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Synergy of collaboration and competitiveness for sustainable handcraft small medium enterprises

Alhidayatullah

Universitas Muhammadiyah Sukabumi, Jawa Barat, Indonesia
alhidayatullah@ummi.ac.id

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ABSTRACT

Purpose-This study seeks to examine the impact of collaborative synergy on business competitiveness and sustainability, and to evaluate the effect of competitiveness on business sustainability within handmade small medium enterprises. This research originates from the issues of inadequate formal collaboration, restricted product competitiveness, and sustainability concerns within the local culture-based creative industry sector.

Methodology-The study employs a quantitative methodology via a survey technique. The research population comprises 285 handicraft small medium enterprises registered with the Sukabumi cooperatives and small medium enterprises office in 2024. Data was gathered using a Likert scale questionnaire and processed via structural equation modeling with Smart PLS version 4.0.

Findings-The study's findings indicate that cooperation synergy significantly enhances competitiveness, collaboration synergy significantly improves business sustainability, and competitiveness significantly contributes to business sustainability. Likewise, the synergy of collaboration towards business sustainability mediated by competitiveness has a significant positive effect. This research substantiates that strategic collaboration is the primary catalyst for competitiveness and the cornerstone of small medium enterprises sustainability.

Research Limitations-This study is limited to handcraft small medium enterprises in Sukabumi, Indonesia so the findings cannot be generalized to other sectors or regions. The cross-sectional survey captures only one point in time, restricting analysis of long-term dynamics. Self-reported data may introduce response bias, and external factors such as government policy, economic conditions, and digital transformation were not included in the model.

Novelty-This research is new due to the integration of three critical variables: Cooperation synergy, competitiveness, and company sustainability, inside an empirical model grounded in resource-based view and dynamic capability theory, particularly concerning creative small medium enterprises rooted in local culture.

1. Introduction

Micro small and medium enterprises (MSMEs) play a crucial role in fostering national economic development, generating employment, and enhancing cultural identity through their innovative offerings. Within the SME sector, the handicraft industry plays a significant role as a producer of high-value-added items that incorporate cultural, artistic, and functional characteristics (Khaddam, 2020). Sukabumi, Indonesia, recognized for its unique handicraft potential, including woven bamboo, written batik, and wood crafts, has emerged as a hub for the development of MSMEs focused on both domestic and export markets (Das & Dave, 2023). Nonetheless, escalating global competition, evolving consumer preferences, and digital market dynamics require handicraft MSMEs to persist in adapting through integrated business strategy innovations.

An increasingly pertinent strategy is to cultivate collaborative synergy across business entities, both horizontally (among similar MSMEs) and vertically (with suppliers, distributors, and governmental bodies). Collaboration enables MSMEs to exchange resources, broaden their market networks, and enhance their operational efficiency (Achmad & Wiratmadja, 2025; Masudin et al., 2025). Furthermore, collaboration can enhance information dissemination and foster an innovative environment that promotes sustainable corporate practices. Within the creative industry, collaboration effectively merges the benefits of local artistry with contemporary technology, enhancing product adaptability to global market trends (Herawaty & Raharja, 2019; Mastika et al., 2023).

Despite their considerable potential, gap phenomena persist in handmade MSMEs in Sukabumi. The degree of collaboration among business entities is generally constrained and frequently informal, complicating the assessment of its effect on business performance (Micak & Kocmanova, 2022; Oham & Ejike, 2024). Second, the competitiveness of handcraft MSMEs goods continues to encounter obstacles regarding quality, production consistency, and international market penetration. According to data from the Ministry of Cooperatives and MSMEs in 2024, the export contribution of handmade items from Sukabumi MSMEs is merely 5% of total production, much lower than the national aim of 15%. Third, business sustainability is frequently hindered by reliance on seasonal markets, insufficient capital, and the absence of integration of sustainable business practices, including the utilization of eco-friendly materials and production waste management (Brandão et al., 2025; Waqar et al., 2025).

