

Digital Survival Strategies: The Impact of Agility and Ambidexterity on Organizational Digital Resilience in Fostering Consumer-Responsive Behaviour

Bharat Bhushan^{*1}, Lalit Kumar²

¹Doctoral Research Scholar, Strategy Management Area, XLRI Xavier School of Management, Jamshedpur.

²Doctoral Research Scholar, Marketing Area, XLRI Xavier School of Management, Jamshedpur.

Email ID: fb22007@astra.xlri.ac.in

***Corresponding Author:**

Bharat Bhushan

Email ID: bharat.bhushan@astra.xlri.ac.in

Cite this paper as: Bharat Bhushan, Lalit Kumar, (2025) Digital Survival Strategies: The Impact of Agility and Ambidexterity on Organizational Digital Resilience in Fostering Consumer-Responsive Behaviour. *Advances in Consumer Research*, 2 (4), 2151-2162

KEYWORDS

Organizational Digital Resilience, Digital Agility, Digital Ambidexterity, Consumer Responsiveness, Digital Technological Turbulence

ABSTRACT

As digital technologies evolve at an unprecedented pace, organizations face mounting challenges in maintaining adaptability, strategic clarity, and resilience. This study investigates how firms can build organizational digital resilience (ODR) in response to digital technological turbulence (DTT) by cultivating two key dynamic capabilities: digital ambidexterity (ODA), and digital agility (DAG). Drawing on the dynamic capabilities view and contingency theory, we develop and empirically test a conceptual model using survey data from 311 managers across a range of industries in India. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), our findings reveal that digital ambidexterity, a key enabler of organizational digital resilience, also enhances digital agility, which in turn strengthens digital resilience. As such, digital agility emerges as a crucial link that transforms ambidexterity into resilience. The study also finds that the influence of ambidexterity on agility becomes more pronounced under higher levels of digital turbulence, highlighting the importance of contextual responsiveness. By integrating theoretical perspectives and empirical insights, this research contributes to a deeper understanding of how organizations can proactively navigate uncertainty and turbulence. The findings hold practical relevance for managers and policymakers aiming to foster resilient, future-ready organizations in an increasingly volatile digital environment.

1. INTRODUCTION

In today's volatile business landscape, organizations must adapt rapidly to ongoing technological disruption, global competition, and market volatility (Teece, Peteraf, & Leih, 2016). The digital era has dramatically transformed sectors like technology, healthcare, and retail (Bharadwaj et al., 2013), with innovations in AI, automation, and analytics reshaping consumer behavior. External shocks—such as pandemics and economic crises—further intensify uncertainty (Chen, Preston, & Swink, 2015; Reeves et al., 2020). To navigate this complexity, firms must develop dynamic capabilities like ambidexterity, agility, and resilience (Teece, 2007; O'Reilly & Tushman, 2013). For instance, Apple demonstrates ambidexterity by simultaneously innovating (e.g., AR devices) and refining existing products (e.g., iPhone), while also shifting focus to services amid declining hardware sales (O'Reilly & Tushman, 2004; Teece et al., 2016). Similarly, Netflix transitioned from DVD rental to streaming, balancing innovation in content and algorithm optimization (Wade & Hulland, 2004; Li, 2020), and showed resilience during COVID-19 by adapting content delivery (Gong, Greenwood, & Han, 2022). In contrast, firms like J.C. Penney and Sears, lacking these capabilities, failed to adapt to digital disruption and faced bankruptcy (Svahn, Mathiassen, & Lindgren, 2017). These examples underscore the need for integrated dynamic capabilities (Teece, 2014). A major source of disruption today is Digital Technological Turbulence (DTT), referring to unpredictable digital shifts that alter operations and consumer behavior. Traditional strategies often fall short under such conditions. Organizations must build capabilities to detect emerging trends, meet consumer expectations, and realign internally. The



contingency perspective suggests that success hinges on alignment between strategy and environment (Ginsberg & Venkatraman, 1985). In this light, Organizational Digital Ambidexterity (ODA)—the ability to explore new digital innovations while exploiting current ones—is critical (Tushman & O'Reilly, 1996; He & Wong, 2004). For instance, a retailer might deploy AI for product recommendations while using analytics for supply chain optimization—balancing innovation with efficiency in volatile markets.

Yet, ambidexterity alone is insufficient. Digital Agility (DAG)—a firm's capacity to sense and respond quickly to digital shifts—is equally vital (Salmela et al., 2022). It ensures rapid realignment of strategies and offerings, enhancing engagement across digital platforms. Together, ODA and DAG foster Organizational Digital Resilience (ODR), the ability to absorb shocks, adapt, and maintain performance amid digital disruption. While resilience has been studied, its digital dimension remains underexplored, especially in consumer-centric sectors. Firms that swiftly restore services post-cyberattacks, personalize offerings amid shifting trends, or launch new channels during crises are more likely to retain customers and build trust. Hence, digital resilience is crucial for sustained consumer relationships. This study extends the dynamic capabilities view (Teece, 2007) and ambidexterity theory (O'Reilly & Tushman, 2013), presenting a unified model linking DTT, ODA, and DAG to ODR. These interdependent capabilities collectively foster adaptability and sustained advantage. DTT acts as a catalyst for change, requiring firms to balance innovation and discipline through ODA and DAG. Their integration forms digital resilience—a necessary trait for survival and success in today's VUCA world (Johansen, 2013).

