Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10, 1269-1284
2025
Publisher: Learning Gate
DOI: 10.55214/2576-8484.v9i10.10656

Supply chain resilience as a mediator of the relationship between entrepreneurial marketing and competitive advantage in service-sector SMEs in Thailand: Evidence from the Nakhonchaiburin region

Nantaphon Phusamphao[1*], Adisak Suvittawat[2]
[1,2]School of Management Technology, Suranaree University of Technology, Nakhon Ratchasima, Thailand; nantaphon.b6111939@gmail.co (N.P.) adisak@sut.ac.th (A.S.).

Abstract: This study aims to investigate how supply chain resilience (SCR) mediates the relationship between entrepreneurial marketing (EM) and competitive advantage (CA) among service-sector small and medium-sized enterprises (SMEs) in Thailand, grounded in the resource-based view (RBV) and dynamic capabilities theory (DCT). A quantitative research design was adopted, using a structured questionnaire distributed to 393 SME entrepreneurs and managers in the Nakhonchaiburin region through a multi-stage sampling technique. Data were analyzed using structural equation modeling (SEM) via SPSS and AMOS to test the proposed hypotheses and model fit. The findings revealed that EM exerted a statistically significant positive direct influence on both CA and SCR, while SCR also positively influenced CA and partially mediated the EM–CA relationship. The results suggest that service-sector SMEs in Thailand that adopt EM practices such as proactive innovation, customer-centric risk management, value network creation, and opportunistic resource leveraging enhance their resilience and sustain competitiveness in turbulent environments. The study concludes that integrating EM and SCR as complementary dynamic capabilities and strategic resources is essential for maintaining long-term CA. Practically, the findings provide strategic guidance for SME managers, policymakers, and practitioners to collaboratively develop EM and SCR competencies that strengthen firm- and sector-level resilience.

Keywords: *Competitive advantage, Entrepreneurial marketing, Supply chain resilience, Thailand, SMEs.*

1. Introduction

In the current digitally oriented and intensely competitive business environment, service-sector small and medium-sized enterprises (SMEs) serve as key contributors to global economic progress by promoting innovation, generating employment opportunities, and enhancing economic resilience, particularly in emerging markets; however, amid dynamic market environments, frequent disruptions, resource constraints, and intensified global competition, sustaining a competitive advantage proves increasingly challenging [1, 2]. SMEs, representing more than 99% of registered firms and employing over 80% of the labor force, constitute the backbone of Thailand's economy by creating jobs and driving economic development. However, deglobalization, marked by declining global trade and rising protectionism, reshapes international markets and poses significant challenges for these enterprises [3]. Thai SMEs struggle to maintain competitiveness due to limited resources, low levels of technological adoption, and workforce limitations. While digitalization and digital competencies are increasingly recognized as key drivers of innovation, they also play an interconnected role in facilitating digital transformation and new product development, enabling SMEs to create distinctive products and services [4].

History: Received: 30 July 2025; Revised: 17 September 2025; Accepted: 22 September 2025; Published: 22 October 2025
* Correspondence: nantaphon.b6111939@gmail.com

To thrive amid growing complexity and volatility in the business environment, infrastructure firms in developing countries must adopt strategic orientations, namely market, entrepreneurial, and learning orientations to strengthen competitive advantage and sustain firm performance [5]. Additionally, fostering robust knowledge, skills, and digital competencies among organizational members is essential, as awareness of these attributes, particularly digital literacy, significantly strengthens human capital, enhances collaborative leadership, and drives board service performance and superior organizational outcomes [6, 7]. Entrepreneurial marketing (EM) has emerged as a vital strategy for SMEs, helping them navigate dynamic and uncertain market conditions by blending traditional marketing tools with an innovative, proactive, and opportunity-focused entrepreneurial mindset. In the current era of globalization and continuous market evolution, where SMEs face intense competition and resource constraints, EM enables them to distinguish themselves from competitors, acquire and retain customers, and address customer needs through creative, customer-centric approaches that emphasize personal relationships and the effective leveraging of limited resources [8]. Simultaneously, supply chain resilience (SCR) emerges as a strategic competence for managing global disruptions, including climate change, pandemics, supply chain breakdowns, and evolving consumer demands that strongly affect business continuity and competitive standing. For SMEs, implementing artificial intelligence (AI) functions as a pivotal driver of resilience by strengthening risk management and agility, enabling data-driven responses to disruptions, and ultimately reinforcing competitive advantage (CA) [9].

In the highly competitive and rapidly evolving business environment, EM functions as a vital mechanism for achieving and sustaining CA, particularly among SMEs. Recent studies have emphasized that EM practices significantly enhance CA, which subsequently strengthens overall business performance [10-12]. Alongside EM, SCR has gained increasing scholarly attention amid global disruptions and the momentum of digital transformation. Recent studies emphasize that SCR enhances firms' capacity to navigate market uncertainty and preserve CA by utilizing digital technologies, fostering collaborative partnerships, and implementing integration strategies [13-15].

1.1. Research Gap

While prior research addresses entrepreneurial marketing (EM) and supply chain resilience (SCR) as independent sources of competitive advantage (CA), empirical evidence remains scarce regarding the mediating function of SCR in linking EM to CA. Moreover, the direct association between EM and SCR, as well as the mediating pathway through which SCR connects EM with CA, has not been sufficiently investigated. This study attempts to bridge this research gap, which is essential to comprehending how EM strategies not only directly enhance the CA of SMEs but also cultivate SCR capabilities that further strengthen their competitive positioning, particularly within service-sector SMEs in the Nakhonchaiburin region of Thailand.

The objective of this study is to investigate the direct and indirect influences of EM on CA, with a focus on the mediating role of SCR among service-sector SMEs in the Nakhonchaiburin region of Thailand. Specifically, this research seeks to (1) examine the direct influence of EM on CA, (2) assess the direct effect of EM on SCR, (3) evaluate the direct impact of SCR on CA, and (4) analyze the mediating role of SCR in the relationship between EM and CA. In addressing these issues, the study contributes to both theory and practice by offering insights into how EM enhances SCR and, consequently, strengthens the CA of service-sector SMEs in Thailand's Nakhonchaiburin region.

2. Literature Review

2.1. Resource-Based View (RBV) and Dynamic Capabilities Theory (DCT)

The RBV is a foundational perspective in strategic management, emphasizing that internal resources constitute the foundation of sustained competitive advantage. Barney [16] posits that resources possessing value, rarity, inimitability, and non-substitutability (VRIN) allow firms to implement strategies that enhance effectiveness and efficiency. When managed appropriately, these resources constitute a foundation for achieving sustained competitive advantage. Similarly, firms

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

possess a wide range of tangible and intangible resources that can be strategically deployed to strengthen competitiveness [17]. RBV is widely applied across multiple business disciplines, including entrepreneurship [18], marketing [19], and supply chain management [20] to explain how firms utilize distinctive internal capabilities to achieve and sustain superior performance.

However, RBV offers a relatively static view of value creation, often overlooking environmental turbulence. The DCT complements this by providing a dynamic, process-oriented perspective that explains how firms, especially SMEs, adapt, innovate, and sustain competitive advantage in volatile markets. Originating from Teece et al. [21], dynamic capabilities are defined as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments" (p. 516). Teece [22] further categorizes these capabilities into three core capacities: sensing, seizing, and transforming, each essential for adaptation, innovation, and sustained performance.

In sum, the RBV provides an integrative framework for analyzing how SMEs leverage internal capabilities and resources, particularly entrepreneurial marketing and supply chain resilience, to build and sustain competitive advantage, while the DCT offers a strategic foundation for developing these capabilities as dynamic pathways toward sustained competitiveness.

