Digital Transformation Readiness and its Impact on Sustainable Competitive Advantage in Global Business Organizations

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Abstract

In today's world, digital transformation has become one of the major strategies employed by multinational firms to stay competitive in the highly dynamic and advanced marketplace environment. But to implement digital transformation strategies, a firm needs to be able to handle changes in the technological aspect as well as the managerial, cultural, and human resource aspects. This research aims to examine how the readiness for digital transformation affects the sustainable competitive advantage of multinational corporations. The readiness for digital transformation involves four key aspects, namely, readiness of digital leadership, technological readiness, human capital readiness, and organizational culture readiness. Innovation, efficiency, flexibility, creation of customer value, and performance of the firm are some of the indicators of sustainable competitive advantage. A quantitative design involving a survey using a questionnaire aimed at managers and employees working for multinational companies undergoing digital transformation is included in the research methodology. In order to examine the relationship among the study variables, the statistical techniques, including descriptive statistics, reliability, correlation, and either regression or structural equation modeling, are applied to the gathered data. Due to the improved agility of organizations, more effective decision-making processes because of digitalization, innovation, and quick response to environmental changes in the market, the expected positive effect of digital transformation readiness on sustainable competitive advantage is assumed by the study. This study will be valuable for managers who wish to implement digital technologies in the workplace. Moreover, the contribution to the literature is expected due to the development of a holistic model of sustainable competitive advantage and digital preparedness in the context of global organizational change.

Keywords: Digital Transformation Readiness; Sustainable Competitive Advantage; Digital Leadership; Technological Readiness; Human Capital; Organizational Culture; Global Business Organizations.

I. INTRODUCTION

In this regard, digital transformation has become a strategic focus for companies working in globalized markets. Rapid advances in areas such as artificial intelligence, cloud computing, big data analytics, and automation technologies have brought about a new way of managing their customers, doing business, and planning (Leão & da Silva, 2021; Agustian et al., 2023). Nonetheless, the organization's readiness, which depends on the leadership, infrastructure, skills of employees, and company culture, is essential for the success of digital transformation (Michelotto & Joia, 2024). Companies that are well-prepared for digital transformation will be able to cope with market changes and gain a competitive advantage (Al Jabri & Lahrech, 2026).

1.1. Background of Digital Transformation in Global Business

Digital transformation can be defined as the use of digital technologies in business strategy and processes. Companies that work in a globalized world have been using digital technologies to increase their efficiency, deliver a better customer experience, coordinate activities across countries, and improve their decision-making process. In addition, digital technologies allow companies to penetrate into new markets and innovate while responding to customer demands (Otieno et al., 2025). Thus, digital transformation has become one of the key factors of competitiveness in the global world.

1.2. Digital Transformation Readiness in Organizations

Digital transformation readiness is the ability of an organization to apply digital technologies efficiently and make proper use of them. Digital transformation readiness consists of numerous aspects such as digital leadership, technology infrastructure, digital skills of staff, and organizational culture (del Socorro Encinas-Grijalva et al., 2024; Jewapatarakul & Ueasangkomsate, 2024). Effective leadership ensures the presence of a vision for an organization and having appropriate technology makes it possible to conduct digital operations. Readiness of human capital would ensure that staff possess the required skills, and organizational culture encourages innovation and flexibility.

1.3. Sustainable Competitive Advantage in the Digital Era

Sustainable competitive advantage is the ability of a firm to maintain its performance and market value over time. In the contemporary digital age, the elements that contribute to competitive advantage are innovativeness, efficiency, agility, customer value generation, and efficient use of information (Du et al., 2025; Probojakti et al., 2025). Digital transformation assists in realizing all these through enhanced decision-making and efficient allocation of resources. Sustainable competitive advantage is thus dependent on how effectively the firms utilize their digital technologies and other strategic resources.

1.4. Research Objectives

The key objective of this research is to examine the relationship between preparedness for digital transformation and the competitive advantage of international businesses. In other words, the research will seek to identify how sustainability of an organization's competitiveness is impacted by its preparedness for digital leadership, technology, human resources, and organizational culture.

1.5. Key Contributions

1. This study constructs a holistic theoretical model that looks into the relationship between sustainable competitive advantage and digital transformation readiness within the context of multinationals.
2. Four main aspects of readiness are analyzed: digital leadership readiness, technology readiness, human capital readiness, and organizational culture readiness.
3. The research provides practical insights into the ways to improve digital competence for competitiveness and innovation.