Accordingly, this paper seeks to address the following questions: (1) To what extent does digital technological turbulence influence digital agility? (2) How does this influence impact the building of digital resilience in organizations? (3) In what manner does turbulence moderate the relationship between digital ambidexterity and agility? To address the above ontological queries, this paper delves on to the following research questions.

RQ1: What is the association between digital ambidexterity and digital agility?

RQ2: How do digital agility and digital ambidexterity associated with organizational digital resilience?

This article makes key theoretical and practical contributions. It extends resilience literature by integrating insights from strategic management, information systems, and consumer behavior, and addresses gaps by exploring how firms orchestrate digital resources to deliver value in volatile contexts. Practically, it offers actionable guidance for leaders and policymakers, emphasizing the importance of not only investing in digital technologies but also fostering organizational cultures that support agility, experimentation, and coordinated resource use. It highlights the need for on-going learning, especially in consumer-facing areas like marketing and service delivery. Using data from diverse sectors, this cross-industry approach supports broader generalization and reveals best practices and pitfalls across different firm types—ranging from tech startups to legacy manufacturers.

Findings are especially relevant for marketing professionals and consumer behavior scholars. As consumer experiences become more digital, firms must adapt to shifting expectations through agility and ambidexterity. Agile firms better personalize offerings and respond to real-time feedback, while ambidextrous ones balance innovation with efficiency. The research also contributes to policy debates on digital transformation, stressing that resilience is vital for public and economic stability. Policymakers can apply these insights to support SME capability-building, workforce up-skilling, and innovation ecosystems that enhance regional and national resilience. The paper proceeds with an introduction, followed by literature review, methodology, results, implications, and finally, limitations and future research directions.

2. LITERATURE REVIEW AND THEORETICAL UNDERPINNING

2.1 Theoretical Background

Dynamic Capability View

The Dynamic Capabilities View (DCV) is a key strategic management framework explaining how firms adapt to rapidly evolving technological and market conditions (Teece et al., 1997; Eisenhardt & Martin, 2000). It emphasizes the continual development, integration, and reconfiguration of internal competencies to maintain competitive advantage in turbulent environments (Teece, 2007). DCV centers on three higher-order capabilities—sensing, seizing, and reconfiguring—which enable firms to detect change, exploit opportunities, and adapt resources to disruptions (Teece, 2007, 2018). DCV's relevance to organizational resilience is well-established, aligning with the need for rapid adaptation and recovery in adverse conditions (O'Reilly & Tushman, 2013; Bag et al., 2019; Irfan et al., 2022; Ali et al., 2022). It directly influences the speed and scope of organizational responses to uncertainty, linking it closely to resilience-building (Teece et al., 2016). Scholars have also applied DCV to study agility and ambidexterity, further supporting its broad strategic relevance (O'Reilly & Tushman, 2008; Warner & Wäger, 2019; Russell, 2015; Blome et al., 2013b; Gligor et al., 2015). This study adopts DCV to examine how digital ambidexterity, digital agility, and digital resilience are interrelated. It proposes that digital ambidexterity enhances resilience, with digital agility mediating this effect, collectively enabling firms to sustain competitive advantage in dynamic environments (Teece, 2007, 2018; Teece et al., 2016; Bahrami & Shokouhyar, 2021; Dovbischuk, 2022; Kähkönen et al., 2023; Yu et al., 2019).



Contingency Theory

Dynamic capabilities equip firms to navigate rapidly changing environments (Ambrosini & Bowman, 2009; Teece et al., 1997). To deepen this perspective, we integrate it with contingency theory, which posits that relationships between variables—such as dynamic capabilities and strategy—are shaped by contextual factors (Miller, 1981). Specifically, the business environment significantly influences strategic decisions. Two key contingencies are technological turbulence, which reflects the speed and impact of tech changes, and competitive intensity, referring to the level of market rivalry and consumer choice (Jaworski & Kohli, 1993). These factors are critical in shaping firms’ marketing strategies and have been applied in recent contingency-based studies (e.g., Morgan et al., 2019; Zhang et al., 2019).

3. HYPOTHESES DEVELOPMENT

Based on the above arguments, we analyse the relationships between digital technological turbulence and organizational digital resilience considering digital agility, and digital ambidexterity. We propose a conceptual model as presented in Figure 1.

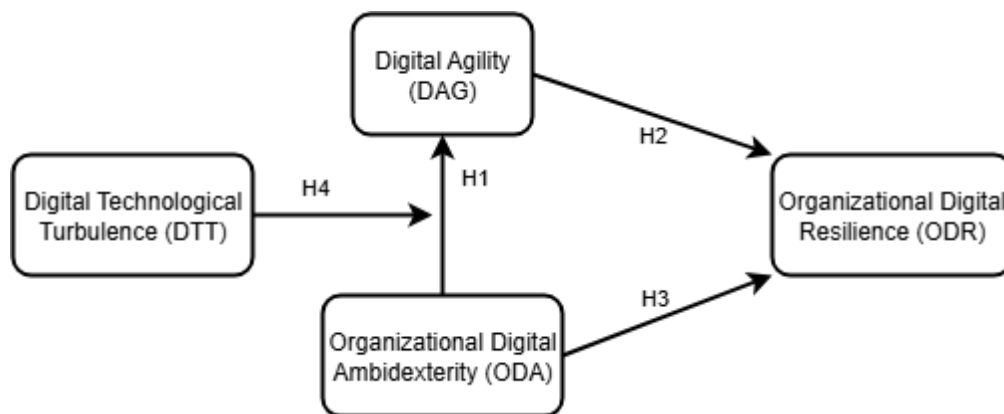


Figure 1: Proposed Research Model

3.1.1 Role of Digital Ambidexterity

An organization’s ability to respond swiftly and effectively to environmental shifts is key to its agility, especially in digitally turbulent markets (Rialti et al., 2018). Research underscores the role of IT capabilities in enhancing agility through operational ambidexterity. Lee et al. (2024) show that IT exploration and exploitation both contribute to agility by promoting innovation and efficiency. IT exploration helps detect and anticipate technological shifts, while IT exploitation focuses on optimizing existing technologies to align with goals and drive growth (Zhen et al., 2021).

