability concerns. These factors include social structures, political decision-making, general economic trends, and technical advancement (Wiles, 2024). An organization must be aware of these developments while also being able to engage with them in order to be successful. Core competencies in the form of structural changes are like glue that binds the organization to attain a sustainable position. Therefore, with respect to the specific context of e-Governance sustainability, this study also draws on relevant

studies to identify predictors that can be utilized within the TOE framework. In the light of these suggestions, it is anticipated that digital transformation strategy has provide with benefits such as profitability and response time improvement for sustainable e-governance thus we have hypothesized that:

Hypothesis No.1(a): Use of new technologies has a positive relation with e-Governance sustainability.
Hypothesis No.1(b): Value Creation has a positive relation with e-Governance sustainability.
Hypothesis No.1(c): Structural changes has a positive relation e-Governance sustainability.

2.3 Sustainability Oriented Innovation - (SOI)

Nowadays, concerns about resource depletion, environmental deterioration, and social inequalities have prompted calls for a shift to a more sustainable society and economy (Adams et al., 2016). According to Parolin (2021), sustainability oriented innovation can take numerous forms, including the development of new or enhanced products, services, processes, and business models that benefit the environment or society as a whole. The redesign of routines and structures within enterprises to focus individuals and organizations is referred to as organizational innovation (Klewitz and Hansen, 2014). Technology is perceived as an active function in societal transformation and is considered as a critical component in the development of the public sector. Yet, this knowledge for SOI has remained in an emergent phase and several research gaps still exist (Candelario-Moreno and Sánchez-Hernández, 2024). Therefore, "sustainability-oriented innovation" (SOI), for this can clearly and uniquely identify a field of research explicitly focused on the connection between digital transformation and e-Governance sustainability.

Hypothesis No. 2: Sustainability Oriented Innovation has a positive relation with e-Governance sustainability.

2.4 E-Governance Sustainability - (EGS)

In recent years, the use of information and communication technology (ICT) as well as various types of systems such as e-government applications in the context of sustainability has been investigated. However, the term e-Governance sustainability has been defined as the use of Information Communication Technologies to uplift public services, public administration, at the same time improve the interaction between government and the public, through social equity and socio-economic development by protecting natural resources for future generations (Estevez and Janowski, 2013). The Larsson and Grönlund (2016), literature assessment showed a mostly arbitrary usage of the sustainability term in the eGov area (covering research on both eGovernment and e-Governance) between 1981 and 2012. E-Governance benefits citizens' more than traditional methods of contacting government entities because of digital capabilities. Citizens who use e- governance receive a variety of benefits, laying the groundwork for citizen happiness (Nguyen et al., 2021). Companies are adopting and using digital tools and solutions as a natural element of business operations to achieve improved performance in digitalizing operational settings.

In other words, public sector organizations can enhance their operations through the continuous use of digital technologies. This approach can lead to significant advancements in automated and intelligent internal processes, substantial cost reductions, improved operational efficiency and management quality, transformations in business processes and models, and ultimately, an optimized customer experience (Yeow et al., 2018).Therefore, in the light of TOE framework, we have hypothesized as the following:

Hypothesis No.3(a): Sustainability Oriented Innovation mediates the relationship between use of new technologies and e-Governance sustainability.

Hypothesis No.3(b): Sustainability Oriented Innovation mediates the relationship between value creation and e-Governance sustainability.

Hypothesis No.3(c): Sustainability Oriented Innovation mediates the relationship between structural changes and e-Governance sustainability.

