

DOI: <https://doi.org/10.5281/zenodo.13469544>

EXPLORING THE IMPACT OF STRATEGIC MANAGEMENT AND DIGITAL INNOVATION ON ORGANIZATIONAL GROWTH AND DEVELOPMENT: A COMPREHENSIVE STUDY

Satyasri Akula
Swiss School of Management
Rome, ITALY

ABSTRACT

In today's fast-changing business world, more and more companies are realizing how important strategy management and digital innovation are to their growth and development. Strategic management practices help organizations establish objectives, develop strategies, and make decisions to attain competitive advantage and sustainable growth. This study delves into the complex connections between strategic management, digital innovation, strategic agility, and organizational outcomes, specifically examining their impact on organizational growth and development. The purpose of this extensive study is to explore the complex relationship that exists between strategic management, digital innovation, strategic agility, and organizational results, with a particular emphasis on the influence that these factors have on the growth and development of organizations. The research investigates the intricate connections that exist between these variables by using a technique known as structural equation modeling (SEM). The findings provide evidence that supports the hypotheses that strategic management has a positive influence on digital innovation, that digital innovation in strategic management has a significant impact on organizational development, and that strategic agility acts as a mediator between the relationship between organizational development and digital innovation in strategic management. The research highlights the relevance of strategic management practices, digital innovation efforts, and strategic agility in the process of promoting the growth and development of organizations.

Keywords: Strategic management, Digital innovation, Strategic agility, Organizational growth, Organizational development, Structural Equation Modelling (SEM), Corporate competitiveness

1 INTRODUCTION

Over the past ten years, scholars who have made studying digital transformation their primary focus have seen such a surge in interest that the corporate community has also taken an interest in these phenomena [1]. Furthermore, the majority of organizations are facing significant pressure to update their operating systems in order to comply with the new rules brought about by the digital transformation. Even while digital transformation has received attention, its significance is still not fully understood, which could cause certain discrepancies in research [2]. Although strategic management has always been important to the economy, its tenets must be updated throughout time to reflect shifting consumer expectations. Changes in strategic management methods have been brought about by the dynamic nature of the digitalization process, underscoring the substantial impact of digital transformation on this subject. The advent of digital transformation has resulted in modifications to strategic management, namely in terms of integrating technology into its operations. Because of this, senior managers may now concentrate on detecting and resolving the most important problems that develop in an organization by applying their specialized talents, with technology helping with the simpler duties. Before the invention of technology, managers who were skilled at addressing strategic problems had to deal with a number of obstacles that took up

their time and distracted them. Though it is recognized that digital transformation has an impact on many facets of contemporary society, there hasn't been as much attention paid to this topic in the literature when it comes to studies on how it affects strategic management.

Strategic management and digital transformation

"In times of change, the greatest danger is to act with yesterday's logic." Drucker, Peter (1909–2005) Because of the digitization and climate change processes made possible by contemporary technologies, businesses have experienced a number of changes. Top management must acquire new abilities in order to implement these changes, especially in terms of growing the company's people resources [3].

Strategic and senior management must start making specific changes in order for a business to successfully navigate the changes brought about by digitization. However, in order to start this change process, top management must first be persuaded that changes are necessary to the organization's overall operations in all areas that potentially affect productivity, as well as to the current top management activity and structure. To advance the change process, senior management must also acknowledge the benefits of the suggested modifications. The organization's progress in all areas must be facilitated by the change process that is selected. The drive to manage a digital business and to contend with the escalating market rivalry serves as the driving forces behind strategic management's changes. Thus, adopting new organizational cultures that place a priority on digitization in place of outdated behaviors and paradigms is one of top management's most popular and straightforward suggestions for company reform. It is crucial to remember that digital transformation cannot occur without a leader who establishes the framework necessary for it to grow and guides stakeholders toward practical action. This demonstrates the significance of leadership in a company's digital transition, irrespective of its industry. According to [4], a leader is someone who strategically uses technology to move the organization toward sustainable development.

For strategic managers, top managers, and individuals who are viewed by businesses as being crucial to their leadership, Real issues will surely arise as a result of the shift in the environment of decision-making brought about by digital transformation. Since digitization is still a relatively new process, senior managers are unable to depend on tried-and-true methods. Rather, a fresh evaluation of the business's existing circumstances is required in order to develop new solutions that satisfy evolving market demands[5].

Managers play a vital role in the efficient operation of businesses. Managers' jobs have been adjusted to the new environment, where the economy is dominated by digitization, and they now have an obligation to coordinate changes within the organization in addition to their traditional duties. It seems sense that managers would need to acquire new skills and capacities in light of the growing responsibilities associated with digital technology and digital transformation initiatives. The literature is becoming more and more concerned with pinpointing the essential competencies needed by leaders in a digital economy. To encourage harmonious growth, these talents are being examined in numerous studies. Nonetheless, scholars are debating the degree to which leadership competencies needed by digital firms differ from those needed by traditional ones[6].

A leader in the midst of a digital transition needs to possess a number of critical abilities, which the literature highlights. These include the ability to communicate effectively via digital media, make decisions quickly, be skilled at managing connectivity, and be technically proficient.

The impact of digital transformation on organizational strategies

Without a question, digital technologies—such as social networks, mobile phones, and the cloud are practically a part of everyone's life these days and have a significant impact on both the personal and professional lives of companies [7]. Because of this growing market competition and the belief that digitization is the way of the future for all of humanity, organizations need to reassess their entire business model, including the goods and services they offer, in order to align with the new concept of digital transformation. They also need to integrate all of these new technologies into new business systems. In order to thrive in the digital age, businesses must draw in knowledgeable workers who are up to date on the newest innovations in technology. It is advised that a company's whole process portfolio be re-engineered and optimized in a way that fully aligns with the company's goal in order to achieve a successful digital transformation.