Building on this, recent studies propose digital ambidexterity—the simultaneous pursuit of digital exploration and exploitation—as essential for effective digital decision-making (Liang et al., 2022). This capability enables firms to assess and implement digital solutions that balance efficiency with strategic fit. Organizational Digital Ambidexterity thus enhances agility by enabling rapid adaptation, fulfilling consumer expectations, and sustaining competitiveness in volatile, tech-driven markets. Thus, we hypothesize the following,

H1: *Organizational Digital Ambidexterity (ODA) positively influences Digital Agility (DAG)*

H3: *Organizational Digital Ambidexterity (ODA) positively influences Organizational Digital Resilience (ODR)*

3.1.2 Role of Digital Agility

In rapidly changing technological environments, organizational resilience relies on the ability to absorb and recover from disruptions. While resilience addresses sudden shocks, agility supports continuous adaptation, making both essential for managing digital disruption (Mangalaraj et al., 2023). Digital agility enhances resilience by promoting proactive digital transformation and enabling swift responses to external technological shifts (Duvivier & Gupta, 2023). As a dynamic capability, agility underpins digital resilience by supporting adaptability, competitiveness, and long-term performance (Andersson et al., 2019; Scala & Lindsay, 2021; Teece et al., 2016). Agility is also vital in supply chains, where it improves resilience through responsive infrastructure and flexible management (Aslam et al., 2020; Lotfi & Saghiri, 2018; Mandal & Dubey, 2020; Nguyen Thi et al., 2023). Disruptions expose supply chain vulnerabilities, but capabilities like agility, adaptability, and alignment mitigate these risks and foster resilience (Pettit et al., 2010). Technologies such as AI further



strengthen agility by enhancing visibility, responsiveness, and transparency across supply networks (Dey et al., 2023), increasing competitive pressure to adopt digital innovations.

Resilience thus becomes a strategic imperative, especially for firms offering time-sensitive or tech-based products. R&D and IT capabilities help detect technological shifts, while strategic and operational strengths enable firms to exploit emerging opportunities (Overby et al., 2006). Collectively, these capabilities build digital resilience and support continuous evolution in fast-changing environments. Thus, we hypothesize that,

H2: *Digital Agility positively influences Organizational Digital Resilience*

3.1.5 Role of Digital Technological Turbulence

In today's fast-changing digital environment, firms face constant technological turbulence driven by unpredictable innovation and shifting market demands. This digital technological turbulence is characterized by high uncertainty and frequent disruption, requiring strategic adaptability (Day & Schoemaker, 2019). Environmental dynamism shapes firms' strategic choices; in turbulent settings, agility becomes essential for competitiveness (Prange, 2021), while in stable contexts, the incentive for change lessens due to high transformation costs.

To stay responsive, firms must sense emerging technologies and react quickly to evolving consumer needs (Lee et al., 2015). This calls for flexible, iterative strategies over linear planning. Organizational agility depends on balancing exploration—seeking new technologies—and exploitation—refining existing capabilities (Stein et al., 2024). This balance forms digital ambidexterity, enabling firms to thrive amid volatility and turn uncertainty into strategic gain. As digital turbulence increases, such adaptive capabilities are vital for sustaining relevance and competitive advantage. Thus, we hypothesize the following,

H4: *The positive effect of Organizational Digital Ambidexterity (ODA) is stronger on digital agility (DAG) under higher degrees of Digital Technological Turbulence (DTT)*

4. RESEARCH METHOD

4.1 Sample and Data Collection

This study employed a cross-sectional research design, with data collected via an online survey administered through the Qualtrics platform between April and May 2025. Given the study's focus on digital transformation and resilience in dynamic environments, it was deemed important to include organizations across a wide range of industry sectors, rather than limiting the sample to a single domain. Accordingly, the sampling frame comprised firms operating within the Indian business environment across diverse sectors. Table 1 provides a summary of the organizational profile of the participating firms. The unit of analysis for this study was the organization, as perceived by individuals occupying managerial roles. Respondents were selected based on their professional positions and familiarity with digital practices and strategic initiatives within their firms. Participants were recruited using a random sampling approach through professional networks and personal contacts of all authors, ensuring a wide and representative distribution across industries. A total of 650 invitations were distributed to prospective respondents whose profiles aligned with the study's inclusion criteria. To ensure data quality, two attention-check items were embedded in the survey, and incomplete responses were removed during the data cleaning process. After applying these quality control measures, 311 complete and valid responses were retained for analysis, resulting in a response rate of approximately 47.84%. Table 2 presents the demographic and professional characteristics of the respondents.