The paper is structured as follows. Section 1: Introduction to current work. Section 2: An overview of the literature on sustainable competitive advantage and readiness for digital transformation. Section 3: Research hypotheses and theoretical framework. Section 4: Methodology of the research. Section 5: Results and discussion of the research. Section 6: Conclusions of the paper and its implications. Theoretical and managerial implications of the study are presented in Section 7, and the limitations of the paper and directions of future research are provided in Section 8.

II. LITERATURE REVIEW

2.1. The Digital Transformation Concept

"Digital transformation" implies a change in decision-making systems, business models, consumers' experiences, and processes through the application of digital technology. Artificial intelligence, cloud computing, big data analytics, automation, and digital platforms are examples of digital technologies that help the organization operate effectively and respond to changes in the market (Shehadeh et al., 2023). Therefore, digital transformation of the organization can be considered as a strategic change.

2.2. Organizational Digital Transformation Readiness

The digital transformation readiness of an organization denotes the ability of the organization to adapt and manage digital technologies. It is related to the level at which resources of the organization are ready to embrace the process of digital transformation (Citraresmi et al., 2023). It is likely to lower barriers and make transformation successful.

2.3. Dimensions of Digital Transformation Readiness

Factors of digital transformation readiness include leadership, technology, human capital, and organizational culture. Digital leadership helps create a vision and innovation in an organization, but technology readiness creates proper infrastructure and digital systems. Human capital readiness is associated with the digital skills of employees and their readiness to adapt to changes, while organizational culture readiness encourages collaboration and learning (Kahveci, 2025).

2.4. Sustainable Competitive Advantage

Sustainable competitive advantage is the capability of an organization to outperform its competitors in terms of generating better performance and more value creation for an extended period of time. This is achieved by developing innovations, efficient operations, good customer relations, agility within the organization, and internal competencies. In the contemporary

business setting, the organizations that are able to efficiently integrate their technology resources with knowledge and management skills are better off (Lu & Shaharudin, 2024).

2.5. Digital Transformation Readiness and Competitive Advantage

Digital transformation readiness has a key part to play in building competitive advantage because of the ability of firms to use digital technology in an efficient manner. Firms that have a high level of readiness have the ability to make decisions fast, use resources effectively, innovate, respond to customers, and adapt to changes in the market environment (Kahveci et al., 2026; Katsamba, 2025). Firms with effective leaders, infrastructure, skilled employees, and culture are able to realize strategic value from their digital investments.

2.6. Theoretical Foundation

The present study relies mainly on the Resource-Based View Theory and the Theory of Dynamic Capabilities. According to the Resource-Based View theory, a company can gain competitive advantage due to the unique and valuable resources owned by it, which cannot be imitated by its competitors. On the other hand, the Dynamic Capability theory goes beyond the resource-based approach with the emphasis on managing the resources dynamically.

2.7. Research Gap

Current literature tends to focus on each of the dimensions of digital leadership, technology, skills, and culture individually. However, very few studies incorporate the above factors collectively in a single model of readiness for digital transformation and analyze their impact on the sustainability of competitive advantage in international business organizations.

III. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3.1. Proposed Conceptual Framework