Numerous studies have shown the significance of collaboration in enhancing the performance and competitiveness of MSMEs (Qrunfleh & Tarafdar, 2014; Al-Shboul, 2025) and the correlation between competitiveness and company sustainability (Porter & Kramer, 2011). Nonetheless, there are at least three research deficiencies that require attention. Primarily, most studies concentrate on the large-scale manufacturing sector or the technology industry, resulting in the context of creative industries, such as artisanal MSMEs, receiving comparatively scant attention. The simultaneous analysis of cooperation synergy, competitiveness, and sustainability within a single study model has rarely been conducted, despite their interdependence. Third, studies connecting these variables to the resource-based view (RBV) and dynamic capability theory (DCT) at the local SME level, particularly in culturally robust regions such as Sukabumi, are few. This study presents a conceptual paradigm that synthesizes collaboration, competitiveness, and sustainability within the framework of handcraft MSMEs. Unlike the last study that isolated the discussion of these variables, this study investigates the direct and indirect relationships among them by evaluating the robustness of the distinctive resources held by Sukabumi MSMEs and their adaptability to market fluctuations. The novelty of this research lies in the integration of three critical variables: cooperation synergy, competitiveness, and company sustainability, inside an empirical model grounded in RBV and DCT, particularly concerning creative MSMEs rooted in local culture.

This study examines the impact of collaborative synergy on the competitiveness and sustainability of handcraft MSMEs in Sukabumi and the relationship between competitiveness and business sustainability. Additionally, it aims to develop an empirical model that incorporates these three variables within the RBV and DCT, thereby offering a thorough understanding of strategies to enhance the competitiveness and sustainability of MSMEs based

on local potential. The selection of Sukabumi handcraft MSMEs as the object of research is important because this sector has high creative economy potential but faces real challenges such as limited market access, suboptimal product innovation, and limited partnership networks. In addition, its contribution to the absorption of local labor and cultural preservation makes handcraft MSMEs a strategic sector that needs to be strengthened through effective collaboration in order to be able to compete and be sustainable in the midst of global market dynamics. This research is significant because it offers strategic advice for handicraft MSMEs in Sukabumi to develop a collaborative, competitive, and sustainable business ecosystem. This study theoretically advances the creation of a conceptual model that unifies collaboration, competition, and sustainability within a singular research framework Small and Medium Enterprises (MSMEs) play a crucial role in fostering national economic development, generating employment, and enhancing cultural identity through their innovative offerings. Within the SME sector, the handicraft industry plays a significant role as a producer of high-value-added items that incorporate cultural, artistic, and functional characteristics (Khaddam, 2020). Sukabumi City, recognized for its unique handicraft potential, including woven bamboo, written batik, and wood crafts, has emerged as a hub for the development of MSMEs focused on both domestic and export markets (Das & Dave, 2023). Nonetheless, escalating global competition, evolving consumer preferences, and digital market dynamics require handicraft MSMEs to persist in adapting through integrated business strategy innovations.

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2. Literature Review and Hypothesis Development

Grand Theory

This study is based on the amalgamation of four principal theoretical frameworks: RBV, DCT, stakeholder theory, and institutional theory. Barney's (1991) RBV asserts that sustained competitive advantage is derived from the management of precious, scarce, elusive, and irreplaceable resources, including artisan skills, distinctive designs, and localized cultural knowledge inherent to handicraft MSMEs. According to DCT by Teece (2018), strategic collaboration enhances the adaptive capacity of MSMEs to capitalize on market opportunities, embrace technical advancements, and efficiently reorganize resources. Moreover, Freeman and Phillips (2002) stakeholder theory posits that a business's success and sustainability hinge on its capacity to fulfill the expectations of stakeholders, such as consumers, suppliers, governments, and local communities, which can be enhanced through collaboration. Institutional theory by Sankaran et al. (2023) posits that sustainability strategies are shaped by normative, coercive, and mimetic pressures, which, in the realm of handcraft MSMEs, manifest through adherence to quality standards, environmental certification, and governmental regulations. The amalgamation of these four theories offers a thorough conceptual framework for elucidating how collaborative synergy influences the competitiveness and sustainability of handmade MSMEs in Sukabumi.

Collaboration Synergy

Collaboration synergy denotes the strategic engagement of business entities to collectively leverage resources, knowledge, and networks in pursuit of mutually advantageous objectives (Achmad & Wiratmadja, 2025). Within the realm of handicraft MSMEs, collaboration may manifest as partnerships among producers, cooperation with raw material suppliers, and strategic collaborations with distributors and local authorities. The RBV hypothesis posits that a sustainable competitive advantage is achievable through the management of resources that are valuable, limited, inimitable, and non-substitutable (Barney, 1991). Collaborative synergy is a crucial strategy for accessing these resources without necessitating complete internal possession of the resources.

