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The Role of Digital Mindset in Mediating the Relationship Between Dynamic Managerial Capabilities and Strategic Leadership in Indonesian Startups

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Abstract

High failure rates among Indonesian startups often stem from weak strategic planning and an inability to navigate rapid technological shifts. This study investigates the mediating role of a digital mindset in the relationship between dynamic managerial capabilities and strategic leadership. A quantitative explanatory design was employed, utilizing data from 100 startup managers collected via LinkedIn and Google Forms. Analysis using multiple regression and the PROCESS Macro reveals that while dynamic managerial capabilities do not directly impact strategic leadership significantly, they exert a profound influence on developing a digital mindset. Digital mindset serves as a full mediator, effectively translating managerial resources into impactful leadership behaviors and explaining 50.9% of the variation in strategic leadership. These findings contribute to the Upper Echelons Theory by highlighting that managerial skills in the digital era remain latent unless filtered through a technology-oriented cognitive framework. Practical results offer a roadmap for founders to prioritize mental adaptability and digital experimentation to ensure long-term organizational sustainability

Keywords

Digital Mindset; Dynamic Capabilities; Strategic Leadership; Indonesian Startups; Organizational Performance

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1. INTRODUCTION

The global and national business environment has undergone rapid transformation in recent years. Advances in digital technology, the acceleration of digital transformation, and shifts in consumer behavior have significantly altered the way companies operate and compete. The COVID-19 pandemic also intensified these changes by forcing businesses to quickly adopt digital solutions while simultaneously facing economic pressure and uncertainty. Startups in Indonesia operate within this challenging environment, where innovation and technological adaptation determine the sustainability of business operations. Indonesia currently has one of the largest startup ecosystems in Southeast Asia, with more than 2,500 startups operating across various sectors such as financial technology, education technology, health technology, and electronic commerce. Despite the rapid growth of this ecosystem,

many startups struggle to maintain stability and achieve long-term sustainability (Anirudh N M, 2025).

High failure rates remain one of the major issues faced by startups in Indonesia. Various reports indicate that nearly ninety percent of startups fail within the first five years of operation. Weak managerial capability, unstable funding, lack of strategic planning, and difficulties in responding to rapid market changes often contribute to this problem (M.T. Ali et al., 2023). Funding conditions also illustrate the pressure experienced by the startup ecosystem. Startup investment in Indonesia declined significantly during 2023, reflecting increasing caution from investors and global economic uncertainty. The reduction in funding occurred at both early and late investment stages, creating additional challenges for startup founders who must maintain operations while continuing to innovate and grow their market presence (Gyamerah et al., 2025).

Empirical evidence from Indonesia suggests that startup failure is driven not only by financial constraints but also by limited managerial capability to respond to digital transformation. Reports indicate that over 65% of startups that ceased operations in the past three years struggled to adapt to technological change and evolving digital consumer behavior rather than facing capital shortages alone (Kementerian Koperasi dan UKM Republik Indonesia, 2023); (DailySocial, 2024). This highlights the importance of digital mindset as a key mechanism linking managerial capabilities to strategic leadership in Indonesian startups.

Digital transformation continues to expand across Indonesia despite the challenges faced by startups, as digitalization accelerated significantly during the pandemic and remained strong due to increasing reliance on digital platforms in everyday activities. Consumer behavior has shifted toward online services, digital payments, and technology-based transactions, while electronic commerce and systems like QRIS have grown dramatically. Business competitiveness increasingly depends on how effectively organizations integrate digital technology into their operations and strategic decisions (Heubeck, 2023). Although strategic leadership is traditionally viewed as an antecedent of organizational capabilities, this study adopts an alternative perspective based on Upper Echelons Theory. In the context of digital startups, Dynamic Managerial Capabilities (DMC)—including sensing, seizing, and transforming resources—serve as cognitive and operational assets that precede strategic leadership. Managers who continuously develop these capabilities are more likely to cultivate a digital mindset, which subsequently translates into effective strategic leadership. Thus, the proposed pathway (DMC → Digital Mindset → Strategic Leadership) extends Upper Echelons Theory by positioning managerial capabilities as drivers of managerial cognition and strategic leadership rather than merely their outcomes (Hambrick & Mason, 1984) (Teeluckdharry et al., 2021). Leadership capability plays a decisive role in determining whether startups are able to survive and grow, particularly through strategic leadership which allows leaders to formulate long-term vision and align resources. The

effectiveness of strategic leadership is closely associated with dynamic managerial capabilities (Abdeen et al., 2026), which enable managers to build, integrate, and reconfigure organizational resources in response to evolving business conditions.