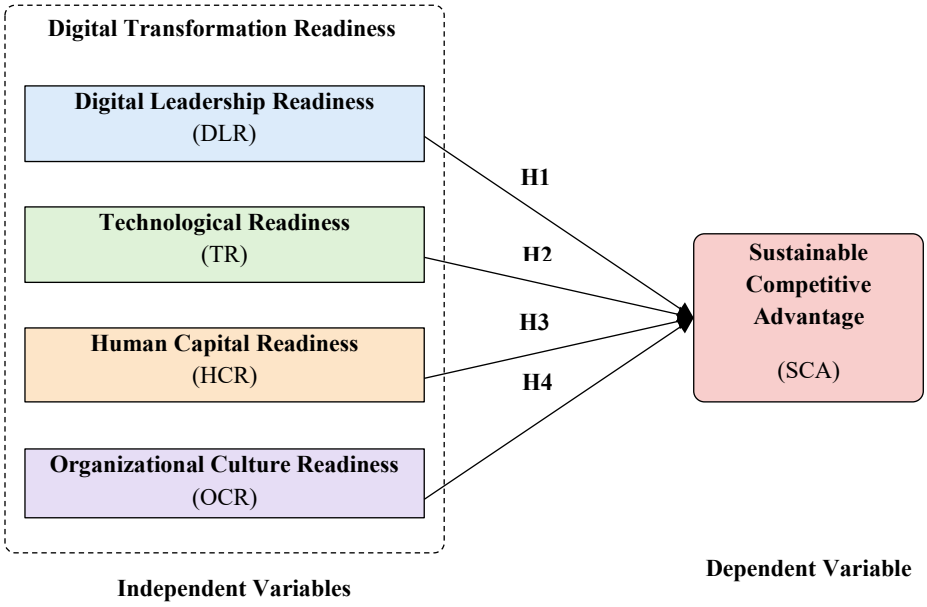


Figure 1: Conceptual Framework for Sustainable Competitive Advantage and Digital Transformation Readiness

In the suggested theoretical framework, there is an analysis of how digital transformation readiness impacts sustainable competitive advantage. Digital transformation readiness has four dimensions, which are as follows: digital leadership readiness, technology readiness, human resource readiness, and organizational culture readiness. All these dimensions are considered independent variables, whereas sustainable competitive advantage is a dependent variable.

Figure 1 shows how four factors related to digital transformation readiness, including digital leadership, technological readiness, human readiness, and organizational culture readiness, act as independent variables that affect sustainable competitive advantage through four hypotheses (H1-H4).

3.2. Preparedness for Digital Leadership and Competitive Advantage

Leaders' capacity to formulate digital visions, stimulate innovation, allocate resources, and manage organizational change is known as readiness for digital leadership. Innovations and technology adoption, as well as strategic alignment, become easier through digital leadership. Digital leadership makes it easy for the staff to comprehend transformation objectives and quicken decision-making processes. Hence, organizations with good digital leadership will have greater innovation and competitiveness.

3.3. Technological Readiness and Sustainable Competitive Advantage

Technological readiness involves access to dependable technology infrastructure, systems integration, data, security, and scalable technology. Technological readiness provides an organization with the ability to increase efficiencies, automate operations, analyze data quickly, and adapt to any changes within the marketplace. This may lead to cost reduction, quality service provision, and innovation, which contribute to competitive advantage.

3.4. Human Capital Readiness and Sustainable Competitive Advantage

Human capital readiness refers to digital competencies, technical expertise, adaptability, and continuous learning among employees. Employees who have skills can utilize technology in an effective manner, solve problems quickly, and foster innovation. Through continuous learning, employees will be able to adapt to the changes in technology. Strong human capital readiness, therefore, can contribute to increased efficiency and innovation capability of the organization.

3.5. Organizational Culture Readiness and Sustainable Competitive Advantage

Culture readiness in organizations is associated with the willingness to embrace change, collaborate, experiment, innovate, and share knowledge. An organization with a supportive culture will have less resistance to digital transformation and will encourage employees to embrace different ways of doing things. The organization that embraces a culture of readiness is flexible and continuously improving. Such organizations are able to quickly adapt to changes in business environments.

3.6. Research Hypotheses

The following hypotheses have been formulated based on the conceptual framework below:

H1: Digital leadership readiness contributes positively to sustainable competitive advantage.

H2: Technological readiness helps to achieve sustainable competitive advantage.

H3: Human capital readiness contributes to sustainable competitive advantage.

H4: Organizational culture ready contributes to sustainable competitive advantage.

H5: Preparedness for digital transformation contributes to sustainable competitive advantage.

IV. RESEARCH METHODOLOGY

4.1. Research Design

This research study uses a quantitative and cross-sectional research design in order to investigate the relationship between digital transformation readiness and sustainable competitive advantage.

4.2. Population and Sampling Technique

The population of the study is comprised of employees and managers of global business organizations that have implemented digital transformation techniques. The sample of the study comprises respondents who have been selected on the basis of the purposive sampling method and who possess sufficient knowledge and experience regarding digital technologies and organizational transformations.

4.3. Data Collection and Research Instrument

The main sources of information for the research will be the results of the completion of a structured survey among the selected respondents. The survey includes demographic questions and questions concerning the measures of digital transformation readiness and sustainable competitive advantage. Such measures as digital leadership readiness, technological readiness, human capital readiness, and organizational culture readiness exist. The Likert scale with five options is used.

