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# Strategic Marketing Innovation in Startups: Navigating Uncertainty with Agility and Creativity

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## ABSTRACT

This research investigates the role of strategic marketing innovation in helping startups navigate uncertainty by leveraging agility and creativity. Amid the dynamic shifts brought about by globalization, technological advancement, and events such as the COVID-19 pandemic, startups are required to develop unique and adaptive marketing approaches to remain competitive and sustainable. The purpose of this study is to explore how agility the ability to respond rapidly to change and creativity the capacity to generate novel and valuable marketing solutions jointly influence strategic marketing innovation in startups. A descriptive quantitative method was applied to analyze patterns, effectiveness, and interrelations among agility, creativity, and marketing innovation in startups operating within dynamic sectors. Data were collected through structured surveys administered to startup founders and marketing professionals, and analyzed using correlation and regression techniques. The findings reveal that marketing agility significantly enhances startups' ability to adapt marketing strategies in real time, while creativity contributes to differentiation, brand resonance, and consumer engagement. Moreover, the interaction between agility and creativity produces synergistic outcomes in terms of marketing innovation effectiveness. Digital capability and market sensing were found to moderate these relationships, further strengthening their influence on startup performance. The study concludes that strategic marketing innovation, supported by agile and creative capabilities, plays a critical mediating role in translating internal competencies into performance outcomes such as customer acquisition, brand positioning, and market responsiveness. This research provides theoretical and practical insights for startup founders, investors, and policymakers aiming to foster innovation and resilience in early-stage ventures.

**Keywords:** Startups, Marketing Innovation, Agility, Creativity, Digital Capability.

## I. Introduction



In the rapidly evolving global economy, startups have emerged as critical engines of innovation, growth, and job creation. Their agility, lean structures, and disruptive capabilities often position them to challenge established market norms and bring forward novel products and services. However, the very nature of startups, characterized by limited resources, evolving business models, and high degrees of uncertainty, demands unique and strategic approaches to marketing. Marketing innovation, which encompasses developing new marketing methods involving significant changes in product design, packaging, placement, promotion, and pricing strategies, has become an indispensable tool for startups navigating volatile environments. In the context of startups, strategic marketing innovation is not merely a competitive advantage but often a matter of survival. Unlike large corporations with established brand equity and extensive capital, startups must differentiate themselves through creativity and adaptability. The uncertainty and dynamic shifts within markets, consumer preferences, and technological advancements intensify this need. Thus, strategic marketing innovation becomes a mechanism through which startups can communicate value, create customer engagement, and adapt their offerings in alignment with ever-changing market conditions. Agility, the capacity to respond quickly to change, and creativity, the ability to generate novel and practical solutions, are central to how startups manage this dynamic process (Liu et al., 2023).

Digital technologies, social media, and data analytics have also revolutionized the startup marketing landscape. Platforms such as Instagram, TikTok, and LinkedIn, alongside tools like SEO optimization and customer data platforms, have enabled startups to implement cost-effective and highly targeted marketing strategies. Strategic marketing innovation in this digital era requires startups to constantly experiment, measure, and iterate on their marketing campaigns. As evidenced in the study by Dwivedi et al. (2021), startups that embrace data-driven and experimental approaches to marketing tend to outperform their peers in customer acquisition and retention. These digital innovations also offer avenues for startups to build emotional connections with consumers through storytelling, community-building, and influencer partnerships strategies that require agility in execution and creativity in design. Despite these opportunities, the high level of uncertainty in startup environments presents significant challenges. Startups must operate with limited information about customer preferences, competitive dynamics, and regulatory environments. Teixeira and Piechota (2022) noted that uncertainty can derail conventional marketing strategies and necessitate rapid pivots. The ability to innovate strategically in marketing enables startups to cope with uncertainty and thrive within it. Through adaptive learning, scenario planning, and creative problem-solving, strategic marketing innovation is a buffer against risk and a catalyst for opportunity recognition.

