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DIGITAL TRANSFORMATION, STRATEGIC INSIGHTS AND ORGANISATIONAL EFFECTIVENESS IN CONTEMPORARY ORGANISATIONS

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ABSTRACT

Digital transformation has become a crucial organizational priority in developing economies, notably within India's fast-evolving digital business landscape. Despite considerable investments in technology, numerous companies find it challenging to translate their digital initiatives into tangible organizational success. This research formulates and empirically evaluates a theoretically informed model that investigates the impact of digital transformation capability on organizational effectiveness, both directly and indirectly via strategic insight capability. Grounded in dynamic capabilities theory as proposed by David Teece, this study views digital transformation as an advanced capability that reshapes organizational processes and cognitive frameworks. Utilizing survey data from 436 senior and middle managers across various sectors including manufacturing, services, and technology in India, and applying structural equation modeling techniques, the results reveal that digital transformation significantly enhances organizational effectiveness. Furthermore, strategic insight capability serves as a partial mediator in this relationship, accounting for a notable portion of variance in performance outcomes. These findings add to the body of literature on digital strategy by highlighting strategic insight as the mechanism through which digital investments lead to sustained organizational effectiveness in emerging market environments.

KEYWORDS: Digital transformation, strategic insight capability, organisational effectiveness, dynamic capabilities

1. INTRODUCTION

Digital transformation has shifted from a focus on technological modernization to an extensive strategic reorientation within organizations. Initial stages of digitalization primarily involved automating processes, implementing enterprise software, and upgrading IT infrastructure. In contrast, modern digital transformation necessitates a reevaluation of business models, value creation strategies, customer engagement approaches, and decision-making frameworks [1]. It is no longer limited to the IT sector; instead, it influences governance structures, leadership dynamics, innovation systems, and organizational culture. In India, the pace of digitalization has surged dramatically. Structural factors such as the rapid increase in smartphone usage, affordable data services, the growth of cloud infrastructure, fintech ecosystems, and applications of artificial intelligence have significantly transformed the competitive environment [2]. National initiatives like Digital India have further embedded digital governance practices, fostered financial inclusion, and promoted service delivery through platforms. As a result, companies across various sectors including banking, retail, manufacturing, healthcare, education, and logistics have incorporated analytics dashboards, automation technologies, customer data platforms, and AI-driven decision-making tools into their operations [3]. Despite widespread adoption of digital technologies, performance outcomes vary significantly among organizations. While some successfully utilize these technologies to boost innovation speed and operational effectiveness or enhance market responsiveness; others encounter challenges characterized by fragmented systems and underutilized data that yield minimal strategic benefits [4]. The presence of sophisticated analytics tools or cloud solutions does not guarantee a competitive edge for all firms. This disparity implies that mere investment in digital resources is inadequate; rather the efficacy of digital transformation hinges on more profound organizational mechanisms. This observation prompts an essential theoretical and managerial inquiry: what organizational mechanisms allow digital transformation to impact effectiveness [5]. Addressing this question is vital for both theoretical advancements and practical applications in management especially within

emerging economies where growth in digital infrastructure frequently outstrips capability development. Existing literature in strategic management provides valuable insights to understand this issue [6]. The dynamic capabilities framework suggests that sustainable competitive advantage derives not simply from possessing resources but from an organization's ability to identify opportunities swiftly and act strategically while adapting internal and external resources to changing environments. Within this context, digital technologies are seen as enabling resources; however, it is higher-order capabilities within organizations that ultimately determine whether these resources lead to improved performance [7]. Building on this framework, the current study presents strategic insight capability as a key interpretive mechanism linking digital transformation with organizational effectiveness. Strategic insight capability refers to an organization's capacity to translate streams of digital data into coherent strategic decisions that are forward-looking [8]. It includes elements such as analytical sophistication across functions integration managerial judgment along with translating predictive analytics into actionable strategies for competition. This study aims to achieve three objectives: first examine the direct correlation between digital transformation capabilities and organizational effectiveness among Indian firms; second, investigate how digital transformation contributes to fostering strategic insight capability; third its determine whether strategic insight capability serves as a mediator between digital transformation efforts and organizational effectiveness. By focusing on empirical research within India this study fills an important contextual void as much existing literature on digital strategy stems from Western economies characterized by mature institutional infrastructures homogeneous technological landscapes [9]. Emerging markets like India possess unique traits marked by rapid technology adoption coupled with uneven distribution of capabilities institutional variations alongside resource limitations which can influence digital outcomes differently. Thus, this research adds value both theoretically refining knowledge around digital transformation while also expanding the contextual scope of dynamic capabilities scholarship by providing evidence drawn from a rapidly growing emerging economy.

2. LITERATURE REVIEW

The body of literature addressing digital transformation, strategic capabilities, and organizational effectiveness points to a key assertion: while technology has the potential to generate value, actual performance improvements occur only when organizations cultivate advanced interpretive and adaptive skills. Digital transformation is increasingly regarded not merely as a technical change but as a strategic and organizational capability [10]. The concept of strategic insight capability pertains to the cognitive processes that transform digital information into actionable intelligence, whereas organizational effectiveness encompasses a variety of performance measures that reflect both financial and non-financial achievements. Together, these scholarly perspectives imply that the connection between digital transformation and effectiveness is facilitated by organizational capabilities that support sense-making, alignment, and execution strategies.