4.4. Measurement of Variables

There are four dimensions of digital transformation readiness, including digital leadership readiness, technological readiness, human capital readiness, and organizational culture readiness. The indicators of sustainable competitive advantage include innovation, efficiency, adaptability, creation of value for customers, and long-term organizational performance.

Table 1: Measurement of Study Variables

Construct	Code	No. of Items	Key Measurement Areas
Digital Leadership Readiness	DLR	4	Vision, support, resources, innovation
Technological Readiness	TR	4	Infrastructure, integration, data, cybersecurity
Human Capital Readiness	HCR	4	Digital skills, learning, training, adaptability
Organizational Culture Readiness	OCR	4	Innovation, openness, collaboration, change
Sustainable Competitive Advantage	SCA	5	Innovation, efficiency, agility, customer value, performance

Table 1 provides an overview of the constructs and measurement dimensions utilized in the research. The readiness for digital transformation is measured by four organizational dimensions, whereas the sustainable competitive advantage is measured by indicators of innovation, efficiency, agility, customer value, and performance.

4.5. Reliability and Validity

Cronbach's alpha is used to measure the reliability of the measurement instrument, and a value of 0.70 or more is acceptable. Content validity is provided by the relevant literature, whereas construct validity is measured by the use of factor-based validity if required.

4.6. Methods of Analyzing Data

Data are analyzed using statistical tools. Descriptive statistics are used to describe the respondents' profile as well as the distribution of variables. Reliability testing is done to measure internal consistency of data and correlation analysis is done to examine the association between the variables. Multiple regression or structural equation modeling can be done for hypothesis testing.

V. RESULTS AND ANALYSIS

5.1. Demographic Profile of Respondents

In this case, 250 people who worked in companies that were undergoing digital transformation were used in the study. The respondents had experience since they had been working for more than three years. This means that they were acquainted with the digital organizational processes. They came from different organizational hierarchies and different backgrounds.

5.2. Descriptive Statistics

According to descriptive statistics, there are positive views towards digital transformation readiness. Table 2 below gives digital leadership readiness with a mean value of 4.02, while technological readiness scored 3.94, human capital readiness 3.88, and organizational culture readiness 3.91. As for sustainable competitive advantage, the mean value is 4.05; hence, respondents generally viewed digital transformation capability as significant for organizational competitiveness.

Table 2: Descriptive Statistics of Study Variables

Variable	Mean	SD
DLR	4.02	0.61
TR	3.94	0.66
HCR	3.88	0.69
OCR	3.91	0.64
SCA	4.05	0.60