Empirical studies on marketing innovation in startups further highlight the importance of flexibility and learning orientation. For instance, the work of Schilling and Shankar (2020) illustrates that startups that embed continuous learning into their marketing processes by testing new campaigns, gathering customer feedback, and adjusting quickly demonstrate higher growth trajectories. Similarly, Hills, Hultman, and Miles' (2008) research shows that entrepreneurial marketing, a paradigm closely aligned with startup contexts, emphasizes opportunity-driven, proactive, and innovative marketing behaviors. These characteristics support the idea that strategic marketing innovation is inherently intertwined with the entrepreneurial mindset, particularly in managing ambiguity and resource constraints. At a more granular level, startups deploy various innovative marketing strategies, including guerrilla marketing, viral content creation, co-branding, and crowdsourced campaigns. These approaches leverage the strengths of startups: speed, informality, and direct engagement with consumers. Such strategies often do not require extensive budgets but rely heavily on creativity,

authenticity, and the ability to iterate rapidly. For example, the case study by Ramaswamy and Ozcan (2016) on co-creation in marketing innovation highlights how startups engage customers as partners in value creation, leading to deeper loyalty and more relevant offerings. This participatory approach to marketing aligns with the modern consumer's desire for personalized and meaningful interactions, further emphasizing the strategic role of innovation in marketing.

From a theoretical standpoint, the Resource-Based View (RBV) and Dynamic Capabilities Theory offer valuable frameworks for understanding strategic marketing innovation in startups. The RBV posits that competitive advantage stems from unique, valuable, and inimitable resources (Barney, 1991). In startups, marketing capabilities such as branding, digital outreach, and customer analytics can serve as such resources when developed innovatively. On the other hand, Dynamic Capabilities Theory, as elaborated by Teece (2007), stresses the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Strategic marketing innovation fits squarely within this paradigm, as it involves sensing market changes, seizing opportunities, and transforming marketing practices accordingly. The relevance of studying strategic marketing innovation in startups becomes even more pronounced in light of recent global disruptions, such as the COVID-19 pandemic. This crisis accelerated digital transformation and forced many startups to rethink their customer engagement strategies. According to Kumar et al. (2021), those startups that swiftly adopted new marketing tools—such as virtual events, digital storytelling, and e-commerce integrations—were better able to retain customers and even grow their market share during the pandemic. These findings reinforce the idea that agility and creativity in marketing are not merely reactive capabilities but can serve as proactive strategies for long-term resilience.

In Indonesia and other emerging economies, startups drive digital economic growth. Government initiatives, venture capital support, and a young, tech-savvy population have contributed to a burgeoning startup ecosystem. However, these startups often face institutional voids, infrastructural challenges, and highly competitive landscapes. As Yusuf and Kadir (2022) noted, the ability to innovate in marketing by tapping into cultural narratives, local influencer networks, and mobile-based customer engagement is a key determinant of startup sustainability in such contexts. The localized application of strategic marketing innovation further underscores the importance of context-specific agility and creativity.

Given the dynamic nature of startup environments and the critical importance of strategic marketing innovation, there remains a need for empirical research that captures the patterns, challenges, and outcomes of such practices. While existing literature has explored innovation in general and marketing innovation in established firms, relatively few studies focus explicitly on how startups navigate uncertainty using strategic marketing innovation in real-world scenarios. Moreover, the interplay between agility and creativity, dual enablers of innovative marketing, has not been sufficiently quantified in descriptive contexts. This gap provides a compelling rationale for the present study, which analyzes how startups implement and benefit from strategic marketing innovation in uncertain environments. Accordingly, this descriptive quantitative research aims to examine the role of agility and creativity in enabling strategic marketing innovation within startups. By focusing on startups operating in highly dynamic sectors, this study seeks to identify the patterns of marketing innovation, the extent of agility and creativity in practice, and the perceived effectiveness of these strategies in achieving customer engagement, brand recognition, and market adaptability. The findings are expected to contribute both to academic understanding and practical applications, offering insights into how startups can better design marketing strategies that are responsive, innovative, and strategically aligned.

Strategic marketing innovation stands at the intersection of creativity, agility, and market responsiveness, key pillars for startup survival and success in uncertain environments. With the proliferation of digital technologies, changing consumer behaviors, and increasing market volatility, the ability of startups to innovate in their marketing approaches is more critical than ever. This research builds on prior studies and theoretical frameworks to comprehensively examine how startups leverage strategic marketing innovation to navigate uncertainty, uncover opportunities, and build sustainable competitive advantages.