2.2. Entrepreneurial Marketing and Competitive Advantage

The relationship between entrepreneurial marketing (EM) and competitive advantage (CA) has garnered increasing scholarly attention in recent years, with a growing body of evidence supporting a positive and direct influence. Hanaysha et al. [23] examined this relationship in SMEs, finding that multiple EM dimensions, namely value creation, opportunity focus, customer intensity, proactiveness, resource leveraging, and innovativeness, exert statistically significant and positive effects on CA. Similarly, Tolossa et al. [12] emphasized that EM practices serve as strategic drivers of CA, particularly when aligned with sustainability initiatives and long-term performance objectives. Reinforcing this perspective, Siregar et al. [10] demonstrated that integrating EM with architectural innovation markedly improves SMEs' competitive advantage in North Sumatra, Indonesia, thereby affirming the practical implications of EM strategies. In a different context, Suandi et al. [11] established that EM enhances CA in Islamic banking by promoting cost reduction, product and service differentiation, and improved operational efficiency. Furthermore, Dhameria et al. [24] identified networking capability as a complementary element to EM that positively influences both SMEs' competitive advantage and marketing performance, underscoring the strategic value of relationship-building and network management. Although Mahrinasari et al. [25] focused more broadly on local wisdom and governmental support, their findings also affirmed that EM, when embedded in cultural values and reinforced by policy frameworks, can serve as a cornerstone for sustaining CA, particularly within creative industries.

Drawing on this evidence, the study advances the following hypothesis:

H_1: Entrepreneurial marketing has a positive direct influence on competitive advantage.

2.3. Entrepreneurial Marketing and Supply Chain Resilience

Entrepreneurial orientation (EO), acknowledged as a key component of entrepreneurial marketing (EM) [26], is consistently linked to strengthening supply chain resilience (SCR), particularly in dynamic and uncertain environments. For instance, Munongo and Pooe [27] found that EO positively influences SCR among SMEs, with dimensions such as risk-taking, proactiveness, competitive aggressiveness, and innovativeness significantly improving firms' ability to adjust and recover following disruptive events. Similarly, Yadav and Tripathi [28] demonstrated that proactiveness and risk-taking positively and significantly influence SCR. Supporting this, Sturm et al. [29] revealed that EO encompassing the dimensions of competitive aggressiveness, autonomy, and innovativeness not only enhances SCR but also improves financial and commercial performance, underscoring the strategic importance of entrepreneurial activities in reinforcing supply chains and achieving competitive advantage. Complementing these findings, Goaill and Al-Hakimi [30] emphasized that absorptive

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

capacity is essential in reinforcing the EO–SCR link, suggesting that companies with robust learning capabilities and dynamic knowledge-processing routines derive greater resilience benefits from EO. Additionally, Madhavika et al. [31] investigated factors influencing SCR in construction SMEs during an economic downturn and identified EO as a critical determinant of SCR, particularly in enhancing adaptability under severe disruptions.

Although previous studies have offered robust evidence regarding the relationship between EO and SCR, research on Thai service-sector SMEs, particularly in the Nakhonchaiburin region, remains limited in addressing entrepreneurial marketing (EM) as a broader construct that integrates both market orientation (MO) and entrepreneurial orientation (EO). Existing studies have largely overlooked how MO may complement EO in shaping SCR. This gap underscores the importance of examining EM as an integrated approach and its contribution to SCR, rather than focusing solely on EO.

Drawing on this evidence, the study advances the following hypothesis:

H_2. Entrepreneurial marketing has a positive direct influence on supply chain resilience.

2.4. Supply Chain Resilience and Competitive Advantage

Amid supply chain disruptions, investing in supply chain resilience (SCR) is essential for ensuring enterprise survival, growth, and competitive advantage (CA). Resilient supply chains mitigate disruption risks and enhance mutual profitability, particularly when product order volumes and the likelihood of disruption are high, making mechanisms such as cost-sharing contracts more effective [32]. Kristanto and Kurniawati [33] found that SCR significantly strengthened firms' competitive advantage by ensuring product reliability, operational efficiency, and consumer trust, thereby improving financial performance. Similarly, Setiawan et al. [15] showed that integrating digitalization and green practices into supply chain management strengthened resilience, thereby enhancing CA through greater operational adaptability and stakeholder coordination. From a dynamic capability perspective, Pu et al. [34] identified SCR as essential for enabling firms to adapt to environmental uncertainties by effectively reconfiguring and utilizing resources, thus supporting CA. Badwan [13] emphasized that SCR, particularly through rapid responsiveness to demand fluctuations and operational adaptability, significantly contributes to CA by improving delivery performance, product quality, and customer satisfaction in volatile environments. Furthermore, Huang et al. [14] argued that IT-enabled SCR through Industry 4.0 adoption, IT advancements, collaboration, and visibility acts as a catalyst for CA, while Siagian et al. [35] found SCR enhances SMEs' competitive advantage by supporting rapid recovery and market adaptability.

Drawing on this evidence, the study advances the following hypothesis:

H_3. Supply chain resilience has a positive direct influence on competitive advantage.

2.5. The Mediating Role of Supply Chain Resilience

Recent literature consistently demonstrates that supply chain resilience (SCR) serves as a mediating variable in the relationship between entrepreneurial marketing (EM) and competitive advantage (CA). Several empirical studies confirm this mediation effect. Haq and Aslam [36] found that SCR mediates the link between entrepreneurial leadership and supply chain performance, indicating that entrepreneurial leadership strengthens resilience, thereby improving performance and sustaining CA in uncertain environments. Similarly, Rezaei et al. [37] illustrated that SCR mediates the link between data analytics capability and CA by enabling firms to convert analytical capabilities into superior performance under uncertainty. Metwally et al. [38] reported that SCR partially mediates the effect of digital technology adoption on sustainable environmental performance by enhancing adaptability and operational efficiency, thus facilitating the translation of strategic capabilities such as digital integration into improved outcomes. Bahrami and Shokouhyar [39] found that SCR mediates the link between big data analytics capabilities and firm performance, reinforcing the importance of information-driven strategies in strengthening competitiveness. Feng et al. [40] further confirmed the mediating effect of SCR between big data capabilities and supply chain performance in uncertain environments.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

Furthermore, Abou Kamar et al. [41] identified SCR as a mediator between supply chain dynamic capabilities, namely reconfiguration, agility, integration, and collaboration and operational performance in hotel food supply chains, underscoring resilience as a critical channel for enhancing performance under disruptions. Collectively, these studies affirm that SCR operates as a mediator in translating EM into CA.

Although earlier studies highlight SCR as the mediating variable across diverse domains, empirical evidence on its mediating effect between EM and CA remains limited, particularly among Thai service-sector SMEs in the Nakhonchaiburin region within emerging economies. This gap underscores the need to examine whether SCR functions as the mechanism through which EM initiatives are transformed into CA.

Drawing on this evidence, the study advances the following hypothesis:

H_4. Entrepreneurial marketing has a positive direct influence on competitive advantage, with supply chain resilience serving as a mediating factor.

Drawing upon the literature review, the authors developed a conceptual framework that was subsequently tested using a quantitative research approach. As shown in Figure 1, this framework illustrates the causal links among entrepreneurial marketing, supply chain resilience, and competitive advantage. Entrepreneurial marketing, conceptualized as the exogenous latent variable, comprises four dimensions: proactive innovation, customer-centric risk management, opportunistic resource leveraging, and value network creation. Competitive advantage, treated as the endogenous latent variable, consists of four dimensions: targeted cost leadership, value-focused differentiation, resource-based superiority, and proficient access-based advantage. Supply chain resilience represents the mediating variable and encompasses four dimensions: speedy agility, flexible redundancy, transparent information sharing, and trust-based collaboration.

