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Influence of Digital Transformation, Financial Strategies, and Project Management on Organizational Performance: The Mediating Role of Process Optimization

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KEYWORDS	ABSTRACT
Digital Transformation, Financial Strategies, Project Management, Organizational Performance, Process Optimization  ARTICLE HISTORY  Date of Submission: 15-07- 2024 Date of Acceptance: 13-08- 2024 Date of Publication: 30-09- 2024  Funding  This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors	This study analyzes the effect of digital transformation, financial strategy, and project management on organizational performance, with process optimization as a mediating variable. The primary objective of this research is to examine the role of these strategic initiatives in enhancing organizational performance, with a particular focus on emerging economies. A quantitative research approach was employed to collect data from 250 organizations in Pakistan using a structured survey. Data were analyzed, and relationships among the variables were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that digital transformation, financial strategy, and project management positively influence process optimization, which, in turn, significantly impacts organizational performance. Additionally, process optimization plays a crucial mediating role between these strategic factors and organizational performance. This suggests that while digital transformation, financial strategies, and project management are essential, their full potential can only be realized through effective process optimization within the organization. Therefore, this study provides valuable insights for managers and decision-makers aiming to improve organizational operational efficiency and overall success. Furthermore, these findings contribute to the existing literature on process optimization and strategic management, offering practical recommendations for organizations to enhance their performance.
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#### 1.0 Introduction

Digital transformation is the process of using digital technologies to transform the way organizations operate and conduct business in radically new ways; the transformation is deeply affecting how companies relate to their customers. Looking at it beyond technology adoption requires that the way business models, processes and even management are practiced is reconsidered (Zaman et al., 2024). Digital technologies current in the extreme rate of development (cloud computing, artificial intelligence (AI), the internet of things (IOT), and big data analytics) allow organizations to become more agile, innovative and customer centered. Digital transformation is not a trend but it is essential for the survival of any organization that wishes to stay competitive in today's dynamic and technological global society (Li et al., 2024). For organizations, it enables to utilize the power of data, refine decision making, streamline the operations, and encourage innovation. But success of digital transformation is a function of how good an organization is able to bring its financial strategies and project management practices in sync with its digital goal. When these factors lack coherence, this will hamper the performance of digital initiatives; it will restrict the scope of digital initiatives' impact upon organizational performance (Muneer et al., 2024).

In such a context, financial strategies are essential for their support of digital transformation. Digital initiatives must be funded and their sustainability must be planned over time by organizations, they should be allocated resources strategically. It involves not only spending on necessary technologies but also spending on related risks and costs. Strong financial strategies form the basis for effective digital transformation by securing that the company has the financial ability to back the innovation and process changes needed to stay afloat in today's business environment (Badwy, 2024). This strategy incorporates financial planning, budgeting, and risk management in efforts to help organizations overcome unexpected and obstacle that firms experience during digital transformation. On the other hand, organizations should have a long-term financial perspective and evaluate the costs and benefits of digital initiatives and the impact of digital initiative on possible organizational performance. Financial strategies should be aligned to digital transformation if the organization is to fully realize the opportunities offered by digital technologies (Liu et al., 2024).

Project management is similarly as important on the list of conditions necessary for the successful implementation of digital transformation. Most digital transformation projects are complex projects that need to be well planned, coordinated and executed. Project management gives the tools and means of managing these endeavors so they're delivered on time, within budget, and fail to meet desired specifications (Ali et al., 2024). Digital transformation takes a toll on an organization as it introduces identifiable risks and uncertainties; and, through proper implementation of effective project management practices brings it at par with the rapid pace

of digital innovation. The additional benefit is that project management promotes the communication and collaboration among various departments and teams so that everyone is on the same page and aligns themselves with the organization's digital goals. Digital transformation cannot be complete without project management as it provides the steering capability to organizations in order to manage technology adoption, processes optimization, and change (Rodrigues et al., 2021).

Process optimization further strengthens the relationship between the digital transformation, financial strategies and project management as well. Process optimization is continuous improvement of a business process with the objective of reducing costs and enhancing efficiency and, therefore, improving overall performance. Digital transformation enables organizations to provide tools and technology to optimize the organization's processes by automating the routine tasks, improving the accuracy of the data and making the decision in real time. Process optimization is supported by financial strategies which allow the organization to provide the necessary resources and make required investments, and by project management, which allows implementing process improvement initiatives in a correct manner (Nwachukwu & Onuoha, 2023). In this sense, process optimization is a mediator between digital transformation, financial strategies, and project management and the organizational performance. Not only is new technology crucial to digital transformation, but the importance of an organization's ability to optimize or even redefine its processes in order to support the achievement of long-term strategic goals is of equal significance. Organizations can achieve enhanced operational efficiency, decrease costs as well as be able to enhance their capacity to innovate for improving in their organizational performance through process optimization (Zhang et al., 2023).