Dynamic managerial capabilities (Therapy et al., 2018) (Svensson & Löwstedt, 2021) represent the capacity of leaders to recognize opportunities and transform resources into competitive advantages through human capital, social networks, and cognition. Strategic leadership (Ireland & Hitt, 1999) reflects the actual ability of leaders to influence organizational direction and sustain long-term performance in uncertain markets. Digital mindset (Kane et al., 2015; Westerman et al., 2014) serves as a crucial cognitive filter, characterized by an openness to innovation and a strategic orientation toward technology adoption. These three constructs are theoretically intertwined because managerial capabilities provide the necessary resource-base, which must then be filtered through a digital mindset to effectively manifest as impactful strategic leadership. This integration suggests that possessing managerial skills is insufficient in the digital era unless leaders develop the specific cognitive orientation required to translate those skills into modern strategic actions.

Dynamic managerial capabilities enable leaders to purposefully create, extend, and reconfigure organizational resources in response to changing environments, particularly in startup contexts where adaptability determines long-term sustainability. These capabilities support managers in planning, organizing, directing, and evaluating resources while maintaining strategic control amid uncertainty, thereby strengthening strategic leadership. At the same time, dynamic managerial capabilities are closely related to managerial cognition, which forms the basis for how leaders interpret environmental changes and make decisions; however, this differs from a digital mindset, which specifically reflects an individual's openness and orientation toward digital technologies. Managerial cognition refers to the general mental framework managers use to process information and make decisions, whereas Digital Mindset represents a domain-specific cognitive orientation toward understanding and leveraging digital technologies for business strategy. Consequently, managers may possess strong cognitive abilities without necessarily exhibiting a digital orientation. In the context of Indonesian startups, where digital transformation is accelerating, Digital Mindset becomes a critical differentiator that enables leaders to recognize and respond effectively to technology-driven opportunities. Therefore, examining Digital Mindset as a mediator between Dynamic Managerial Capabilities and Strategic Leadership provides a novel perspective that remains underexplored in startup research within emerging economies (Helfat & Peteraf, 2015). While managerial cognition provides general cognitive flexibility, a digital mindset represents a more focused technological perspective that allows leaders to recognize and leverage digital innovation opportunities. Managers with strong dynamic capabilities are therefore more likely to develop a digital mindset, which in turn enhances their ability to lead strategically in a

digital environment. Furthermore, a digital mindset equips leaders with the adaptability, critical thinking, and technological awareness required to align organizational resources with digital transformation goals and foster continuous innovation. Consequently, the influence of dynamic managerial capabilities on strategic leadership is expected to be strengthened when mediated by a digital mindset, as this cognitive orientation enables the effective translation of resource reconfiguration capabilities into strategic actions that support sustainable organizational growth.

A digital mindset influences how leaders interpret technological change and respond to digital transformation, as leaders who develop this orientation tend to encourage experimentation, promote innovation, and support data-driven decision making. Such a mindset enables leaders to recognize technological opportunities and transform them into business value, yet research on the interaction between dynamic managerial capabilities, strategic leadership, and digital mindset remains limited in the startup environment. Mutie et al. (2025) highlight the connection between entrepreneurial leadership and innovation capabilities for startup growth in emerging digital markets, but do not specifically address the cognitive mediation of a digital mindset. Bardai et al. (2026) examine the influence of strategic leadership, entrepreneurial orientation, and flexibility strategy on the performance of Indonesian digital startups, leaving a gap regarding how specific managerial resource configurations influence leadership outcomes through digital cognition. This study seeks to examine how digital mindset mediates the relationship between dynamic managerial capabilities and strategic leadership among Indonesian startups to address these theoretical omissions and support leadership effectiveness in the digital era.

This study aims to investigate the influence of dynamic managerial capabilities on strategic leadership with the mediating role of a digital mindset among startup leaders in Indonesia. High failure rates in the startup sector necessitate a clear understanding of how cognitive frameworks and resource reconfiguration abilities interact to sustain business performance. Specifically, this study addresses the following research questions: RQ1: Does dynamic managerial capabilities have a positive and significant effect on strategic leadership? RQ2: Does dynamic managerial capabilities have a positive and significant effect on digital mindset? RQ3: Does digital mindset have a positive and significant effect on strategic leadership? RQ4: Does digital mindset significantly mediate the relationship between dynamic managerial capabilities and strategic leadership?