Due to the incredibly wide range of technologies used, as well as the various ways that digitization purports to improve the performance of goods and services, respectively, digital transformation has a significant impact on the various stages of the innovation process in a very complex and occasionally ambiguous way.

The significance of digital transformation plans lies in their ability to capture the widespread effects of digital technology on a business [8]. Organizations must review their long-standing traditional business models in order to stay up with the changing demands of the market. Although these models have shown to be successful, businesses must adapt to these trends by changing their business models, as the economy is always changing and they must meet the expectations of the market [9].

It is impossible to create a standard recipe for digitization that is generally successful because every company develops its own process, despite the fact that many studies attempt to provide a standard process for the digital transformation of businesses that is generally successful. Digital transformation is a unique, particular process that applies to different companies in many ways.

For businesses, digital transformation offers numerous advantages, including financial ones. A Massachusetts Institute of Technology study found that businesses that have embraced digitalization are 26% more lucrative than traditional businesses. Establishing a strategy based on a distinct vision for corporate development and taking use of the potential presented by new technology exemplifies a significant aspect of digital transformation. Without implementing such a plan, the great majority of businesses place more emphasis on the technology process rather than concentrating on understanding client wants and how best to satisfy them.

Therefore, a company can consider its digital transformation successful if it has strong leadership and a well-developed plan that keeps up with the ongoing changes in the market. Changes must be made to the organization's organizational culture, strategy, and leadership in order to execute the company's digital transformation. Studies on business practices have demonstrated that a successful digital company must fulfill a number of requirements, including having a well-thought-out strategy, a commitment to change from top management, active employee participation in the digitization process, and a company-wide emphasis on the needs and interests of customers.

Information systems research has long demonstrated that a company's digital transition necessitates significant organizational changes. In the case of digitizing a business entity's

operations, changes frequently entail a number of challenges. These typically relate to the strategy and the realization of extremely rapid digitization, the total reorganization of firm processes, as well as the organizational structure and current culture[10]. Project management is one area where the digital transition is most noticeable. Integrated software, cloud computing, and mobile hardware are just a few of the advantages it has practically improved for businesses worldwide. As of right now, these digital tools are employed for simulation tasks, automated information search, and data storage [11]. Cloud-based technologies have transformed consumer and product receiver interactions, enabling remote communication as well [12].

2 LITERATURE REVIEW

[13] Examines the impact of digital transformation on value creation through technology entrepreneurship and technological market expansion. It analyzes data from 28 European countries from 2009 to 2015, breaking down digital transformation into three categories: technology readiness, exploration, and exploitation. The study identifies significant relationships between these constructs, providing insights for business management and practitioners.

[14] Explores the impact of digital industry and firm digitization on enterprise innovation. It uses a game model to analyze the level of digitalization in two organizations. Results show that both digitalization and regional digital industry innovation can promote innovation, but regional innovation can have a negative effect. Firm digitalization is more visible in digital-related service industries, and higher digital industrialization in a region lowers marginal innovation efficiency. The study suggests digital industry should receive more attention and financial support.

[15] Aims to map the thematic evolution of digital transformation (DT) research in business and management, focusing on articles published in Chartered Association of Business Schools' 2-star journals. It proposes a synergistic framework to relate existing DT research to business and management, providing an evolutionary perspective and a basis for continued discussion and advancement in the topic.

[16] Examines the impact of organizational leadership, structure, and employee technological capabilities on the successful implementation of e-HRM systems. Results show that organizational structure and employee technological competence positively influence the success of e-HRM implementation, while leadership does not significantly influence it. However, internal marketing plays a crucial role in aligning organizational goals, employee capabilities, and expectations.

[17] Investigates the impact of digital transformation on corporate information disclosure quality in A-share listed companies. It finds that digital transformation significantly improves disclosure quality, with different technologies having varying effects. Market competition and corporate governance also enhance the positive impact of digital transformation. The research contributes to the literature on economic implications of digital transformation.

According to [18] Industry 4.0 offers significant opportunities for Supply Chain Resilience (SCR), but its mechanisms are not well understood. A study identifies 16 interrelated functions that Industry 4.0 enhances SCR, including data-centric functions like automation, quality, and visibility. It also enables better collaboration on mapping, complexity management, and innovation capabilities. Industry 4.0 also increases transparency, flexibility, and agility, delivering more dependent resilience functions like responsiveness and adaptive capability. The study highlights potential implications and research avenues.

3 STATEMENT OF THE PROBLEM

In today's rapidly evolving business environment, organizations are constantly challenged to adapt and innovate to sustain growth and competitiveness. Strategic management and digital innovation have emerged as key drivers of organizational success, offering opportunities for enhanced efficiency, customer engagement, and market expansion. However, there is a gap in understanding the precise mechanisms through which these factors influence organizational growth and development. This study aims to address this gap by exploring the impact of strategic management and digital innovation on organizational growth and development. It will examine the relationship between strategic management practices, such as strategic planning, resource allocation, and performance measurement, and the role of digital innovation, including technologies like artificial intelligence and data analytics. The study will also explore the challenges and barriers organizations face in implementing these initiatives and their implications for growth and development. The findings will provide valuable insights into strategic decisions and technological investments that can facilitate sustainable growth and development for organizations in today's dynamic business environment.

4 AIM AND OBJECTIVES

The aim of this comprehensive study is to investigate the interplay between strategic management practices and digital innovation and their collective impact on organizational growth and development.

The main objectives of the study are as follows:

- To understand the Impact of Strategic Management on Digital Innovation.
- To investigate the impact of digital innovation on organizational growth.
- To investigate the role of strategic agility as a mediator.
- To Provide Insights for Strategic Decision Making.