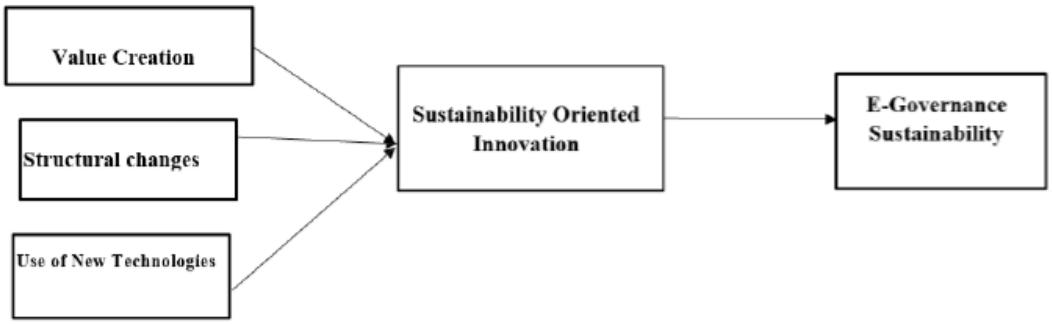

Figure 1: Research Model

3 Data and Methodology

The research adopts a positivist philosophical stance, emphasizing the use of tangible, quantitative data to test the hypotheses. A sample of 350 respondents was drawn from middle and top management employees, specifically those involved in digital transformation and strategic planning in two public sector organizations in Pakistan. These organizations focus on leveraging information technology to enhance quality and productivity, making them ideal for this study. Data were collected in a time-lagged design over three periods, with a two-week interval between each: at Time 1, the independent variable (Digital Transformation Strategy) was measured; at Time 2, the mediator (Sustainability-Oriented Innovation) was assessed; and at Time 3, the dependent variable (e-Governance Sustainability) was captured. The selection of these respondents is justified by their direct involvement in digital transformation initiatives and their ability to provide insights into e-Governance sustainability. Respondents merely employees from top management heads, senior supervisors/project managers, involved in strategic planning especially those who were engaged in digital transformation and innovative projects and could address e-Governance sustainability w.r.t digital transformation.

Digital transformation strategy was measured through its 3 dimensions that are new technology use, value creation & structural change were adapted from (Matt et al., 2015). All the items were measured on seven-point Likert scale ranging from 1= "Strongly Disagree" to 7 = "Strongly Agree". Sustainability oriented innovation was measured by 5-items scale on 7 Likert developed by Siebenhüner and Arnold (2007). For e-Governance sustainability, 9 items was used on seven- point Likert scale from (Aljarallah and Lock, 2020).

4 Results and Discussion

4.1 Descriptive Statistics and Correlation Analysis

Before undertaking Structural Equation Modeling (SEM), missing data and testing multivariate statistical steps were performed done using the SPSS software. After removing the cases with missing values, univariate and multivariate outliers were checked in the data collected. Overall, data normality was checked by the values of skewness and kurtosis for all variables fall within the acceptable range of (-1.96 to +1.96) and (-7 to +7), respectively. To begin with the measurement model testing, initial CFA was conducted latent variables. Later validly was checked by the AVE values range from 0.508 to 0.663 for the different constructs. These values suggest that a substantial portion of the variance in each construct is explained by its respective indicators.

Table 4.1: Correlation and Reliability Test

Mean	S.D.	UOT	VC	SC	SOI	EGS
UOT	4.93	1.28	(.72)			
VC	4.53	1.17	.506**	(.69)		
SC	5.50	1.35	.467**	.576**	(.82)	
SOI	5.49	1.11	.274**	.537**	.580**	(.72)
EGS	5.20	1.17	.305**	.551**	.412**	.487**

*UOT = Use of Technology; VC = Value Creation; SC = Structural Changes; SOI = Sustainable Oriented Innovation; EGS = eGovernance Sustainability. N = 350. Reliabilities (Cronbach's alphas) are in parentheses on the diagonal. **p < .01 (2-tailed), ***p < .001.*

The mean values represent in table 1, the average responses for each variable, ranging from 4.53 for Value Creation (VC) to 5.50 for Structural Changes (SC). The standard deviations reflect the variability in responses, with SC showing the highest dispersion (S.D. = 1.35), indicating a wider range of responses for Structural Changes. Regarding reliability, all variables have Cronbach's alpha values above the acceptable threshold of 0.70, demonstrating strong internal consistency. The highest reliability is observed in SC (α = .82), while the lowest is in VC (α = .69), though still within acceptable limits. In terms of correlations, Use of Technology (UOT) is positively associated with all other variables, with the strongest correlation being with VC (r = .506**), suggesting a moderate relationship between technology use and value creation. VC has its strongest correlation with SC (r = .576**), indicating that a clear value creation is linked to greater structural changes. SC is moderately correlated with Sustainability-Oriented Innovation (SOI) (r = .580**), showing that structural changes enhances innovation focused on sustainability. SOI, in turn, has a moderate positive correlation with e-Governance Sustainability (EGS) (r = .487**), suggesting that sustainability-oriented innovation contributes to e-Governance sustainability. Additionally, VC shows a significant correlation with EGS (r = .551**), achieving sustainable e-Governance outcome