Alongside RBV, DCT perceives collaboration as a mechanism for enhancing an organization's adaptability to market fluctuations (Teece, 2018). Studies indicate that strategic collaboration can enhance product innovation, broaden market share, and fortify competitive advantages (Khaddam, 2020; Oham & Ejike, 2024). A recent study by Micak and Kocmanova (2022) emphasize that cross-actor collaboration within the creative sector ecosystem may expedite the adoption of digital technology and enhance global competitiveness. Within the

framework of sustainability, collaboration is vital for disseminating eco-friendly methods and ensuring responsible supply chain management (Trang et al., 2022). Consequently, collaborative synergy is regarded as a strategic element that fosters competitiveness and promotes sustainability.

Competitiveness

Competitiveness refers to an entity's capacity to deliver products or services that fulfill or exceed market quality criteria at competitive rates while offering superior added value compared to rivals (Porter, 1996). In the realm of handicraft MSMEs, competitiveness encompasses design superiority, product quality, the distinctiveness of local motifs, and responsiveness to consumer trends. RBV perceives competitiveness as the outcome of managing both tangible (e.g., production equipment) and intangible (e.g., artisan skills and brand reputation) assets possessed by the business.

Porter's (1980) competitive advantage theory delineates three primary tactics for enhancing competitiveness: cost advantage, product differentiation, and market segment focus. Empirical research indicates that design innovation and the application of digital technology can enhance the competitiveness of creative MSMEs (Mahrinasari et al., 2024). Simultaneously, coordination across business entities substantially enhances the development of marketing and distribution synergies (Waqar et al., 2025). In the context of global competition, the competitiveness is significantly affected by flexibility, ongoing innovation, and foreign market entry (Peng, 2025). Consequently, competitiveness is a crucial factor that links the impact of collaboration on corporate sustainability.

Business Sustainability

Business sustainability refers to an organization's capacity to function over the long term by preserving economic viability, ensuring environmental stewardship, and delivering social benefits to stakeholders (Elkington & Rowlands, 1999). This notion is referred to as the Triple Bottom Line, encompassing the dimensions of profit, planet, and people. In the handcraft MSMEs sector, sustainability entails preserving production continuity, safeguarding artisan welfare, and utilizing eco-friendly materials.

RBV by Barney (1991) and stakeholder theory by Freeman (2010) assert that sustainability is attained through the effective utilization of distinctive resources and the satisfaction of diverse stakeholder expectations, encompassing customers, local communities, and governmental entities. Research indicates that sustainability is affected by innovation, market strategies, and environmental commitment (Dangelico et al., 2020; Trang et al., 2022). Conversely, institutional theory posits that government restrictions and industry standards incentivize MSMEs to implement sustainable business practices (Nylenna, 2024). Sustainability is influenced not only by internal qualities, such as competitiveness, but also by external relationships formed through strategic collaboration.

Hypothesis Development

According to RBV, collaborative synergy enables MSMEs to acquire rare resources that are challenging to acquire independently, including technology, distribution networks, and market intelligence (Barney, 1991). Recent studies indicate that strategic collaboration enhances innovation, product quality, and process efficiency, thereby bolstering competitiveness (Khaddam, 2020; Achmad & Wiratmadja, 2025). Castellani et al. (2024) discovered that collaboration among creative industry stakeholders in West Java substantially enhances market penetration. Hariastuti et al. (2021) and Brandão et al. (2025) observed analogous findings, asserting that effective collaborations enhance brand visibility and broaden distribution networks for MSMEs. **H_1: Collaboration Synergy Has a Positive Effect on Competitiveness**.