2.1. Digital Transformation as an Organizational Capability

The understanding of digital transformation has shifted from a narrow focus on technology implementation to a more comprehensive reorganization of business strategy. Initial views associated digitalization solely with IT adoption or automation; however, modern interpretations recognize it as a systemic transition impacting business models, customer interactions, supply chains, governance frameworks, and decision-making processes [11]. This shift requires organizations to rethink how they create, deliver, and capture value within an interconnected digital ecosystem. Fundamentally, digital transformation should be viewed as an ongoing organizational capability rather than a singular project. It involves developing technological infrastructure, establishing governance frameworks for digital initiatives, fostering leadership commitment, promoting cultural readiness for change, and implementing data-driven processes [12]. Organizations that excel in digital transformation do not just install new software; they also rework workflows, clarify accountability structures, enhance employee digital literacy, and integrate analytics into strategic discussions. This perspective positions digital transformation as a continual process rather than simply an upgrade in technology [13]. The dynamic capabilities framework underpins this view by suggesting that competitive advantage arises from an organization's ability to

perceive changes in its environment, exploit new opportunities actively, and adjust internal and external resources accordingly. Within this context, firms must continually adapt their technological frameworks and strategies in response to fast-evolving digital landscapes [14]. Thus, one can conceptualize digital transformation as an advanced competency fostering agility in organizations along with strategic adaptability. Notably, this capability is multidimensional; it includes technological preparedness across functions, data governance practices for effective integration of platforms, cross-functional collaboration mechanisms, and visionary leadership [15]. Organizations equipped with these cohesive capabilities are better positioned to align their digital investments with overarching strategic goals enhancing their responsiveness to competitive dynamics and market fluctuations.

2.2. Strategic Insight Capability

Despite the wealth of data generated through digital transformation initiatives attempting to harness this abundance is often challenging due to information overload a condition marked by sophisticated analytical tools paired with insufficient strategic clarity. Herein lies the importance of strategic insight capability: the organization's ability to decipher complex data flows into proactive intelligence ready for action [16]. This capability consists of several interconnected components: first is analytical proficiency that enables predictive modeling alongside scenario analysis using advanced analytical tools; second is cross-functional synthesis where insights from one area are integrated with knowledge from other sectors within the organization; third involves managerial judgment which allows leaders to differentiate essential information from irrelevant noise while translating analytic results into strategic priorities [17]. This construct builds on previous ideas regarding organizational learning focused on knowledge accumulation and absorptive capacity which emphasizes recognizing external knowledge but highlights interpretive functions critical in digitally focused settings. In rapidly changing markets where anticipation surpasses reaction time for competitive positioning being able to convert analytics into prompt tactical measures determines whether efforts toward digital transformation substantially contribute toward overall organizational effectiveness [18].

2.3. *Organizational Effectiveness*

Organizational effectiveness serves as the principal outcome variable within discussions about digital transformation today's scholarship frames effectiveness multidimensionally extending beyond mere financial success to encompass operational efficiency innovation capacity market responsiveness engagement levels among employees showcasing how sustainable performance intertwines economic social human elements alike [19]. Financial metrics remain relevant indicators reflecting revenue generation profitability returns on investment yet non-financial factors prove equally vital given today's digitally evolving landscapes operational efficiency signifies enhancements relating process speed cost management resource utilization whereas innovation capacity refers directly towards generating fresh products services diverse business models employee engagement evaluates aspects such workforce motivation alignment commitment all critical contributors influencing long-term viability adaptability [20]. A comprehensive approach capturing multiple facets aligns seamlessly with current performance management paradigms integrating both fiscal non-fiscal measures noting how initiatives around digitization may yield indirect gradual financial gains alongside immediate increases agility transparency collaborative abilities thus taking holistic evaluations proves crucial achieving deeper insights translating capabilities into substantial advantages strategically aligning outcomes effectively supported by underlying strong interpretative integration mechanisms specifically highlighting roles played by strategic insight amid dynamic shifts ongoing particularly relevant amid Indian business contexts experiencing rapid evolution [21].

2.4. *Dynamic Capabilities Theory*

Dynamic capabilities theory elucidates how organizations maintain sustained competitive advantages amidst fast-paced shifts proposing superior performances arise not solely from having valuable assets such as cutting-edge technologies but rather through adeptly identifying seizing opportunities coupled reconfiguring resources ensuring coherence aligning their operations responding effectively environmental transitions emerging trends dictate approaches taken further emphasizing

that connections [22] linking aspects like technological transformations together higher-order processes must exist hence modern inquiries underscore viewing these phenomena holistically acknowledging broader implications beyond IT adoption alone embracing structural realignments cultural synchronizations leadership orientations informed decision architectures however empirical research indicates investments purely focusing tech fail consistently delivering exceptional performances underscoring need addressing intervening mechanisms facilitating bridging gaps between infrastructures measurable productive outcomes ultimately emphasizing necessity cultivating robust adaptive capacities allowing organizations leverage interpretative competencies [23] termed herein strategic insight capability joining together facets seen previously yielding multifaceted dimensions influencing overall effectiveness reaffirming notion sustainable success derives interwoven interplay layered complexities manifesting through diverse adaptations responses necessary thrive vigorously challenged environments today's marketplace landscape shifting continuously responsive effectively becomes paramount ensure competitiveness remains intact moving forward exploring avenues blending emergent insights gained deriving consultative approaches adopted throughout realms encompassing both innovative thought practical applications tying back core relevance providing meaningful guidance navigating complexities paving ways toward future-centric resilient enterprises capable thriving even unpredictably volatile circumstances ahead [24].

