The Agile Mindset: Design Thinking and Organizational Agility as Catalysts for Startup Performance

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Abstract. This study investigates the mediating roles of design thinking (DT) and organizational agility (OA) in translating entrepreneurial orientation (EO) and entrepreneurial marketing (EM) into enhanced startup business performance, focusing on the regional context of West Java, Indonesia. Employing a quantitative approach supplemented with qualitative insights, data were collected from 215 startups through structured surveys combined with semi-structured interviews to enrich the interpretation of the quantitative findings. Structural equation modeling (SEM) with bootstrapping was employed to test both the direct and indirect effects among the constructs under investigation. The results indicate that design thinking and organizational agility significantly mediate the relationships between entrepreneurial orientation and performance, as well as between entrepreneurial marketing and performance. Startups that integrate agile digital tools with human-centered design practices demonstrate superior outcomes across multiple performance dimensions, including financial performance, market share growth, and customer satisfaction. These findings extend the application of dynamic capability theory to the regional startup context of an emerging market, contributing to the theoretical understanding of how entrepreneurial capabilities are converted into performance outcomes through mediating mechanisms. Practically, the study offers actionable guidance for entrepreneurs seeking to strengthen innovation-driven growth strategies and for policymakers aiming to design supportive ecosystems for startup development in emerging markets such as Indonesia.

Keywords: Design Thinking · Organizational Agility · Entrepreneurial Orientation · Entrepreneurial Marketing, Startup Performance.

1 Introduction

The dynamic landscape of startups demands innovative management frameworks to sustain competitive advantage in volatile markets [1, 2]. Entrepreneurial orientation (EO) encompassing innovativeness, risk-taking, and proactiveness and entrepreneurial marketing (EM) leveraging resource-efficient, opportunity-driven tactics are widely recognized as primary drivers of startup performance [3, 4]. However, the mechanisms

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through which EO and EM translate into tangible outcomes remain underexplored, particularly in emerging regional ecosystems [5].

Design thinking (DT) and organizational agility (OA) have emerged as critical enablers in this translation process. DT, a human-centered iterative methodology emphasizing empathy, ideation, and rapid prototyping [6], enables startups to develop customer-responsive innovations [7]. OA, defined as an organization's capacity to sense and rapidly adapt to environmental changes [8, 9], is reinforced by digital tools such as cloud platforms and collaborative software that streamline cross-functional coordination [1, 10]. Despite growing scholarly interest, few studies have simultaneously examined both mediators within an integrated entrepreneurial framework, especially in the West Java contexta region experiencing rapid digital economic growth yet understudied in international literature [11, 12].

This study addresses this gap by investigating: How do design thinking and organizational agility mediate the relationship between entrepreneurial orientation, entrepreneurial marketing, and startup business performance in West Java? Three hypotheses are proposed: (H1) DT mediates the EO–performance relationship; (H2) OA mediates the EO–performance relationship; and (H3) the combined EO–EM synergy is amplified by DT and OA. The study contributes to dynamic capability theory [2] and provides empirical evidence from 215 West Java startups.

2 Methods

Research Design. A quantitative cross-sectional survey was employed, supplemented by qualitative semi-structured interviews for triangulation. EO and EM are treated as independent variables; startup business performance (BP) is the dependent variable; DT and OA serve as mediators. The framework is grounded in the resource-based view [13] and dynamic capability theory [2].

Sampling and Data Collection. Data were gathered from 215 startups in West Java between January and December 2022. Respondents were founders and senior managers. Constructs were measured via validated five-point Likert scales adapted from prior literature [1, 3, 9]. Qualitative interviews (n = 20) explored DT and OA adoption in depth. Purposive and snowball sampling ensured sector diversity across technology, creative industries, and trade.

Analytical Approach. Structural equation modeling (SEM) using AMOS 24 tested the measurement and structural models. Confirmatory factor analysis (CFA) verified construct reliability ($\alpha > 0.70$) and validity (AVE > 0.50). Bootstrapping (5,000 resamples) assessed mediation significance [14]. Qualitative data were analyzed through inductive thematic coding [15].

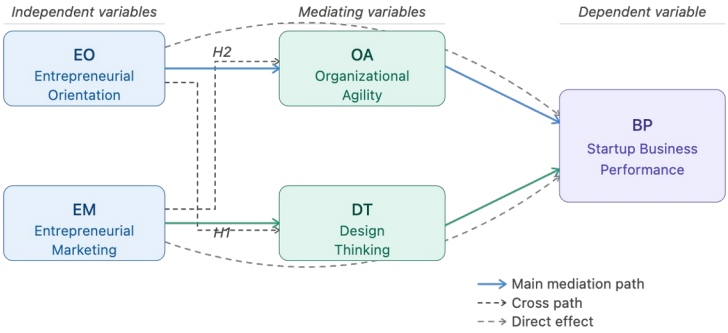

Fig. 1. Conceptual framework of the mediating effects of DT and OA.

Source : Author's Work

3 Results and Discussion

3.1 Mediation of Organizational Agility (H2)

Organizational agility significantly mediated the EO–performance relationship (indirect effect = 0.171, $p < .01$), supporting H2 (Table 1). Startups leveraging cloud-based services and collaboration platforms such as project management tools exhibited faster innovation cycles and superior market responsiveness, consistent with [1] and [14]. The path OA → BP ($\beta = 0.38$, $p < .001$) confirms that agile practices amplify the inherent entrepreneurial potential of startups. Qualitative findings corroborate this: managers cited "real-time information sharing" as instrumental in enabling rapid pivoting during market disruptions.