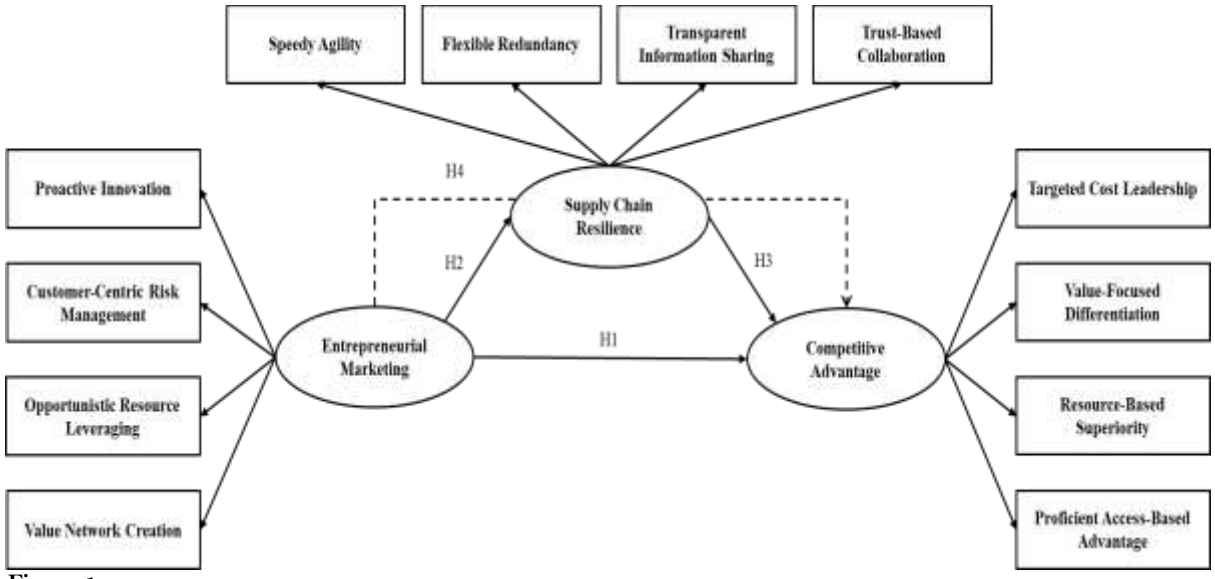

Figure 1.
Conceptual framework.

3. Methodology

This study employed a quantitative approach using a survey research design to examine how entrepreneurial marketing enhances competitive advantage through the mediating role of supply chain resilience among service-sector SMEs in Thailand's Nakhonchaiburin region. The research population consisted of SME entrepreneurs and managers operating in the service sector within Nakhon Ratchasima, Chaiyaphum, Buriram, and Surin provinces.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

Structured questionnaires, designed as the primary research instrument, were employed for data collection. The questionnaire was constructed from an extensive literature review and theoretical synthesis, with items carefully aligned to the conceptual framework variables to facilitate the analysis of interrelationships and support the construction of a structural equation model (SEM). The instrument comprised four sections: the first section captured demographic information using checklist-style items, while the remaining three sections measured entrepreneurial marketing, supply chain resilience, and competitive advantage using five-point Likert scales.

To ensure instrument validity, content validation was conducted by five experts using the Item Objective Congruence (IOC) index [42]. A pilot test with 30 participants was conducted to assess the instrument's clarity and effectiveness. Following this, the questionnaire underwent evaluations for construct validity and reliability. Based on the analysis results, necessary revisions were made to finalize the instrument for actual data collection.

According to official data from the Department of Business Development (DBD), the total research population consisted of approximately 21,189 SMEs in the Nakhonchaiburin region as of April 2025 [43]. Using Yamane [44] with a 5% error margin, the minimum sample size was calculated at 393. However, to enhance statistical reliability and ensure robustness for SEM analysis, the final sample size was increased to 400 respondents, consistent with the adequacy guidelines of Hair et al. [45] and Comrey and Lee [46].

A probability sampling method was applied through a multi-stage sampling technique. Initially, stratified sampling was employed to proportionally allocate the sample across the four provinces. Next, cluster sampling was applied to select districts with the highest concentration of SMEs in each province. Finally, simple random sampling was conducted within each selected district to proportionally select respondents based on SME size and location.

Participants were recruited respectfully and voluntarily, with ex-ante controls such as clear instructions and confidentiality assurances to preserve respondent anonymity.

Data were analyzed using SPSS Version 26 and AMOS Version 24. Descriptive statistics were applied to summarize the demographic information, while SEM was employed to test the proposed hypotheses. After data preparation and preliminary analysis in SPSS, SEM was performed in AMOS using the two-step approach outlined by Anderson and Gerbing [47], comprising measurement and structural model assessment. Confirmatory factor analysis (CFA) was first conducted to assess the validity and reliability of the latent constructs using observed variables. This process involved examining model fit indices, as well as the magnitude and direction of factor loadings. Subsequently, the structural model was analyzed to determine the causal associations among latent variables, taking into account model fit, statistical significance, and the theoretical consistency of path coefficients, thereby ensuring alignment with the empirical data.

4. Results

A total of 400 questionnaires were initially collected from entrepreneurs and managers of SMEs in the Nakhonchaiburin region of Thailand. After removing seven multivariate outliers, detected through Mahalanobis Distance in SPSS ($p < 0.001$), the final valid sample consisted of 393 responses, which were retained for further analysis.

4.1. Respondents' Demographic Profile

As reported in Table 1, the respondents demonstrated substantial diversity. The descriptive analysis revealed that the sample was predominantly female (65.65%), with the majority aged between 25 and 44 years (72.01%) and holding a bachelor's degree (74.05%). Most respondents reported a monthly income between 20,001 and 40,000 Baht (29.77%), while a significant proportion operated in the food and beverage enterprises (59.54%). In terms of business experience, approximately one-third had been operating for more than 10 years (33.33%).

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

Table 1.
Respondents' demographic profile.

Items	Categories	Frequencies	Percentages (%)
Gender	Male	126	32.06
	Female	258	65.65
	LGBTQ+	8	2.04
	Preferred not to disclose	1	0.25
	Total	393	100.00
Age	Below 25 years	34	8.65
	25–34 years	150	38.17
	35–44 years	133	33.84
	45–54 years	59	15.01
	55 years and above	17	4.33
	Total	393	100.00
Monthly Average Income of Respondents	Less than or equal to 20,000 Baht	107	27.23
	20,001 – 40,000 Baht	117	29.77
	40,001 – 60,000 Baht	89	22.65
	60,001 – 80,000 Baht	43	10.94
	80,001 – 100,000 Baht	13	3.31
	More than 100,000 Baht	24	6.11
	Total	393	100.00
Educational Level	Lower than a bachelor's degree	81	20.61
	Bachelor's degree	291	74.05
	Higher than a bachelor's degree	21	5.34
	Total	393	100.00
Types of SMEs in the Service Sector	Hotels/Accommodation	13	3.31
	Food and Beverage	234	59.54
	Health and Beauty	66	16.79
	Education and Training	12	3.05
	Information Technology and Digital Services	17	4.33
	Maintenance Services	10	2.54
	Transportation and Logistics	2	0.51
	Animal Feed	10	2.54
	Clothing	12	3.05
	Footwear	3	0.76
	Household Products	4	1.02
	Electrical Appliances	4	1.02
	Ornamental Fish	4	1.02
	Chemical Fertilizers and Agricultural Products	2	0.51
	Total	393	100.00
Duration of Business Operation	Less than 3 years	88	22.39
	3–5 years	92	23.41
	6–10 years	82	20.87
	More than 10 years	131	33.33
	Total	393	100.00

4.2. Structural Equation Modeling (SEM) Analysis

4.2.1. Measurement Model

Confirmatory factor analysis (CFA) was conducted to examine the hypothesized associations between observed indicators and their latent constructs, as outlined in the conceptual framework [48]. The analysis, conducted using AMOS and SPSS, evaluated the measurement structure of entrepreneurial marketing, supply chain resilience, and competitive advantage. Following the guidelines of Hair et al. [49], items with factor loadings below 0.50 were removed, while those with standardized loadings of 0.50 or higher were retained to enhance measurement model reliability.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

To verify, assessments of construct reliability, convergent validity, and discriminant validity were conducted. Construct reliability, which indicates internal consistency, was evaluated using both composite reliability (CR) and Cronbach's alpha (α), with values exceeding 0.70 deemed acceptable [45, 50]. Convergent validity was confirmed when the average variance extracted (AVE) exceeded 0.50 and CR surpassed 0.70 [45]. As presented in Table 2, the statistical measures met these thresholds, confirming both construct reliability and convergent validity.