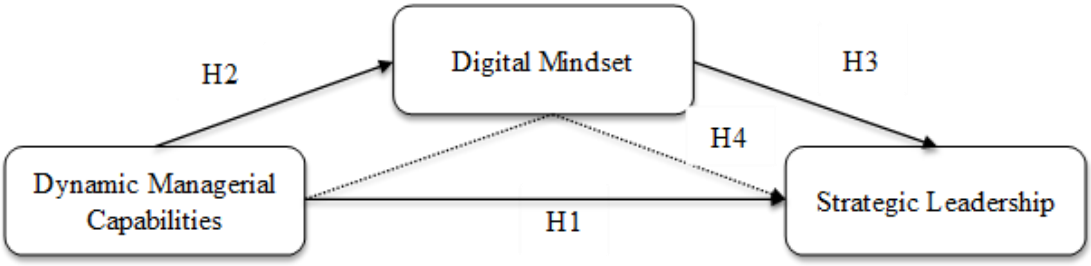

Figure 1. Conceptual Framework

This study examines the effect of Dynamic Managerial Capabilities on Strategic Leadership, with Digital Mindset as a mediating variable, among Indonesian startup leaders. By integrating Upper Echelons Theory and the dynamic capabilities perspective, the study explores how managerial capabilities and digital cognition contribute to strategic leadership in digital startups. It addresses four research questions: (1) Does Dynamic Managerial Capabilities significantly influence Strategic Leadership? (2) Does Dynamic Managerial Capabilities significantly influence Digital Mindset? (3) Does Digital Mindset significantly influence Strategic Leadership? and (4) Does Digital Mindset mediate the relationship between Dynamic Managerial Capabilities and Strategic Leadership?

2. METHOD

This study employed a quantitative explanatory design with a cross-sectional approach to examine the relationships among Dynamic Managerial Capabilities (DMC), Digital Mindset (DM), and Strategic Leadership (SL). This design was selected to test the proposed causal relationships while collecting data at a single point in time, making it appropriate for mediation analysis in the context of Indonesian startups (Prof. Dr. (Prof.Dr.Sugiyono, 2022) (Sugiyono, 2019). Data were collected from 100 startup managers in Indonesia through online questionnaires distributed via LinkedIn, startup communities, and email invitations. Respondents included founders, co-founders, CEOs, CTOs, and operations directors with at least one year of managerial experience, representing diverse industries and regions to enhance sample representativeness. To minimize self-selection bias, questionnaires were distributed through multiple channels, participation was voluntary and anonymous, and the study was introduced as general research on leadership practices without emphasizing digital mindset or technology-related constructs. The sample size (N = 100) was considered adequate for mediation analysis using Hayes' PROCESS Macro Model 4, exceeding the minimum recommendations for regression-based mediation models (Hair et al., 2019) ; (Fritz & MacKinnon, 2007). The measurement instruments were adapted from validated international scales, with DMC measured using four items adapted from (Helfat & Peteraf, 2015), Digital Mindset using four items adapted from (Ridha et al., 2025), and Strategic Leadership using five items adapted from (Alsayed et al., 2023). All instruments underwent back-translation and expert review to ensure linguistic equivalence and content validity. Responses were

measured using a four-point Likert scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree), which was selected to reduce neutral responses (Garland, 1991).

Firm Age and Funding Stage were included as control variables because managerial capabilities and leadership behaviors may vary across startup maturity levels and funding conditions (Colombo & Grilli, 2010) (Picken, 2017). To reduce common method bias (CMB), predictor, mediator, and outcome variables were presented in separate questionnaire sections, while respondent anonymity and confidentiality were ensured (Podsakoff et al., 2003). CMB was further assessed using Harman's Single-Factor Test and the Full Collinearity VIF Test, indicating that common method bias was not a significant concern (Kock, 2015). Data were analyzed using SPSS version 26 and Hayes' PROCESS Macro version 4.0 (Model 4) with 5,000 bootstrap resamples. Instrument reliability and validity were evaluated using Cronbach's Alpha, factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR), following the recommended thresholds (Nunnally & Bernstein, 1994). Descriptive statistics and classical assumption tests, including normality, multicollinearity, and heteroscedasticity, were performed before testing the mediation model. The indirect effect was assessed using bootstrap 95% confidence intervals, where intervals excluding zero indicated significant mediation (Hayes, 2018). Finally, the study adhered to standard ethical guidelines by obtaining informed consent electronically, ensuring voluntary participation, maintaining anonymity, and securely storing all research data.

3. FINDINGS AND DISCUSSION

Findings

Instrument validity was assessed using the Pearson Product Moment correlation. Items were considered valid if the calculated correlation coefficient exceeded the critical r-table value (0.1966; n = 100, α = 0.05) and the significance value (p) was below 0.05. Items meeting these criteria were retained for further analysis.

