ROLE OF CUSTOMER-CENTRIC APPROACH AND ENTREPRENEURIAL ORIENTATION ON INNOVATION AMBIDEXTERITY OF SMES IN VIETNAM

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ABSTRACT

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KEYWORDS

Customer-centric approach Entrepreneurial orientation Innovation ambidexterity Small and medium enterprises PLS-SEM This study examines the impact of a customer-centric approach and entrepreneurial orientation on innovation ambidexterity in Vietnamese small and medium enterprises. Although research on innovation ambidexterity has primarily focused on large firms, studies addressing the unique challenges small and medium enterprises face in balancing explorative and exploitative innovation, especially within the Vietnamese context remain limited. Using PLS-SEM analysis on data from 142 small and medium enterprises managers and team leaders, the findings reveal that both customer-centricity and entrepreneurial positively influence ambidextrous orientation innovation. Additionally, entrepreneurial orientation mediates this relationship, helping small and medium enterprises address both emerging and current market demands. This research enriches the literature of innovation ambidexterity by applying the Resource-Based View and Dynamic Capability Theory to small and medium enterprises in a developing market and offers practical managerial implications for these firms.

VAI TRÒ CỦA CÁCH TIẾP CẬN LẤY KHÁCH HÀNG LÀM TRUNG TÂM VÀ ĐỊNH HƯỚNG SÁNG NGHIỆP ĐỐI VỚI TÍNH THUẬN CẢ HAI TAY TRONG ĐỔI MỚI CỦA CÁC DOANH NGHIỆP VÙA VÀ NHỎ

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TỪ KHÓA

Lấy khách hàng làm trung tâm Định hướng sáng nghiệp Khả năng đổi mới thuận cả hai tay Doanh nghiệp vừa và nhỏ PLS-SEM Nghiên cứu này xem xét tác động của cách tiếp cận lấy khách hàng làm trung tâm và định hướng sáng nghiệp đối với khả năng đổi mới thuận cả hai tay trong các doanh nghiệp vừa và nhỏ tại Việt Nam. Trong khi các đối tượng nghiên cứu trước đó thường là các tập đoàn lớn, nghiên cứu về các thách thức đặc thù mà các doanh nghiệp vừa và nhỏ đối mặt trong việc cân bằng giữa đổi mới mang tính khám phá và cải tiến, đặc biệt là trong bối cảnh Việt Nam, vẫn còn han chế. Phân tích PLS-SEM dữ liêu sơ cấp thu thập từ 142 quản lý và lãnh đạo nhóm tại các doanh nghiệp vừa và nhỏ cho thấy cả hai yếu tố này đều tác đông tích cực đến khả năng đổi mới thuận cả hai tay. Đinh hướng sáng nghiệp đóng vai trò trung gian, giúp các doanh nghiệp vừa và nhỏ đáp ứng nhu cầu thị trường hiện có và tiềm năng. Nghiên cứu này đóng góp vào chủ đề đổi mới sáng tạo thuận cả hai tay khi ứng dụng Lý thuyết Nguồn lực và Lý thuyết Năng lực Động vào các doanh nghiệp vừa và nhỏ tại một thị trường đang phát triển và đề xuất hàm ý quản trị cho các doanh nghiệp này.

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1. Introduction

The evolution of technology has foster a competitive business landscape, compelling companies to continuously innovate and launch new products or services. In this dynamic environment, prior studies have emphasized the crucial role of organizational capabilities in both leveraging existing products, expertise, and resources, while simultaneously seeking out new opportunities for growth and innovation [1], [2]. Balancing exploration and exploitation in innovation is crucial. Overemphasizing exploitation hinders adaptability, while excessive exploration risks neglecting essential competencies for market success. These balancing is called innovation ambidexterity. It is grounded in organizational ambidexterity theory, which initially emphasized balancing exploration and exploitation for organizational adaptability [1]. Over time, it has been further refined through resource-based view and dynamic capabilities theory, highlighting the need for firms to leverage existing assets while continuously adapting to dynamic environments. Existing research has highlighted that achieving ambidexterity could bring benefits, albeit with challenges. Balancing these innovations also enables organizations to adapt to changing environments, seize new opportunities, and refresh their knowledge and capabilities [2]. However, achieving ambidexterity requires managing the tensions, oppositions between exploration and exploitation sides [3]. While firms were once thought to choose between these paths due to trade-offs [4], recent research suggests that they can pursue both at the same time in case of a properly structured context [3]. This topic was not be concerned a lot by researchers especially with SMEs in emerging countries. Although, SMEs have been proven essential for economic growth [5], and need to sustain competitive capability by leveraging their innovativeness between explore new opportunities and expoit current strategic business unit in order to growth [5]