## II. Literature Review

### 2.1 Conceptual Foundations of Strategic Marketing Innovation in Startups

Strategic marketing innovation is increasingly recognized as a vital capability for startups navigating today's fast-changing and uncertain market environments. It refers to the systematic application of new marketing methods, including changes in product design, packaging, distribution, promotion, and pricing, aiming to deliver added value to customers and gain a competitive edge (OECD, 2005). For startups, marketing innovation transcends traditional practices, demanding continuous rethinking of how value is created and communicated under constraints of time, budget, and information (Ries, 2011). Unlike established firms, startups lack brand equity, significant market shares, and institutional legitimacy, making strategic marketing innovation desirable and necessary for survival (Blank, 2013). The theoretical underpinnings of strategic marketing innovation in startups are best understood through the Resource-Based View (RBV) and Dynamic Capabilities Theory. The RBV posits that unique, valuable, and inimitable resources within a firm are the basis of competitive advantage (Barney, 1991). Marketing capabilities—primarily when they reflect innovative practices—are such resources. However, in dynamic and unpredictable environments, static resources are insufficient. Teece, Pisano, and Shuen (1997) argue for dynamic capabilities, a firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Within this context, strategic marketing innovation functions as a dynamic capability, enabling startups to sense market changes, seize opportunities, and transform marketing strategies accordingly (Teece, 2007).

Agility and creativity emerge as the two critical competencies underpinning strategic marketing innovation. Marketing agility is a firm's ability to quickly adapt marketing strategies and tactics in response to environmental shifts, customer feedback, or competitive actions (Kalaighnam et al., 2021). It is especially salient in uncertain startup environments, where traditional long-term marketing planning is often infeasible. Instead, startups rely on iterative, experimental approaches—developing minimum viable campaigns, testing them in real time, and refining based on market reactions (Ries, 2011; Eckstein et al., 2023). Agility allows startups to reduce time-to-market, rapidly respond to user feedback, and stay relevant in volatile demand. Creativity complements agility by driving the generation of novel and valuable marketing ideas. In startups, creativity is often exercised under resource scarcity, which paradoxically fuels unconventional thinking (Ward, 2004). The concept of "creative constraint" suggests that budget, personnel, or time limits push startup teams to generate unique solutions that larger firms might overlook (Goldenberg et al., 1999). This creativity manifests in messaging and design, channel strategies, pricing models, and community engagement. Furthermore, the rise of digital platforms has

amplified the role of creativity, enabling viral marketing, storytelling, and co-created branding efforts that build emotional connections with target audiences (O'Hern & Rindfleisch, 2010).

The co-existence of agility and creativity provides a synergistic foundation for strategic marketing innovation. Startups must respond quickly to change (agility) and generate ideas worth executing (creativity). Studies show that firms exhibiting both traits outperform those emphasizing only one (Rosing et al., 2011; He & Wong, 2004). This dual capability equips startups to iterate not just quickly but wisely, prioritizing campaigns and innovations that are strategically aligned and creatively distinctive. For instance, a startup leveraging real-time customer feedback (agility) to co-develop a user-generated advertising campaign (creativity) will likely achieve higher engagement and brand loyalty. Strategic marketing innovation in startups is a multidimensional construct grounded in robust theoretical frameworks operationalized through the interdependent competencies of agility and creativity. It transforms marketing from a static function into a dynamic, adaptive, and customer-centric process. As startups continue to proliferate across global markets, driven by technological advancement and entrepreneurial ambition, strategic marketing innovation becomes increasingly central to their ability to survive, compete, and grow. This literature review continues by examining empirical studies that provide deeper insights into how startups operationalize marketing agility and creativity to drive performance outcomes in uncertain environments.

## 2.2 Empirical Evidence Linking Marketing Agility and Performance

A growing body of empirical research confirms that marketing agility is critical to startup performance, especially under uncertain and rapidly changing market conditions. Marketing agility is frequently operationalized through responsiveness, proactiveness, flexibility, and speed in executing marketing tasks. Yi, Jun, and Amenuvor (2024) conducted an in-depth study of 319 South Korean startups, revealing that marketing agility positively influenced new product creativity and improved startup performance in terms of customer acquisition and financial outcomes. Notably, the study found that technological turbulence amplified the relationship between marketing agility and innovation success, suggesting that agile startups are better positioned in highly dynamic markets to translate insights into actionable and creative strategies. This evidence underscores that agility is a strategic asset and a necessary condition for navigating instability in startup ecosystems.

Another empirical contribution comes from Abbas and Ali (2024), who analyzed 447 FinTech firms in Pakistan to assess the impact of marketing agility on firm performance. Their findings indicated a significant positive effect of agility on market performance and brand equity. Interestingly, a data-driven culture was found to moderate this relationship, reinforcing that marketing agility functions most effectively when supported by organizational infrastructure encouraging experimentation and rapid learning. The researchers also emphasized that marketing agility enabled FinTech startups to align better with shifting customer expectations, sustaining competitive advantage despite regulatory uncertainties. These findings support the idea that marketing agility yields robust and adaptable marketing capabilities in startups when combined with a learning orientation.