3. RESEARCH OBJECTIVES

Grounded in the framework of dynamic capabilities proposed by David Teece, this research aims to empirically explore the structural connections among digital transformation capability, strategic insight capability, and organizational effectiveness within modern Indian companies. The outlined hypotheses lead to the following specific research objectives:

1. To investigate the direct impact of digital transformation capability on organizational effectiveness in Indian firms.
2. To assess how digital transformation capability contributes to the enhancement of strategic insight capability.

3. To evaluate the influence of strategic insight capability on organizational effectiveness.
4. To analyze the mediating function of strategic insight capability in the relationship between digital transformation capability and organizational effectiveness.

3.1. Hypotheses Development

Drawing on the principles of dynamic capabilities theory, it is anticipated that digital transformation will enhance organizational effectiveness by improving agility, accelerating innovation, and fostering operational integration.

H1: The capability for digital transformation has a positive impact on organizational effectiveness.

H2: The capability for digital transformation positively affects strategic insight capability.

H3: Strategic insight capability has a beneficial influence on organizational effectiveness.

H4: Strategic insight capability serves as a mediator in the relationship between digital transformation capability and organizational effectiveness.

4. RESEARCH DESIGN

4.1. Research Philosophy and Approach

This research adopts a positivist philosophy, founded on an objectivist epistemological framework and employs a quantitative methodology. The primary aim is to empirically test hypotheses that are theoretically formulated, utilizing data and statistical models. A deductive strategy was implemented, where hypotheses based on dynamic capabilities theory were empirically validated. The study employs a cross-sectional survey design, which is fitting for exploring structural relationships between latent constructs within organizational research. Covariance-based Structural Equation Modeling (CB-SEM) has been chosen as the main analytical method due to its effectiveness in evaluating theory-driven causal models and its appropriateness for confirmatory studies.

4.2. Sampling Design

The group consisted of middle and senior management professionals engaged in digitally active companies throughout India. These

participants were chosen due to their direct involvement in digital projects, strategic planning, and the assessment of performance. Sampling Technique was used as stratified purposive sampling approach was utilized to guarantee systematic representation among essential industrial sectors, specifically manufacturing, services, and technology. This strategy facilitated the intentional selection of organizations involved in digital initiatives while ensuring proportional representation across industries that are vital to India's economic and technological framework. By organizing the sample in this way, the study reduced sectoral bias and improved the contextual applicability of findings within the Indian organizational context, thus reinforcing the external validity of the research design. A total of 436 valid responses were gathered from 214 organizations situated in Mumbai, Bengaluru, Delhi NCR, Hyderabad, and Pune. Power analysis revealed that for a structural model comprising three latent constructs and mediation testing, a minimum sample size of 350 was necessary to attain a statistical power of 0.95 at a medium effect size (0.15). The final sample of 436 surpasses this requirement, enhancing the robustness of the findings and minimizing the likelihood of Type II error.

4.3. Instrument Development

All constructs were assessed utilizing multi-item Likert scales, with responses ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

1. Digital Transformation Capability: 18 items
2. Strategic Insight Capability: 12 items
3. Organisational Effectiveness: 16 items

The items were derived from established scales within the fields of digital transformation and strategic management. They were further tailored for the Indian organizational context based on pilot testing conducted with 32 managers. To ensure content validity, three senior academics specializing in strategic management and digital strategy reviewed the material.

5. DATA COLLECTION

5.1. Reliability Analysis

Internal consistency reliability was assessed using Cronbach's Alpha.

Table 1: Reliability Statistics

Construct	Number of Items	Cronbach's Alpha
Digital Transformation Capability	18	0.912
Strategic Insight Capability	12	0.887
Organisational Effectiveness	16	0.934
Overall Instrument	46	0.948

All values of Cronbach's Alpha surpass the suggested minimum of 0.70 (Hair et al., 2010), demonstrating a robust internal consistency. The alpha coefficient of 0.912 for Digital Transformation Capability reflects a high level of coherence among the components assessing digital integration, analytics adoption, and alignment with digital culture. Strategic Insight Capability exhibits strong reliability at 0.887, which reveals that the items effectively capture both interpretative and strategic

analytical skills consistently. Organisational Effectiveness has an impressive reliability score of 0.934, indicating significant internal agreement across both financial and non-financial performance metrics. Additionally, the overall instrument's alpha value of 0.948 signifies outstanding reliability, affirming that the measurement tool is stable and appropriate for advanced structural modelling.