Collaboration influences competition and enhances sustainability by facilitating the exchange of eco-friendly techniques, managing supply chain risks, and ensuring adherence to

sustainability standards (Trang et al. 2022). Research conducted by Brandão et al. (2025) revealed that effective collaboration aids small enterprises in accessing new markets and financial opportunities for sustainability initiatives. Dangelico et al. (2020) asserted that cross-sector collaboration can enhance knowledge transfer in sustainable resource management. Mulyana and Wasitowati (2021) and Chaudhuri et al. (2023) present analogous findings that emphasize the significance of collaborative networks in enhancing company resilience and environmental sustainability. **H_2: Collaboration Synergy Has a Positive Effect on Business Sustainability.**

Intense competition enables MSMEs to preserve their market share, generate consistent revenue, and invest in sustainable business practices (Porter, 1996). Kim et al. (2018) found that product differentiation and enhanced quality augment the likelihood of long-term business sustainability. Setyaningrum et al. (2023) demonstrate that innovation grounded in competitive advantage propels the implementation of ecologically sustainable practices. Giraud-Carrier et al. (2025) and Singh et al. (2025) discovered consistent results confirming that robust competitiveness enhances business resilience to market fluctuations and external pressures. **H_3: Competitiveness Has a Positive Effect on Business Sustainability**

Collaboration synergies allow MSMEs to access scarce resources, share knowledge, and expand market networks that cannot be obtained independently. This collaboration increases product innovation, operational efficiency, and market penetration, thereby strengthening the competitiveness of the companies involved (Barney, 1991; Teece, 2018). Strong competitiveness further makes an important contributes to business sustainability through increased revenue, market stability, and investment in environmentally friendly business practices (Porter & Kramer, 2011; Lee & Falahat, 2019). Previous research confirms that effective collaboration not only has a direct impact on sustainability but also indirectly through strengthening competitiveness (Mulyana & Wasitowati, 2021; Trang et al., 2022). Therefore, competitiveness plays a role as a mediating variable that bridges the influence of collaboration synergy on business sustainability, ensuring that strategic partnerships produce sustainable competitive advantages for handcraft MSMEs in Sukabumi (Singh et al., 2024). **H_4: Collaboration Synergy Has a Positive Effect on Business Sustainability through Competitiveness**

Based on the theoretical basis and hypothesis development above, Figure 1 was developed to explain the relationship between the main variables, namely collaboration synergy, competitiveness, and business sustainability. This model emphasizes that collaborative synergy plays an important role in increasing competitiveness, which will further support the sustainability of handcraft MSMEs in Sukabumi. In addition, this framework serves as a reference for testing hypotheses that have been formulated and guides empirical analysis in research.

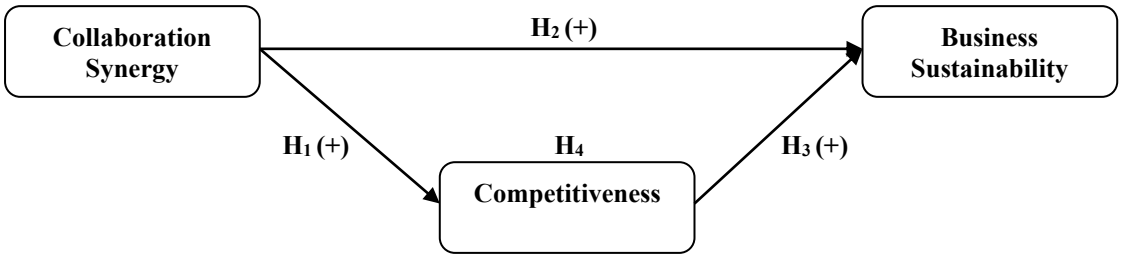

Figure 1. Conceptual Framework

3. Research Methodology

This study employs a quantitative methodology via a survey to examine the causal relationship between cooperation synergy, competitiveness, and company sustainability in

handmade MSMEs in Sukabumi. The research population comprises all handcraft MSMEs (bamboo and wood crafts) registered with the Cooperatives, Small and Medium Enterprises Office of Sukabumi in 2024, totaling 285. The sample was obtained using the Krejcie Morgan Calculator, employing a confidence level of 95% and a margin of error of 5%, with an anticipated response rate of 80%, resulting in a total of 133 respondents.