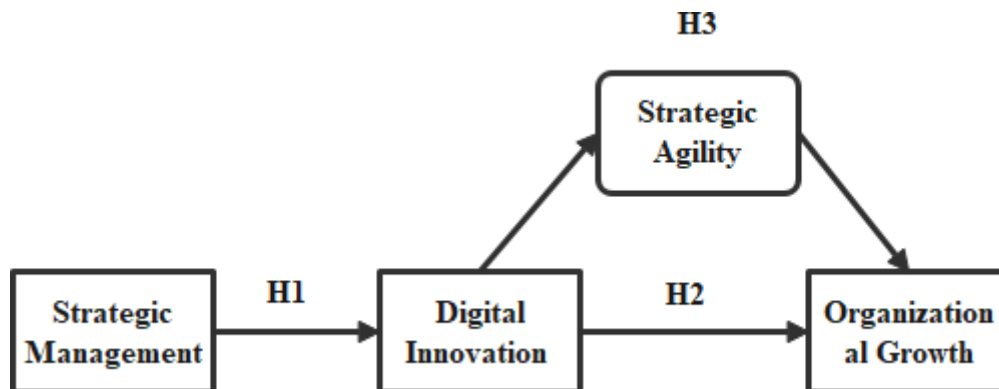
Hypothesis

H1: Strategic management positively influences digital innovation within organizations. **H2:** Organizational growth is strongly impacted by digital innovation in strategic management.

H3: Organizational development and digital innovation in strategic management are mediated by strategic agility.

5 METHODOLOGY

Conceptual Frame Work



RESEARCH DESIGN

The proposed research method for this study adopts a quantitative approach to investigate how strategic management practices and digital innovation impact organizational growth and development. Participants will be randomly selected from a diverse population of organizations operating across various industries. Data collection will involve administering a comprehensive questionnaire designed to assess strategic management practices, digital innovation initiatives, and organizational growth and development outcomes. Structural Equation Modeling (SEM) will be employed to identify the relationships between strategic management, digital innovation, and organizational growth and development.

Sampling Technique

A random sample method was employed to ensure inclusivity, involving 384 sample of different organizations to ensure how strategic management practices and digital innovation impact organizational growth and development. The selected members are actively participated in a questionnaire-based data collection process.

Random Sampling

Random sampling, a strategy for selecting samples from a group of individuals, guarantees that every potential participant has an equal chance of being picked. A representative sample of the complete population may often be obtained by randomly selecting a sample from a group. Random sampling is among the most straightforward techniques for obtaining data from a large population. When the population is only picked once, the random sampling formula is as follows.

$$P = 1 - \left(\frac{N-1}{N} \right) \left(\frac{N-2}{N} \right) \dots \left(\frac{N-n}{N} \right)$$

Data Collection

Gathering pertinent data is a critical component of every research endeavors. Primary data

collection and secondary data collection are the two methods of information gathering that are most often employed. Using a questionnaire, the main data will be obtained. Aside from these places, books, essays, research papers, yearly reports, and periodicals and journals may also include secondary data.

Tools for Data collection

Surveys/questionnaires: To gather information from respondents, structured questions are used in surveys, which are tools for collecting data. Their usage in research is common, since they provide valuable perspectives on attitudes, beliefs, and experiences. Researchers may quantify data, look for trends, and understand the different perspectives of participants on a given topic by using surveys, which are an adaptable instrument.

Inclusion and Exclusion Criteria

- **Inclusion Criteria:** who had consented to participate in the study and provided personal information.
- **Exclusion Criteria:** Those who were not related to the certain organizations at the time of data collection and who were unwilling to participate in the study were declined.

Tools and Techniques of this Study

Data Analysis

The Structural Equation Modeling (SEM) approach is used to analyze the impact of strategic management and digital innovation on organizational growth and development. The SEM model incorporates latent constructs representing key variables such as strategic planning, resource allocation, and performance measurement, and digital innovation as a latent construct. It assesses the relationships between digital innovation and strategic management practices, elucidating how organizations integrate digital technologies into their decision-making processes. The SEM analysis examines the direct and indirect effects of strategic management and digital innovation on organizational growth and development, incorporating mediating variables like innovation capability and organizational culture. The model's statistical analysis assesses the strength and significance of relationships between variables, providing insights into the relative importance of strategic management practices and digital innovation in driving growth and development. It also allows for the exploration of moderating factors, such as industry dynamics, organizational size, and market competition. The SEM analysis provides a robust framework for organizations seeking to leverage strategic management and digital innovation for sustainable growth and competitiveness in today's dynamic business environment.

Analysis of Structural Equation Modeling (SEM)

This study uses Structural Equation Modeling (SEM) to analyze the impact of strategic management and digital innovation on organizational growth and development. SEM provides a systematic approach to understanding how these factors influence organizational outcomes. It examines direct and indirect effects among latent variables, such as strategic management practices and digital innovation adoption. SEM also allows for the exploration of mediating and moderating effects, such as organizational culture or leadership style. This provides a nuanced understanding of the mechanisms driving organizational development in the context of strategic management and digital innovation. SEM also allows for the evaluation of model fit and validity, ensuring that the proposed relationships align with empirical data. Measures such as goodness-of-fit indices and model chi-square tests help assess the model's adequacy in explaining observed

variance in organizational growth and development. The SEM model offers valuable insights for practitioners and policymakers seeking to enhance organizational performance in today's dynamic business landscape.