This study also addresses critical research gaps in innovation ambidexterity, specifically within Vietnamese SMEs. First, while according to [6], [8] which has highlighted the positive effects of customer-centricity on innovation capabilities, it lacks of research about roles of customer-centricity, including customer orientation and customer relationship orientation influence on explorative and exploitative, which are dimensions of innovation ambidexterity. Second, given that most ambidexterity strategies have targeted large firms [3] with few exceptions acknowledging SMEs [5], [9], [10]. Third, this research fills a void in the Vietnamese SME landscape, where innovation ambidexterity is relatively new and underexplored. Although several studies have investigated explorative and exploitative innovation in Vietnamese companies, they excluded SMEs and utilized different variables such as technology-sensing, market-sensing capabilities [11]. These gaps in both international and domestic research present a valuable chance for this study to make substantial contributions.

This study aims to elaborate on the relationships between customer-centric approach, entrepreneurial orientation, and innovation ambidexterity in SMEs. It examines the direct impact of placing customers on priority (measured through two factors: customer orientation and customer relationship orientation) on innovation ambidexterity (comprising explorative innovation and exploitative innovation). Next, this study evaluates the potential mediating role of entrepreneurial orientation, exploring whether a strong entrepreneurial orientation facilitates the positive effects of customer focus on innovation ambidexterity.

2. Methodology

2.1. The research model and proposed hypothesis

This research examines the effect of customer centric approach to innovation ambidexterity and join effect of entrepreneurial orientation. The proposed hypotheses as follows:

- H1: Customer-centric approach has a positive relationship with Innovation ambidexterity
- H2: Entrepreneurial orientation has a positive relationship with Innovation ambidexterity

H3: Entrepreneurial orientation mediates the relationship between Customer-centric approach and Innovation ambidexterity.

The research model is depicted as follows:

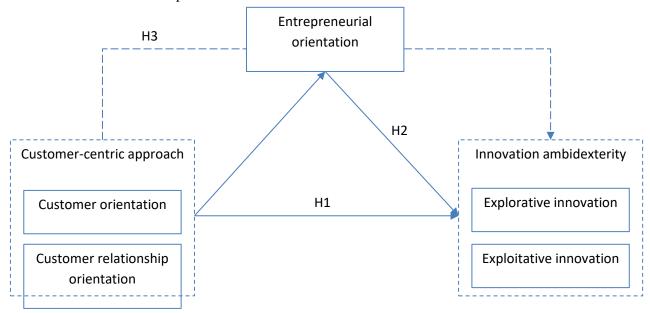


Figure.1. The research model

Figure 1. Proposes the role of customer-centric approach and entrepreneurial orientation on innovation ambidexterity of SMEs in Vietnam

2.2. Measurement scale

The research focuses on three key variables: a customer-centric approach (CCA), entrepreneurial orientation (EO), and innovation ambidexterity (IA), utilizing items derived from previous studies. CCA is measured through: customer orientation (five items) and customer relationship orientation (four items). These items, from Tuominen et al. [12], are rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree). EO is characterized by proactiveness and risk-taking tolerance, with 6 items adapted from Zhang et al. [13], using a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree). IA encompasses both exploration (5 items) and exploitation (5 items), as assessed using items adopted from Chen et al. [14], rated on a 7-point Likert scale (1 = Very low, 7 = Very high). Table 1 displays the measurement scale of each variable.