Table 1. Organization representation in the sample

Industry Sector	Frequency	Percentage
Education	15	4.82
Energy Sector	26	8.36
Finance	44	14.15
Food & Beverage	37	11.90
Government	19	6.11
Healthcare	13	4.18
HR and other Services	21	6.75
Manufacturing	43	13.83
Others	10	3.22



Retail & e-commerce	16	5.14
Telecom & IT	52	16.72
Transportation	15	4.82
Organization Type		
Public Sector Firm	79	25.40
Private Firm	168	54.02
Wholly foreign-owned firm	27	8.68
Others	37	11.90
Size of Organisation		
100 people or less	48	15.43
101-500 people	43	13.83
501-1000 people	64	20.58
1001 people and above	156	50.16

Table 2. Respondent description

Designation	Frequency	Percentage
Junior Manager	93	29.90
Middle Manager	98	31.51
Senior Manager	120	38.59
Experience		
Less than 1 Year	21	6.75
1 – 2 Years	57	18.33
3 – 5 Years	56	18.01
6 – 10 Years	64	20.58
11 Years and above	113	36.33

4.2 Measures

The study employs validated scales from existing literature, using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Questionnaire items were adapted from established research in digital technological turbulence (DTT), ambidexterity, agility, and digital resilience. DTT is measured using the scale by Jaworski & Kohli (1993), capturing rapid, unpredictable digital changes. Organizational Digital Ambidexterity (ODA) is assessed through an eight-item multidimensional scale used in digital contexts (Benner, 2003; Jansen et al., 2008; Lubatkin et al., 2006). Digital Agility (DAG) is measured using a five-item scale by Kó et al. (2023), reflecting adaptability and risk-taking. Organizational Digital Resilience (ODR) is measured using a five-item scale from Shao & An (2024). Face validity was confirmed through expert reviews assessing clarity, redundancy, and construct representation. Scale operationalization details are provided in the supplement.

Two control variables were included to strengthen model robustness: organizational size and age. Size affects response agility, as smaller firms often adapt faster due to flatter hierarchies (d’Amboise & Muldowney, 1988). Organizational age accounts for experiential learning, as older firms may possess greater resilience due to prior disruption experience (Thornhill & Amit, 2003).



4.3 Systematic Measurement Error and Bias

Survey-based research can suffer from common method bias (CMB), which may inflate construct relationships when data is collected from a single source (Podsakoff et al., 2003). To mitigate CMB, this study used several procedural remedies: selecting domain experts as respondents, randomizing item order, separating independent and dependent variables, and adding attention-check questions (Jordan & Troth, 2020). Statistically, Harman’s one-factor test showed a single factor explained only 45.06% of the variance—below the 50% threshold—suggesting minimal CMB. Full collinearity testing via SmartPLS confirmed this, with all VIF values below the conservative cutoff of 3.0 (Kock, 2015).

To address non-response bias, a paired samples t-test compared early (n = 124) and late (n = 124) respondents across key variables. No significant differences emerged, indicating non-response bias is unlikely. For causality validation, we applied the Nonlinear Bivariate Causality Direction Ratio (NLBCDR), which exceeded the 0.90 benchmark, suggesting correct directional inferences and minimal reversed causality risk (Guide & Ketokivi, 2015; Kock, 2019). Model robustness was further supported by an average R² of 0.352, indicating moderate explanatory power, and a Tenenhaus GoF index of 0.511, validating overall model fit.

5. DATA ANALYSIS AND RESULTS

5.1 Descriptive statistics

Table 3 summarizes the descriptive statistics of study variables. Mean scores indicate moderate to high adoption of all constructs, ranging from 3.66 to 4.18 on a five-point Likert scale. Digital Technological Turbulence (DTT) shows the highest adoption (M = 4.18), reflecting its broad organizational integration. Standard deviations highlight variability in implementation, with Digital Agility (DAG) showing the greatest variation (SD = 0.91). This suggests that while DTT is widely emphasized, capabilities like DAG vary more across firms, likely influenced by differences in organizational maturity, size, and strategic focus.

Table 3. Assessment of discriminant validity

Variables	Composite Reliability	Mean	SD	DTT	ODA	DAG	ODR
DTT	0.894	4.18	0.83	<i>0.824</i>			
ODA	0.951	3.99	0.77	0.501**	<i>0.842</i>		
DAG	0.896	3.66	0.91	0.469**	0.583**	<i>0.827</i>	
ODR	0.897	3.94	0.76	0.458*	0.631**	0.519**	<i>0.827</i>

Notes: ** p < 0.01; * p < 0.05; DTT – Digital Technological Turbulence; ODA – Digital Ambidexterity; DAG – Digital Agility; ODR – Organizational Digital Resilience; SD – Standard Deviation; diagonal (bold, italic) – AVE Square Root

Source: Author’s own work.

5.2 Statistical Analysis

This study explores structural relationships among DTT, ODA, DA, and ODR using a two-stage analytical approach. Preliminary analysis was done in SPSS (v23), followed by PLS-SEM in SmartPLS 4.0. PLS-SEM was chosen for its effectiveness with latent constructs, suitability for predictive research, and reliability with smaller samples (Sarstedt et al., 2020; Hair et al., 2019). This aligns with our managerial sample's size constraints. PLS's variance-based nature supports the study's aim of examining digital capabilities and resilience. Unlike covariance-based SEM, PLS prioritizes maximizing R² for endogenous constructs, enabling flexible modeling and richer insights. The analysis involved two stages: measurement model evaluation (reliability, convergent and discriminant validity) and structural model testing (path coefficients, significance, and explanatory power).