Table 1. Validity Test Results

Variable	Item	r-calculated	Sig.	Remark
DMC	DMC1	0.814	0.000	Valid
DMC	DMC2	0.792	0.000	Valid
DMC	DMC3	0.789	0.000	Valid
DMC	DMC4	0.787	0.000	Valid
DM	DM1	0.811	0.000	Valid
DM	DM2	0.796	0.000	Valid
DM	DM3	0.842	0.000	Valid
DM	DM4	0.837	0.000	Valid
SL	SL1	0.888	0.000	Valid
SL	SL2	0.882	0.000	Valid
SL	SL3	0.900	0.000	Valid
SL	SL4	0.890	0.000	Valid
SL	SL5	0.900	0.000	Valid

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	Number of Items	Remark
DMC	0.807	4	Reliable
DM	0.840	4	Reliable
SL	0.936	5	Highly Reliable

Based on the results of the reliability analysis, all variables examined in this study (DMC, DM, and SL) demonstrate Cronbach's Alpha values exceeding 0.70, indicating that the measurement instrument possesses good internal consistency and can be considered reliable. Furthermore, among the variables, SL exhibits an exceptionally high level of reliability, as reflected by its Cronbach's Alpha value of 0.936. This suggests that the items used to measure the SL construct are highly consistent in capturing the underlying concept.

Normality Test

Table 3. Normality Test Result

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.70208255
Most Extreme Differences	Absolute	.060
	Positive	.059
	Negative	-.060
Test Statistic		.060
Asymp. Sig. (2-tailed)		.200c,d
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: Processed Researcher Data, 2026

The residual data met the normality assumption, as indicated by the One-Sample Kolmogorov-Smirnov test, which produced an Asymp. Sig. (2-tailed) value of 0.200 ($p > 0.05$). This result suggests that the residuals are normally distributed. Furthermore, the heteroscedasticity test conducted using the Glejser method showed no evidence of heteroscedasticity, since the significance values for DMC ($p = 0.115$) and DM ($p = 0.178$) were both greater than 0.05. In terms of multicollinearity, the diagnostic results are presented in the integrated regression table provided below, which offers detailed information on tolerance and variance inflation factor (VIF) values for each independent variable.

Multicollinearity Test

Table 4. Multicollinearity Test Result

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statisticst	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.520	.214		2.433	.017		
	Dynamic Managerial Capabilities	.2031	.188	.145	.864	.390	.180	5.563
	Digital Mindset	.7871	.182	.580	3.457	.001	.180	5.563
a. Dependent Variable: Strategic Leadership								

Source: Processed Researcher Data, 2026

The multicollinearity test showed that both Dynamic Managerial Capabilities and Digital Mindset had tolerance values of 0.180 and VIF values of 5.563. Since the tolerance values exceeded 0.10 and the VIF values remained below 10, multicollinearity was not considered problematic. Nevertheless, the VIF values slightly exceeded the conservative threshold of 5, indicating moderate correlation between the predictors. Therefore, the interpretation of individual regression coefficients should be made with caution.

Heteroscedasticity Test

Table 5. Heteroscedasticity Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.652	.117		5.567	.000
	Dynamic Managerial Capabilities	-.164	.103	-.376	-1.590	.115
	Digital Mindset	.136	.100	.321	1.358	.178
a. Dependent Variable: ABS_RES						

Source: Processed Researcher Data, 2026

The heteroscedasticity test showed that the significance values for Dynamic Managerial Capabilities (0.115) and Digital Mindset (0.178) were both above 0.05, indicating no evidence of heteroscedasticity. Moreover, neither variable significantly affected the absolute residuals (ABS_RES), confirming that the residual variance remained constant across observations. Therefore, the regression model satisfied the assumption of homoscedasticity and was considered appropriate for further analysis.

Multiple Regression Test

Table 6. Multiple Regression Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.520	.214		2.433	.017
	Dynamic Managerial Capabilities (DMC)	.2031	.2351	.8639	.3898	.180
	Digital Mindset (DM)	.7871	.2277	3.4574		
a. Dependent Variable: Strategic Leadership						

Source: Processed Researcher Data, 2026

Multiple regression analysis showed that Dynamic Managerial Capabilities had a positive but insignificant effect on Strategic Leadership (B = 0.2031, t = 0.8639, p = 0.3898), whereas Digital Mindset had a significant positive effect (B = 0.7871, t = 3.4574, p = 0.0008), indicating that it was the stronger predictor of Strategic Leadership. Although the VIF value (5.563) was below the conventional threshold of 10, the high correlation between the two predictors (β = 0.906) suggests potential construct overlap and possible discriminant validity concerns. Therefore, the findings should be interpreted with caution.