The research included a structured questionnaire utilizing a five-point Likert scale (1 = strongly disagree to 5 = strongly agree), adopted from previously validated and reliable tools, and subsequently modified to suit the setting of MSMEs. The synergy variables of SME collaboration are measured using five indicators: added value, rarity, not easy to replicate, organized, and resource management (Barney, 1991). The competitiveness variable is measured using three indicators: cost advantage, differentiation advantage, and focus advantage (Porter, 1980). Business sustainability variables are measured through economic, social, and environmental dimensions based on the concept of the Triple Bottom Line (Elkington & Rowlands, 1999). The six indicators are cash flow management, supply chain, market competition and competence, disaster risk management capacity, social empowerment and cooperation, and participation in the circular economy. The data gathering method was the direct distribution of questionnaires (Google Forms) to MSMEs serving as respondents. Data analysis was carried out using structural equation modeling with partial least squares (SEM-PLS) using Smart PLS 4.0 to test the causal relationship between collaboration synergy, competitiveness, and sustainability of handcraft MSMEs in Sukabumi.

The analysis procedure began with an evaluation of the outer model to assess the quality of the measurement. Convergent validity was tested using factor loading values and average variance extracted (AVE). The standards used were factor loading ≥ 0.7 and AVE ≥ 0.5 (Hair et al., 2021). The reliability of the construct was assessed using Cronbach's alpha and composite reliability, with a minimum threshold of 0.7, as suggested by Fornell and Larcker (1981). After the instrument was declared valid and reliable, the next stage was the internal evaluation of the model to test the hypothesis through the bootstrapping method. The relationship between variables is considered significant when the t-statistics > 1.96 and the p-value < 0.05 (Chin, 2009; Hair et al., 2021).

4. Result and Discussion

Characteristics of Respondents

Table 1 indicates that the majority of respondents in this study were male, including 80 individuals (60.2 %), while female respondents totaled 53 individuals (39.8 %). This indicates that male participation was more prevalent than female participation in this study. The majority of respondents were aged 36-40 years, comprising 52 individuals (39.1 %). This was followed by the 41-45 age group, which included 40 individuals (30.1 %). The 25-35 age group accounted for 31 individuals (23.3 %), while the least represented were those over 45 years old, totaling 10 individuals (7.5 %). The data indicate that the majority of respondents are of productive age, suggesting that they possess the ideal capabilities and energy to engage in commercial activities. Regarding educational attainment, the largest group of respondents comprised individuals with a high school diploma (55 individuals or 41.4 %). This was followed by bachelor's degree holders (48 individuals, 36 %) and diploma recipients (30 individuals, 22.6 %). This indicates that respondents possessed varied educational backgrounds, with secondary education being predominant, while the highly educated cohort was also notably substantial. In terms of business duration, the majority of respondents have operated their enterprises for 6-10 years, comprising 45 individuals or 33.8%. This was followed by those with 11-15 years of experience, totaling 33 individuals (24.8 %). Additionally, 30 individuals (22.6 %) have been in business for 1-5 years, while 25 individuals (18.8 %) have surpassed 15 years.

Table 1. Respondent Characteristics

Classification	Description	Frequency	
		Total	Percentage
Gender	Male	80	60.2
	Female	53	39.8
Age	25 – 35 years old	31	23.3
	36 – 40 years old	52	39.1
	41 – 45 years old	40	30.1
	> 45 years old	10	7.5
Education Level	High School	55	41.4
	Diploma	30	22.6
	Bachelor	48	36
Long Term of Effort	1 – 5 years	30	22.6
	6 – 10 years	45	33.8
	11 – 15 years old	33	24.8
	> 15 years old	25	18.8

Validity Test

The validity test results in Table 2 and Figure 2 indicate that all indicators included in this study possess a loading factor value of over 0.7, confirming their validity. The Collaboration Synergy (SC) variable yielded the following values for the SC1–SC5 indicators. This result suggests that all indicators effectively represent the construct, as they fall under the highly valid group, consistent with Hair et al. (2021), who asserted that a factor loading value of ≥ 0.7 signifies a robust level of convergent validity. Moreover, in the sustainability business (SB) variable, the indicators SB2 to SB6 exhibited very high values, while SB1 was an outlier (discarded because it was invalid). This indicates that the indicators employed to assess company sustainability possess high validity and reliably describe the constructs consistently. Simultaneously, the competitiveness (CT) variable was assessed using three indicators, all of which fell within the very good category.