5.2.1 Measurement Model

The measurement model’s reliability and validity were confirmed using standard criteria. Reliability was assessed through Cronbach’s alpha and composite reliability (CR), with all values above 0.70, indicating strong internal consistency (Hair et al., 2019). Convergent validity was established as all constructs had AVE values above 0.50 (Fornell & Larcker, 1981). Discriminant validity was confirmed using both the Fornell–Larcker criterion and HTMT ratios. In Table 3, the square roots



of AVEs exceeded inter-construct correlations, and Table 4 shows all HTMT values were below 0.80, satisfying criteria as per Henseler et al. (2015). Indicators with loadings below 0.60 were excluded, ensuring only reliable items were retained (Hair et al., 2019; Sarstedt et al., 2020). Overall, the measurement model demonstrated robust internal consistency, convergent, and discriminant validity, supporting its adequacy for structural analysis.

Table 4. Exploratory and Confirmatory Factor Analysis

Constructs and Factors	Standard Factor Loadings (CFA)	Cronbach' Alpha	Bartlett's Test	Explained Variance (%)	HTMT < 0.80
Digital Technological Turbulence DTT1 DTT2 DTT3 DTT4 DTT5	 0.832 0.766 0.733 - 0.720	 0.844	 $X^2 = 422.183$ df = 6 Sig < 0.001	 68.108	 YES
Digital Ambidexterity ODA1 ODA2 ODA3 ODA4 ODA5 ODA6 ODA7 ODA8	 0.772 0.769 0.718 0.754 0.724 0.753 0.751 0.701	 0.941	 $X^2 = 1563.20$ df = 28 Sig < 0.001	 70.838	 YES
Digital Agility DAG1 DAG2 DAG3 DAG4 DAG5 DAG6 DAG7	 - - - 0.807 0.828 0.927 0.751	 0.848	 $X^2 = 409.782$ df = 6 Sig < 0.001	 68.683	 YES
Organisational Digital Resilience ODR1 ODR2 ODR3 ODR4 ODR5	 0.560 0.709 0.770 0.748	 0.846	 $X^2 = 406.975$ df = 6 Sig < 0.001	 68.478	 YES



	-				
--	---	--	--	--	--

* Red Marked items were removed due to no loading/mixed loading

5.2.2 Structural Model Assessment

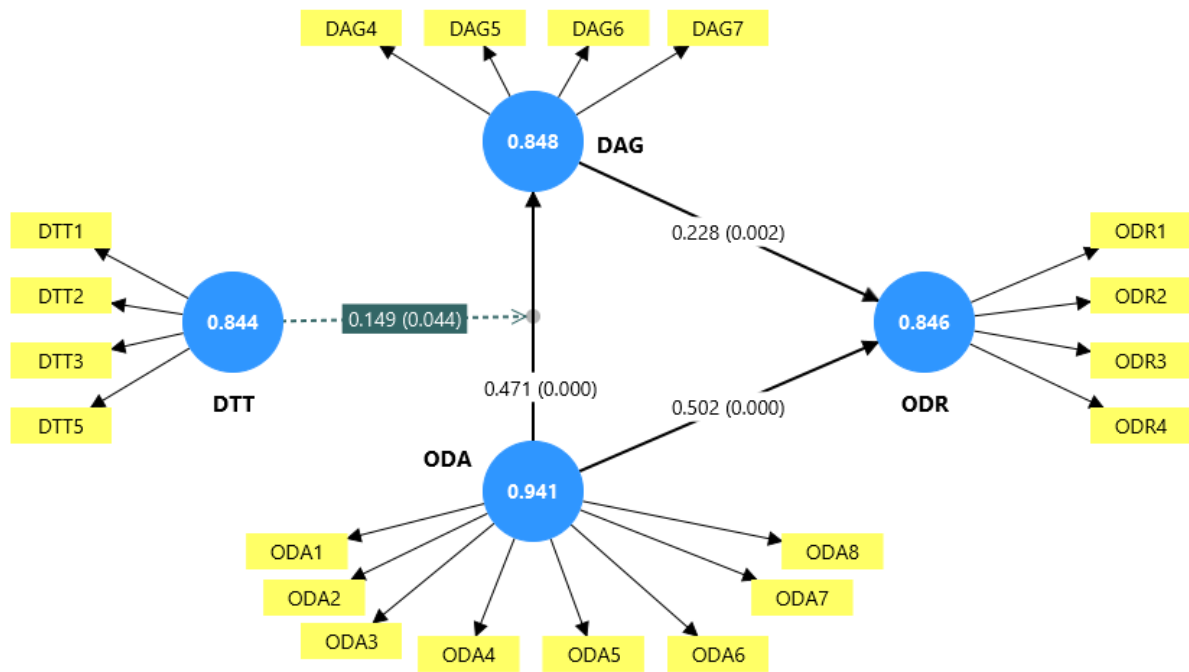


Figure 2: Analysis results of research model

The coefficient of determination (R^2) serves as a critical indicator for assessing the explanatory power of exogenous constructs, ODA in predicting endogenous constructs such as DAG, and ODR. According to Henseler et al. (2016), R^2 values are interpreted as follows: values above 0.75 denote substantial predictive power, values around 0.50 indicate moderate predictive power, and values near 0.25 suggest weak predictive power. As illustrated in Table 5, the R^2 values for ODR (0.485) and DAG (0.404) indicate moderate predictive relevance in the context of consumer-oriented digital strategies. To further evaluate the individual impact of predictor constructs, Cohen's f^2 is used to assess effect sizes, with benchmarks of 0.35 (large), 0.15 (medium), and 0.02 (small) as suggested by Cohen (1988). Results presented in Conversely, other paths - such as DAG to ODR and DTT*ODA to DAG - fall within the small effect size range, albeit approaching the threshold for medium effects, highlighting their emerging but still meaningful roles in consumer-centric organizational strategy (Hair et al., 2019).