6 DATA ANALYSIS

Demographic Variables

Gender		
	Frequency	Percent
Male	189	49.2
Female	195	50.8
Total	384	100.0
Mean	1.507	
Age		
	Frequency	Percent
18 - 22 Years	104	27.1
23 - 27 Years	109	28.4
28 - 32 Years	74	19.3
Above 32 Years	97	25.3
Total	384	100.0
Mean	2.427	
Education		
	Frequency	Percent
high school diploma	95	24.7
bachelor's degree	94	24.5
master's degree	96	25.0
Above master's	99	25.8
Total	384	100.0
Mean	2.518	
Income		
	Frequency	Percent
Less than 2 Lacs	92	24.0
2 - 4 Lacs	90	23.4
More than 4 Lacs	103	26.8
4.00	99	25.8

Total	384	100.0
Mean	2.544	
Location		
	Frequency	Percent
Urban	207	53.9
Rural	177	46.1
Total	384	100.0
Mean	1.46	

The study includes a total of 384 individuals in the demographic profile of the respondents. When it comes to gender distribution, around 49.2% of the participants identified as male, with 50.8% identifying as female. The respondents covered a variety of age groups, including 27.1% in the 18-22 years category, 28.4% in 23-27 years, 19.3% in 28-32 years, and 25.3% above 32 years. Regarding educational achievement, most participants had either completed a bachelor's degree (24.5%) or a master's degree (25.0%), with 24.7% holding a high school diploma, and 25.8% having pursued education beyond a master's degree. When it comes to income levels, 24.0% of participants stated an income of less than 2 lacs, 23.4% reported earning between 2-4 lacs, 26.8% reported earning more than 4 lacs, and 25.8% chose not to disclose their income. From a geographical standpoint, 53.9% of participants lived in urban regions, with the remaining 46.1% residing in rural areas. These demographic variables offer valuable information about the sample population, helping to understand how various groups might perceive or react to the research study's focus.

Structural Equation Model (SEM)

Structural Equation Modeling (SEM) is a strong statistical tool that allows for a full study of complex relationships between variables, whether they are apparent or hidden. This approach excels in analyzing complicated causal relationships, including hidden variables, testing numerous hypotheses at the same time, addressing measurement problems, evaluating model quality, and combining elements of factor analysis and regression. SEM is important in a variety of domains, including psychology, sociology, and economics. It helps to validate theoretical models, assess the effectiveness of initiatives or policies, and streamline unwieldy datasets. Adopting this rigorous strategy allows for a more complete and accurate assessment of facts as well as experimenting with hypotheses.

Exploring the Measurement Model and Ensuring Validity

Understanding measurement models and validity is critical in research because they give a formal framework for ensuring the quality and relevance of collected data. Understanding measurement models may help explain the relationships between observable variables and underlying conceptions, making it easier to appraise complex ideas. Precision is essential to guarantee that measuring instruments correctly capture the intended ideas, reducing the possibility of erroneous or misleading results. Understanding measurement models and validity is critical in research because they provide the foundation for dependable and trustworthy outcomes. Ensuring the integrity of this information is critical for making educated judgments and expanding knowledge in many disciplines.

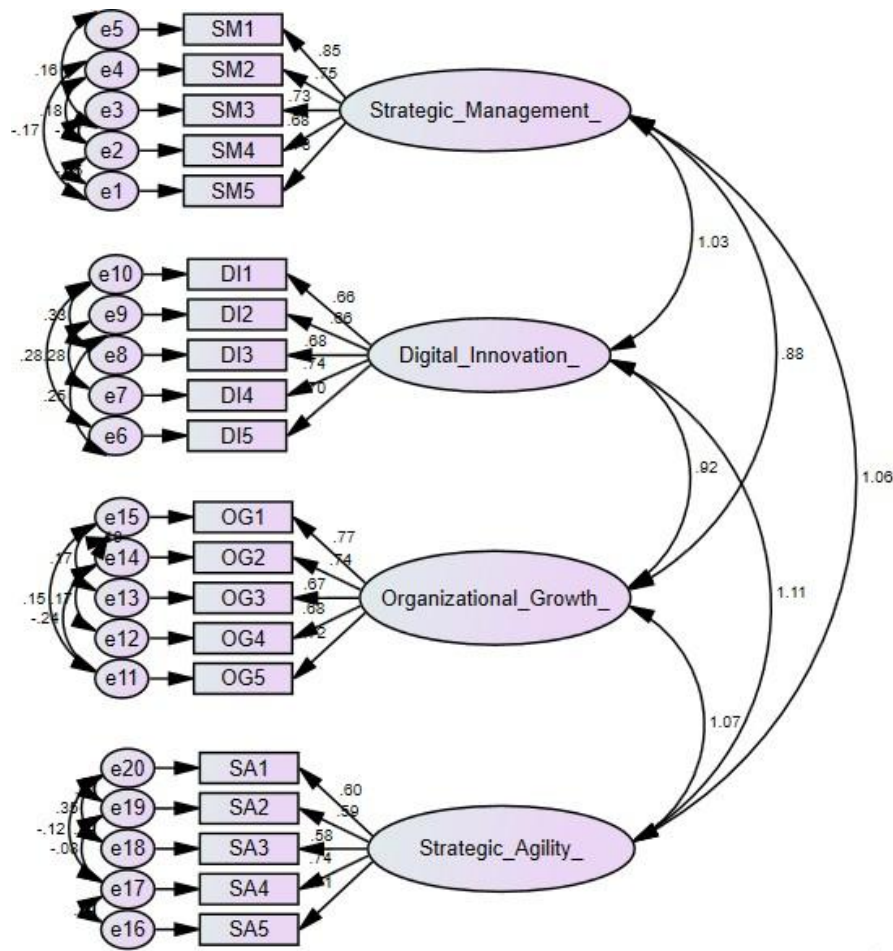


Table 1 Regression Weights: (Group number 1 - Default model)

PATH		Unstandardized Estimate	S.E.	Standardized Estimate	P
SM5	<---	1.000		.727	
SM4	<---	.870	.074	.683	***
SM3	<---	.997	.071	.732	***
SM2	<---	1.021	.077	.746	***