Discriminant validity, defined as the degree to which items of one construct differ from those of others, was evaluated using the procedure suggested by Hair et al. [51]. Three main criteria were employed in the assessment: (1) average shared variance (ASV) < AVE, (2) maximum shared variance (MSV) < AVE, and (3) the Fornell–Larcker criterion, which stipulates that the square root of each construct's AVE exceeds its correlations with other constructs [52]. The MSV and ASV results were documented in Table 2, while the Fornell–Larcker criterion results were shown in Table 3. As shown in these tables, discriminant validity across all measures was confirmed, as the required assumptions were satisfied.

Table 2.
Construct reliability, convergent validity, and discriminant validity.

Constructs	Items	Factor Loadings	Cronbach's Alpha	CR	AVE	MSV	ASV
Entrepreneurial Marketing	Proactive Innovation	0.810	0.841	0.868	0.624	0.498	0.481
	Customer-Centric Risk Management	0.685					
	Opportunistic Resource Leveraging	0.765					
	Value Network Creation	0.887					
Supply Chain Resilience	Speedy Agility	0.571	0.810	0.797	0.503		
	Flexible Redundancy	0.602					
	Transparent Information Sharing	0.900					
	Trust-Based Collaboration	0.717					
Competitive Advantage	Targeted Cost Leadership	0.556	0.843	0.837	0.568		
	Value-Focused Differentiation	0.805					
	Resource-Based Superiority	0.800					
	Proficient Access-Based Advantage	0.821					

Table 3.
Discriminant validity using the Fornell-Larcker criterion.

Construct	Entrepreneurial Marketing	Supply Chain Resilience	Competitive Advantage
Entrepreneurial Marketing	**0.790**		
Supply Chain Resilience	0.602**	**0.709**	
Competitive Advantage	0.605**	0.584**	**0.754**

** Correlation is significant at the 0.01 level (2-tailed).

4.2.2. Structural Model

A structural model was constructed from the proposed hypotheses, and the inner structural model was evaluated to assess the overall fit of the measurement model and the relationships among variables and their items. The sample size of 393 was deemed adequate for conducting structural equation modeling (SEM), considering the number of variables and parameters included in the model. The analysis revealed no evidence of identification issues, as none of the estimated coefficients exhibited negative error variances or excessively large standard errors [49]. The model fitting process proceeded without any convergence problems.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

SEM was employed to test the hypotheses, with results shown in Figure 2 and detailed further in Tables 5 and 6.

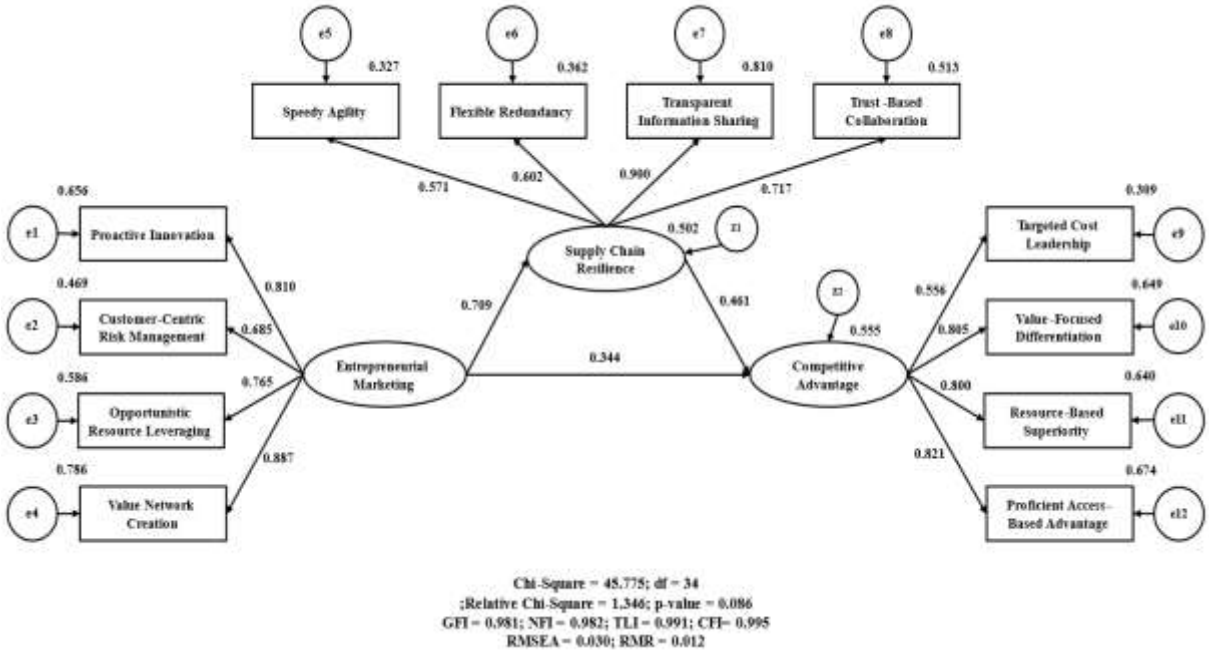

Figure 2.
Results of SEM analysis.

To evaluate the model's fit with the empirical data, several fit indices were applied following the guidelines of Schumacker and Lomax [53] and Hair et al. [45]. The chi-square (χ^2) statistic was employed to assess overall model fit, with a non-significant result ($p > 0.05$) interpreted as evidence of an acceptable fit. The relative chi-square (CMIN/DF) was considered acceptable when its value was less than 2. Additional fit indices included the Goodness of Fit Index (GFI), Normed Fit Index (NFI), Tucker–Lewis Index (TLI), and Comparative Fit Index (CFI), all of which were expected to exceed 0.95 to demonstrate a good model fit. The Root Mean Square Error of Approximation (RMSEA) and Root Mean Residual (RMR) were also examined, with values below 0.05 indicating a good model fit. These indices were applied throughout the SEM process using AMOS, encompassing both measurement and structural models to ensure theoretical consistency and empirical adequacy. As shown in Table 4, the structural model's fit indices indicated an adequate model fit, with all values meeting the recommended threshold criteria.

Table 4.
Structural model fit indices.

Fit indices	Criteria	Obtained value
Relative chi-square (CMIN/DF)	< 2	1.346
p-value	> 0.05	0.086
GFI	> 0.95	0.981
NFI	> 0.95	0.982
TLI	> 0.95	0.991
CFI	> 0.95	0.995
RMSEA	< 0.05	0.030
RMR	< 0.05	0.012

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

Table 5.
Path analysis and hypothesis testing.

Hypothesis	Paths	Path Coefficient	P-value	Relationship
H1	Entrepreneurial Marketing → Competitive Advantage	0.344***	< 0.001	Supported
H2	Entrepreneurial Marketing → Supply Chain Resilience	0.709***	< 0.001	Supported
H3	Supply Chain Resilience → Competitive Advantage	0.461***	< 0.001	Supported

Note: *Sig at 0.05 level, **Sig at 0.01 level, ***Sig at 0.001 level.