 Table 1. Measurement scale items for variables

Code	Item description			
Custom	er orientation			
CO1	Our business objectives are driven by customer satisfaction			
CO2	We monitor our level of commitment to serving customers' needs			
CO3	Our strategy for competitive advantage is based on our understanding of customer needs	Tuominen		
CO4	Our business strategies are driven by our beliefs about how we can create greater value for customers	et al. [12]		
CO5	We measure customer satisfaction systematically and frequently			
Custom	er relationship orientation			
CRO1	In our organization, retaining customers is considered to be a top priority	Tuominen		
CRO2	Our employees are encouraged to focus on customer relationships			
CRO3	In our organization, customer relationships are considered to be a valuable asset	et al. [12]		

Code	Item description	Sources
CRO4	Our senior management emphasizes the importance of customer relationships	
Entrep	reneurial orientation	
EO1	Our firm favors a strong emphasis on tried and tested practices, equipment and	
LOI	processes	
EO2	In general, the top managers of our firm tend to invest in high-risk and high-	
LOZ	return products and projects	Zhang et
EO3	Our firm seeks to explore knowledge and information of products characterized	al. [13]
	by a tendency of experimental and risk-taking	ar. [13]
EO4	Our firm places a strong emphasis on products and services innovation activities	
EO5	Our firm tends to response to market and industrial changes ahead of competitors	
EO6	Our firm tends to initiate actions in the market and industry to take opportunities	
Explora	tive innovation	
ERI1	Acquired manufacturing technologies and skills entirely new to the firm?	
ERI2	Learned product development skills and processes entirely new to the industry?	
ERI3	Acquired entirely new managerial and organizational skills that are important for	Chen et al.
Little	innovation?	[14]
ERI4	Learned totally new skills in funding new technology and training R&D	[2.]
	personnel?	
ERI5	Strengthened innovation skills in areas where it has no prior experience?	
	ative innovation	
ETI1	Upgraded current knowledge for familiar products?	
ETI2	Invested in exploiting mature technologies that improve the productivity of	
	current innovation operations?	
ETI3	Enhanced abilities in searching for solutions to customer problems that are near to	Chen et al.
2110	existing solutions?	[14]
ETI4	Upgraded skills in product development processes in which the firm already	FJ
	possesses rich experience?	
ETI5	Strengthened the knowledge and skills to improve the efficiency of existing	
	innovation activities?	

2.3. Population and sampling

The study surveyed managers and team leaders from SMEs with fewer than 200 employees, primarily located in Vietnam's three major economic centers: Hanoi, Ho Chi Minh City, and Da Nang, and time spans from November 2023 to April 2024. These cities represent the economic hubs of northern, central, and southern Vietnam, making the sample representative of SMEs nationwide. This target group was chosen because individuals in management positions are better positioned to assess their companies' innovation capabilities. An online survey yielded 201 responses, of which 142 were valid, resulting in a validity rate of 70.65%. The majority of the respondents hold a bachelor's degree (76.06%), with others holding college degrees (11.27%), master's degrees (10.56%), high school education (1.41%), and PhDs (0.7%). The respondents work in diverse industries: 52.11% in service firms and 47.89% in manufacturing firms. Firm size distribution shows 50% with 11-50 employees, 38.03% with 51-200 employees, and 11.97% with 1-10 employees. Regarding customer type, 49.30% serve business customers (B2B), 43.66% serve end-users (B2C), 3.52% serve both B2B and B2C, 1.41% provide goods and services to the government, and 2.11% serve all of the above customer types.

2.4. Data analysis

This research applies partial least squares structural equation modeling (PLS-SEM) through Smart PLS 4.0.9.2 to evaluate the predictive ability of the statistical model. The model includes two second-order constructs: Customer-Centric Approach (CCA), comprising Customer Orientation (CO) and Customer Relationship Orientation (CRO), and Innovation Ambidexterity

(IA), including Explorative Innovation (ERI) and Exploitative Innovation (ETI). A two-stage analysis approach is used to enhance model robustness, covering measurement and structural model assessments, and examining the mediating role of EO in the CCA–IA relationship. Variance Accounted For (VAF) analysis is applied to assess EO's mediating effect.