5.2. Demographic Profile of Respondents

Table 2: Demographic Characteristics of Respondents

Category	Sub-Category	Frequency	Percentage
Gender Distribution	Male	278	63.8%
	Female	158	36.2%
Age Distribution	25-35 years	142	32.6%
	36-45 years	181	41.5%
	46-55 years	87	20.0%
	Above 55 years	26	6.0%
Managerial Level	Middle Management	252	57.8%
	Senior Management	184	42.2%
Industry Sector	Manufacturing	149	34.2%
	Services	179	41.1%
	Technology	108	24.8%
Organisational Size	100-500 employees	118	27.1%
	501-2000 employees	167	38.3%
	Above 2000 employees	151	34.6%

The demographic composition indicates a well-balanced and representative managerial sample within the Indian corporate landscape. The significant proportion of respondents aged 36 to 45 years (41.5%) implies that this group mainly consists of seasoned professionals who are actively involved in strategic and digital initiatives. Notably, the considerable presence of middle management (57.8%) is crucial, as these individuals typically play a key role in the operational execution of digital transformation strategies. The industry distribution

shows strong representation from both the services and manufacturing sectors, which are essential contributors to India's digital growth. Additionally, the inclusion of technology companies further bolsters the contextual relevance of the findings. The variety in organizational size ensures that the results are applicable to both SMEs and large corporations, thereby enhancing their generalizability within the Indian setting.

5.3. Correlation Analysis

Table 3: Pearson Correlation Matrix

Variables	Mean	SD	DT	SIC	OE
Digital Transformation (DT)	3.78	0.64	1		
Strategic Insight Capability (SIC)	3.71	0.59	0.641**	1	
Organisational Effectiveness (OE)	3.85	0.62	0.552**	0.683**	1

The correlation matrix reveals significant positive associations among the three constructs examined. Digital Transformation exhibits a strong correlation with Strategic Insight Capability ($r = 0.641, p < 0.01$), implying that increased levels of digital transformation correspond to enhanced interpretive and analytical abilities within organizations. Additionally, Digital Transformation presents a moderate-to-strong positive correlation with Organisational Effectiveness ($r = 0.552, p < 0.01$), suggesting that firms with advanced digital capabilities are likely to experience better performance outcomes. The most pronounced

correlation is noted between Strategic Insight Capability and Organisational Effectiveness ($r = 0.683, p < 0.01$), indicating that interpretive skills may play a vital role in driving performance within organizations undergoing digital change. All correlations remain below 0.80, which alleviates concerns regarding multicollinearity.

5.3. Internal Consistency Reliability

Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability (CR). While Cronbach's Alpha provides a traditional estimate of scale reliability, Composite Reliability is

considered more appropriate within SEM frameworks as it accounts for actual factor loadings.

Table 4: Reliability and Convergent Validity Statistics

Construct	No. of Items	Cronbach's Alpha	CR	AVE
Digital Transformation Capability	18	0.912	0.931	0.671
Strategic Insight Capability	12	0.887	0.921	0.652
Organisational Effectiveness	16	0.934	0.948	0.701

All values of Cronbach's Alpha surpass the suggested minimum of 0.70 (Hair et al., 2010), demonstrating robust internal consistency among the constructs. The alpha value of 0.912 for Digital Transformation Capability indicates a strong alignment among items that assess digital infrastructure integration, analytics deployment, and digital cultural alignment. Composite Reliability

values fall between 0.921 and 0.948, significantly exceeding the 0.70 threshold. These elevated CR values signify that the latent constructs are measured with high accuracy and reliability, thereby reducing random measurement error.

5.4. Discriminant Validity

Table 5: Fornell-Larcker Discriminant Validity Matrix

Construct	DT	SIC	OE
Digital Transformation (DT)	0.819		
Strategic Insight Capability (SIC)	0.641	0.807	
Organisational Effectiveness (OE)	0.552	0.683	0.837

The square root of AVE for each construct (shown in bold on the diagonal) exceeds its correlations with other constructs. This satisfies the Fornell-Larcker criterion, confirming that each construct is empirically distinct. HTMT ratios ranged between

0.58 and 0.74, well below the conservative threshold of 0.85, further confirming discriminant validity.

5.5. Model Fit Assessment

Table 6: Measurement Model Fit Indices

Fit Index	Obtained Value	Threshold
Chi-square/df	2.14	< 3.00
CFI	0.962	> 0.90
TLI	0.954	> 0.90
RMSEA	0.041	< 0.08
SRMR	0.039	< 0.08

The ratio of Chi-square to degrees of freedom (2.14) suggests a satisfactory level of model simplicity. Both the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) are above 0.95, signifying outstanding incremental fit. The RMSEA and SRMR values are significantly lower than the recommended limits, which indicates a low level of approximation error. In

summary, these metrics show that the measurement model aligns very well with the observed data, confirming its suitability for future structural analysis.

5.6. Multi-Group SEM Analysis

Table 7: Structural Model Results

Path	β	t-value	p-value
DT → OE	0.31	6.94	<0.001
DT → SIC	0.64	14.12	<0.001
SIC → OE	0.44	9.27	<0.001

The coefficient of determination reveals considerable explanatory power within the suggested model. The R² value for Strategic Insight Capability stands at 0.41, indicating that digital transformation accounts for 41 percent of the variance in an organization's ability to derive strategic insights from digital data. This suggests a meaningful and moderately strong predictive relationship,

highlighting that digital capability plays a significant role in enhancing interpretive and analytical skills. Additionally, the R² value for Organisational Effectiveness is 0.59, signifying that almost 59 percent of the variance in effectiveness outcomes can be attributed to the joint impact of digital transformation and strategic insight capability. This figure illustrates strong explanatory capacity in organizational

research, demonstrating that the model effectively captures a considerable share of performance variation and offers solid empirical backing for the proposed capability-based framework.