Table 1. Structural path coefficients — organizational agility mediation.

Path	Coefficient	t-value	Significance
EO → BP (direct)	0.32	3.28	$p < .01$
EO → OA	0.45	4.12	$p < .001$
OA → BP	0.38	3.56	$p < .001$
Indirect (EO → OA → BP)	0.171	3.40	$p < .01$

Source : Author's Work

3.2 Mediation of Design Thinking (H1)

Design thinking significantly mediated the EM–performance relationship (indirect effect = 0.144, $p < .01$), supporting H1 (Table 2). The path EM → DT ($\beta = 0.41$, $p < .001$) and DT → BP ($\beta = 0.35$, $p < .001$) confirm that iterative, user-centered problem-solving converts entrepreneurial marketing initiatives into market-resonant offerings. Startups conducting empathy-mapping workshops and rapid-prototype testing reported

23 % higher customer satisfaction scores than counterparts relying on conventional product development. These findings align with the innovation-amplifying role of DT documented in the broader literature [6, 7].

Table 2. Structural path coefficients — design thinking mediation.

Path	Coefficient	t-value	Significance
EM → BP (direct)	0.28	3.05	p < .01
EM → DT	0.41	3.89	p < .001
DT → BP	0.35	3.60	p < .001
Indirect (EM → DT → BP)	0.144	3.20	p < .01

Source : Author's Work

3.3 EO–EM Synergy and Integrated Mediation (H3)

The interaction analysis confirms H3: startups simultaneously exhibiting high EO and high EM consistently outperform across all business performance dimensions (Table 3). This synergy is most pronounced when DT and OA jointly mediate the relationship, indicating that creative strategic orientation and agile execution are complementary rather than substitutable. High-EO/High-EM startups achieved the highest scores in financial outcomes, market share, and customer satisfaction, underscoring that entrepreneurial intent must be operationalized through structured agile and human-centered practices [2, 3, 4]. Regional factors including West Java's young demographic, rising digital penetration, and supportive incubator ecosystem further amplify these mediation effects [6].

Table 3. Interaction effects of EO and EM on business performance indicators.

Performance Indicator	Low EO/Low EM	High EO/Low EM	Low EO/High EM	High EO/High EM
Financial Outcome	Moderate	Moderate	Above Avg.	High
Market Share Growth	Low	Moderate	Moderate	High
Customer Satisfaction	Moderate	Low	Moderate	High

Source : Author's Work

4 Conclusion

This study demonstrates that design thinking and organizational agility serve as pivotal mediators through which entrepreneurial orientation and entrepreneurial marketing enhance startup business performance in West Java. By integrating these two mediators, startups can systematically convert entrepreneurial intent into superior financial, market, and customer-centric outcomes. The findings extend dynamic

capability theory to a regional Southeast Asian startup context and provide actionable guidance: startups should embed DT methodologies into product development cycles and adopt cloud-based agile platforms to accelerate innovation. Policymakers and business incubators should invest in DT training programs and digital infrastructure to nurture an innovation-driven entrepreneurial ecosystem. Future research should explore longitudinal effects, cross-regional comparisons, and additional mediating constructs such as ambidexterity and digital literacy.

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References

1. Gonçalves, D., et al.: How digital tools align with organizational agility and strengthen digital innovation in automotive startups. Procedia Comput. Sci. 196, 107–116 (2022).
2. Teece, D., Peteraf, M., Leih, S.: Dynamic capabilities and organizational agility: risk, uncertainty and entrepreneurial management in the innovation economy. Calif. Manage. Rev. 58(4), 13–35 (2016).
3. Brettel, M., Mauer, R., Engelen, A., Küpper, D.: Corporate effectuation: entrepreneurial action and its impact on R&D project performance. J. Bus. Venturing 27(2), 167–184 (2012).
4. Weiblen, T., Chesbrough, H.W.: Engaging with startups to enhance corporate innovation. Calif. Manage. Rev. 57(2), 66–90 (2015).
5. Tallon, P.P., Pinsonneault, A.: Competing perspectives on the link between strategic information technology alignment and organizational agility. MIS Q. 35(2), 463–486 (2011).
6. Eisenhardt, K.M.: What is the Eisenhardt Method, really? Strateg. Organ. 19(1), 147–160 (2021).
7. Lyytinen, K., Yoo, Y., Boland, R.J.: Digital product innovation within four classes of innovation networks. Inf. Syst. J. 26(1), 47–75 (2016).
8. Crocitto, M., Youseef, M.: The human side of organizational agility. Ind. Manage. Data Syst. 103(6), 388–397 (2003).
9. Conboy, K.: Agility from first principles: reconstructing the concept of agility in information systems development. Inf. Syst. Res. 20(3), 329–354 (2009).
10. Gonçalves, D., et al.: Cultural aspects of organizational agility affecting digital innovation. J. Entrep. Manag. Innov. 16(4), 13–46 (2020).
11. Goldman, S.L., Nagel, R.N., Preiss, K.: Agile Competitors and Virtual Organizations. Van Nostrand Reinhold, New York (1995).
12. Felipe, C.M., Roldán, J.L., Leal-Rodriguez, A.L.: Impact of organizational culture values on organizational agility. Sustainability 9(12), 2354 (2017).
13. Bryman, A.: Social Research Methods. Oxford University Press, New York (2012).
14. Schein, E.H.: Organizational Culture and Leadership, 3rd edn. Jossey-Bass, San Francisco (2004).
15. Myers, M.D.: Qualitative Research in Business & Management, 2nd edn. SAGE, London (2013).

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