3. Results

3.1. Statistical analysis of the measurement scale

The analysis results in Table 2 reveal mean values of all observed variables ranging from 4.56 to 5.48. This suggests that respondents generally hold favorable views regarding the extent to which their enterprises engage in exploration and exploitation activities, maintain a customercentric approach, and exhibit entrepreneurial orientation. However, the standard deviations, all greater than 1, indicate substantial variability in respondents' opinions. When comparing the mean scores of explorative innovation (ERI) and exploitative innovation (ETI), the findings suggest that SMEs in Vietnam tend to prioritize exploitation over exploration activities.

Table 2. Descriptive statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Customer orie	entation (CO)				
CO1	142	1	7	5.48	1.44
CO2	142	1	7	5.13	1.41
CO3	142	1	7	5.18	1.40
CO4	142	1	7	5.11	1.33
CO5	142	1	7	4.99	1.38
Customer rela	tionship orienta	tion (CRO)			
CRO1	142	1	7	5.18	1.41
CRO2	142	2	7	5.37	1.36
CRO3	142	2	7	5.20	1.38
CRO4	142	2	7	5.29	1.41
Entrepreneuria	al orientation (E	EO)			
EO1	142	1	7	5.02	1.43
EO2	142	1	7	4.56	1.49
EO3	142	1	7	4.73	1.41
EO4	142	2	7	5.00	1.34
EO5	142	1	7	5.02	1.34
EO6	142	1	7	4.86	1.32
EO1	142	1	7	5.02	1.43
Exploitative in	nnovation (ETI))			
ETI1	142	1	7	4.97	1.47
ETI2	142	1	7	4.82	1.35
ETI3	142	1	7	4.99	1.41
ETI4	142	2	7	5.13	1.34
ETI5	142	2	7	4.97	1.41
Entrepreneuria	al orientation (E	EO)			
EO1	142	1	7	5.02	1.43
EO2	142	1	7	4.56	1.49
EO3	142	1	7	4.73	1.41
EO4	142	2	7	5.00	1.34
EO5	142	1	7	5.02	1.34
EO6	142	1	7	4.86	1.32

In this study, a pre-test was conducted with three experts under analysis to ensure the items were relevant within those business contexts. Clarity and readability of the items were confirmed in these pre-test interviews, supporting test validity. The measurement models for both first-order and second-order construct were evaluated for construct reliability (Cronbach alpha), convergent

validity (AVE) and discriminant validity (HTMT). All constructs show outer loadings and Cronbach's alpha values above the 0.7 threshold, indicating strong reliability [15]. Convergent validity is also confirmed, with Average Variance Extracted (AVE) values exceeding 0.5 [16]. HTMT values for most variable pairs in the first-order construct are below 0.9, except for pairs CCA-CO, CCA-CRO, IA-ERI, IA-ETI, and EO-IA, which are above 0.9 (Table 3). HTMT values for the second-order construct are all less than 0.9 (Table 4).

Table 3. Construct reliability, convergent validity, discriminant validity (First-order construct)

CCA 0.959 0.959 0.965 0.753 CO 0.925 0.926 0.944 0.770 1.037 CRO 0.932 0.932 0.952 0.831 1.022 0.956 EO 0.913 0.917 0.932 0.697 0.792 0.823 0.734		Cronbach's	CR	CR	AVE		Di	scrimina	nt validi	ity	
CO 0.925 0.926 0.944 0.770 1.037 CRO 0.932 0.932 0.952 0.831 1.022 0.956 EO 0.913 0.917 0.932 0.697 0.792 0.823 0.734		alpha	(rho_a)	(rho_c)		CCA	CO	CRO	EO	ERI	ETI
CRO 0.932 0.932 0.952 0.831 1.022 0.956 EO 0.913 0.917 0.932 0.697 0.792 0.823 0.734	CCA	0.959	0.959	0.965	0.753						
EO 0.913 0.917 0.932 0.697 0.792 0.823 0.734	CO	0.925	0.926	0.944	0.770	1.037					
	CRO	0.932	0.932	0.952	0.831	1.022	0.956				
FRI 0.916 0.916 0.937 0.749 0.620 0.676 0.536 0.862	EO	0.913	0.917	0.932	0.697	0.792	0.823	0.734			
ERI 0.710 0.710 0.737 0.747 0.020 0.070 0.330 0.002	ERI	0.916	0.916	0.937	0.749	0.620	0.676	0.536	0.862		
ETI 0.919 0.920 0.940 0.757 0.868 0.879 0.832 0.867 0.771	ETI	0.919	0.920	0.940	0.757	0.868	0.879	0.832	0.867	0.771	
IA 0.938 0.939 0.947 0.643 0.797 0.833 0.733 0.925 0.996 0	IA	0.938	0.939	0.947	0.643	0.797	0.833	0.733	0.925	0.996	0.995