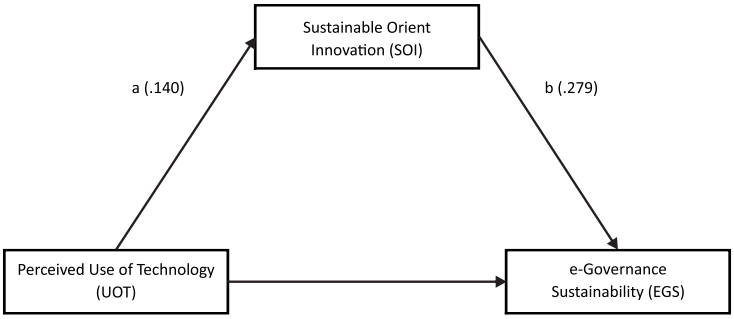

Figure 2: SOI as Mediator in the Relationship of UOT and EGS

4.1.1 Mediation Model (UOT-SOI-EGS)

The figure 2 suggests that UOT (Use of Technology) has a positive direct effect on SOI (Sustainable Orient innovation), as indicated by the positive path coefficient 'a' (0.140). SOI (Sustainable Orient innovation), also has a positive direct effect on EGS (e-Governance Sustainability), as indicated by the positive path coefficient 'b' (0.279). This suggests that higher levels sustainable orient innovation are associated with higher e-Governance sustainability. The indirect effect (a*b = 0.039) represents the extent to which the relationship between UOT and EGS is mediated by SOI. In other words, SOI partially explains how the use of technology (UOT) influences e-Governance sustainability (EGS). An indirect effect suggests that SOI serves as a mediator in this relationship.

4.1.2 Mediation Model (VC-SOI-EGS)

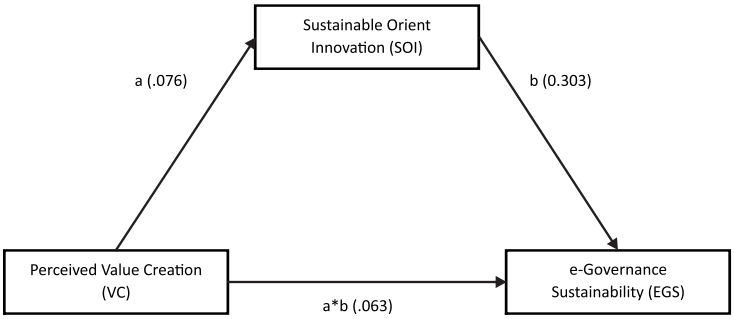

Figure 3: SOI as Mediator in the Relationship of VC and EGS

Figure 3 presents the positive path coefficient "a (.076)" indicating that there is a positive relationship between value creation (VC) and SOI (Sustainable Orient innovation), in other words, as the level of value creation (VC) increases, the level of the mediator variable SOI (Sustainable Orient innovation) tends to increase as well. The positive path coefficient "b (.303)" suggests a

positive relationship between SOI and e-Governance sustainability (EGS). This implies that as the mediator variable SOI increases, e-Governance sustainability (EGS) also tends to increase. The product of the path coefficients "a * b (.063)" represents the indirect effect of VC on EGS through SOI. This means that part of the influence of VC on EGS is explained by the mediator SOI. In this case, 0.078 indicates the size of this indirect effect. Overall, the figure 7 illustrates that SOI (Sustainable Orient innovation) plays a mediating role in the relationship between value creation (VC) and e-Governance sustainability (EGS).