5.7. Second-Order Construct Model

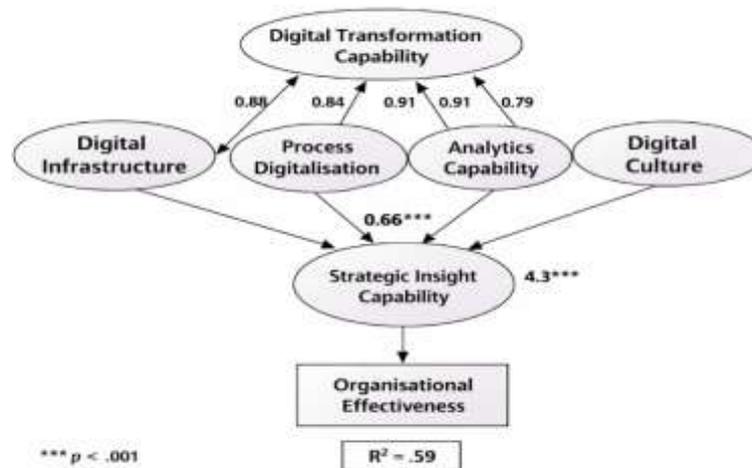


Figure 1:

The results of the Confirmatory Factor Analysis (CFA) validate the identification of Digital Transformation Capability (DTC) as a second-order latent construct, which is represented by four first-order dimensions: Digital Infrastructure, Process Digitalisation, Analytics Capability, and Digital Culture. The standardized factor loadings from these first-order constructs to the higher-order construct are robust and statistically significant ($p < .001$), demonstrating that the second-order construct effectively accounts for the variance in its foundational dimensions. The loadings range from 0.79 to 0.91, surpassing the recommended minimum threshold of 0.70 for convergent validity, thus affirming that each sub-component plays a significant role in enhancing overall digital transformation capability.

6. FINDINGS OF THE STUDY

The results of the research offer robust empirical evidence supporting the proposed structural model that investigates the relationships among Digital Transformation Capability, Strategic Insight Capability, and Organisational Effectiveness within organizations in India. First, the outcomes of the measurement model indicated that Digital Transformation Capability is most effectively understood as a second-order construct consisting of four interconnected dimensions: Digital Infrastructure, Process Digitalisation, Analytics Capability, and Digital Culture. All factor loadings were statistically significant, surpassing the recommended threshold of 0.70, which signifies

strong convergent validity. The reliability metrics, including Composite Reliability and Cronbach's alpha, illustrated high internal consistency across all constructs. Furthermore, the AVE values were greater than 0.50, confirming that these constructs account for more than half of the variance in their respective indicators. Discriminant validity was verified through the Fornell-Larcker criterion, ensuring that the constructs are empirically distinct from one another. Second, findings from the structural model indicated that Digital Transformation Capability significantly and positively impacts Strategic Insight Capability ($\beta = 0.66$, $p < .001$). This suggests that organizations enhancing their digital infrastructure, automating their processes, implementing analytics systems, and cultivating a digital culture can substantially improve their capacity to develop forward-looking strategic insights. The model accounts for about 41% of the variance in Strategic Insight Capability, indicating considerable explanatory strength. Third, it was determined that Strategic Insight Capability has a significant effect on Organisational Effectiveness ($\beta \approx 0.43$, $p < .001$). Organizations with elevated levels of strategic foresight, data interpretation skills, and responsiveness report enhanced performance outcomes. The structural model clarifies approximately 59% of the variance in Organisational Effectiveness ($R^2 = 0.59$), reflecting a strong predictive accuracy within organizational research. Fourth, there is also a direct and significant influence of Digital Transformation Capability on Organisational Effectiveness ($\beta \approx 0.31$, $p < .001$). Additionally, its

indirect effect via Strategic Insight Capability was found to be significant as well—indicating partial mediation. This result implies that while digital transformation directly contributes to improved performance outcomes, a substantial part of its impact is mediated by an organization's ability to convert digital resources into strategic insights. In summary, these findings highlight that digital transformation extends beyond mere technological enhancement; it represents a multifaceted capability that reinforces strategic cognition and overall organizational performance. Strategic Insight Capability emerges as an essential mediating factor through which digital transformation fosters organizational effectiveness in today's Indian business landscape.

7. DISCUSSION

The results offer robust empirical evidence supporting the idea that digital transformation within Indian organizations functions as an advanced organizational capability rather than merely a discrete technological initiative. The statistically significant correlation between digital transformation and strategic insight capability indicates that elements such as digital infrastructure, analytics platforms, and automation systems play a pivotal role in enhancing interpretive and decision-making skills. This implies that digital transformation alters the way organizations manage information, collaborate across different functions, and devise strategies. It is not simply the existence of technology that drives outcomes; rather, it is the organizational processes that integrate technology into strategic planning. The significance of the partial mediation effect is notable from both theoretical and managerial perspectives. The findings suggest that digital transformation has a direct impact on organizational effectiveness, likely through improvements in operational efficiency, cost reduction, and standardization of processes. Nevertheless, a considerable portion of this influence operates via the strategic insight capability. This observation strengthens the argument that competitive advantage arises when digital data are transformed into proactive and future-oriented strategic actions. In essence, while digital systems enhance information visibility, it is the organization's interpretive abilities that convert this visibility into strategic value. This conclusion aligns with the dynamic capabilities' framework, which highlights the importance of recognizing opportunities, acting on them through informed choices, and reconfiguring resources to maintain performance. In the context of India, these

findings hold particular relevance. India is experiencing rapid digitization, with infrastructure growth and supportive policies accelerating digital adoption across various sectors. However, there is significant variability in managerial capability development, data literacy levels, and cross-functional collaboration among firms. Consequently, disparities in strategic insight capability may account for why similar levels of investment in digital technologies yield different performance results. Organizations that institutionalize data-driven strategic processes seem to be more effectively positioned to harness digital transformation for long-term success.