PATH		Unstandardized Estimate	S.E.	Standardized Estimate	P
SM1	<---	Strategic Management 1.390	.084	.848	***
DI5	<---	Digital Innovation 1.000		.698	
DI4	<---	Digital Innovation 1.067	.074	.742	***
DI3	<---	Digital Innovation .904	.060	.680	***
DI2	<---	Digital Innovation .858	.067	.664	***
DI1	<---	Digital Innovation .896	.059	.664	***
OG5	<---	OrganizationalGrowth 1.000		.720	
OG4	<---	OrganizationalGrowth .896	.071	.676	***
OG3	<---	OrganizationalGrowth .953	.076	.669	***
OG2	<---	OrganizationalGrowth 1.128	.090	.745	***
OG1	<---	OrganizationalGrowth 1.111	.071	.771	***
SA5	<---	Strategic Agility 1.000		.705	
SA4	<---	Strategic Agility 1.419	.071	.741	***
SA3	<---	Strategic Agility .874	.072	.579	***
SA2	<---	Strategic Agility .892	.072	.590	***
SA1	<---	Strategic Agility .965	.076	.605	***

Table 2 Model Fit Summary

Variable	Value
Chi-square value(χ^2)	451.243
Degrees of freedom (df)	144
CMIN/DF	3.314
P value	0.000
GFI	0.894
NFI	0.911
RFI	0.883
IFI	0.938
CFI	0.937
RMR	0.044
RMSEA	0.075

The quality of fit was acceptable representation of the sample data ($\chi^2 = 451.243$), NFI (Normed Fit Index) = 0.911; IFI (Incremental fit index) = 0.938, GFI (Goodness of Fit) = 0.894, RFI (Relative Fit Index) = 0.883 and CFI (Comparative Fit Index) = 0.937 which is much larger than the 0.90. Similarly, RMR (Root Mean Square Residuals) = 0.044 and RMSEA (Root mean square error of approximation) = 0.075 values are lower the 0.080 critical value. Results indicated a good fit for the model presented including RMSEA of 0.075, RMR of 0.044, GFI of 0.894, and CFI of 0.937.

Table 3 KMO and Bartlett's Testa

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.958
Bartlett's Test of Sphericity	Approx. Chi-Square	4994.138
	Df	190
	Sig.	.000
a. Based on correlations		

Assessing the suitability for factor analysis through KMO and Bartlett's tests. The KMO value of 0.958 suggests a high level of sampling adequacy. Moreover, the Bartlett's test produced a very significant outcome ($P = 0.00$), offering additional backing for the factor analysis.

Table 4 Post CFA, Cronbach alpha, factor loadings

Factors and items	Cronbach alphavalues	Post CFA factorloadings	AVE	CR
Strategic Management	0.857		0.747	0.475
SM5		0.727		
SM4		0.683		
SM3		0.732		
SM2		0.746		
SM1		0.848		
Digital Innovation	0.853		0.690	0.435
DI5		0.698		
DI4		0.742		
DI3		0.680		
DI2		0.664		
DI1		0.664		

OrganizationsGrowth	0.818		0.716	0.454
OG5		0.720		
OG4		0.676		
OG3		0.669		
OG2		0.745		
OG1		0.771		
Strategic Agility	0.841		0.644	0.402
SA5		0.705		
SA4		0.741		
SA3		0.579		
SA2		0.590		
SA1		0.605		

Table 4 displays the outcomes of the post-Confirmatory Factor Analysis (CFA) for the strategic management, digital innovation, organizational growth, and strategic agility constructs. The Cronbach alpha values demonstrate strong internal consistency for each construct, with values ranging from 0.818 to 0.857. After conducting the CFA, the factor loadings show significant correlations between the items and their corresponding constructs, with loadings ranging from 0.644 to 0.747. Moreover, the AVE values vary from 0.402 to 0.475, suggesting that a significant amount of the variance in the constructs is explained by their items. All the Composite Reliability (CR) values are satisfactory as they surpass the recommended threshold of 0.7 for all constructs. The results indicate that the measurement model shows strong reliability and validity, which boosts confidence in how the constructs are defined for further analysis in the study.

Discussing discriminant validity

Determining discriminant validity cannot be directly performed using SPSS or other statistical software. It's a concept utilized for validating measurement instruments and assessing the relationships between variables. It is crucial to establish discriminant validity to confirm that different constructs or variables in a study are truly distinct and not measuring the same underlying concept. Researchers use various techniques, like confirmatory factor analysis (CFA) or correlation analysis, to ensure that the measures created to assess different constructs are genuinely separate and not highly correlated. It is essential for measurement instruments to accurately represent distinct concepts by ensuring discriminant validity. By avoiding any duplication or repetition in constructs, it allows for a more dependable and accurate analysis and understanding of the data.

Table 5 Discriminant Validity Test

	Strategic Management	Digital Innovation	Organizational Growth	Strategic Agility
Strategic Management	0.8644			
Digital Innovation	.840 ^{**}	0.8304		
Organizational Growth	.765 ^{**}	.737 ^{**}	0.8463	
Strategic Agility	.845 ^{**}	.850 ^{**}	.814 ^{**}	0.8025

The discriminant validity test, displayed in Table 5, evaluates the uniqueness of constructs within a research model. The diagonal cells show the square root of the average variance extracted (AVE) for each construct, while the off-diagonal cells indicate the correlations between constructs. Based on the data in the table, it is evident that the square roots of the AVEs for each construct exceed the correlations between constructs, thus confirming discriminant validity. In this case, the diagonal elements, which indicate the AVEs, are higher than the correlations between constructs. It indicates that each construct is able to capture distinct variance that is not overlapping with other constructs, which confirms the measurement model's ability to differentiate between them.

Hypothesis Testing

H1: Strategic management positively influences digital innovation within organizations.