Source: The authors

Table 4. Construct reliability, convergent validity, discriminant validity (Second-order construct)

	Cronbach's	CR (rho_a)	CR (rho_c)	AVE	Discrimina	ant validity
	alpha				CCA	EO
CCA	0.941	0.950	0.971	0.944		
EO	0.913	0.917	0.932	0.697	0.795	
IA	0.830	0.836	0.922	0.854	0.849	0.883

Source: The authors

3.2. Evaluation of the structural model

In this study, the VIF value is 1.000 for CCA - EO, and 2.267 for both CCA - IA and EO - IA, all values are below 3, indicating no significant multicollinearity among the independent variables [17]. The adjusted R-squared values indicate that CCA explains 55.6% of the variation in EO, while CCA and EO together account for 76.6% of the variation in IA. The effect size results show CCA has a large effect on EO (f-squared = 1.267), a small effect on IA (f-squared = 0.135), and EO has a large effect on IA (f-squared = 0.832).

Through a Bootstrapping analysis of 5000 subsamples, the results in Table 5 indicate that all relationships: CCA - EO, CCA - IA, and EO - IA are significant, with p-values less than 0.05. All coefficients are positive, demonstrating a positive association in the research model. EO has a greater impact on IA compared to the CCA, with EO having a coefficient of 0.660 versus CCA's 0.266. The results are presented below:

Table 5. Hypothesis testing results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
CCA -> EO	0.748	0.747	0.047	15.929	0.000
CCA -> IA	0.266	0.265	0.083	3.200	0.001
EO -> IA	0.660	0.661	0.077	8.606	0.000

Source: The authors

Table 6. The indirect effect of customer-centric approach on innovation ambidexterity through entrepreneurial orientation

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Specific indirec	ct effect				
CCA -> EO -	0.493	0.493	0.064	7.670	0.000

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	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
> IA					
Total effect					
CCA -> EO	0.748	0.747	0.047	15.929	0.000
CCA -> IA	0.759	0.758	0.047	16.059	0.000
EO -> IA	0.660	0.661	0.077	8.606	0.000
Total indirect	effect				
CCA -> IA	0.493	0.495	0.064	7.693	0.000

Source: The authors

The results in Table 6 reveal a specific indirect effect with a p-value less than 0.05 and a standardized effect coefficient of 0.493, indicating that EO mediates the relationship between CCA and IA. Thus, H3 is accepted. The direct effect between CCA and IA has a coefficient of 0.266 and a p-value of 0.001, indicating statistical significance. This demonstrates partial mediation, with direct and indirect effects in the same direction (0.266 * 0.493 > 0), classifying it as complementary partial mediation [18]. The Variance Accounted For (VAF) analysis, following [19], shows the mediating variable's contribution is statistically significant, with confidence intervals at 95% not containing zero. Hence, the VAF, calculated as the percentage of Total indirect effect divided by Total effect, equals 64.95%, indicating that the mediating variable EO accounts for 64.95% of the total effect from CCA to IA.

4. Discussion

The study results state the positive relationship between a customer-centric approach and innovation ambidexterity, which aligns with other study identifying a strong correlation between a customer-focused strategy and a firm's innovativeness, particularly in companies targeting international markets [12]. Additionally, this result also shed the light on role of customer orientation in innovation ambidexterity of small and medium enterprises.