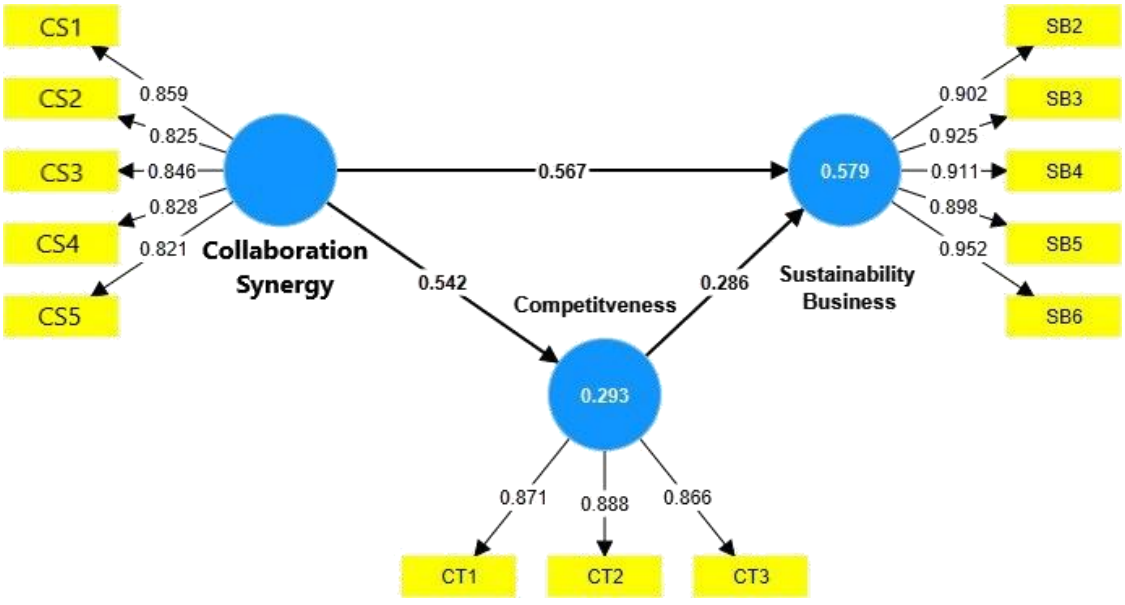

Figure 2. Measurement Model

The findings collectively affirm that all questions in the study questionnaire satisfy the criteria for convergent validity, indicating that the instruments are suitable for proceeding to reliability analysis and structural model testing. These indicators effectively indicate constructs that are measured with ideal consistency, ensuring that the research outcomes are reliable and academically accountable (Hair et al., 2021).

Table 2. Validity Test Results

Indicator	Collaboration Synergy	Sustainability Business	Competitiveness
CS1	0.859		
CS2	0.825		
CS3	0.846		
CS4	0.828		
CS5	0.821		
SB2		0.902	
SB3		0.925	
SB4		0.911	
SB5		0.898	
SB6		0.952	
CT1			0.871
CT2			0.888
CT3			0.866

Reliability Test

The reliability test findings presented in Table 3 indicate that all research variables satisfy the criteria for good reliability, as they possess Cronbach's alpha and composite reliability values of over 0.70, as recommended by Hair et al. (2021). The competitiveness variable exhibits a Cronbach's alpha of 0.850 and a composite reliability of 0.872, indicating robust internal consistency among the indicators of this construct for measuring competitiveness. The sustainability business variable achieved a Cronbach's alpha of 0.953 and a composite reliability of 0.954, categorizing it as extremely high. This number signifies that the indicators pertaining to the business sustainability variable are highly consistent and stable in representing the construct being examined. Simultaneously, the Collaboration Synergy variable exhibited a Cronbach's alpha of 0.892 and composite reliability of 0.894, affirming the exceptional dependability of the employed indicators. Consequently, it may be inferred that all research instruments exhibit a high degree of reliability, enabling them to yield consistent, valid, and dependable measurement results. This substantiates the assertion that the acquired data are suitable for subsequent examination in the structural model evaluation (Fornell & Larcker, 1981; Hair et al., 2021).