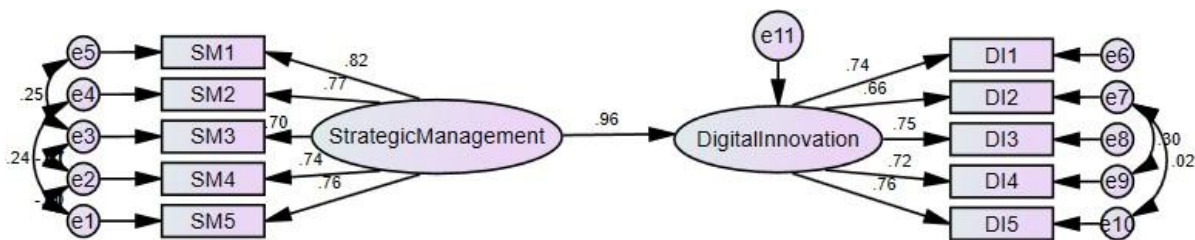


Table 6 Regression Weights: (Group number 1 - Default model)

PATH		Unstandardized Estimate	S.E.	Standardized Estimate	P
Digital Innovation	<--- Strategic Management	.866	.063	.957	***
SM5	<--- Strategic Management	1.000		.756	

SM4	<---	Strategic Management	.903	.074	.736	***
SM3	<---	Strategic Management	.917	.069	.698	***
SM2	<---	Strategic Management	1.013	.074	.767	***
SM5	<---	Strategic Management	1.297	.082	.819	***
DI1	<---	Digital Innovation	1.000		.745	
DI2	<---	Digital Innovation	.854	.067	.665	***
DI3	<---	Digital Innovation	.993	.068	.751	***
DI4	<---	Digital Innovation	1.028	.074	.719	***
DI5	<---	Digital Innovation	1.084	.073	.761	***

The regression coefficients presented in Table 6 demonstrate the relationship between strategic management and digital innovation within organizations, as predicted in H1. The standardized estimates, especially for Digital Innovation <- Strategic Management, demonstrate a significant positive relationship ($\beta = 0.957$, $p < 0.001$), which backs the hypothesis that strategic management has a positive impact on digital innovation. In addition, the unstandardized estimates for each path consistently show positive coefficients, indicating a link between higher levels of strategic management practices and increased digital innovation initiatives in organizations. The results offer strong evidence supporting H1, showing that strategic management is essential for promoting digital innovation in organizational settings. Based on the regression analysis, it is evident that strategic management practices have a positive impact on digital innovation within organizations, supporting the hypothesis. This indicates that companies with stronger strategic management processes typically demonstrate greater levels of digital innovation. Thus, organizations can benefit from investing in strategic management capabilities to boost their digital innovation and maintain competitiveness in the fast-changing business environment.

Table 7 Model Fit Summary

Variable	Value
Chi-square value(χ^2)	87.245
Degrees of freedom (df)	28

CMIN/DF	3.116
P value	0.000
GFI	0.953
NFI	0.960
RFI	0.936
IFI	0.973
CFI	0.972
RMR	0.035
RMSEA	0.074

The quality of fit was acceptable representation of the sample data ($\chi^2 = 87.245$), NFI (Normed Fit Index) = 0.960; IFI (Incremental fit index) = 0.973, GFI (Goodness of Fit) = 0.953, RFI (Relative Fit Index) = 0.936 and CFI (Comparative Fit Index) = 0.972 which is much larger than the 0.90. Similarly, RMR (Root Mean Square Residuals) = 0.035 and RMSEA (Root mean square error of approximation) = 0.074 values are lower the 0.080 critical value. Results indicated a good fit for the model presented including RMSEA of 0.074, RMR of 0.035, GFI of 0.953, and CFI of 0.972.

H2: Organizational growth is strongly impacted by digital innovation in strategic management.

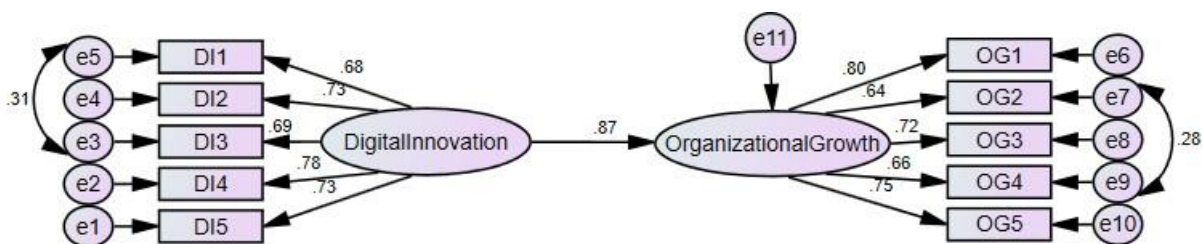


Table 8 Regression Weights: (Group number 1 - Default model)

PATH	Unstandardized Estimate	S.E.	Standardized Estimate	P

Organizational Growth	<---	Digital Innovation	.921	.071	.873	***
DI5	<---	Digital Innovation	1.000		.728	
DI4	<---	Digital Innovation	1.070	.076	.776	***
DI3	<---	Digital Innovation	.879	.070	.690	***
DI2	<---	Digital Innovation	.903	.068	.729	***
DI1	<---	Digital Innovation	.879	.071	.679	***
OG1	<---	Organizational Growth	1.000		.795	
OG2	<---	Organizational	.844	.068	.640	***

PATH		Unstandardized Estimate	S.E.	Standardized Estimate	P	
		Growth				
OG3	<---	Organizational Growth	.894	.062	.720	***
OG4	<---	Organizational Growth	.759	.059	.657	***
OG5	<---	Organizational Growth	.912	.060	.753	***