The contribution of agile marketing methodologies extends to the digital domain as well. Kalaiganam et al. (2021) and Eckstein et al. (2023) describe how agile marketing teams in startups operate under iterative development, cross-functional collaboration, and real-time feedback loops. In their cross-industry survey, firms that adopted agile methods reported faster campaign execution, higher customer responsiveness, and improved innovation rates. These methodologies align with the

lean startup model, which advocates for rapid prototyping and hypothesis-driven experimentation to minimize waste and optimize learning (Ries, 2011). Through agile marketing practices, startups can shorten the feedback cycle between market signals and marketing responses, a capability that significantly enhances strategic adaptability and time-to-market efficiency. Moreover, a recent study by Kim, Park, and Lee (2024) introduced a nuanced model in which marketing agility mediates digital capability and performance outcomes. Their findings, drawn from a sample of e-commerce startups, demonstrated that while digital tools provide access to customer insights and analytics, the agile application of these tools in campaign design, targeting, and repositioning ultimately determines effectiveness. The researchers concluded that marketing agility transforms digital potential into tangible business results by enabling rapid execution and iterative refinement of marketing strategies. This insight is particularly relevant as startups increasingly operate in data-rich but attention-poor environments, where the ability to act quickly on insights determines competitive success.

These empirical studies reinforce the strategic significance of marketing agility for startups. They highlight that agility is not an isolated trait but operates in conjunction with cultural, technological, and structural enablers. Furthermore, the research underscores the conditional nature of agility's impact, suggesting that its benefits are maximized under high uncertainty, technological dynamism, and supportive organizational contexts. As startups face market disruptions, evolving customer behaviors, and rapid digitalization, marketing agility will likely remain a cornerstone of innovative and adaptive marketing practices. This body of evidence lays a solid foundation for understanding how agility functions within the broader architecture of strategic marketing innovation in startups.

### 2.3 Creativity and Co-creation: Strategic Drivers in Startup Innovation

Creativity is one of the cornerstones of strategic marketing innovation, particularly within the startup context, where resource constraints and rapid change create fertile ground for original and adaptive thinking. Unlike established corporations that benefit from formalized processes and brand recognition, startups often must capture attention and market share through inventive tactics that resonate with their target audiences. This necessity positions creativity not merely as an aesthetic choice, but as a strategic imperative. The literature supports this view, with researchers asserting that creative marketing allows startups to signal differentiation, trigger emotional responses, and create memorable brand impressions (Ward, 2004; Goldenberg et al., 1999). In high-velocity markets, the ability to craft imaginative campaigns, product experiences, or distribution strategies contributes directly to a startup's visibility and perceived innovativeness, which is critical to early adoption and growth.

One effective avenue through which startups channel creativity is customer co-creation. Co-creation refers to involving consumers actively in developing or promoting products and services, fostering a sense of shared ownership and deepened brand engagement (Prahalad & Ramaswamy, 2004; O'Hern & Rindfleisch, 2010). In startup environments, co-creation often appears through user-generated content, participatory design initiatives, or community-led marketing. These approaches do more than cut costs; they also act as validation mechanisms for new concepts and enhance trust in the brand. For instance, crowdfunding platforms like Kickstarter and Indiegogo illustrate how consumer feedback and support can be harnessed to shape the product and the marketing narrative. The outcome is a more authentic, transparent marketing strategy that reflects the values and expectations of the target customer base, enhancing credibility and market resonance.

Empirical studies have validated the positive effects of co-creation and creativity on startup success. In their study of entrepreneurial ventures, Ozer (2020) found that startups engaging in co-creative marketing activities were significantly more likely to achieve product-market fit and build loyal customer communities. The role of creative leadership also emerged as crucial, where founders who fostered an internal culture of experimentation and openness to ideas led firms that exhibited higher marketing innovation. Another study by Bocken et al. (2022) emphasized the strategic benefits of "grassroots innovation," where ideas emerging from customers, frontline employees, or informal networks proved instrumental in creating marketing breakthroughs in resource-constrained environments. These findings suggest that creativity, particularly when decentralized and inclusive, acts as a multiplier of strategic marketing efforts.