Entrepreneurial orientation has a positive relationship with innovation ambidexterity. This finding is consistent with previous studies stating that EO relates to both the refinement of existing resources and the acquisition of new resources [20], and that EO plays a crucial role in enabling the simultaneous implementation of exploration and exploitation activities to help resource-constrained firms overcoming challenges [21]. On the other hand, an overemphasis on EO focused exclusively on innovation and growth may have drawbacks [22]. Excessive risk-taking and overwhelming focus on new opportunities may cause firms to neglect optimizing existing operations, thereby compromising their core competencies. These could arise from differences in research contexts, for example, firms in fast-paced, technology-driven sectors may require a stronger emphasis on exploration compared to those in more stable industries.

EO plays the mediating role in the relationship between CCA and IA, which aligns with research suggesting that firms with strong EO are more likely to leverage customer insights for innovative solutions [23]. EO, characterized by proactiveness, entails a firm's readiness to anticipate and respond to future market demands and requirements, introducing new products, processes, and services ahead of competitors to shape forthcoming demand and opportunities. EO emphasizes the efficient allocation of resources between exploration and exploitation activities, driven by customer needs and market opportunities.

These findings display some implications for developing innovation ambidexterity. Firstly, this study contributes to dynamic capability theory and resources-based view theory by demonstrating how a customer-centric approach enhances innovation ambidexterity in SMEs, enabling them to dynamically balance exploration and exploitation. Unlike traditional views that emphasize internal resources, this research highlights customer orientation as an external

dynamic capability, fostering adaptability and sustained competitive advantage in a rapidly evolving market.

Secondly, the study addresses the challenge of balancing innovation exploitation and exploration in SMEs, known as innovation ambidexterity. SMEs should embed customer insights into their business models to align products and services with market needs, enhancing customer satisfaction and loyalty, especially in emerging markets as Vietnam. SMEs should establish robust frameworks for collecting and analyzing customer feedback through various methods, such as surveys, focus groups, to tailor their offerings.

Finally, encouraging a proactive and risk-taking mindset across the organization is essential. This entrepreneurial orientation helps SMEs sense and respond to new opportunities and anticipate future demands, vital for navigating the Vietnamese market. Managers and team leaders are crucial in cultivating a customer-focused and entrepreneurial environment by championing innovation and aligning organizational objectives with these principles. Dedicating resources to employee development in areas such as customer empathy, problem-solving, and creative thinking can boost innovation ambidexterity within the company.

5. Conclusion

This study acknowledges limitations in sample size due to time and financial restrictions, which may lessen the representativeness of the findings. In addition, ambidextrous capabilities may vary across disciplines, sectors, and internal factors (e.g., vision, structure, strategy), which could be masked by the cross-sectional dataset. Thus, larger-scale longitudinal studies are recommended for more comprehensive data and methodological diversity to enhance depth, credibility, and insights.

The study empirically confirms a positive relationship between a customer-centric approach and innovation ambidexterity in Vietnamese SMEs, with entrepreneurial orientation as a mediator. This finding addresses a theoretical gap in the limited research on these variables in Vietnam. Practical insights suggest fostering a customer-centric mindset to drive innovation, integrating entrepreneurial thinking through training, and providing hands-on experiences for employees to interact with customers, thereby enabling explorative and exploitative innovation.