T Test

Table 7. T Test Result

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.520	.214		2.433	.017
	Dynamic Managerial Capabilities	.2031	.188	.145	.864	.390
	Digital Mindset	.7871	.182	.580	3.457	.001
a. Dependent Variable: Strategic Leadership						

Source: Processed Researcher Data, 2026

The t-test results showed that Dynamic Managerial Capabilities had no significant partial effect on Strategic Leadership (p = 0.390), whereas Digital Mindset had a significant positive effect (p = 0.001). The higher t-value for Digital Mindset (3.457) compared with Dynamic Managerial Capabilities (0.864) further indicates that Digital Mindset is the stronger predictor of Strategic Leadership.

Test F

Table 8. Test F Result

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.681	2	25.340	50.370	.000b
	Residual	48.799	97	.503		
	Total	99.480	99			
a. Dependent Variable: Strategic Leadership						
b. Predictors: (Constant), Digital Mindset, Dynamic Managerial Capabilities						

Source: Processed Researcher Data, 2026

Based on the table above, the F-test results reveal an F-statistic of 50.370 with a significance value of 0.000, which is below the 0.05 threshold. This indicates that the overall regression model is statistically significant. The comparison between the regression sum of squares (50.681) and the residual sum of squares (48.799) suggests that a considerable proportion of the variance in Strategic Leadership is explained by the independent variables included in the model. These findings demonstrate that Dynamic Managerial Capabilities and Digital Mindset, when considered simultaneously, have a significant combined effect on Strategic Leadership, confirming the overall explanatory power of the model.

Coefficient of Determination

Table 9. Coefficient of Determination Result

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.714a	.509	.499	.70928
a. Predictors: (Constant), Digital Mindset, Dynamic Managerial Capabilities				
b. Dependent Variable: Strategic Leadership				

Source: Processed Researcher Data, 2026

Based on the table above, the R Square value of 0.509 indicates that approximately 50.9% of the variance in Strategic Leadership can be explained by the independent variables, namely Dynamic Managerial Capabilities and Digital Mindset. The remaining 49.1% of the variation is attributable to other factors not included in the model. The Adjusted R Square value of 0.499 reflects a slight correction for the number of predictors used, suggesting that the model retains a relatively strong explanatory capability even after adjustment. In addition, the R value of 0.714 signifies a strong positive correlation between the independent variables and the dependent variable, indicating a robust relationship within the regression model.

Sobel Test

Table 10. Regression Analysis Results of the Influence of Dynamic Managerial Capabilities on Digital Mindset

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.648	.469		1.380	.171
	DMC	.935	.044	.906	21.146	.000
a. Dependent Variable: DM						

Source: Processed Researcher Data, 2026

Regression analysis showed that Dynamic Managerial Capabilities had a significant positive effect on Digital Mindset (B = 0.935, β = 0.906, t = 21.146, p < 0.001). These results indicate that higher Dynamic Managerial Capabilities are strongly associated with higher levels of Digital Mindset, confirming its important role in shaping managers' digital orientation.

Table 11. Results of Regression Analysis of the Influence of Digital Mindset on Strategic Leadership

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.848	1.027		2.773	.007
	DM	.965	.096	.711	10.013	.000
a. Dependent Variable: SL						

Source: Processed Researcher Data, 2026

Based on the table above, the regression results indicate that Digital Mindset has a coefficient value of 0.965 with a significance level of 0.000, demonstrating a strong and statistically significant positive effect on Strategic Leadership. This finding implies that higher levels of Digital Mindset are associated with increased levels of Strategic Leadership. The standardized coefficient (Beta) of 0.711 further reflects a substantial contribution of Digital Mindset in explaining the variance in Strategic Leadership, highlighting its importance within the model. This relationship is also supported by a high t-value of 10.013, which provides strong statistical evidence of the significance and robustness of the effect.

Table 12. Mediation Hypothesis Test Results (Sobel Test)

Variable	**Sobel test**	**P-value**	**Description**
Dynamic Managerial Capabilities → Digital Mindset → Strategic Leadership	9.0867	0.000	Significant mediation

Source: Processed Researcher Data, 2026

Regression analysis indicated that Digital Mindset had a significant positive effect on Strategic Leadership (B = 0.965, β = 0.711, t = 10.013, p < 0.001). These findings suggest that higher levels of Digital Mindset are associated with stronger Strategic Leadership, highlighting Digital Mindset as an important

predictor within the model.