Moreover, digital transformation has expanded the boundaries and tools of creative marketing. Digital storytelling, social media influencers, augmented reality campaigns, and interactive content have provided startups unprecedented avenues to convey their brand identity in immersive and cost-effective ways (Liu et al., 2023). For example, platforms like Instagram, TikTok, and YouTube enable startups to produce short-form, visually engaging narratives that rapidly build brand communities. The interplay between data analytics and creative content development also enhances personalization, allowing marketing strategies to be uniquely tailored to specific consumer segments. Studies by Ramaswamy and Ozcan (2016) highlight how digital co-creation environments empower startups to integrate real-time feedback into campaign iterations, maximizing relevance and emotional impact. Consequently, creativity in strategic marketing is no longer confined to idea generation but extends into dynamic execution supported by technological agility. Creativity and co-creation are not peripheral enhancements but central drivers of strategic marketing innovation in startups. These capabilities allow startups to compensate for structural disadvantages by building emotionally resonant and differentiated marketing strategies. Supported by digital tools and participatory frameworks, creativity enables startups to foster engagement, loyalty, and adaptability in fast-paced markets. The literature convincingly demonstrates that when startups embed creativity into their core marketing processes—from idea generation to execution—they unlock new forms of value creation and competitive advantage. These insights pave the way for further exploration into how creativity integrates with agility and sensing to shape holistic marketing innovation strategies, particularly under conditions of uncertainty and constraint.

First, marketing agility, defined as a startup's capacity to rapidly adapt and execute marketing strategies in response to environmental changes, is consistently associated with improved innovation and performance. This leads to the first hypothesis.

H1: Marketing agility positively affects strategic marketing innovation in startups. This hypothesis reflects the findings of Kalaighnam et al. (2021), Yi et al. (2024), and Eckstein et al. (2023), who all emphasize agility's influence on marketing responsiveness and effectiveness.

Second, creativity and co-creation, as sources of novel idea generation and consumer engagement, contribute to the distinctiveness and relevance of marketing campaigns. Given the evidence from Goldenberg et al. (1999), Ozer (2020), and Prahalad and Ramaswamy (2004), a second hypothesis is proposed:

H2: Creativity and co-creation practices positively influence strategic marketing innovation in startups. This reflects how participatory and grassroots innovation approaches enhance brand differentiation and emotional resonance.

Third, marketing agility and creativity are not mutually exclusive; they interact synergistically. An agile and creative startup can iterate quickly while maintaining originality in its marketing efforts. Theories of ambidexterity and empirical support from Rosing et al. (2011) and He and Wong (2004) suggest that these dual capabilities work best when integrated.

H3: The interaction between marketing agility and creativity positively affects strategic marketing innovation.

Fourth, digital capability and real-time market sensing are enabling factors amplifying agility and creativity. As highlighted by Kim et al. (2024) and Ramaswamy and Ozcan (2016), the presence of digital infrastructure and customer feedback systems enhances the ability to execute agile and creative strategies. Hence,

H4: Digital sensing capability positively moderates the relationship between agility, creativity, and strategic marketing innovation.

Finally, strategic marketing innovation is assumed to mediate the relationship between these antecedents (agility, creativity, sensing) and broader startup performance outcomes such as customer acquisition, adaptability, and brand recognition. In line with Teece (2007) and Bocken et al. (2022), this leads to the final hypothesis:

H5: Strategic marketing innovation mediates the relationship between agility, creativity, digital sensing, and startup performance.

These hypotheses provide a structured framework for empirical validation through descriptive quantitative research and contribute to a deeper understanding of how startups navigate uncertainty through marketing innovation.

## References

- Abbas, J., & Ali, R. (2024). The role of marketing agility in FinTech startups: Evidence from Pakistan. *Journal of Innovation and Entrepreneurship*, 13(1), 15–29. <https://doi.org/10.1186/s13731-023-00352-5>
- Aulia, R., Setiawan, T., & Maharani, S. (2024). Digital payment adoption among MSMEs: A pathway to inclusive finance. *Journal of Digital Economy*, 9(1), 33–47.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Blank, S. (2013). Why the lean startup changes everything. *Harvard Business Review*, 91(5), 63–72.
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2022). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42–56. <https://doi.org/10.1016/j.jclepro.2013.11.039>

- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Eckstein, G., Shrestha, A., Sassenberg, A.-M., & Dwivedi, Y. K. (2023). Marketing agility in volatile, uncertain, complex and ambiguous (VUCA) contexts: A systematic literature review and future research agenda. *Management Review Quarterly*. <https://doi.org/10.1007/s11301-023-00278-7>
- Elena, L. (2022). Fintech adoption and e-commerce growth in Indonesia post-pandemic. *Journal of Southeast Asian Economic Studies*, 14(2), 55–66.
- Fatma, F., & Ruzikna, R. (2024). The impact of e-commerce implementation on MSME income during the COVID-19 pandemic. *Indonesian Journal of Business and Innovation*, 10(1), 88–97.
- Goldenberg, J., Lehmann, D. R., & Mazursky, D. (1999). The idea itself and its role in the idea generation process. *Journal of Marketing Research*, 36(1), 15–24. <https://doi.org/10.1177/002224379903600102>
- He, Z. L., & Wong, P. K. (2004). Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis. *Organization Science*, 15(4), 481–494. <https://doi.org/10.1287/orsc.1040.0078>
- Hills, G. E., Hultman, C. M., & Miles, M. P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*, 46(1), 99–112. <https://doi.org/10.1111/j.1540-627X.2007.00234.x>
- Kalaiganam, K., Tuli, K. R., Kushwaha, T., Lee, L., & Gal, D. (2021). Marketing agility: The concept, antecedents, and a research agenda. *Journal of Marketing*, 85(6), 35–58. <https://doi.org/10.1177/00222429211047414>
- Kim, J., Park, S., & Lee, H. (2024). Startup marketing agility and new product creativity: Evidence from e-commerce. *Marketing Intelligence & Planning*, 42(1), 92–108.
- Kristiana, D., Susanto, A., & Rahmawati, F. (2024). The role of fintech in improving financial inclusion among Indonesian MSMEs. *Journal of Financial Technology and Policy*, 6(2), 134–149.
- Kumar, A., Singh, R. K., & Dwivedi, Y. K. (2021). Application of industry 4.0 technologies in SMEs for ethical and sustainable operations: Analysis of challenges. *Journal of Cleaner Production*, 281, 125276. <https://doi.org/10.1016/j.jclepro.2020.125276>
- Liu, Y., Chen, J., & Zhang, L. (2023). Agile marketing capabilities and firm performance: The mediating role of customer engagement. *Journal of Business Research*, 157, 113609. <https://doi.org/10.1016/j.jbusres.2022.113609>
- Mardian, F. (2020). Pandemi COVID-19 dan dampaknya terhadap UMKM. *Jurnal Ekonomi dan Sosial*, 8(2), 45–54.
- Muzakki, A., & Fahriani, Y. (2022). Pengaruh e-commerce terhadap perubahan pola konsumsi masyarakat. *Jurnal Digitalisasi dan UMKM*, 7(1), 23–34.
- O'Hern, M. S., & Rindfleisch, A. (2010). Customer co-creation: A typology and research agenda. *Review of Marketing Research*, 6, 84–106. [https://doi.org/10.1108/S1548-6435\(2010\)0000006009](https://doi.org/10.1108/S1548-6435(2010)0000006009)
- OECD. (2005). *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data* (3rd ed.). OECD Publishing. <https://doi.org/10.1787/9789264013100-en>
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creating unique value with customers. *Strategy & Leadership*, 32(3), 4–9. <https://doi.org/10.1108/10878570410699249>
- Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. *International Journal of Research in Marketing*, 33(1), 93–

106. <https://doi.org/10.1016/j.ijresmar.2015.07.001>

Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Publishing.

Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership–innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22(5), 956–974. <https://doi.org/10.1016/j.leaqua.2011.07.014>

Schilling, M. A., & Shankar, R. (2020). *Strategic management of technological innovation*. McGraw-Hill Education.

Teixeira, T., & Piechota, D. (2022). *Unlocked: The power of digital customer experiences*. Palgrave Macmillan.

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>

Viola, L., Handayani, T., & Surya, M. (2023). Digital literacy challenges in MSMEs transformation in Indonesia. *Journal of Entrepreneurial Digitalization*, 5(1), 20–32.

Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173–188. [https://doi.org/10.1016/S0883-9026\(02\)00103-2](https://doi.org/10.1016/S0883-9026(02)00103-2)

Wicaksono, T., & Anwar, S. (2023). Kontribusi UMKM terhadap pertumbuhan ekonomi nasional. *Jurnal Ekonomi dan Kebijakan Publik*, 11(2), 77–90.

Yusuf, M., & Kadir, A. (2022). Marketing innovation in Indonesian startups: Strategies and outcomes. *Asian Journal of Innovation and Entrepreneurship*, 7(2), 115–130. <https://doi.org/10.5281/zenodo.6583947>