Table 5: Coefficient of Determination

Variables	R Square	Adj. R Square	Q Square
Digital Agility	0.404	0.397	0.353
Organizational Digital Resilience	0.485	0.481	0.312

Table 6: Results

Hypotheses	Relationship	F ²	β	t-value	p-value	Sign.
H1	ODA-DAG	0.277	0.471	2.481	0.000	***
H2	DAG-ODR	0.061	0.228	1.383	0.002	**
H3	ODA-ODR	0.297	0.502	2.732	0.000	***
H4	DTT*ODA-DAG	0.040	0.149	0.945	0.044	*



Table 7. Model Fit (All Factors)

	Model	χ^2	df	χ^2/df	RMSEA	SRMR	CFI	TLI
4 Factors	four factor	367	164	2.24	0.071	0.0475	0.937	0.927
All-DTT-ODR	three factor	607	167	3.63	0.103	0.0708	0.864	0.845
All-ODR	two factor	852	169	5.04	0.128	0.0879	0.789	0.763
All	one factor	1018	170	5.99	0.142	0.0938	0.738	0.707

Table 8. Model Fit

RMSEA	GFI	CFI	TLI	SRMR	χ^2	df	χ^2/df
0.0706	0.934	0.937	0.927	0.0475	367	164	2.24

Predictive relevance was assessed using the Stone–Geisser’s Q^2 statistic. All Q^2 values reported in Table 4 are substantially greater than zero, indicating adequate out-of-sample predictive power for the endogenous constructs (Peng & Lai, 2012). This reinforces the model’s capacity to anticipate consumer behavior and organizational adaptation within turbulent environments. The structural relationships were further examined through path analysis using SmartPLS 4 with 5,000 bootstrap samples. The path coefficients (β) denote the magnitude of influence of one construct on another, while the associated p-values indicate statistical significance. As depicted in Figure 2 and Table 6, ODA significantly influences ODR ($\beta = 0.502, p < 0.001$), and DAG ($\beta = 0.471, p < 0.001$). Likewise, DAG demonstrates significant positive effects on ODR ($\beta = 0.228, p < 0.01$). These findings support the proposed hypotheses and suggest a robust interconnection between digital initiatives, agile business models, and organizational resilience from a strategic consumer engagement perspective (Mikalef et al., 2020; Teece, 2018).

6. DISCUSSION

6.1 Theoretical and Practical Implications

This study offers key theoretical contributions to strategic management and consumer research. First, it applies the dynamic capabilities framework to explore how digital agility enhances organizational digital resilience, a critical capability amid widespread digital integration (Teece, 2007; Bharadwaj et al., 2013). While prior work links agility to supply chain resilience (Pettit et al., 2010), this study uniquely examines digital agility’s role in resilience from a consumer research lens. Second, it extends digital ambidexterity literature by showing how balancing exploration of new technologies and exploitation of existing ones boosts agility under digital turbulence (Raisch & Birkinshaw, 2008; Vial, 2019). Findings reveal that the ability to sense and respond to disruptions through agility directly influences resilience in dynamic markets, essential for consumer trust and competitiveness.

Practically, the strong link between digital agility and resilience urges firms to invest in responsive digital infrastructures (Overby et al., 2006). Promoting digital ambidexterity, balancing innovation and efficiency—is vital for strategic flexibility (O’Reilly & Tushman, 2013). This dual focus fosters adaptive cultures that sustain consumer relevance amid volatility.

6.2 Limitations and Future Research Directions

Despite its contributions, this study has several limitations that open avenues for future research. First, environmental turbulence varies across technological, institutional, and market disruptions, each influencing resilience differently (Lavie, 2006). Context-specific disruptions—such as platform-based shifts (Cennamo et al., 2022) or institutional transitions like e-commerce adoption (Pokhrel & Chhetri, 2021)—warrant deeper, differentiated analysis to understand how organizations tailor dynamic capabilities to specific turbulence types. Second, the cross-sectional design limits understanding of the temporal evolution of capabilities and resilience. As resilience develops over time, longitudinal designs and multimethod approaches—e.g., panel data, case studies, or secondary sources—could offer stronger causal insights and mitigate bias (Sirmon et al., 2011; Podsakoff et al., 2003; Edmondson & McManus, 2007). Third, the study focuses on Indian firms, limiting generalizability. Variations in digital maturity and institutional conditions across advanced economies (e.g., the U.S., Germany, South Korea) call for comparative research on national influences in resilience-building (Henisz et al., 2005; Kraus et al., 2021). Fourth, sectoral and firm-size differences may shape resilience dynamics. SMEs may follow distinct resilience paths due to resource constraints, and industries such as healthcare, manufacturing, or tech may face divergent pressures (Battisti & Deakins, 2017). Future work should explore these contextual differences. Finally, while antecedents of digital resilience are examined, its outcomes remain underexplored. Future research could assess how resilience drives strategic performance, including customer satisfaction, responsiveness, efficiency, and financial gains (Duchek, 2020; Linnenluecke, 2017).



7. CONCLUSION

In today's volatile, digitally turbulent landscape, organizational resilience is essential. This study advances the dynamic capabilities literature by empirically validating a model where digital agility and ambidexterity serve as key enablers of organizational digital resilience (ODR). Grounded in dynamic capabilities and contingency theory, the findings reveal that digital agility directly enhances resilience, while digital ambidexterity—particularly under high digital turbulence—acts as a crucial antecedent, emphasizing the need for a balanced focus on exploration and exploitation.