REFERENCES

- [1] A. Čirjevskis, "Sustainability in information and communication technologies' industry: Innovative ambidexterity and dynamic capabilities perspectives," *Journal of Security & Sustainability Issues*, vol. 6, no. 2, pp. 211-226, 2016.
- [2] S. Berraies and S. Zine El Abidine, "Do leadership styles promote ambidextrous innovation? Case of knowledge-intensive firms," *Journal of Knowledge Management*, vol. 23, no. 5, pp. 836-859, 2019.
- [3] Y. Y. Chang and M. Hughes, "Drivers of innovation ambidexterity in small-to medium-sized firms," *European Management Journal*, vol. 30, no. 1, pp. 1-17, 2012.
- [4] S. Raisch and J. Birkinshaw, "Organizational ambidexterity: Antecedents, outcomes, and moderators," *Journal of Management*, vol. 34, no. 3, pp. 375-409, 2008.
- [5] H. Tian, C. S. K. Dogbe, W. W. K. Pomegbe, S. A. Sarsah, and C. O. A. Otoo, "Organizational learning ambidexterity and openness, as determinants of SMEs' innovation performance," *European Journal of Innovation Management*, vol. 24, no. 2, pp. 414-438, 2021.
- [6] L. Selden and I. C. MacMillan, "Manage customer-centric innovation-systematically," *Harvard Business Review*, vol. 84, no. 4, 2006, Art.no. 108.
- [7] A. T. Bon and E. M. A. Mustafa, "The Impacts of Customer Focus on Innovation in Service Organizations," *Journal of Engineering and Technology (JET)*, vol. 5, no. 1, pp. 57-68, 2014.
- [8] Z. Yaacob, "The direct and indirect effects of customer focus on performance in public firms," *International Journal for Quality Research*, vol. 8, no. 2, pp. 265-276, 2014.
- [9] I. I. Wiratmadja, W. B. Profityo, and A. A. Rumanti, "Drivers of innovation ambidexterity on small medium enterprises (SMEs) performance," *IEEE Access*, vol. 9, pp. 4423-4434, 2020.

- [10]I. Kowalik and A. Pleśniak, "Marketing determinants of innovation ambidexterity in small and medium-sized manufacturers," *Entrepreneurial Business and Economics Review*, vol. 10, no. 2, pp. 163-185, 2022.
- [11] L. V. Ngo, T. Bucic, A. Sinha, and V. N. Lu, "Effective sense-and-respond strategies: Mediating roles of exploratory and exploitative innovation," *Journal of Business Research*, vol. 94, pp. 154-161, 2019.
- [12] S. Tuominen, H. Reijonen, G. Nagy, A. Buratti, and T. Laukkanen, "Customer-centric strategy driving innovativeness and business growth in international markets," *International Marketing Review*, vol. 40, no. 3, pp. 479-496, 2022.
- [13] J. A. Zhang, F. Edgar, A. Geare, and C. O'Kane, "The interactive effects of entrepreneurial orientation and capability-based HRM on firm performance: The mediating role of innovation ambidexterity," *Industrial Marketing Management*, vol. 59, pp. 131-143, 2016.
- [14] M. Chen, Z. Yang, W. Dou, and F. Wang, "Flying or dying? Organizational change, customer participation, and innovation ambidexterity in emerging economies," *Asia Pacific Journal of Management*, vol. 35, pp. 97-119, 2018.
- [15] J. F. Hair, C. M. Ringle, and M. Sarstedt, "Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance," *Long Range Planning*, vol. 46, no. 1-2, pp. 1-12, 2013.
- [16] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981.
- [17] J. F. Hair Jr, L. M. Matthews, R. L. Matthews, and M. Sarstedt, "PLS-SEM or CB-SEM: updated guidelines on which method to use," *International Journal of Multivariate Data Analysis*, vol. 1, no. 2, pp. 107-123, 2017.
- [18] R. M. Baron and D. A. Kenny, "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations," *Journal of Personality and Social Psychology*, vol. 51, no. 6, 1986, Art. no. 1173.
- [19] P. E. Shrout and N. Bolger, "Mediation in experimental and nonexperimental studies: new procedures and recommendations," *Psychological Methods*, vol. 7, no. 4, 2002, Art. no. 422.
- [20] G. G. Dess and G. T. Lumpkin, "The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship," *Academy of Management Perspectives*, vol. 19, no. 1, pp. 147-156, 2005.
- [21] T. Kollmann and C. Stöckmann, "Filling the entrepreneurial orientation—performance gap: The mediating effects of exploratory and exploitative innovations," *Entrepreneurship Theory and Practice*, vol. 38, no. 5, pp. 1001-1026, 2014.
- [22] J. Wiklund and D. Shepherd, "Entrepreneurial orientation and small business performance: A configurational approach," *Strategic Entrepreneurship Journal*, vol. 1, no. 1-2, pp. 79-103, 2005.
- [23] G. T. Lumpkin and G. G. Dess, "Clarifying the entrepreneurial orientation construct and linking it to performance," *Academy of Management Review*, vol. 21, no. 1, pp. 135-172, 1996.