The research problem of this study is the lack of understanding on what digital transformation, financial strategies, and project management should be integrated for organizational performance to be optimized. The reasons for not getting to benefit fully out of Digital Transformation lie in misaligned financial strategies, mismanaged projects, and lack of focus on process optimization. Typically, the opportunity is being overlooked or underutilized for process optimization to be leveraged as a key enabler of performance improvements. In this study, we attempt to look at the extent to which digital transformation, financial strategies and project management lead to process optimization and then how they work together to improve organizational performance. The emphasis on process improvement as a mediating variable further enhances the understanding about how organizations can avail the benefits of the digital technologies and enhance their performance.

For this study, its significance lies in the possible contributions it can make to academic theory as well as practical management strategies. This research adds to the digital transformation literature, the studies on financial strategies, and project management in

providing process optimization as a mediating factor between organization's performance and technological transformation strategies. This study makes new contribution to the understanding of how organizations can utilize their resources to secure long term success in a digitalized world by drawing on the RBV and Dynamic Capabilities Theory. Most importantly, the study has practical implications for the business leaders and managers implementing the digital transformation initiatives in their organizations. The study highlights how financial strategies can be aligned with digital goals as well as appropriate project management practices to maximize processes and improve performance of organizations. Furthermore, the findings can be used by policy makers and industry regulators to design policies and strategies to empower SMEs in their adoption of digital technologies specifically in industries where use of technology is essential for maintaining competitiveness.

#### 2.0 Literature Review

There has been much referencing in the literature of organizational performance to theories such as Resource Based View (RBV) and Dynamic Capabilities Theory to explain how firms advantage themselves over the competition by implementing their resources and capabilities. Drawing on RBV, an organization's resources can provide it with some sustained competitive advantage if those resources are rare, valuable, imitable, and non-substitutable (Wu et al., 2024). In this framework, digital transformation, financial strategies and project management become key organizational resources, management of which would lead to improved performance in the organization. Digital transformation is a dynamic capability – the organization's ability to reconfigure resources to respond to a rapidly changing environment – as proposed by (Zhao et al., 2023). Therefore, process optimization as a dynamic capability in the organizations allows them to become able to enhance their efficiency, productivity and overall performance. The mediating role of process optimization between digital transformation, financial strategies, project management and organizational performance is the concern of this study (Li & Li, 2025).

The empirical studies reveal that digital transformation has a positive effect on the organizational performance. For example, studies such as those by (Etienne Fabian et al., 2024), shows that digital transformation helps in innovation, customer relationship and operational efficiency and result in better organizational performance. Harahap et al. (2024) found elsewhere that organizations that equipped digital technologies into their business processes saw gains in agility, innovation, as well as productivity all of which translated into enhanced financial performance. Furthermore, financial strategies have been discovered to be essential in assisting digital transformation initiatives to have a successful outcome by offering resources for technology investments and also ensuring that the investments are in line with the company's long-term targets (Meng et al., 2023).

The literature has also given a considerable attention to process optimization as a mediating variable. Multiple studies have already proven that investing in Process Optimization makes you better able to improve the operational efficiency, reduce costs, and overall performance. Continuous improvement of business process using digital technologies like automation, data analytics and artificial intelligence is known as process optimization (Aghazadeh et al., 2024). Putra et al. (2024) reports that organizations that made use of digital technologies to optimize their processes significantly reduced costs improved the satisfaction of customers and found a greater amount of capacity for innovation.

# 3.0 Methodology

This study was developed in order to investigate the impact of digital transformation, financial strategies and project management on organizational performance through a process optimization acting as a mediator. The research design adopted is quantities and it was to gather empirical evidence and test the hypothesized relationship between the variables. The research philosophy of the study was positivist which assumes that reality is objectively measurable and that knowledge is obtained through observable facts. This method was suitable for testing hypotheses and analyzing the relation among the variables using the statistical techniques.

Organizations operating in Pakistan across all these sectors; manufacturing, services and technology were the population of the study. As digital transformation is being given more time and the impact of digital on organizational performance, the target population was mid-level to senior level managers directly involved in decision making in regards to digital initiatives, financial strategies, and project management. For this purpose, an attempt was made to study organizations with varying sizes so as to have a diverse representation of the business environments of Pakistan.

The participants were selected by means of a non-probability sampling strategy specifically purposive sampling. This saved the researcher's time because it enabled him to target respondents who had requisite knowledge and experience with respect to the study variables. From the PLS-SEM, the study decided a sample size of 300 respondents to be adequate in the data analysis. The sample size was set to the degree that guarded against violating the assumptions of the statistical analysis and fulfilling the suggested minimum thresholds for PLS-SEM.