Macro Process Model 4 Hayes

```
***************** PROCESS Procedure for SPSS Version 4.2 *****************
          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3
**************************************************************************
Model  : 4
    Y  : SL
    X  : DMC
    M  : DM

Sample
Size:  100
**************************************************************************
OUTCOME VARIABLE:
 DM

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .9057      .8202     2.4764   447.1426     1.0000    98.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant      .6477      .4694     1.3797      .1708     -.2839     1.5793
DMC           .9352      .0442    21.1457      .0000      .8475     1.0230
**************************************************************************
OUTCOME VARIABLE:
 SL

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7138      .5095    12.5771    50.3703     2.0000    97.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     2.5984     1.0682     2.4326      .0168      .4784     4.7184
DMC           .2031      .2351      .8639      .3898     -.2635      .6697
DM            .7871      .2276     3.4574      .0008      .3352     1.2389

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .2031      .2351      .8639      .3898     -.2635      .6697

Indirect effect(s) of X on Y:
       Effect     BootSE   BootLLCI   BootULCI
DM      .7361      .2118      .3428     1.1784
************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
------ END MATRIX -----
```

The direct effect analysis showed that Dynamic Managerial Capabilities (DMC) had a significant positive effect on Digital Mindset (DM) ($p < 0.001$) but no significant direct effect on Strategic Leadership (SL) ($p = 0.3898$). In contrast, Digital Mindset significantly influenced Strategic Leadership ($p = 0.0008$).

The indirect effect analysis further confirmed the mediating role of Digital Mindset, with bootstrap confidence intervals excluding zero (BootLLCI = 0.3428; BootULCI = 1.1784). These findings indicate that Digital Mindset fully mediates the relationship between Dynamic Managerial Capabilities and Strategic Leadership.

Discussion

The findings of this study provide several important theoretical and contextual insights into the relationship between Dynamic Managerial Capabilities (DMC), Digital Mindset, and Strategic Leadership, particularly within the startup ecosystem in emerging economies. First, the insignificant direct effect of DMC on Strategic Leadership, despite its positive direction, indicates that managerial capabilities alone are not sufficient to produce immediate or observable leadership effectiveness. This suggests that the translation of capabilities into strategic actions is not automatic, but instead depends on intervening mechanisms that enable their activation. In highly uncertain and resource-constrained startup environments, managerial capabilities may remain underutilized or only partially expressed due to limitations in organizational structure, financial capacity, and market stability. This reinforces the argument proposed by Hagen et al. (2024) that dynamic managerial capabilities are context-dependent and may not always yield direct performance outcomes.

From a contextual perspective, this finding highlights a critical distinction between startups in developed and developing economies. In more mature ecosystems, where infrastructure, access to capital, and institutional support are stronger, managerial capabilities are more likely to be directly translated into effective leadership behaviors (Igalla et al., 2020). In emerging markets such as Indonesia, structural constraints and environmental volatility may weaken this direct relationship. This aligns with contingency theory, which suggests that the effectiveness of managerial capabilities depends on environmental conditions (Mahmud et al., 2021). Therefore, the non-significant direct effect observed in this study can be interpreted as evidence that startup leaders require additional cognitive or strategic filters to convert their capabilities into impactful leadership practices.

The non-significant direct relationship between Dynamic Managerial Capabilities and Strategic Leadership also illuminates a critical boundary condition that distinguishes contemporary startups from traditional organizations: the diminishing relevance of conventional managerial competencies in hyper-accelerated digital environments. In traditional business settings, managerial capabilities such as operational oversight, rigid resource allocation, bureaucratic coordination, and static budget planning are often directly associated with leadership effectiveness, as they provide structure, predictability, and control (Kotter, 1990). However, in the context of Indonesian startups—which operate under conditions of extreme velocity, where market trends shift within weeks and technological disruptions emerge

unpredictably—these traditional managerial skills appear to have lost their direct correlation with strategic leadership outcomes.

This finding aligns with the observation that technical competencies, no matter how well-developed, become "sterile" or functionally inert when leaders lack the cognitive agility to interpret rapidly evolving digital signals. A leader may possess strong analytical skills, financial acumen, and operational expertise, yet these abilities remain largely ineffective if they are not filtered through a digital mindset that enables the leader to read emerging technological patterns, anticipate platform-based disruptions, and reorient organizational strategy accordingly. For instance, a manager with exceptional budgeting skills may still fail to lead strategically if they cannot recognize when a new digital payment system or artificial intelligence tool renders their existing resource allocation obsolete (Westerman et al., 2014). In this sense, technical proficiency without digital cognitive orientation is akin to possessing a sophisticated toolset but lacking the map to navigate the terrain.