The results highlight the value of an adaptive, integrated digital strategy. Firms that can effectively structure and deploy digital assets are better equipped to respond to disruption and maintain performance. Agility connects technological sensing with responsive action, while ambidexterity enables innovation alongside operational continuity.

Practically, the study offers actionable guidance: firms must pair digital investments with skill development, collaboration, and a culture of adaptability. Policy implications also arise for economies supporting digital transformation, especially in SMEs and public institutions. Ultimately, digital resilience emerges not just from technology but from the strategic orchestration of capabilities, culture, and leadership attuned to continuous change.

REFERENCES

- [1] Ambulkar, Saurabh, Jennifer Blackhurst, and Scott Grawe. "Firm's Resilience to Supply Chain Disruptions: Scale Development and Empirical Examination." *Journal of Operations Management* 33–34, no. 1 (January 2015): 111–22. <https://doi.org/10.1016/j.jom.2014.11.002>.
- [2] Andersson, U., Dasí, Á., Mudambi, R., & Pedersen, T. (2016). Technology, innovation and knowledge: The importance of ideas and international connectivity. *Journal of World Business*, 51(1), 153-162.
- [3] Arici, T., & Gok, M. S. (2023). Examining environmental turbulence intensity: A strategic agility and innovativeness approach on firm performance in environmental turbulence situations. *Sustainability*, 15(6), 5364.
- [4] Aslam, H., Blome, C., Roscoe, S., & Azhar, T. M. (2018). Dynamic supply chain capabilities: How market sensing, supply chain agility and adaptability affect supply chain ambidexterity. *International Journal of Operations & Production Management*, 38(12), 2266-2285.
- [5] Bag, S., Gupta, S. and Foropon, C. (2019), "Examining the role of dynamic remanufacturing capability on supply chain resilience in circular economy", *Management Decision*, Vol. 57 No. 4, pp. 863-885, doi: 10.1108/MD-07-2018-0724.
- [6] Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- [7] Battisti, M., & Deakins, D. (2017). The relationship between dynamic capabilities, the firm's resource base and performance in a post-disaster environment. *International Small Business Journal*, 35(1), 78-98.
- [8] Benner, M. J. (2003). Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited.
- [9] Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471–482.
- [10] Chen, D. Q., Preston, D. S., & Swink, M. (2015). How the use of big data analytics affects value creation in supply chain management. *Journal of Management Information Systems*, 32(4), 4–39.
- [11] d'Amboise, G. and Muldowney, M. (1988), "Management theory for small business: attempts and requirements", *Academy of Management Review*, Academy of Management Briarcliff Manor, NY 10510, Vol. 13 No. 2, pp. 226-240.
- [12] Duchek, Stephanie. "Organizational Resilience: A Capability-Based Conceptualization." *Business Research* 13, no. 1 (April 2020): 215–46. <https://doi.org/10.1007/s40685-019-0085-7>.
- [13] Duvivier, F., & Gupta, G. (2023). Unleashing digital agility: a review of literature on agile responses to digital challenges. *Journal of Global Information Management (JGIM)*, 31(8), 1-22.
- [14] Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of management review*, 32(4), 1246-1264.
- [15] Ginsberg, Ari, and N Venkatraman. "Contingency Perspectives of Organizational Strategy: A Critical Review of the Empirical Research," n.d.
- [16] Gong, Y., Greenwood, R., & Han, S. (2022). Digital transformation during a crisis: The role of resilience and agility. *Strategic Organization*, 20(2), 355–381.
- [17] Gregory, A. J., Atkins, J. P., Midgley, G., & Hodgson, A. M. (2020). Stakeholder identification and engagement in problem structuring interventions. *European journal of operational research*, 283(1), 321-340.