A survey questionnaire structured was used to collect the data. In order to assure the reliability and validity of the measures, the questionnaire was based on several validated scales from previous research studies. The study questionnaire was composed of sections aimed at collecting data related to the study's key variables such as digital transformation, financial strategies, project management, process optimization, and organizational performance. The responses were measured in a five-point Likert scale with the options vary from strongly agree to strongly disagree. The target respondents were contacted online to distribute the

questionnaire and remind them in order to increase respondent response rate. A pilot test with a small group of respondents was conducted prior to data collection to check the wording of the questions and if they are clear and comprehensible.

The data were then analyzed by means of Partial Least Squares Structural Equation Modeling (PLS-SEM). The reason for using this statistical technique was that it is applicable in analyzing complex relationships between latent variables and testing mediation effects. As such, a robust method to handle small sample size and non-normally distributed data was PLS-SEM. Several steps in the analysis included assessing the measurement model and testing the structural model. Reliability and validity of the measurement model was assessed using criteria of Cranach's Alpha, composite reliability, and Average Variance Extracted (AVE). The appropriateness of the constructs was assessed through the convergent and discriminant validity. Then, the structural model was tested to see how it tested the hypothesized relationships between the independent variables, a mediating variable (process optimization) and a dependent variable (organizational performance).

During the research process, ethical considerations were carefully dealt with. All participants were consented before survey completion and were assured of confidential and anonymous responses. Firstly, the study participants were informed about the purpose of the study and were informed that they were free to leave the research at any point without having any consequences. The data were kept securely and only for this research purpose. In addition, the research followed the ethical rules of the academic institution and the regulatory authorities in Pakistan to conduct the research with integrity and with the respect of the rights of the participants.

#### 4.0 Findings and Results

#### 4.1 Measurement Model

**Table 4.1 Reliability Analysis** 

Construct	Cranach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Digital Transformation	0.85	0.89	0.68
Financial Strategies	0.80	0.87	0.65
Project Management	0.82	0.88	0.67
Process Optimization	0.78	0.84	0.60
Organizational Performance	0.86	0.90	0.70

The reliability analysis shows that all constructs meet the acceptable thresholds for Cranach's Alpha ( $\geq$  0.7) and Composite Reliability (CR  $\geq$  0.7). This indicates that the measurement items are consistently measuring their respective constructs. The Average. Variance Extracted (AVE) values are above 0.5, which suggests satisfactory convergent validity, meaning that the constructs are well represented by their indicators.

#### 4.2 Discriminant Validity

### 4.2 Discriminant Validity (HTMT Analysis)

Constructs	Digital Transformation	Financial Strategies	Project Management	Process Optimization	Organizational Performance
Digital Transformation	-				
Financial Strategies	0.72				
Project Management	0.65	0.70	-		
Process Optimization	0.68	0.66	0.69	-	
Organizational Performance	0.61	0.59	0.58	0.62	-

The HTMT values are below the threshold of 0.85, which indicates good discriminant validity. This suggests that the constructs are distinct from one another and measure different concepts. None of the constructs show high correlations that would suggest overlapping measures.

# 4.3. Variance Inflation Factor (VIF)

Table 4.3 VIF

Indicator	VIF
Digital Transformation	1.32
Financial Strategies	1.45
Project Management	1.38
Process Optimization	1.42
Organizational Performance	1.35

The VIF values are all below 3.0, which indicate that there is no Multicollinearity issue among the independent variables. Multicollinearity occurs when two or more variables are highly correlated, leading to unreliable estimates. The low VIF values ensure that each predictor contributes uniquely to the model.

4.4. Structural Equation Model (SEM) Path Coefficients

Table 4.4 Structural Equation Model (SEM) Path Coefficients

Path	Path Coefficient (β)	t-value	p-value	Result
Digital Transformation → Process Optimization	0.45	6.32	<0.001	Supported
Financial Strategies $\rightarrow$ Process Optimization	0.32	4.80	< 0.001	Supported
Project Management $\rightarrow$ Process Optimization	0.37	5.25	< 0.001	Supported
$Process\ Optimization \rightarrow Organizational\ Performance$	0.50	7.10	<0.001	Supported

The path coefficients between the independent variables (Digital Transformation, Financial Strategies, and Project Management) and the mediating variable (Process Optimization) are positive and statistically significant, suggesting that these factors positively influence process optimization. Furthermore, process optimization has a significant positive effect on organizational performance, indicating its critical mediating role. The t-values are all above the critical value (generally 1.96 for a 95% confidence level), and the p-values are below 0.05, supporting the hypothesized relationships.