Table 3. Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability
Collaboration Synergy	0.892	0.894
Sustainability Business	0.953	0.954
Competitiveness	0.850	0.872

Hypothesis Test

The findings of the hypothesis test in Table 4 indicate that all the variable associations exhibited a positive impact. The correlation between competitiveness and sustainability yielded an original sample value of 0.286, a t-value of 3.092 (exceeding 1.96), and a p-value of 0.002 (below 0.05). The results demonstrate that competition significantly contributes to MSMEs sustainability. These findings align with those of Haseeb et al. (2019) and Romadhon et al. (2025), who highlighted that enhancing competitiveness through product excellence, operational efficiency, and adaptability can fortify MSMEs against market pressures, thereby improving their long-term survival prospects. The impact of collaboration synergy on competitiveness shows an original sample value of 0.542, accompanied by a t-statistic of 7.973 and a p-value of 0.000. The results demonstrate that synergistic coordination among business entities, the government, and external stakeholders can substantially enhance the competitiveness. These findings corroborate the research of McWilliams and Siegel (2011), who elucidate that strategic collaboration can engender a durable competitive advantage via the utilization of pooled resources, product innovation, and expanded network access.

Consequently, MSMEs that actively foster collaboration exhibits greater competitiveness than those that operate independently.

The correlation between collaboration synergy and sustainable business yielded notable results, with an original sample value of 0.567, t-statistics of 7.464, and a p-value of 0.000. This demonstrates that synergistic collaboration enhances competitiveness and directly leads to sustainable corporate development. Collaboration synergy can assist MSMEs in surmounting resource constraints, enhancing technological access, and bolstering adaptability to evolving business landscapes. The findings align with the studies conducted by (Prasetyo & Kistanti, 2020; Chen & Liu, 2023), which assert that collaboration among corporate entities fosters the generation of shared value and is a crucial element in sustaining business viability throughout global market fluctuations. Fourth, competitiveness was proven to mediate the relationship between synergistic collaboration and business sustainability, with an original sample of 0.155, a statistical T of 2.799, and a p-value of 0.005. This indicates that collaboration can increase competitiveness, which further strengthens business sustainability. This study demonstrates that competitiveness and collaboration synergy are mutually reinforcing determinants of MSMEs sustainability. Efficient collaboration enhances competitiveness, and together, they fortify the foundation for corporate sustainability. This reinforces the RBV theory of Wernefelt (1984) and Barney (1991), which asserts that competitive advantage and economic sustainability may be attained through the utilization of distinctive internal resources and strategic external collaborations.

Table 4. Hypothesis Test Results

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Competitiveness → Sustainability Business	0.286	0.284	0.092	3.092	0.002
Collaboration Synergy → Competitiveness	0.542	0.545	0.068	7.973	0.000
Collaboration Synergy → Sustainability Business	0.567	0.569	0.076	7.464	0.000
Collaboration Synergy → Competitiveness → Sustainability Business	0.155	0.155	0.055	2.799	0.005

Discussion

Synergy of Collaboration to Competitiveness

The results indicate that collaborative synergy positively and significantly influences the competitiveness of handicraft MSMEs in Sukabumi. This study validates that strategic collaboration across business entities and with external partners enhances product competitiveness in terms of quality, innovation, and market reach. The RBV theory posits that competitive advantage is achieved through the management of resources that are valued, limited, inimitable, and non-substitutable (Barney, 1991). Collaborative synergy enables MSMEs to utilize resources such as technology, design expertise, and distribution networks without necessitating complete ownership. This aligns with the findings of Holubčík et al. (2022), who affirm that cross-actor collaboration expedites the adoption of innovations and enhances competitive standing in the global market. Furthermore, these findings substantiate the research conducted by Vătămănescu et al. (2020), which showed that collaboration among innovative MSMEs in West Java greatly enhances market penetration. The more intensive the collaboration, the greater the chance for MSMEs to lower production costs, enhance product distinctiveness and broaden their market reach. Consequently, it can be inferred that collaboration is not merely a supplementary technique but the primary catalyst for establishing lasting competitiveness in the handicraft SME sector.

Collaboration Synergy for Business Sustainability

The findings indicate that collaborative synergy has a substantial beneficial influence on business sustainability. This signifies that collaboration enhances competitiveness and serves as a crucial foundation for achieving sustainable corporate sustainability. Collaboration among MSMEs can foster a more robust business ecosystem by exchanging sustainable practices, enhancing market access, and mitigating the risk of business failure through joint supply chain management. These findings align with those of a study (Trang et al., 2022) that underscores the significance of collaborative networks in promoting sustainability behaviors across economic, social, and environmental dimensions. Moreover, Ukko et al. (2022) found that cross-sector alliances facilitate MSMEs' access to funding and new markets to bolster sustainability initiatives. Mastika et al. (2023) highlighted that collaboration enhances the efficient and environmentally sustainable transfer of knowledge concerning resource management. Handcraft MSMEs in Sukabumi can achieve collaborative synergy through the utilization of sustainable local raw materials, collective control of manufacturing waste, and cooperative promotion of eco-friendly products. Consequently, collaboration serves not only as a method for attaining economic advantages but also as a strategic tool for ensuring long-term sustainability in accordance with the Triple Bottom Line approach (Elkington & Rowlands, 1999).