Furthermore, the Indonesian startup ecosystem presents unique environmental characteristics that amplify this phenomenon. Unlike their counterparts in developed economies where digital infrastructure is relatively stable and predictable, Indonesian startups face simultaneously volatile conditions: fragmented digital adoption across regions, shifting regulatory landscapes, intense competition from both local and global players, and a talent pool that is still developing its digital literacy (Auliah et al., 2025). In such an environment, static managerial routines—such as annual strategic planning cycles, fixed operational procedures, or hierarchical decision-making—are not only ineffective but potentially detrimental. Leaders who rely solely on these traditional approaches risk becoming disconnected from the lived realities of their market, where consumer behaviors, platform ecosystems, and competitive dynamics evolve continuously. Therefore, the insignificance of DMC's direct effect should not be interpreted as evidence that managerial capabilities are unimportant, but rather as an indication that their value is contingent upon, and mediated through, a leader's cognitive readiness to engage with digital complexity.

This study's core finding—that Digital Mindset fully mediates the relationship between Dynamic Managerial Capabilities and Strategic Leadership—offers a meaningful refinement to Upper Echelons Theory (Hambrick & Mason, 1984). Upper Echelons Theory traditionally posits that organizational outcomes are a reflection of top managers' demographic characteristics, values, cognitive base, and limited rationality. However, the original formulation has often been criticized for its relative silence on the specific mechanisms through which managerial characteristics influence strategic choices, treating cognition largely as a "black box" (Hambrick, 2007). This study addresses this theoretical gap by empirically demonstrating that digital mindset operates as a critical cognitive filter that mediates the translation of managerial capabilities into strategic leadership behaviors.

More specifically, the findings suggest that the Upper Echelons framework must be expanded to recognize that managerial cognition is not monolithic but consists of multiple domain-specific orientations. Within the domain of digital transformation, the traditional cognitive base described by Hambrick and Mason—comprising managers' experiences, values, and problem-solving heuristics—is insufficient to explain leadership effectiveness. Leaders require a specialized digital cognitive orientation, which we term digital mindset, that allows them to perceive technological opportunities, evaluate digital threats, and frame strategic decisions within a digitally connected reality. Without this specific cognitive lens, even the most capable managers may fail to translate their expertise into actions that resonate with contemporary market demands (Baiyere et al., 2025).

Furthermore, the full mediation finding adds nuance to the theory's treatment of the relationship between managerial characteristics and strategic outcomes. While Upper Echelons Theory acknowledges that managerial characteristics influence strategic choices through the manager's interpretation of the environment (Hambrick & Mason, 1984), it does not fully elaborate on the sequential cognitive processes involved. This study demonstrates that dynamic managerial capabilities—which represent the "capacity" dimension of managerial resources—must first undergo a cognitive transformation into a digital-oriented mental framework before they can manifest as effective strategic leadership. In other words, the pathway from what managers are capable of doing to what they actually achieve strategically is intermediated by how they think digitally. This cognitive mediation layer extends Upper Echelons Theory by introducing a temporal and transformational sequence: capabilities are not directly enacted; they are first cognitively processed, interpreted, and reframed through a digital mindset, which then shapes strategic leadership behavior.

This perspective also addresses an implicit assumption in Upper Echelons Theory that the link between managerial characteristics and strategic outcomes is relatively direct and linear. The mediation model proposed and tested in this study suggests a more intricate pathway, wherein the cognitive orientation of leaders serves as a necessary interpretive lens that determines the strategic relevance of their capabilities. In the context of Indonesian startups, where the digital landscape is both rapidly changing and highly uncertain, this interpretive function becomes even more critical. Leaders who fail to develop a digital mindset may find their otherwise strong managerial capabilities rendered ineffective because they are unable to frame their decisions within the appropriate technological context (Rahmadani, 2025). Thus, the study contributes to the refinement of Upper Echelons Theory by emphasizing the mediating role of domain-specific cognition and by situating this refinement within the empirical context of an emerging digital economy.

Second, the strong and significant effect of DMC on Digital Mindset confirms that managerial capabilities primarily operate at the cognitive level. This finding extends the upper echelons theory

Hambrick & Mason (1984) by emphasizing that the cognitive dimension of leadership plays a central role in shaping organizational responses to digital transformation. Leaders with high dynamic capabilities are more likely to develop flexible and adaptive mental models, enabling them to interpret technological change as an opportunity rather than a threat (Konlechner et al., 2018). This cognitive adaptability fosters openness to innovation, encourages experimentation, and supports data-driven decision-making, all of which are fundamental characteristics of a digital mindset. Thus, DMC can be seen as a precursor that shapes how leaders think, rather than directly determining what they do.