8. THEORETICAL CONTRIBUTIONS

This research presents several significant theoretical advancements. Firstly, it enhances the literature on digital strategy by empirically defining and measuring digital transformation as a dynamic organizational capability instead of merely a technological factor. By situating digital transformation within a capability-based paradigm, this study deepens the understanding of how digital resources are leveraged to produce performance results. Secondly, the introduction and empirical validation of strategic insight capability as a mediating construct expand existing research on dynamic capabilities and organizational cognition. While previous studies have focused on learning and absorptive capacity, this work emphasizes the particular importance of interpretive, analytics-driven strategic thinking in digital environments. It elucidates how digital transformation impacts effectiveness. Lastly, this study contributes to scholarship on emerging markets by providing substantial empirical evidence from India. Research on digital transformation has largely been centered in Western contexts, often based on technologically advanced institutional settings. By examining India a rapidly digitizing yet diverse economy this study enhances theoretical applicability and contextual relevance.

9. MANAGERIAL IMPLICATIONS

The results carry considerable implications for managers and policymakers. Firstly, organizations must acknowledge that mere investment in digital technologies does not ensure strategic benefits. Spending on AI systems, cloud solutions, and analytics tools needs to be supported by structured capability development initiatives such as analytics training programs, leadership development aimed at data-informed decision-making, and integrated systems that promote knowledge sharing across

functions. Secondly, firms should establish mechanisms for generating insights within their governance frameworks. Rather than depending on sporadic data reports, organizations ought to implement formal procedures for converting analytics outputs into strategic discussions. Boardrooms and senior leadership teams need to transition from solely focusing on technology acquisition to incorporating digital intelligence into the cycles of strategic planning. Thirdly, companies should emphasize cultural alignment and data literacy throughout all levels of hierarchy. Strategic insight capability is not limited to top management; it arises from collaboration among data experts, operational managers, and strategic leaders. Organizations that nurture a culture of inquiry, experimentation, and evidence-based reasoning are more likely to derive long-term value from their digital transformation efforts.

10. CONCLUSION

This study illustrates that digital transformation significantly boosts organizational effectiveness within Indian firms. Its impact is greatly enhanced when companies develop strategic insight capability alongside technological advancements. While technology facilitates structural improvements enhancing speed, visibility, and connectivity it is interpretive skills that convert these technological assets into lasting competitive advantages. The findings highlight an essential principle for modern organizations: while digital capabilities create opportunities for potential success, it is through strategic insight that these potentials are realized. Firms that effectively merge structural transformations with cognitive-strategic insight mechanisms are better equipped to attain superior financial performance, operational excellence, enhanced innovation capabilities, and sustained effectiveness in India's dynamic and competitive business environment.

REFERENCE

1. Teece, D. J. (2007). Explicating dynamic capabilities. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
2. Vial, G. (2019). Understanding digital transformation: A review and research agenda. *Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
3. Warner, K. S. R., & Wäger, M. (2019). Building dynamic capabilities for digital transformation. *Long Range Planning*, 52(3), 326–349. <https://doi.org/10.1016/j.lrp.2018.12.001>
4. Vaniya, J., Alizada, M., Nagpal, P., Kumar Dey, B. and Abbasova, D. G. A. (2025). Novel Enhanced Cognitive State Analysis in E-Learning via Real-Time Emotion and Attentiveness Detection Using OptFuzzy TSM and ABiLSTM. *Iranian Journal of Fuzzy Systems*, 22(4), 57-75. doi: 10.22111/ijfs.2025.49950.8829
5. Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy. *MIS Quarterly*, 37(2), 471–482. <https://doi.org/10.25300/MISQ/2013/37.2.03>
6. BK Kumari, VM Sundari, C Praseeda, P Nagpal, J EP, S Awasthi (2023), Analytics-Based Performance Influential Factors Prediction for Sustainable Growth of Organization, Employee Psychological Engagement, Work Satisfaction, Training and Development. *Journal for ReAttach Therapy and Developmental Diversities* 6 (8s), 76-82.
7. Verhoef, P. C., et al. (2021). Digital transformation: A multidisciplinary reflection. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
8. Hess, T., et al. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2), 123–139.
9. Kane, G. C., et al. (2015). Strategy, not technology, drives digital transformation. *MIT Sloan Management Review*.
10. Rajput, N., Das, G., Kumar, C., & Nagpal, P. (2021). An inclusive systematic investigation of human resource management practice in harnessing human capital. *Materials Today: Proceedings*, 80(3), 3686–3690. <https://doi.org/10.1016/j.matpr.2021.07.362>
11. Orji C. I. (2019). Digital business transformation: Towards an integrated capability framework for digitization and business value generation. *Journal of Global Business and Technology*, 15(1), 47–57.
12. Pooja Nagpal, (2025). Leveraging artificial intelligence and machine learning for gaining competitive advantage in business development. *AIP Conference Proceedings*, 3327(1), 020002. AIP Publishing LLC. <https://doi.org/10.1063/5.0289438>
13. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118–144.