4.1.3 Mediation Model (SC-SOI-EGS)

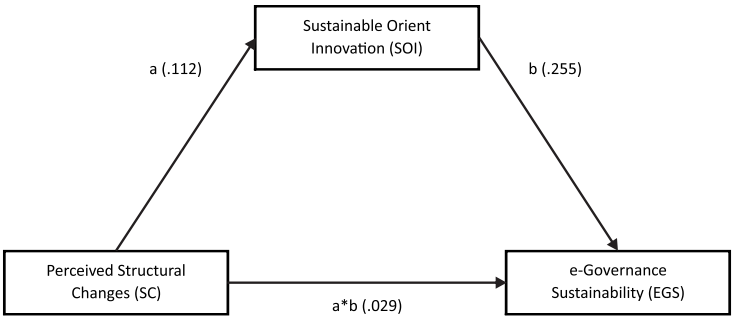

Figure 4: SOI as Mediator in the Relationship of SC and EGS

The figure 4 suggests that SC (Structural Changes) has a positive direct effect on SOI (sustainable orient innovation), with a path coefficient of .112. This means that as SC increases, SOI tends to increase as well. SOI, in turn, has a positive direct effect on EGS, with a path coefficient of .255. This means that as SOI increases, EGS also tends to increase. The indirect effect of SC on EGS through the mediator SOI (a * b) is .029. This indicates that a portion of the relationship between SC and EGS is explained by the mediator SOI. In other words, SC may impact EGS not only directly but also indirectly through its influence on SOI.

5 Discussion

The study finds affirmative evidence for the positive impact of new technologies, value creation, and structural changes, on e-Governance sustainability, aligning with H1a, H1b, and H1c respectively. Furthermore, the research extends its examination to the interconnectedness of sustainability-oriented innovation and e-Governance sustainability (H2), establishing a positive relationship between the two. Additionally, the investigation delves into the mediating role of sustainability-oriented innovation in the relationships between new technologies, value creation, structural changes and e-Governance sustainability (H3a to H3c), finding supportive evidence for each mediation hypothesis. This understanding can guide future research and organizational strategies, emphasizing the need for a comprehensive exploration of the factors influencing innovation processes in the realm of sustainability.

5.1 Limitations and Directions for Future Research

When evaluating the findings, it is crucial to acknowledge the study's limitations. The data were collected from a small sample within a restricted geographic area. Using larger and more diverse sample sizes would provide a more comprehensive understanding and enhance the generalizability of the results. In a time-lagged study, several challenges arise due to the rapid evolution of organizational environments. The dynamic nature of the digital landscape, governance structures, innovation practices, and strategic intents may outpace the study's time intervals, potentially leading to outdated information. Furthermore, the ongoing and evolving process of digital transformation poses difficulties in capturing real-time nuances and emerging trends, limiting the study's ability to provide a comprehensive understanding of the current state.

5.2 Future Research

This research holds significant implications for diverse stakeholders, including policymakers, strategic managers, and scholars. The convergence of digitalization and digital transformation strategies within e-Governance sustainability poses intricate challenges at the organizational level, characterized by ambiguity and complexity. Navigating these complexities requires organizations to adopt flexible strategies aligned with the dynamic digital landscape. This study at hand researched a small subset of the digital transformation as well as e-Governance sustainability field. Therefore, suggestions for future research are presented in this section which may help in expanding the understanding of digital transformation strategy, improve e-Governance suitability and facilitate better achievements trough sustainable oriented innovation with strategic intent. The following are some potential research areas highlighted for future studies should probe deeper into the role of digital transformation strategy practices that can support greater e-Governance sustainability.

5.3 Conclusion

To conclude, this study builds on existing literature by demonstrating the pivotal role of sustainability-oriented innovation (SOI) within digital transformation strategies (DTS) aimed at enhancing e-Governance sustainability (EGS). Previous research has highlighted the importance of aligning organizational vision with strategic objectives during digital transformation efforts (Vial, 2019), but our findings extend this by emphasizing that SOI serves as a critical mediator in achieving long-term sustainability outcomes, particularly in public sector e-Governance. By fostering a culture of innovation, aligning leadership, and leveraging data, organizations can more effectively integrate sustainability goals into their digital transformation journeys, as supported by studies on the positive correlation between innovative capacities and sustainable outcomes. Moreover, the active involvement of stakeholders and adaptation of regulatory frameworks, as suggested in the literature Qing et al. (2022) reinforces the need for a collaborative approach to digital governance. Our results echo these studies but further propose that enhancing organizational capabilities through targeted training and robust monitoring processes is essential for sustainable success. This nuanced perspective on DTS and SOI in the context of public sector transformation addresses gaps in the current literature and provides actionable insights for practitioners aiming to achieve e-Governance sustainability.

References

Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D., and Overy, P. (2016). Sustainability-oriented innovation: A systematic review. *International Journal of Management Reviews*, 18(2):180–205.

Aljarallah, S. and Lock, R. (2020). An investigation into sustainable e-government in saudi arabia. *Electronic Journal of e-Government*, 18(1):pp1–16.