Table 5 reports the path analysis and hypothesis testing results, which examined the interrelationships among the variables within the proposed conceptual model. The findings indicated that entrepreneurial marketing (EM) had a statistically significant positive direct influence on competitive advantage (CA) (path coefficient = 0.344, $p < 0.001$), thereby supporting H1. Similarly, EM exerted a statistically significant positive direct influence on supply chain resilience (SCR) (path coefficient = 0.709, $p < 0.001$), supporting H2. Furthermore, SCR demonstrated a statistically significant positive direct influence on CA (path coefficient = 0.461, $p < 0.001$), thereby supporting H3.

Table 6.
Mediation Analysis.

Hypothesis	Paths	Direct effect	Indirect effect	P-value	Mediation	Relationship
	Entrepreneurial Marketing → Competitive Advantage	0.344***		< 0.001		Supported
H4	Entrepreneurial Marketing → Supply Chain Resilience → Competitive Advantage		0.327**	0.005	Partial	Supported

Note: *Sig at 0.05 level, **Sig at 0.01 level, *** Sig at 0.001 level.

Table 6 reports the mediation analysis results for Hypothesis 4, which proposed that SCR served as a mediating variable in the relationship between EM and CA. The analysis showed that EM exerted a statistically significant positive direct influence on CA (path coefficient = 0.344, $p < 0.001$), while SCR demonstrated a statistically significant indirect effect between EM and CA (path coefficient = 0.327, $p = 0.005$), indicating a partial mediating effect. Accordingly, H4 was supported.

To evaluate the predictive efficacy of the structural model, the coefficient of determination (R-squared: R^2) was used to measure the extent to which the endogenous variables were influenced by other variables [45]. As presented in Table 7, the R^2 value for competitive advantage was 0.555, demonstrating that entrepreneurial marketing and supply chain resilience together explained 55.5% of its variance, with the remaining 44.5% attributable to other variables. In addition, the R^2 value for supply chain resilience was 0.502, showing that entrepreneurial marketing accounted for 50.2% of its variance, while the remaining 49.8% was explained by other factors.

Table 7.
R-Square.

Variable		Variable	R-Square (R^2)
Entrepreneurial Marketing	→	Competitive Advantage	0.555
Supply Chain Resilience			
Entrepreneurial Marketing	→	Supply Chain Resilience	0.502

5. Discussion

This study examined the mediating role of supply chain resilience (SCR) in the relationship between entrepreneurial marketing (EM) and competitive advantage (CA) among service-sector SMEs in

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

Thailand's Nakhonchaiburin region, grounded in the resource-based view (RBV) [16] and dynamic capabilities theory (DCT) [21, 22]. The results supported all four hypotheses: EM positively influenced both CA (H1) and SCR (H2); SCR positively affected CA (H3); and SCR partially mediated the link between EM and CA (H4). These findings contribute to theoretical advancement and practical understanding of how SMEs sustain competitiveness in volatile service environments.

The results confirmed that EM exerted a significant positive direct influence on CA (H1). This aligns with previous research, which emphasizes that EM through proactive innovation, customer-centric risk management, opportunistic resource leveraging, and value network creation enhances CA via targeted cost leadership, value-focused differentiation, resource-based superiority, and proficient access-based advantage. EM enhances SMEs' competitiveness by promoting innovativeness, proactiveness, risk-taking, customer intensity, resource leveraging, opportunity focus, value creation, and networking. These practices enable firms to reduce costs, differentiate offerings, and exploit limited resources effectively to innovate in dynamic markets [11, 23, 24, 54, 55]. When integrated with knowledge capabilities and social media strategies, EM further improves SME performance [56]. Additionally, EM supports focus strategies, differentiation, and cost leadership that sustain CA [10, 12]. By leveraging ownership-based sources (valuable assets or strategic positions), access-based sources (exclusive or superior access to markets, supply chains, or distribution networks), and proficiency-based sources (superior knowledge, skills, and operational capabilities), Ma [57]. Zahara et al. [58] further emphasized that EM reflects SMEs' efforts to create customer value through proactive and innovative approaches, calculated risk-taking, customer intensity, optimal resource utilization, and creative innovation. Importantly, customer value is co-created between sellers and buyers, producers and customers, underscoring the collaborative dimension of EM. Taken together, these insights suggest that Thai service-sector SMEs can employ EM not only as a survival strategy but also as a means of building targeted cost leadership, value-focused differentiation, resource-based superiority, proficient access-based advantage, thereby strengthening their positions in competitive service markets.

This study advances scholarly discourse by addressing a notable research gap, demonstrating that EM significantly strengthens SCR (H2). This finding extends previous research, which has predominantly examined the influence of entrepreneurial orientation (EO) on SCR. EO, particularly proactiveness, innovativeness, and risk-taking, has been found to enhance SCR in SMEs [27, 28]. SCR is a firm's adaptive capability to endure disruptions and recover effectively through velocity, agility, flexibility, redundancy, visibility, information sharing, trust, and collaboration [59-61]. Integrating SCR into marketing strategies improves collaboration, adaptability, and continuity, positioning it as a strategic extension of marketing for competitiveness [62]. In the context of construction SMEs, SCR is essential for surviving economic crises, where EO significantly enhances SCR, supported by market access and innovation [31, 63]. By situating EM within this nexus, the present study confirms that EM practices enhance SCR by fostering speedy agility, flexible redundancy, transparent information sharing, and trust-based collaboration.

The findings also confirmed that SCR positively influences CA (H3), aligning with prior studies linking SCR to improved market positioning, sustainability, and performance [33, 35]. SCR strengthens firms' ability to manage risks, maintain responsiveness, and ensure operational stability through partnerships, digitalization, and green supply chain integration [13, 15]. As a dynamic capability, SCR fosters sustainable CA by reducing operational vulnerability and leveraging proactive, reactive, and design-quality dimensions [34]. In digitally driven environments, Industry 4.0 technologies further reinforce collaboration, visibility, and adaptability [14]. Earlier studies also confirm that SCR improves market outcomes, risk management, and financial performance, thereby supporting CA [64]. Agility and collaboration, in particular, strengthen both firm performance and competitiveness [65]. In addition, SCR functions as a key determinant of long-term CA by ensuring reliable delivery, stable performance during disruptions, and timely product provision with steady sales performance, even during pandemic circumstances [66].

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

This study verified that SCR partially mediates the relationship between EM and CA (H4), filling a key research gap. SCR acts as a mechanism through which EM translates into CA by embedding adaptive and collaborative capabilities within supply chains. These findings align with previous research showing that SCR mediates the link between strategic orientations and firm outcomes—for instance, between digitalization and operational performance [67], EO and firm performance [68], and strategic capabilities such as innovation, flexibility, agility, and collaboration with supply chain performance in efficiency, cost, and stability [69]. Further evidence identifies SCR as a mediator in the relationships involving big data capability [40], entrepreneurial leadership [36], supply chain dynamic capabilities [41], data analytics capability [37], big data analytics [39], and supply chain integration across customer, supplier, and internal integrations [70, 71]. For service-sector SMEs in Thailand, EM alone may not fully translate into CA. However, when supported by SCR mechanisms, SMEs can more effectively exploit opportunities and sustain competitiveness under uncertainty.

6. Theoretical Contributions

This study advances theory by integrating entrepreneurial marketing (EM), supply chain resilience (SCR), and competitive advantage (CA) within the theoretical background of the resource-based view (RBV) and dynamic capabilities theory (DCT). Under RBV, EM encompasses proactive innovation, customer-centric risk management, opportunistic resource leveraging, and value network creation capabilities that exhibit value, rarity, inimitability, and non-substitutability (VRIN) [16]. From a DCT perspective, EM represents a firm's capacity to integrate, reconfigure, and develop competencies through transforming, seizing, and sensing processes essential for adaptation and sustained performance [21, 22].