Third, the significant influence of Digital Mindset on Strategic Leadership underscores the growing importance of cognitive orientation toward technology in determining leadership effectiveness in the digital era. Leaders who possess a strong digital mindset are better equipped to integrate digital tools into strategic processes, anticipate market disruptions, and drive innovation across organizational functions (Rahmadani, 2025). This finding reinforces the argument that strategic leadership in contemporary organizations is no longer solely based on traditional managerial competencies, but increasingly depends on digital awareness and technological literacy. In this sense, digital mindset serves as a critical enabler that bridges the gap between abstract capabilities and concrete strategic actions.

Most importantly, the full mediation effect of Digital Mindset provides a deeper theoretical contribution by demonstrating that DMC influence Strategic Leadership only through cognitive transformation. This finding supports the notion of cognition-driven capability deployment, where internal mental frameworks determine how capabilities are interpreted and enacted (Tran et al., 2024). Rather than functioning as a direct driver, DMC act as a latent resource that must first be internalized into a digital-oriented mindset before it can generate meaningful leadership outcomes. This extends the dynamic capability framework by introducing a cognitive mediation layer, suggesting that the effectiveness of capabilities is contingent upon how they are cognitively processed by leaders.

Furthermore, this study contributes to the evolving literature on digital leadership by shifting the analytical focus from capability possession to capability interpretation. It suggests that having strong managerial capabilities is insufficient in the absence of a digital mindset that aligns those capabilities with technological opportunities (Baiyere et al., 2025). In other words, leadership effectiveness in the digital era depends not only on what leaders are capable of doing, but also on how they perceive, frame, and utilize those capabilities within a rapidly evolving digital landscape. This perspective is particularly relevant for startups, where rapid technological change requires leaders to continuously reinterpret their strategic environment.

Taken together, the results of this study reveal a fundamental shift in how leadership effectiveness must be understood in the digital age. Traditional models of leadership, which emphasize hierarchical

authority, operational control, and formal strategic planning, are increasingly inadequate for explaining how leaders succeed in the volatile, uncertain, complex, and ambiguous (VUCA) environment of the startup ecosystem. The mediating role of Digital Mindset in this study demonstrates that the most critical leadership competency in the contemporary digital landscape is not merely the possession of technical or managerial skills, but rather the cognitive capacity to perceive, interpret, and act upon digital opportunities and threats. This suggests that leadership development programs, both within startups and in the broader organizational context, must prioritize cognitive reorientation toward digital thinking as a foundational competency, rather than treating digital literacy as a secondary or peripheral skill.

Theoretically, this study contributes to the ongoing evolution of strategic leadership literature by integrating insights from dynamic capabilities theory, upper echelons theory, and digital cognition research into a unified mediation framework. By demonstrating that Digital Mindset serves as the conduit through which Dynamic Managerial Capabilities influence Strategic Leadership, the study offers a more nuanced understanding of how leaders can effectively navigate digital transformation. This integration provides a theoretical bridge between resource-based views of the firm and cognitive perspectives on leadership, suggesting that organizational success in the digital era depends not only on what resources leaders possess, but also on how their cognitive frameworks enable them to activate and deploy those resources strategically. For future research, this opens avenues for exploring other potential mediators—such as digital self-efficacy, technological readiness, or innovation orientation—that may further refine our understanding of the cognitive pathways underpinning strategic leadership in digital contexts.

These findings carry important practical implications for startup development. Organizations should not only invest in enhancing managerial capabilities through training and experience but also prioritize the development of a digital mindset among leaders. This can be achieved through digital literacy programs, exposure to technological innovation, and the cultivation of a culture that encourages experimentation and learning. By aligning managerial capabilities with a strong digital orientation, startups can improve their ability to translate internal resources into effective strategic leadership and, ultimately, achieve sustainable growth in an increasingly competitive digital economy.

4. CONCLUSION

This study confirms that Digital Mindset fully mediates the relationship between Dynamic Managerial Capabilities (DMC) and Strategic Leadership among Indonesian startup managers. While DMC has no significant direct effect on Strategic Leadership (p = 0.390), it influences leadership indirectly through Digital Mindset (BootLLCI = 0.3428; BootULCI = 1.1784), with the model explaining

50.9% of the variance in Strategic Leadership. The findings extend Upper Echelons Theory by highlighting Digital Mindset as a domain-specific cognitive mechanism that translates managerial capabilities into strategic leadership. Practically, startups should strengthen leaders' digital cognitive capabilities through digital competency-based performance indicators, executive digital literacy programs, and cognitive coaching. However, the study is limited by its cross-sectional design, self-reported data, LinkedIn-based sampling, and a relatively small sample size (N = 100). Future research should employ longitudinal and mixed-methods designs, include moderating variables such as firm age and funding stage, and conduct cross-country comparisons to further examine digital leadership in startup ecosystems.

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