The regression coefficients provided in Table 8 provide valuable information on the connection between digital innovation in strategic management and organizational growth, supporting hypothesis H2. The standardized estimate for Organizational Growth <- Digital Innovation suggests a robust positive correlation ($\beta = 0.873$, $p < 0.001$), backing the hypothesis that digital innovation initiatives significantly influence organizational growth. Moreover, the steady positive coefficients seen in the unstandardized estimates for each path indicate a link between higher levels of digital innovation in strategic management and enhanced organizational growth. Thus, the results offer strong evidence supporting H2, emphasizing the substantial impact of digital innovation on promoting organizational growth. Ultimately, the findings from the regression analysis provide strong evidence in favor of the theory that organizational growth is significantly influenced by digital innovation in strategic management. It highlights the significance of placing digital innovation initiatives at the forefront of organizational strategies to fuel growth and achieve success. Through strategic investments in digital innovation capabilities and their effective utilization, organizations can strengthen their competitive advantage and establish a solid foundation for long-term growth in the current fast-paced business landscape.

Table 9 Model Fit Summary

Variable	Value
Chi-square value(χ^2)	109.004
Degrees of freedom (df)	32
CMIN/DF	3.406
P value	0.000
GFI	0.943
NFI	0.942
RFI	0.919
IFI	0.959
CFI	0.958
RMR	0.039
RMSEA	0.079

The quality of fit was acceptable representation of the sample data ($\chi^2 = 109.004$), NFI (Normed Fit Index) = 0.942; IFI (Incremental fit index) = 0.959, GFI (Goodness of Fit) = 0.943, RFI (Relative Fit Index) = 0.919 and CFI (Comparative Fit Index) = 0.958 which is much larger than the 0.90. Similarly, RMR (Root Mean Square Residuals) = 0.039 and RMSEA (Root mean square error of approximation) = 0.079 values are lower the 0.080 critical value. Results indicated a good fit for the model presented including RMSEA of 0.079, RMR of 0.039, GFI of 0.943, and CFI of 0.958.

H3: Organizational development and digital innovation in strategic management are mediated by strategic agility.

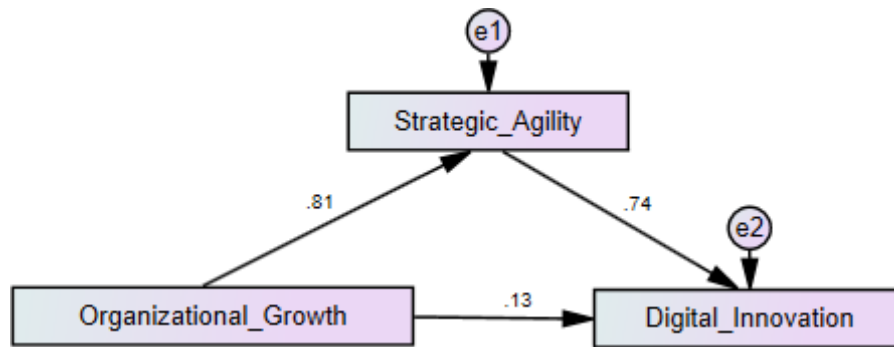


Table 10 Regression Weights: (Group number 1 - Default model)

PATH		Unstandardized Estimate	S.E.	Standardized Estimate	P
Strategic Agility	<--- Organizational Growth	.853	.031	.814	***
Digital Innovation	<--- Strategic Agility	.722	.045	.741	***
Digital Innovation	<--- Organizational Growth	.137	.047	.134	.003

The regression coefficients in Table 10 offer valuable information on the mediating impact of strategic agility on the connection between organizational development, digital innovation in strategic management, and organizational growth, as outlined in hypothesis H3. The standardized estimate for Strategic Agility <- Organizational Growth shows a robust positive relationship ($\beta = 0.814$, $p < 0.001$), indicating that strategic agility has a significant impact on organizational growth. Moreover, the standardized estimate for Digital Innovation <- Strategic Agility shows a strong positive correlation ($\beta = 0.741$, $p < 0.001$), suggesting that digital innovation in strategic management enhances strategic agility. Nevertheless, the standardized estimate for Digital Innovation <- Organizational Growth is quite low ($\beta = 0.134$, $p = 0.003$), indicating a less significant direct impact.

Table 11 Standardized Indirect Effects (Group number 1 - Default model)

	Organizational Growth	Strategic Agility
	Organizational Growth	Strategic Agility
Strategic Agility	.000	.000
Digital Innovation	.603	.000

Table 11 displays the standardized indirect effects among digital innovation, strategic agility, and organizational growth. This demonstrates a notable indirect impact of digital innovation on organizational growth via strategic agility ($\beta = 0.603$), emphasizing the importance of strategic

agility as a mediator in converting digital innovation into organizational advancement. Thus, the findings confirm hypothesis H3, suggesting that organizational development and digital innovation in strategic management are influenced by strategic agility. Understanding the importance of strategic agility is essential for successfully implementing digital innovation projects that drive organizational growth. Thus, organizations should prioritize cultivating strategic agility in addition to digital innovation initiatives to improve their capacity to adjust to change and promote organizational growth successfully.

7 CONCLUSION

In conclusion, this extensive research examined the interconnections among strategic management, digital innovation, strategic agility, and organizational results, with a specific emphasis on the ways in which these factors influence the expansion and progress of the organization. The research objectives were achieved by using Structural Equation Modeling (SEM) to examine intricate relationships among variables. The first hypothesis was confirmed, suggesting that strategic management has a favorable impact on digital innovation in businesses. Additionally, hypothesis 2 was validated, showing that digital innovation in strategic management has a significant influence on organizational development. Furthermore, Hypothesis 3 received confirmation, indicating that organizational development and digital innovation in strategic management are influenced by strategic agility. The study delved deep into statistical analysis to offer insights on the significance of strategic management practices, digital innovation initiatives, and strategic agility in fostering organizational growth and development.