The findings confirmed that EM directly enhances CA (H1), enabling SMEs to achieve targeted cost leadership, value-focused differentiation, resource-based superiority, and proficient access-based advantage, supporting prior research that identifies it as a strategic driver of competitiveness in dynamic markets. More importantly, the study filled a critical gap by demonstrating that EM also strengthens SCR (H2), extending its relevance beyond market outcomes to operational stability. EM fosters SCR through speedy agility, flexible redundancy, transparent information sharing, and trust-based collaboration, enriching both EM and SCR literature.

Additionally, results reaffirmed that SCR positively influences CA (H3), consistent with studies identifying it as a dynamic capability that ensures continuity, stability, and sustainable performance. This study further showed that SCR not only buffers against disruptions but also enhances firms' capacity to pursue sustained cost leadership and differentiation. Most notably, SCR was empirically validated as a mediator in the EM–CA relationship (H4), clarifying the mechanism through which EM translates into sustained CA. This integration bridges marketing, entrepreneurship, and supply chain management domains often examined separately.

Overall, the study extends RBV by confirming EM as a strategic, inimitable resource and advances DCT by positioning SCR as a dynamic capability that converts EM into lasting CA. It also addresses a theoretical gap by validating this mechanism in emerging-market service-sector SMEs, offering deeper insights into how these constructs interact to shape competitive advantage in uncertain environments.

7. Practical Implications

The results offer practical insights for SME managers, policymakers, and practitioners. For managers, the findings highlight that entrepreneurial marketing (EM) alone is insufficient for sustaining competitive advantage (CA); it must be complemented by supply chain resilience (SCR) strategies. Service-sector SMEs in Thailand's Nakhonchaiburin region should therefore strengthen proactive innovation, customer-centric risk management, opportunistic resource leveraging, and value network creation while embedding speedy agility, flexible redundancy, transparent information sharing, and trust-based collaboration into their supply chains to enhance adaptability and differentiation.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

For policymakers and business associations, the study underscores the need for initiatives that jointly develop EM and SCR capabilities. This includes designing training programs, financial incentives, and collaborative platforms to build dual competencies that help SMEs manage crises such as pandemics, geopolitical disruptions, and digital transformation. Strengthening these capabilities collectively enhances both firm-level competitiveness and sectoral resilience.

For practitioners, the key implication is the strategic integration of transparent partnerships, agile operations, and redundancy measures within entrepreneurial initiatives. Such alignment transforms short-term opportunities into sustainable competitive advantage, allowing SMEs to achieve targeted cost leadership, value-focused differentiation, resource-based superiority, and proficient access-based advantage.

8. Conclusion

In conclusion, this study provided empirical evidence that entrepreneurial marketing (EM) exerted a significant and positive influence on the competitive advantage (CA) of service-sector SMEs in the Nakhonchaiburin region of Thailand, both directly and indirectly through the mediating role of supply chain resilience (SCR). EM, comprising proactive innovation, customer-centric risk management, value network creation, and opportunistic resource leveraging, was shown to strengthen firms' strategic positioning. At the same time, SCR, characterized by speedy agility, flexible redundancy, transparent information sharing, and trust-based collaboration, enhanced CA by enabling SMEs to achieve targeted cost leadership, value-focused differentiation, resource-based superiority, and proficient access-based advantage. The findings confirmed that EM positively influenced both SCR and CA, while SCR itself exerted a strong effect on CA and partially mediated the relationship between EM and CA. Overall, the study underscored the strategic significance of combining EM practices with SCR mechanisms to ensure CA and sustainable competitiveness in uncertain and dynamic service environments.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

References

[1] A. Okeke, "Evaluating sustainable practices and supply chain management effectiveness in African small and medium-sized enterprises (SMEs)," *Journal of Sustainability Research*, vol. 6, no. 2, p. e240033, 2024. https://doi.org/10.20900/jsr20240033

[2] N. Toni, T. S. Goh, and Y. R. Edward, "Supply chain sustainability and financial performance: The role of e-commerce, digital banking and digital marketing of SMEs," *ECONOMICS - Innovative and Economics Research Journal*, vol. 13, no. 1, pp. 487 - 507, 2025. https://doi.org/10.2478/eoik-2025-0027

[3] P. Kamkankaew, P. Thanitbenjasith, V. Phattarowas, S. Khumwongpin, and S. Sribenjachot, "Deglobalization and its impact on Thai SMEs: Challenges, opportunities, and adaptation strategies," *International Journal of Sociologies and Anthropologies Science Reviews*, vol. 5, no. 1, pp. 371-394, 2025. https://doi.org/10.60027/ijsasr.2025.5385

[4] P. Ueasangkomsate, "Empowering Thai SMEs through IT competency, digitalization and digital transformation for new product development," *Cogent Business & Management*, vol. 12, no. 1, p. 2458758, 2025. https://doi.org/10.1080/23311975.2025.2458758

[5] E. P. Indriyani *et al.*, "Sustaining infrastructure firm performance through strategic orientation: Competitive advantage in dynamic environments," *Sustainability*, vol. 17, no. 3, p. 1194, 2025. https://doi.org/10.3390/su17031194

[6] G. Meena and K. Santhanalakshmi, "Deconstructing digital transformation: A multidimensional analysis of digital literacy's role in shaping human capital and driving organizational success," *ECONOMICS - Innovative and Economics Research Journal*, vol. 13, no. 1, pp. 405-430, 2025. https://doi.org/10.2478/eoik-2025-0018

[7] W. Voordeckers, A. Vandebeek, F. Lambrechts, Y. Bammens, and M. Vandewaerde, "Director knowledge, shared leadership, and board service performance," *Journal of Business Research*, vol. 189, p. 115208, 2025. https://doi.org/10.1016/j.jbusres.2025.115208

[8] V. Guerola-Navarro, H. Gil-Gomez, R. Oltra-Badenes, and P. Soto-Acosta, "Customer relationship management and its impact on entrepreneurial marketing: A literature review," *International Entrepreneurship and Management Journal*, vol. 20, no. 2, pp. 507-547, 2024. https://doi.org/10.1007/s11365-022-00800-x

[9] P. K. Dey, S. Chowdhury, A. Abadie, E. Vann Yaroson, and S. Sarkar, "Artificial intelligence-driven supply chain resilience in Vietnamese manufacturing small- and medium-sized enterprises," *International Journal of Production Research*, vol. 62, no. 15, pp. 5417-5456, 2024. https://doi.org/10.1080/00207543.2023.2179859

[10] M. Siregar, A. Lubis, Y. Absah, and P. Gultom, "Increasing the competitive advantage and the performance of SMEs using entrepreneurial marketing architectural innovation capability in North Sumatera, Indonesia," *Uncertain Supply Chain Management*, vol. 12, pp. 965-976, 2024. https://doi.org/10.5267/j.uscm.2023.12.011

[11] E. Suandi, Herri, Yulihasri, and Syafrizal, "Evaluating the relationship between entrepreneurial marketing, competitive advantage, and Islamic banks performance," *Journal of Financial Services Marketing*, vol. 28, no. 3, pp. 599-614, 2023. https://doi.org/10.1057/s41264-022-00169-6

[12] A. T. Tolossa, M. Singh, and R. K. Gautam, "Unveiling the Nexus: The crucial role of competitive advantage in bridging entrepreneurial marketing practices and sustainable firm performance in small and medium enterprises," *Journal of Innovation and Entrepreneurship*, vol. 13, no. 1, p. 43, 2024. https://doi.org/10.1186/s13731-024-00398-0

[13] N. Badwan, "Role of supply chain partnership, cross-functional integration, responsiveness and resilience on competitive advantages: Empirical evidence from Palestine," *The TQM Journal*, vol. 37, no. 5, pp. 1385–1417, 2024. https://doi.org/10.1108/TQM-12-2023-0402