Arpaci, I., Yardimci, Y. C., Ozkan, S., and Turetken, O. (2012). Organizational adoption of information technologies: A literature review. *International Journal of ebusiness and egovernment Studies*, 4(2):37–50.

Candelario-Moreno, C. and Sánchez-Hernández, M. I. (2024). Redefining rural entrepreneurship: The impact of business ecosystems on the success of rural businesses in extremadura, spain. *Journal of Entrepreneurship, Management and Innovation*, 20(2):36–52.

Dai, J. and Zhu, Q. (2024). Esg performance and green innovation in a digital transformation perspective. *American Journal of Economics and Sociology*, 83(1):263–282.

El Hilali, W., El Manouar, A., and Janati Idrissi, M. A. (2020). Reaching sustainability during a digital transformation: a pls approach. *International Journal of Innovation Science*, 12(1):52–79.

Estevez, E. and Janowski, T. (2013). Electronic governance for sustainable development—conceptual framework and state of research. *Government information quarterly*, 30:S94–S109.

Hess, T., Matt, C., Benlian, A., and Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2).

Janowski, M. (2016). Socially responsible business and management of contemporary organization. *Współczesne Problemy Ekonomiczne. Globalizacja. Liberalizacja. Etyka.*, (12):87–94.

Klewitz, J. and Hansen, E. G. (2014). Sustainability-oriented innovation of smes: a systematic review. *Journal of cleaner production*, 65:57–75.

Korachi, Z. and Bounabat, B. (2020). General approach for formulating a digital transformation strategy. *J. Comput. Sci*, 16(4):493–507.

Larsson, H. and Grönlund, A. (2016). Sustainable egovernance? practices, problems and beliefs about the future in swedish egov practice. *Government Information Quarterly*, 33(1):105–114.

Lynch-Holmes, K. (2021). *Higher Education Business and Technology Leaders' Behaviors that Drive Outcome Alignment*. The University of Southern Mississippi.

Matt, C., Hess, T., and Benlian, A. (2015). Digital transformation strategies. *Business & information systems engineering*, 57:339–343.

Mohammadi, N. (2023). Investigation of community energy business models from an institutional perspective: Intermediaries and policy instruments in selected cases of developing and developed countries. *Sustainability*, 15(10):8423.

Nguyen, N., Nguyen, C., Nguyen, H., and Nguyen, T. A. V. (2021). The impact of quality management on business performance of manufacturing firms: The moderated effect of industry 4.0. *Quality Innovation Prosperity*.

Parolin, Z. (2021). Automation, occupational earnings trends, and the moderating role of organized labor. *Social Forces*, 99(3):921–946.

Qing, C., Jin, X., and Xu, Y. (2022). The effect of creating shared value on enterprise image: focusing on mediating effects of environmental involvement. *Kybernetes*, 52(2):625–642.

Siebenhüner, B. and Arnold, M. (2007). Organizational learning to manage sustainable development. *Business strategy and the environment*, 16(5):339–353.

Singh, A., Klarner, P., and Hess, T. (2020). How do chief digital officers pursue digital transformation activities? the role of organization design parameters. *Long Range Planning*, 53(3):101890.

Thakur, R., AlSaleh, D., and Hale, D. (2023). Digital disruption: a managers' eye view. *Journal of Business & Industrial Marketing*, 38(1):53–70.

Trujillo, M. P. and Puello, G. O. R. (2022). Economic shocks and their effect on the schooling and labor participation of youth: evidence from the metal mining price boom in chilean counties. *The Annals of Regional Science*, 68(1):65–93.

Udovita, P. (2020). Conceptual review on dimensions of digital transformation in modern era. *International Journal of Scientific and Research Publications*, 10(2):520–529.

Wang, J. and Hu, Y. (2024). Corporate governance in ming & qing china: evidence from shanxi (jin) merchants. *Journal of Chinese Economic and Business Studies*, 22(1):87–110.

Wiles, E. B. (2024). *Artificial Intelligence in Labor Market Matching*. PhD thesis, Massachusetts Institute of Technology.

Ziadlou, R., Rotman, S., Teuschl, A., Salzer, E., Barbero, A., Martin, I., Alini, M., Eglin, D., and Grad, S. (2021). Optimization of hyaluronic acid-tyramine/silk-fibroin composite hydrogels for cartilage tissue engineering and delivery of anti-inflammatory and anabolic drugs. *Materials Science and Engineering: C*, 120:111701.