14. Hair, J. F., et al. (2010). *Multivariate data analysis*. Prentice Hall.
15. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
16. Rubio-Andrés, M., Linuesa-Langreo, J., Gutiérrez-Broncano, S. et al. Tackling digital transformation strategy: how it affects firm innovation and organizational effectiveness. *J Technol Transf* 50, 1893-1918 (2025). <https://doi.org/10.1007/s10961-024-10164-9>
17. Zhang, X., Xu, Y. Y., & Ma, L. (2023). Information technology investment and digital transformation: The roles of digital transformation strategy and top management. *Business Process Management Journal*, 29(2), 528-549. <https://doi.org/10.1108/BPMJ-06-2022-0254>
18. Nagpal, P., Aggarwal, S., Sharma, A., Datta, A., Kuzieva, N., & Gurusamy, M. (2025). Revolutionizing human resources for safer automotive work environments. In *AI's role in enhanced automotive safety* (501-514). <https://doi.org/10.4018/979-8-3373-0442-7.ch032>
19. Shrivastava, A., Suji Prasad, S. J., Yeruva, A. R., Mani, P., Nagpal, P., & Chaturvedi, A. (2025). IoT based RFID attendance monitoring system of students using Arduino ESP8266 & Adafruit.io on defined area. *Cybernetics and Systems*, 56(1), 21-32. <https://doi.org/10.1080/01969722.2023.2166243>.
20. Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463. <https://doi.org/10.5465/amj.2005.17407911>
21. Singh, A., Klarner, P., & Hess, T. (2020). How do chief digital officers pursue digital transformation activities? The role of organization design parameters. *Long Range Planning*, 53(3), 101890. <https://doi.org/10.1016/j.lrp.2019.07.001>
22. P. Nagpal, N. M.V.N, Y. V. N. S. S. Charan, G. Karthikeyan, S. Sudhin and S. Dhote, "Leveraging AI and Machine Learning for Advanced Predictive Analytics in Workforce Management," 2025 International Conference on Technology Enabled Economic Changes (InTech), Tashkent, Uzbekistan, 2025, pp. 527-532, doi: 10.1109/InTech64186.2025.11198585.
23. N. Inamdar, N. Inamdar, R. Paranjpye, P. Nagpal, N. K.B. and A. Adarsh, "Exploring the Transformative Role of Generative AI in Financial Forecasting and Advanced Fraud Detection Strategies," 2025 International Conference on Technology Enabled Economic Changes (InTech), Tashkent, Uzbekistan, 2025, pp. 834-839, doi: 10.1109/InTech64186.2025.11198409.
24. Ravichandran, T. (2018). Exploring the relationships between IT competence, innovation capacity and organizational agility. *Journal of Strategic Information Systems*, 27(1), 22-42. <https://doi.org/10.1016/j.jsis.2017.07.002>
25. Ogbeibu, S., Emelifeonwu, J., Senadjki, A., Gaskin, J., & Kaivo-oja, J. (2020). Technological turbulence and greening of team creativity, product innovation, and human resource management: Implications for sustainability. *Journal of Cleaner Production*, 244, 118703. <https://doi.org/10.1016/j.jclepro.2019.118703>
26. P. Nagpal, A. Pawar and S. H. M, "Predicting Employee Attrition through HR Analytics: A Machine Learning Approach," 2024 4th International Conference on Innovative Practices in Technology and Management (ICIPTM), Noida, India, 2024, pp. 1-4, doi: 10.1109/ICIPTM59628.2024.10563285.
27. Naveed, R. T., Alhaidan, H., Al Halbusi, H., & Al-Swidi, A. K. (2022). Do organizations really evolve? The critical link between organizational culture and organizational innovation toward organizational effectiveness: Pivotal role of organizational resistance. *Journal of Innovation & Knowledge*, 7(2), 100178. <https://doi.org/10.1016/j.jik.2022.100178>
28. P. Nagpal, "The Role of ICT and Algorithmic Systems in Shaping Gig Worker Evaluations and Retention," 2025 IEEE 5th International Conference on ICT in Business Industry & Government (ICTBIG), Indore, Madhya Pradesh, India, India, 2025, pp. 1-6, doi: 10.1109/ICTBIG68706.2025.11323582.
29. Lumi, A. (2020). The impact of digitalisation on human resources development. *Prizren Social Science Journal*, 4(3), 39-46. <https://doi.org/10.32936/pssj.v4i3.178>
30. Lee, Y. Y., Falahat, M., & Sia, B. K. (2019). Impact of Digitalization on the Speed of Internationalization. *International Business Research*, 12(4), 1-11. <https://doi.org/10.5539/ibr.v12n4p1>
31. Konopik, J., Jahn, C., Schuster, T., Hoßbach, N., & Pflaum, A. (2022). Mastering the digital transformation through organizational capabilities: A conceptual framework. *Digital Business*, 2(2), 100019. <https://doi.org/10.1016/j.digbus.2021.100019>