[14] K. Huang, K. Wang, P. K. C. Lee, and A. C. L. Yeung, "The impact of industry 4.0 on supply chain capability and supply chain resilience: A dynamic resource-based view," *International Journal of Production Economics*, vol. 262, p. 108913, 2023. https://doi.org/10.1016/j.ijpe.2023.108913

[15] H. Setiawan, Z. Jiwa, and H. Siagian, "Digitalization and green supply chain integration to build supply chain resilience toward better firm competitive advantage," *Uncertain Supply Chain Management*, vol. 11, pp. 683-696, 2023. https://doi.org/10.5267/j.uscm.2023.1.012

[16] J. Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99-120, 1991. https://doi.org/10.1177/014920639101700108

[17] B. Wernerfelt, "A resource-based view of the firm," *Strategic Management Journal*, vol. 5, no. 2, pp. 171-180, 1984. https://doi.org/10.1002/smj.4250050207

[18] F. Kellermanns, J. Walter, T. R. Crook, B. Kemmerer, and V. Narayanan, "The resource-based view in entrepreneurship: A content-analytical comparison of researchers' and entrepreneurs' views," *Journal of Small Business Management*, vol. 54, no. 1, pp. 26-48, 2016. https://doi.org/10.1111/jsbm.12126

[19] I. V. Kozlenkova, S. A. Samaha, and R. W. Palmatier, "Resource-based theory in marketing," *Journal of the Academy of Marketing Science*, vol. 42, no. 1, pp. 1-21, 2014. https://doi.org/10.1007/s11747-013-0336-7

[20] O. A. Arda, F. Montabon, E. Tatoglu, I. Golgeci, and S. Zaim, "Toward a holistic understanding of sustainability in corporations: Resource-based view of sustainable supply chain management," *Supply Chain Management: An International Journal*, vol. 28, no. 2, pp. 193-208, 2023. https://doi.org/10.1108/SCM-08-2021-0385

[21] D. J. Teece, G. Pisano, and A. Shuen, "Dynamic capabilities and strategic management," *Strategic Management Journal*, vol. 18, no. 7, pp. 509-533, 1997. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7%3C509::AID-SMJ882%3E3.0.CO;2-Z

[22] D. J. Teece, "Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance," *Strategic Management Journal*, vol. 28, no. 13, pp. 1319-1350, 2007. https://doi.org/10.1002/smj.640

[23] J. R. Hanaysha, A. Abuowda, and O. Gulseven, "An exploration of entrepreneurial marketing dimensions and competitive advantage in small and medium enterprises," *Business Perspectives and Research*, vol. 0, no. 0, p. 22785337241255815, 2024. https://doi.org/10.1177/22785337241255815

[24] V. Dhameria, I. Ghozali, A. Hidayat, and V. Aryanto, "Networking capability, entrepreneurial marketing, competitive advantage, and marketing performance," *Uncertain Supply Chain Management*, vol. 9, pp. 941-948, 2021. https://doi.org/10.5267/j.uscm.2021.7.007

[25] M. S. Mahrinasari, S. Bangsawan, and M. F. Sabri, "Local wisdom and Government's role in strengthening the sustainable competitive advantage of creative industries," *Heliyon*, vol. 10, no. 10, p. e31133, 2024. https://doi.org/10.1016/j.heliyon.2024.e31133

[26] M. H. Morris, S. Minet, and R. W. and LaForge, "Entrepreneurial marketing: A construct for integrating emerging entrepreneurship and marketing perspectives," *Journal of Marketing Theory and Practice*, vol. 10, no. 4, pp. 1-19, 2002. https://doi.org/10.1080/10696679.2002.11501922

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656

[27] S. Munongo and D. Pooe, "The influence of entrepreneurial orientation on supply chain resilience: Evidence from the small and medium sized enterprises," *International Journal of Economics and Financial Issues*, vol. 15, no. 1, pp. 208-217, 2025. https://doi.org/10.32479/ijefi.17492

[28] U. S. Yadav and R. Tripathi, "Impact of innovation, entrepreneurial orientation and entrepreneurial leadership on supply chain resilience in handicraft industry: Moderating role of supply chain orientation," *Benchmarking: An International Journal*, vol. 32, no. 5, pp. 1559–1601, 2025. https://doi.org/10.1108/BIJ-09-2023-0615

[29] S. Sturm, N.-O. Hohenstein, and E. Hartmann, "Linking entrepreneurial orientation and supply chain resilience to strengthen business performance: An empirical analysis," *International Journal of Operations & Production Management*, vol. 43, no. 9, pp. 1357-1386, 2023. https://doi.org/10.1108/IJOPM-07-2022-0418

[30] M. M. Goaill and M. A. and Al-Hakimi, "Does absorptive capacity moderate the relationship between entrepreneurial orientation and supply chain resilience?," *Cogent Business & Management*, vol. 8, no. 1, p. 1962487, 2021. https://doi.org/10.1080/23311975.2021.1962487

[31] N. Madhavika *et al.*, "Navigating economic crisis: Factors shaping resilience in Sri Lankan construction SME supply chains," *International Journal of Construction Management*, Article 2024. https://doi.org/10.1080/15623599.2024.2415158

[32] X. Luo, K. Kang, L. Lu, and Y. Ke, "Research on investment and coordination strategies for supply chain resilience under supply disruption risk," *Symmetry*, vol. 16, no. 9, p. 1192, 2024. https://doi.org/10.3390/sym16091192

[33] D. Kristanto and D. A. Kurniawati, "Financial performance of Indonesian frozen food MSMEs: Halal supply chain resilience, certification and competitive advantage," *Journal of Islamic Marketing*, vol. ahead-of-print, no. ahead-of-print, 2025. https://doi.org/10.1108/JIMA-07-2024-0278

[34] G. Pu, S. Li, and J. Bai, "Effect of supply chain resilience on firm's sustainable competitive advantage: A dynamic capability perspective," *Environmental Science and Pollution Research*, Article vol. 30, no. 2, pp. 4881-4898, 2023. https://doi.org/10.1007/s11356-022-22483-1

[35] H. Siagian, S. R. Basana, Z. J. H. Tarigan, M. Novitasari, and F. Jie, "Role of supply chain management in improving competitive advantage of Indonesian small and medium enterprises," *Problems and Perspectives in Management*, vol. 22, no. 2, pp. 696-707, 2024. https://doi.org/10.21511/ppm.22(2).2024.54

[36] M. Z. u. Haq and H. Aslam, "Impact of entrepreneurial leadership on supply chain performance: The mediating role of supply chain resilience," *Journal of Manufacturing Technology Management*, vol. 34, no. 5, pp. 694-712, 2023. https://doi.org/10.1108/JMTM-10-2022-0376

[37] G. Rezaei, S. M. H. Hosseini, and S. S. Sana, "Exploring the relationship between data analytics capability and competitive advantage: The mediating roles of supply chain resilience and organization flexibility," *Sustainability*, vol. 14, no. 16, p. 10444, 2022. https://doi.org/10.3390/su141610444

[38] A. B. M. Metwally, H. A. A. Ali, S. A. S. Aly, and M. A. S. Ali, "The interplay between digital technologies, supply chain resilience, robustness and sustainable environmental performance: Does supply chain complexity matter?," *Sustainability*, vol. 16, no. 14, p. 6175, 2024. https://doi.org/10.3390/su16146175

[39] M. Bahrami and S. Shokouhyar, "The role of big data analytics capabilities in bolstering supply chain resilience and firm performance: A dynamic capability view," *Information Technology & People*, vol. 35, no. 5, pp. 1621-1651, 2022. https://doi.org/10.1108/ITP-01-2021-0048

[40] M. Feng, M. Zhou, and M. Matejun, "Big data capability and supply chain performance: The mediating effect of supply chain resilience and the moderating effect of environmental uncertainty," *Logforum*, vol. 20, no. 2, pp. 243-262, 2024. https://doi.org/10.17270/J.LOG.001035

[41] M. Abou Kamar, O. M. Albadry, S. Sheikhelsouk, M. H. Ali Al-Abyadh, and O. Alsetoohy, "Dynamic capabilities influence on the operational performance of hotel food supply chains: A mediation-moderation model," *Sustainability*, vol. 15, no. 18, p. 13562, 2023. https://doi.org/10.3390/su151813562

[42] R. J. Rovinelli and R. K. Hambleton, "On the use of content specialists in the assessment of criterion-referenced test item validity," *Tijdschrift Voor Onderwijs Research*, vol. 2, no. 2, pp. 49-60, 1977.