**Table 4.5 Mediation Analysis** 

Mediated Path	Indirect Effect (β)	t- value	p- value	Mediation Type
Digital Transformation → Process Optimization → Organizational Performance	0.22	4.75	0.000	Partial Mediation
Financial Strategies → Process Optimization → Organizational Performance	0.18	4.50	0.000	Partial Mediation
Project Management → Process Optimization → Organizational Performance	0.20	4.80	0.000	Partial Mediation

Process Optimization functions as a vital intermediary factor that links Digital Transformation to Financial Strategies as well as Project Management with Organizational Performance based on PLS-SEM mediation analysis. The statistical analysis shows three mediation paths whose indirect effects reach a significant level (p < 0.001). Digital Transformation ( $\beta$  = 0.22, t = 4.75), Financial Strategies ( $\beta$  = 0.18, t = 4.50) as well as Project Management ( $\beta$  = 0.20, t = 4.80) contribute positively to Organizational Performance by enabling Process Optimization.

#### 5.1 Discussion

This study's findings have important implications to the relationship between digital transformation, financial strategy, project management, and organizational performance with process optimization as a mediator variable. It shows that digital transformation, financial

strategies, and project management have positive and significant effect on process optimization, and in turn process optimization has a direct and strong influence on organizational performance. Existing literature is supported by these findings, as process optimization is recognized to be a key process to translate strategic initiatives into better organizational outcomes.

The study also shows that process optimization has a strong positive relation with the digital transformation. This is consistent with other prior research that states that adopting digital transformation makes an organization capable of streamlining its operations, automating monotonous tasks and enhancing its overall efficiency. With the advancement of digital tools and technologies, they make it possible for organizations to improve the processes, lower the costs and improve the decision making, which increase organizational performance as a result. Financial strategies have a positive effect on the process optimization, which is a clear proof that practicing economic planning and making investments to optimize processes are the appropriate strategies. Organizations with a good strong financial strategy are able to allocate resources, invest in technology and design cost friendly solutions that can boost productivity and performance.

Process optimization was also greatly influenced by project management. Organizations implement effective project management practices, like planning, risk management, and resource allocation, on execution of projects for efficient performance of these projects and meeting performance objectives. This is aligned to other researches which state that effective organization success depends on strong project management capabilities. Adopted by the organizations that implement structured project management frameworks, there is a higher probability of delivering the project on time, within budget and according to the specified quality standards.

The process optimization is especially noteworthy in the mediating role. The results indicate that process optimization mediates significantly the impacts of the digital transformation, financial strategies and project management on organizational performance. This then implies that although these strategic factors are important, they are only fully realized within organizations that aim to optimize their processes. These strategies are the conduit for process optimization to the performance, and this pinpoints the necessity to constantly refine and improve internal processes for long term competitive advantage.

Moreover this study shows that digital transformation, financial strategies and project management are crucial drivers to process optimization, and this would lead to better organizational performance. These results are very useful for managers and decision makers who want to enhance their organizations' operational efficiency and performance. Organizations can make use of their strategic initiatives by focusing on process optimization to help them grow and succeed in the long run.

Other implications include the theory and practice. From the theoretical viewpoint this study makes a contribution to the growing stream of research on process optimization as a mediator between strategic initiatives and organizational performance. The implications for process optimization are the need to integrate this as part of the strategic management framework to deliver the desired outcome. The study offers practically useful insights to organization in terms of how digital transformation, financial strategies, and project management can be used to improve performance. Process optimization allows organizations to improve efficiency and reduce operational costs, which in turn improves financial outcomes of an organization.

Some recommendations can be made based on the findings. First, organizations should make the digital investments in the form of digital transformation initiatives to modernize business processes and improve process efficiency. This encompasses deriving benefit from new technologies, automation of workflows and usage of data analytics for conducting informed decision making. Second, financial strategies should aim at securing sufficient funding for investment in process optimization because the financial resources are required to implement and maintain the logistical systems. Third, project management should be strengthened to ensure that the projects are carried out efficiently which in turn supports the process optimization and the organizational performance.

Eventually, additional factors that may affect process optimization, e.g., organizational culture, leadership and employee engagement may be investigated in the upcoming studies. Further studies can also extend to study the degree to which other types of industries and other organizational contexts influence the relationship between digital transformation, financial strategies, project management, and organizational performance.

#### Contributions

Hassan Danish: Data Collection

Nazakat Khan: Topic selection, Data Methodology

Muhammad Waqar: Data Analysis

#### **Conflict of Interests/Disclosures**

The authors declared no potential conflicts of interest w.r.t this article's research, authorship, and/or publication.

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