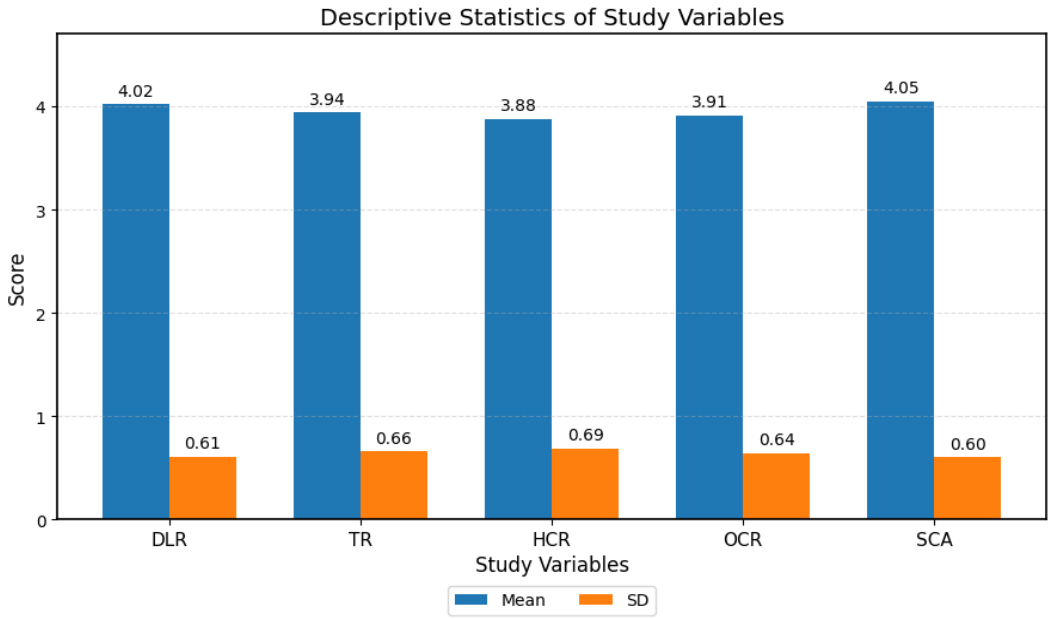


Figure 2: Mean and Standard Deviation of Study Variables

Figure 2 illustrates the mean and standard deviation for the variables used in the study. The SCA has the highest mean value, followed by the DLR and TR, while HCR has the lowest mean. In general, the data show that respondents have a positive perception of all constructs.

5.3. Reliability and Validity Analysis

Table 3.: Reliability and Convergent Validity Analysis of Study Constructs

Construct	**Cronbach's α**	**CR**	**AVE**
DLR	0.87	0.90	0.69
TR	0.85	0.89	0.66
HCR	0.81	0.87	0.63
OCR	0.84	0.88	0.65
SCA	0.89	0.92	0.70

It can be observed that all constructs in the research have good internal consistency, based on the findings presented in table 3 regarding reliability analysis. Cronbach's alpha values ranged from 0.81 to 0.89, which is above the allowable value of 0.70. Furthermore, the values for average variance and composite reliability were acceptable.

5.4. Correlation Analysis

Positive correlation between all dimensions of digital transformation readiness and SCA was noted. The levels of readiness in digital leadership, technology, human capital, and corporate culture were recorded at 0.68, 0.71, 0.63, and 0.66, respectively. This suggests that as the degree of digital readiness of an organization increases, so does its competitive performance.

5.5. Regression/SEM Analysis

A regression test was carried out in order to find out the impact of the four readiness factors on sustainable competitive advantage. Technological readiness had the most positive impact ($\beta = 0.31$), followed by digital leadership readiness ($\beta = 0.27$), organizational culture readiness ($\beta = 0.24$), and human capital readiness ($\beta = 0.21$). All of the impacts were statistically significant at the 5% level of significance. The model accounted for about 68% of the variance ($R^2 = 0.68$) in sustainable competitive advantage.

5.6. Hypothesis Testing

Hypothesis testing through table 4 shows that there is a positive relationship between sustainable competitive advantage and all four dimensions of digital transformation readiness.

Table 4: Hypothesis Testing Results for Digital Transformation Readiness and Sustainable Competitive Advantage

Hypothesis	Relationship	β	p-value	Result
H1	DLR → SCA	0.27	<0.001	Supported
H2	TR → SCA	0.31	<0.001	Supported
H3	HCR → SCA	0.21	0.003	Supported
H4	OCR → SCA	0.24	0.001	Supported

Generally, the findings show that readiness for digital transformation has a positive effect on sustainable competitive advantage. Out of all the dimensions assessed, technological readiness emerges as having the most statistically significant impact, but human capital, leadership, and organizational culture make equally significant contributions.