[43] DBD, "DBD DataWarehouse+ team. Nonthaburi: Department of Business Development," 2025. https://datawarehouse.dbd.go.th/index

[44] T. Yamane, *Statistics: An introductory analysis*, 3rd ed. New York: Harper and Row, 1973.

[45] J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate data analysis*, 7th ed. New York: Pearson, 2010.

[46] A. L. Comrey and H. B. Lee, *A first course in factor analysis*, 2nd ed. Hillsdale, NJ: Lawrence Erlbaum, 1992.

[47] J. C. Anderson and D. W. Gerbing, "Structural equation modeling in practice: A review and recommended two-step approach," *Psychological Bulletin*, vol. 103, no. 3, pp. 411-423, 1988. https://doi.org/10.1037/0033-2909.103.3.411

[48] M. Hutchens, "Structural Equation Modeling," 2017. https://doi.org/10.1002/9781118901731.iecrm0243

[49] J. F. Hair, G. T. M. Hult, C. M. Ringle, and M. Sarstedt, *A primer on partial least squares structural equation modeling (PLS-SEM)*, 2nd ed. Thousand Oaks, CA: Sage Publications Inc, 2017.

[50] M. Sarstedt, C. M. Ringle, and J. F. Hair, *Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. E. Vomberg (Eds.), Handbook of Market Research*. Cham: Springer International Publishing, 2021.

[51] J. F. Hair, C. M. Ringle, and M. Sarstedt, "Editorial - 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.

[52] 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. https://doi.org/10.1177/002224378101800104

[53] R. Schumacker and R. Lomax, *A beginner's guide to structural equation modeling*, 4th ed. New York: Routledge, 2015.

[54] N. Alqahtani and C. Uslay, "Entrepreneurial marketing and firm performance: Synthesis and conceptual development," *Journal of Business Research*, vol. 113, pp. 62-71, 2020. https://doi.org/10.1016/j.jbusres.2018.12.035

[55] A. Mahrous, M. A. Genedy, and M. Kalliny, "The impact of characteristics of intra-organizational environment on entrepreneurial marketing intensity and performance in Egypt," *Journal of Entrepreneurship in Emerging Economies*, vol. 12, no. 5, pp. 621-642, 2020. https://doi.org/10.1108/JEEE-08-2019-0115

[56] B. Santoso and J. Rahayu, "Do social media-based lead generation capabilities? The impact of entrepreneurial marketing and knowledge to performance SMES of the culinary sector in East Java," *Quality - Access to Success*, vol. 26, no. 207, pp. 178-189, 2025. https://doi.org/10.47750/QAS/26.207.19

[57] H. Ma, "Creation and preemption for competitive advantage," *Management Decision*, vol. 37, no. 3, pp. 259-267, 1999. https://doi.org/10.1108/00251749910264497

[58] Z. Zahara, I. , S. I. Nuriya, and and Farid, "Entrepreneurial marketing and marketing performance through digital marketing capabilities of SMEs in post-pandemic recovery," *Cogent Business & Management*, vol. 10, no. 2, p. 2204592, 2023. https://doi.org/10.1080/23311975.2023.2204592

[59] M. Christopher and H. Peck, "Building the resilient supply chain," *The International Journal of Logistics Management*, vol. 15, no. 2, pp. 1-14, 2004. https://doi.org/10.1108/09574090410700275

[60] M. Kamalahmadi and M. M. Parast, "A review of the literature on the principles of enterprise and supply chain resilience: Major findings and directions for future research," *International Journal of Production Economics*, vol. 171, pp. 116-133, 2016. https://doi.org/10.1016/j.ijpe.2015.10.023

[61] S. Hosseini, D. Ivanov, and A. Dolgui, "Review of quantitative methods for supply chain resilience analysis," *Transportation Research Part E: Logistics and Transportation Review*, vol. 125, pp. 285-307, 2019. https://doi.org/10.1016/j.tre.2019.03.001

[62] F. R. Ahmad, "Managing sustainable supply chain resilience: A network approach," *Journal of Educational and Social Research*, vol. 15, no. 3, pp. 195-206, 2025. https://doi.org/10.36941/jesr-2025-0091

[63] P. Liu, J. Liu, and C. Tao, "Market access, supply chain resilience and enterprise innovation," *Journal of Innovation & Knowledge*, vol. 9, no. 4, p. 100576, 2024. https://doi.org/10.1016/j.jik.2024.100576

[64] C. W. Y. Wong, T.-C. Lirn, C.-C. Yang, and K.-C. Shang, "Supply chain and external conditions under which supply chain resilience pays: An organizational information processing theorization," *International Journal of Production Economics*, vol. 226, p. 107610, 2020. https://doi.org/10.1016/j.ijpe.2019.107610

[65] N. Abeysekara, H. Wang, and D. Kuruppuarachchi, "Effect of supply-chain resilience on firm performance and competitive advantage: A study of the Sri Lankan apparel industry," *Business Process Management Journal*, vol. 25, no. 7, pp. 1673-1695, 2019. https://doi.org/10.1108/BPMJ-09-2018-0241

[66] Z. J. H. Tarigan, H. Siagian, and F. Jie, "Impact of internal integration, supply chain partnership, supply chain agility, and supply chain resilience on sustainable advantage," *Sustainability*, vol. 13, no. 10, p. 5460, 2021. https://doi.org/10.3390/su13105460

[67] J. Stentoft, K. A. Wickstrøm, and A. Haug, "The operational performance effect of digitalized manufacturing processes and the mediation effect of supply chain resilience," *Journal of Manufacturing Technology Management*, 2025. https://doi.org/10.1108/JMTM-12-2024-0674

[68] R. Manigandan, J. N. V. Raghuram, and P. Venugopal, "Supply chain strategic shielding: An IPMA approach to unveiling the serial mediating effects of risk management and resilience in the entrepreneurial orientation-firm performance relationship in Indian manufacturing SMEs," *International Journal of Procurement Management*, vol. 22, no. 4, pp. 421-449, 2025. https://doi.org/10.1504/IJPM.2025.145095

[69] Y. Lyu, Z. M. Talib, A. J. Sumayong, and F. Li, "Driving supply chain performance in China's imported soybean supply chain through strategies: The mediating role of supply chain," *Journal of Logistics, Informatics and Service Science*, vol. 12, no. 5, pp. 109-123, 2025. https://doi.org/10.33168/JLISS.2025.0506

[70] A. Z. Piprani, S. Mohezar, and N. I. Jaafar, "Supply chain integration and supply chain performance: The mediating role of supply chain resilience," *International Journal of Supply Chain Management*, vol. 9, no. 3, pp. 58-73, 2020.

[71] S. Kunnapapdeelert and K. Pitchayadejanant, "Analyzing the effect of supply chain strategies and collaboration on performance improvement using MIMIC model," *International Journal of Industrial Engineering and Management*, vol. 12, no. 3, pp. 216-225, 2021. https://doi.org/10.24867/IJIEM-2021-3-289

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 10: 1269-1284, 2025
DOI: 10.55214/2576-8484.v9i10.10656