This study highlights the importance of strategic management in promoting digital innovation within organizations. Organizations can enhance organizational growth by developing strategic management capabilities to drive digital innovation initiatives. Furthermore, the research emphasizes the significance of strategic agility in connecting digital innovation and organizational development. Organizations that focus on developing strategic agility in addition to digital innovation are more likely to successfully adapt to change and achieve organizational development goals. Overall, the research underlines the need of integrating strategic management techniques, digital innovation efforts, and strategic agility into operational plans to achieve long-term development and competitiveness in today's changing corporate environment.

REFERENCES

- [1] B. S. Rêgo, S. Jayantilal, J. J. Ferreira, and E. G. Carayannis, "Digital Transformation and Strategic Management: a Systematic Review of the Literature," *J. Knowl. Econ.*, vol. 13, no. 4, pp. 3195–3222, 2022, doi: 10.1007/s13132-021-00853-3.
- [2] C. Gong and V. Ribiere, "Developing a unified definition of digital transformation," *Technovation*, vol. 102, p.102217, 2021, doi: <https://doi.org/10.1016/j.technovation.2020.102217>.
- [3] G. Vial, "Understanding digital transformation," *Manag. Digit. Transform.*, pp. 13–66, 2021, doi: 10.4324/9781003008637-4.
- [4] G. Sainger, "Leadership in Digital Age: A Study on the Role of Leader in this Era of Digital Transformation," *Int. J. Leadersh.*, vol. 4, pp. 1–6, 2018.
- [5] M. Wrede, V. K. Velamuri, and T. Dauth, "Top managers in the digital age: Exploring the role and practices of top managers in firms' digital transformation," *Manag. Decis. Econ.*, vol. 41, no. 8, pp. 1549–1567, 2020, doi: 10.1002/mde.3202.
- [6] L. Cortellazzo, E. Bruni, and R. Zampieri, "The role of leadership in a digitalized world: A review," *Front. Psychol.*, vol. 10, no. AUG, pp. 1–21, 2019, doi: 10.3389/fpsyg.2019.01938.

- [7] A. Colbert, N. Yee, and G. George, "The digital workforce and the workplace of the future," *Academy of Management Journal*, vol. 59, no. 3, pp. 731–739, 2016. doi: 10.5465/amj.2016.4003.
- [8] S. Chanias, M. D. Myers, and T. Hess, "Digital transformation strategy making in pre-digital organizations: The case of a financial services provider," *J. Strateg. Inf. Syst.*, vol. 28, no. 1, pp. 17–33, 2019, doi: <https://doi.org/10.1016/j.jsis.2018.11.003>.
- [9] M. Kotarba, "Digital transformation of business models," *Found. Manag.*, vol. 10, no. 1, pp. 123–142, 2018, doi: 10.2478/fman-2018-0011.
- [10] M. A. H. M. S. E. S. M. R. P. Wheeler, "New Asymmetric Cascaded Multi-level Converter with Reduced Components," *IEEE Access*, pp. 95–108, 2022, doi: 10.1007/978-3-031-07753-1_7.
- [11] J. Whyte, A. Stasis, and C. Lindkvist, "Managing change in the delivery of complex projects: Configuration management, asset information and 'big data,'" *Int. J. Proj. Manag.*, vol. 34, no. 2, pp. 339–351, 2016, doi: <https://doi.org/10.1016/j.ijproman.2015.02.006>.
- [12] P. J. Guinan, S. Parise, and N. Langowitz, "Creating an innovative digital project team: Levers to enable digital transformation," *Bus. Horiz.*, vol. 62, no. 6, pp. 717–727, 2019, doi: <https://doi.org/10.1016/j.bushor.2019.07.005>.
- [13] V. Jafari-Sadeghi, A. Garcia-Perez, E. Candelo, and J. Couturier, "Exploring the impact of digital transformation on technology entrepreneurship and technological market expansion: The role of technology readiness, exploration and exploitation," *J. Bus. Res.*, vol. 124, pp. 100–111, 2021, doi: 10.1016/j.jbusres.2020.11.020.
- [14] S. Li, L. Gao, C. Han, B. Gupta, W. Alhalabi, and S. Almakdi, "Exploring the effect of digital transformation on Firms' innovation performance," *J. Innov. Knowl.*, vol. 8, no. 1, p. 100317, 2023, doi: <https://doi.org/10.1016/j.jik.2023.100317>.
- [15] S. Kraus, S. Durst, J. J. Ferreira, P. Veiga, N. Kailer, and A. Weinmann, "Digital transformation in business and management research: An overview of the current status quo," *Int. J. Inf. Manage.*, vol. 63, p. 102466, 2022, doi: <https://doi.org/10.1016/j.ijinfomgt.2021.102466>.
- [16] R. Amoako, Y. Jiang, M. F. Frempong, S. Tetteh, and S. S. Adu-Yeboah, "Examining the Effect of Organizational Leadership, Organizational Structure, and Employee Technological Capability on the Success of Electronic Human Resource Management," *SAGE Open*, vol. 12, no. 2, p. 21582440221088852, Apr. 2022, doi: 10.1177/21582440221088852.
- [17] T. Wang, C. CHEN, and X. Jia, "Exploring the Impact of Digital Transformation on Information Disclosure Quality: A Study on Digitally Empowered Corporate Disclosure," Available SSRN 4478772, [Online]. Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4478772
- [18] M. Ghobakhloo, M. Iranmanesh, B. Foroughi, M.-L. Tseng, D. Nikbin, and A. A. A. Khanfar, "Industry 4.0 digital transformation and opportunities for supply chain resilience: a comprehensive review and a strategic roadmap," *Prod. Plan. Control*, pp. 1–31, doi: 10.1080/09537287.2023.2