- [18] Grover, Varun. "Digital Agility: Responding to Digital Opportunities." *European Journal of Information Systems* 31, no. 6 (November 2, 2022): 709–15. <https://doi.org/10.1080/0960085X.2022.2096492>.
- [19] Guide, V.D.R. and Ketokivi, M. (2015), "Notes from the editors: restructuring the Journal of Operations Management", *Journal of Operations Management*, Vol. 38No. 1, pp. v–x.
- [20] Henisz, W. J., Zelner, B. A., & Guillén, M. F. (2005). The worldwide diffusion of market-oriented infrastructure reform, 1977–1999. *American Sociological Review*, 70(6), 871–897.
- [21] Hitt, M. A. (2011). Relevance of strategic management theory and research for supply chain management. *Journal of Supply Chain Management*, 47(1), 9–13.
- [22] Irfan, I., Sumbal, M.S.U.K., Khurshid, F. and Chan, F.T. (2022), "Toward a resilient supply chain model: critical role of knowledge management and dynamic capabilities", *Industrial Management & Data Systems*, Vol. 122 No. 5, pp. 1153–1182.
- [23] 1153–1182.
- [24] Jaworski, B. J., & Kohli, A. K. (1993). Market Orientation: Antecedents and Consequences. *Journal of Marketing*, 57(3), 53–70. <https://doi.org/10.1177/002224299305700304>
- [25] Jiang, Yisa, Taiwen Feng, and Yufei Huang. "Antecedent Configurations toward Supply Chain Resilience: The Joint Impact of Supply Chain Integration and Big Data Analytics Capability." *Journal of Operations Management* 70, no. 2 (March 2024): 257–84. <https://doi.org/10.1002/joom.1282>.
- [26] Johansen, B., & Euchner, J. (2013). Navigating the VUCA world. *Research-Technology Management*, 56(1), 10–15.
- [27] Kraus, Sascha, Paul Jones, Norbert Kailer, Alexandra Weinmann, Nuria Chaparro-Banegas, and Norat Roig-Tierno. "Digital Transformation: An Overview of the Current State of the Art of Research." *Sage Open* 11, no. 3 (July 2021): 21582440211047576. <https://doi.org/10.1177/21582440211047576>.
- [28] Li, F. (2020). The digital transformation of business models in the creative industries: A holistic framework and emerging trends. *Technovation*, 92–93.
- [29] Li, D., Yang, Y., Song, Y. Z., & Hospedales, T. (2018, April). Learning to generalize: Meta-learning for domain generalization. In *Proceedings of the AAAI conference on artificial intelligence* (Vol. 32, No. 1).
- [30] Li, L., Tong, Y., Wei, L. and Yang, S. (2022), "Digital technology-enabled dynamic capabilities and their impacts on firm performance: evidence from the COVID-19 pandemic", *Information & Management*, Vol. 59 No. 8, p. 103689, doi: 10.1016/j.im.2022.103689.
- [31] Lin, Jiabao, and Yuchen Fan. "Seeking Sustainable Performance through Organizational Resilience: Examining the Role of Supply Chain Integration and Digital Technology Usage." *Technological Forecasting and Social Change* 198 (January 2024): 123026. <https://doi.org/10.1016/j.techfore.2023.123026>.
- [32] Neboh, Nkechi D., and Thokozani P. Mbhele. "Sustainability Governance of the Fast-Moving Consumer Goods Industry." *Journal of Governance and Regulation* 11, no. 3 (2022): 70–78. <https://doi.org/10.22495/jgrv11i3art7>.
- [33] O'Reilly, C. A., & Tushman, M. L. (2004). The ambidextrous organization. *Harvard Business Review*, 82(4), 74–81.
- [34] O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives*, 27(4), 324–338.
- [35] Podsakoff, Philip M., Scott B. MacKenzie, and Nathan P. Podsakoff. "Sources of Method Bias in Social Science Research and Recommendations on How to Control It." *Annual Review of Psychology* 63, no. 1 (January 10, 2012): 539–69. <https://doi.org/10.1146/annurev-psych-120710-100452>.
- [36] Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher education for the future*, 8(1), 133–141.
- [37] Prange, Christiane. "Agility as the Discovery of Slowness." *California Management Review* 63, no. 4 (August 2021): 27–51. <https://doi.org/10.1177/00081256211028739>.
- [38] Scala, Barbara, and Claire Frances Lindsay. "Supply Chain Resilience during Pandemic Disruption: Evidence from Healthcare." *Supply Chain Management: An International Journal* 26, no. 6 (September 6, 2021): 672–88. <https://doi.org/10.1108/SCM-09-2020-0434>.
- [39] Seo, D., & La Paz, A. I. (2008). Exploring the dark side of IS in achieving organizational agility. *Communications of the ACM*, 51(11), 136–139.
- [40] Shao, M., & An, L. (2024). Contradiction or Consistency: The "Double-Edged Sword" Effect of Asset Specificity on Organizational Resilience. *IEEE Transactions on Engineering Management*, 71, 1900–1911.



<https://doi.org/10.1109/TEM.2022.3164429>

- [41] Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.
- [42] Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives*, 28(4), 328–352.
- [43] Teece, D. J., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 58(4), 13–35.
- [44] Teece, D.J. (2018), “Dynamic capabilities as (workable) management systems theory”, *Journal of Management & Organization*, Cambridge University Press, Vol. 24 No. 3, pp. 359-368, doi: 10.1017/jmo.2017.75.
- [45] Teubner, R. A., & Stockhinger, J. (2020). Literature review: Understanding information systems strategy in the digital age. *The Journal of Strategic Information Systems*, 29(4), 101642.
- [46] Thornhill, S. and Amit, R. (2003), “Learning about failure: bankruptcy, firm age, and the resource-based view”, *Organization Science*, INFORMS, Vol. 14No.5,pp. 497-509.
- [47] Tushman, M. L., & O'Reilly, C. A. (1996). *Ambidextrous organizations: Managing evolutionary and revolutionary change*. *California Management Review*, 38(4), 8–30. <https://doi.org/10.2307/41165852>
- [48] Verhoef, Peter C., Thijs Broekhuizen, Yakov Bart, Abhi Bhattacharya, John Qi Dong, Nicolai Fabian, and Michael Haenlein. “Digital Transformation: A Multidisciplinary Reflection and Research Agenda.” *Journal of Business Research* 122 (January 2021): 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>.
- [49] Vial, G. (2021). Understanding digital transformation: A review and a research agenda. *Managing digital transformation*, 13-66.
- [50] Yu, W., Jacobs, M.A., Chavez, R. and Yang, J. (2019), “Dynamism, disruption orientation, and resilience in the supply chain and the impacts on financial performance: a dynamic capabilities perspective”, *International Journal of Production Economics*, Elsevier, Vol. 218, pp. 352-362.
- [51] Yusuf, Y. Y., Musa, A., Dauda, M., El-Berishy, N., Kovvuri, D., & Abubakar, T. (2014). A study of the diffusion of agility and cluster competitiveness in the oil and gas supply chains. *International Journal of Production Economics*, 147, 498-513.

fffff