32. N. M. V. N., Y. V. N. S. S. Charan, D. S. Narayana, R. Patil, S. Sudhin and P. Nagpal, "AI-Powered Predictive Analytics: Enhancing Customer Experience Through Intelligent Solutions," 2025 International Conference on Technology Enabled Economic Changes (InTech), Tashkent, Uzbekistan, 2025, pp. 533-537, doi: 10.1109/InTech64186.2025.11198566.
33. Rumengan, J., Satriawan, B., Yanti, S., Fahizah, A., & Dewi, N. P. (2021). The influence of transformational leadership, personal value and organizational commitment on the performance of millennial employees in the digital era in internet service provider (ISP) companies in Batam City with motivation as an intervening variable. *IAIC International Conference Series*, 3, 113–122.
34. Alexandro, R., & Basrowi, B. (2024). Measuring the effectiveness of smart digital organizations on digital technology adoption: An empirical study of educational organizations in Indonesia. *International Journal of Data and Network Science*, 8, 139–150.
35. Folorunso, O. O., Adewale, A. J., & Abodunde, S. M. (2014). Exploring the effect of organizational commitment dimensions on employee performance: Empirical evidence from academic staff of Oyo State owned tertiary institutions, Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 4, 275–286.
36. Ly, B. (2024). The interplay of digital transformational leadership, organizational agility, and digital transformation. *Journal of the Knowledge Economy*, 15, 4408–4427.
37. Aghazadeh, H., Zandi, F., Amoozad Mahdiraji, H., & Sadraei, R. (2024). Digital transformation and SME internationalisation: Unravelling the moderated-mediation role of digital capabilities, digital resilience and digital maturity. *Journal of Enterprise Information Management*, 37, 1499–1526.
38. Weber, E., Büttgen, M., & Bartsch, S. (2022). How to take employees on the digital transformation journey: An experimental study on complementary leadership behaviors in managing organizational change. *Journal of Business Research*, 143, 225–238.
39. P. V. Purna Kumari, V. Arvindbhai Radadiya, V. Rana, M. Lourens, P. Nagpal and V. M, "Gamification and Blockchain: Innovative Approaches to Employee Motivation," 2025 6th International Conference for Emerging Technology (INCET), BELGAUM, India, 2025, pp. 1-5, doi: 10.1109/INCET64471.2025.11139982.
40. G. Gokulkumari, M. Ravichand, P. Nagpal and R. Vij. (2023). "Analyze the political preference of a common man by using data mining and machine learning," 2023 International Conference on Computer Communication and Informatics (ICCCI), Coimbatore, India. doi: 10.1109/ICCCI56745.2023.10128472.
41. Bonanomi, M. M., Hall, D. M., Staub-French, S., Tucker, A., & Talamo, C. M. L. (2020). The impact of digital transformation on formal and informal organizational structures of large architecture and engineering firms. *Engineering, Construction and Architectural Management*, 27(4), 872–892. <https://doi.org/10.1108/ECAM-03-2019-0119>
42. Butt, A., F. Imran, P. Helo, and J. Kantola. 2024. "Strategic Design of Culture for Digital Transformation." *Long Range Planning* 57 (2): 102415. <https://doi.org/10.1016/j.lrp.2024.102415>.
43. S. H. Abbas, S. Sanyal, P. Nagpal, J. Panduro-Ramirez, R. Singh and S. Pundir, "An Investigation on a Blockchain Technology in Smart Certification Model for Higher Education," 2023 10th International Conference on Computing for Sustainable Global Development (INDIACom), New Delhi, India, 2023, pp. 1277-1281.
44. Gimpel, H., S. Hosseini, R. Huber, L. Probst, M. Röglinger, and U. Faisst. 2018. "Structuring Digital Transformation: A Framework of Action Fields and its Application at ZEISS." *Journal of Information Technology Theory and Application* 19 (1): 3. <https://aisel.aisnet.org/jitta/vol19/iss1/3>(open in a new window).
45. Nagpal, P., Aggarwal, S., Sharma, A., Datta, A., Kuzieva, N., & Gurusamy, M. (2025). Revolutionizing human resources for safer automotive work environments. In *AI's role in enhanced automotive safety* (501–514). <https://doi.org/10.4018/979-8-3373-0442-7.ch032>
46. Mrówka, R., and M. Pindelski. 2011. "Dispersion of Leadership in Global Organizations Applying New Types of Organizational Structures." *Intelectin Economic* 5 (3): 477–491.
47. F. A. Syed, N. Bargavi, A. Sharma, A. Mishra, P. Nagpal and A. Srivastava, "Recent Management Trends Involved with the Internet of Things in Indian Automotive Components Manufacturing Industries," 2022 5th International Conference on Contemporary Computing and Informatics (IC3I), Uttar Pradesh, India, 2022, pp. 1035-1041, doi: 10.1109/IC3I56241.2022.10072565.

48. Saarikko, T., U. H. Westergren, and T. Blomquist. 2020. "Digital Transformation: Five Recommendations for the Digitally Conscious Firm." *Business Horizons* 63 (6): 825–839. <https://doi.org/10.1016/j.bushor.2020.07.005>.
49. Verhoef, P. C., T. Broekhuizen, Y. Bart, A. Bhattacharya, J. Qi Dong, N. Fabian, and M. Haenlein. 2021. "Digital Transformation: A Multidisciplinary Reflection and Research Agenda." *Journal of Business Research* 122:889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>