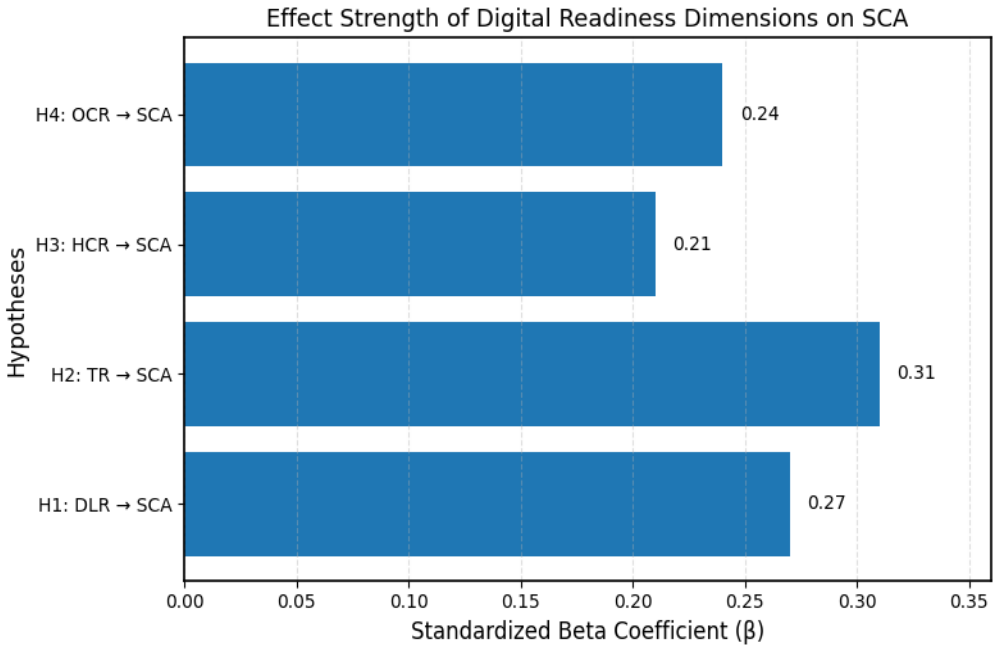


Figure 3: Effect Strength of Digital Readiness Dimensions on SCA

Figure 3 presents a comparison of the impact of digital readiness factors on sustainable competitive advantage. Technological readiness has the greatest impact, followed by digital leadership, organizational culture, and human capital readiness.

VI. DISCUSSION

From the results, it can be seen that preparedness for digital transformation positively affects the competitive advantage of multinationals in the long run. Technology readiness is the factor that affects competitive advantage the most, with digital leadership, organizational culture, and human capital readiness coming next. This means that digital infrastructure should be supplemented by digital leaders, digital skills among employees, and a digital orientation within organizational culture. Digital readiness helps in organizational competitiveness since it enhances agility, innovation, efficiency, decision making, and response to environmental changes. This is further supported by the literature review that stresses the importance of digital competency, organizational leadership, employee digital competency, and organizational adaptability for better business performance. It also proves that technology alone does not matter if it is not combined with other strategic competencies and capabilities of the organization. These findings stress the importance of developing digital transformation as a strategic capability of multinational firms. Organizations need to enhance their capabilities in technology, leadership commitment, digital competency of employees, and change orientation at the same time.

VII. MANAGERIAL AND THEORETICAL IMPLICATIONS

7.1. Implications for Managers

It is evident from the results of the study that the digital transformation readiness is more of an organizational capability approach than technological. The managers need to invest in enhancing the digital capabilities of the organization, developing capabilities of the employees, fostering innovation, and nurturing a culture for change. Such joint efforts will result in increased flexibility and decision-making abilities, among other strengths.

7.2. Implications for Theory

The current research is significant for literature on digital transformation since it proposes a digital transformation readiness model that takes into account the effect of leadership, technology, human capital, and organization culture. Also, it brings value to the Resource-Based View and Dynamic Capabilities Theories since it shows how digital resources and capabilities can help gain competitive advantage.

7.3. How Digital Transformation Readiness Can Be Improved

Digital transformation readiness in organizations can be achieved by ensuring that the organization adopts digital strategies, developing the technological capability of the organization, training employees, improving cyber security and data capability, and building collaborative and innovation culture. Other ways of dealing with technological change include continuous evaluation of digital capabilities, commitment from leaders, and adaptability from employees.

VIII. CONCLUSION AND FUTURE RESEARCH

The present study evaluated the association between digital transformation readiness and sustainable competitive advantage in multinational companies. For this purpose, four dimensions of interest were examined, including digital leadership readiness, technology readiness, human capital readiness, and organizational culture readiness. According to the results of the analysis, each of the four dimensions contributes positively to sustainable competitive advantage. The dimension having the highest contribution to the formation of sustainable competitive advantage is technology readiness (β = 0.31). Digital leadership readiness, organizational culture readiness, and human capital readiness contribute less but still significantly with β values of 0.27, 0.24, and 0.21 correspondingly. Overall, 68% of the total variability in sustainable competitive advantage was explained by the model. The above findings have illustrated that for sustainable competitive advantage through digital competitiveness, apart from adoption of technology, there needs to be leadership involvement, competence in workforce, and a work environment that encourages continuous change. However, some of the limitations that the present research is faced with include the use of cross-sectional design, purposive sampling technique, and self-report measures, which restrict the scope of generalizability of the results of the present study. The future research in this area can include studies based on longitudinal research designs and sample size with diversity from various countries across the world. Some of the other variables that can be considered include organizational agility, innovativeness, environmental uncertainty, and digital maturity.

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