Competitiveness to Business Sustainability

The findings indicate that competition exerts a substantial beneficial effect on business sustainability. This demonstrates that increased competitiveness among MSMEs correlates with enhanced survival and sustainable development prospects. Porter and Kramer (2011) assert that robust competitiveness enables firms to preserve their market share, generate consistent revenue, and allocate resources to sustainability initiatives. Handcraft MSMEs might achieve competitive advantage through new designs, consistent product quality, or distinction rooted in local cultural values. These findings align with those of Aryanti et al. (2023), who underscore that innovation driven by competitiveness fosters the adoption of ecologically sustainable practices. Simultaneously, research conducted by Lee and Falahat (2019) and Mageto (2021) substantiates that elevated competitiveness enhances the resilience of enterprises against external disruptions, such as fluctuations in market trends and regulatory demands. Consequently, competition is a crucial link between efforts to enhance product quality and attain long-term sustainability. Consequently, the SME strategy extends beyond establishing competitive advantages and must focus on leveraging competitiveness to ensure business sustainability across economic, social, and environmental aspects.

Collaboration Synergy on Business Sustainability through Competitiveness

Collaboration synergy has a significant positive effect on business sustainability through competitive mediation. These findings indicate that collaboration between MSMEs actors, both horizontally among artisans and vertically with suppliers, distributors, and other stakeholders, strengthens competitiveness, which then affects business sustainability. Theoretically, these results support the RBV theory, which emphasizes the importance of managing scarce and valuable resources to create sustainable competitive advantages (Barney, 1991). Collaboration allows MSMEs to access resources such as technology, design expertise, and distribution networks without having to own them completely, thereby increasing product innovation and operational efficiency (Holubčík et al., 2022). DCT is also relevant because collaboration increases the adaptive capacity of MSMEs to respond to market and technological changes (Teece, 2018). Practically, the synergy of collaboration expands the market and accelerates the adoption of environmentally friendly practices that support the concept of the Triple Bottom Line (Elkington & Rowlands, 1999). These results are in line with the findings of Mulyana and Wasitowati (2021) and Trang et al. (2022) who affirm that strategic partnerships not only have a direct impact on sustainability, but also through increased competitiveness. Thus, collaboration is not just a complement but a key mechanism that strengthens competitiveness as a bridge to the sustainability of Sukabumi's handicraft MSMEs

business. The emerging policy implications are the importance of government and industry association support to facilitate structured collaborative networks, encourage innovation, and maintain business sustainability in the face of dynamic global markets.

5. Conclusion

This study demonstrates that the interplay of collaboration, competitiveness, and business sustainability is significantly correlated within the setting of handicraft MSMEs in Sukabumi. Collaborative synergy has a beneficial impact on competitiveness, indicating that strategic partnerships among business entities and external parties enhance product quality, foster innovation, and broaden market networks. Second, collaborative synergy directly enhances business sustainability, signifying that cooperative practices foster a more resilient, efficient, and Triple Bottom Line (TBL) (profit, people, planet) business environment. Third, competitiveness significantly influences business sustainability, highlighting that innovation-driven competitive advantage and product uniqueness are essential for the long-term viability of MSMEs. Fourth, the synergy of collaboration on business sustainability, as mediated by competitiveness, has a significant influence. Collaboration synergy can increase business sustainability both directly and indirectly. This study theoretically enhances the literature by synthesizing the RBV and DCT to elucidate the relationship between collaboration, competitiveness, and business sustainability within the creative industry sector, grounded in local culture. The findings of this study indicate that handicraft MSMEs must enhance collaborative networks, augment product innovation, and adopt sustainable business methods to contend with intensifying global competition. Future research should focus on investigating platform-based digital cooperation models that facilitate the expansion of export markets and analyze the contributions of local governments and communities to fostering the sustainability of the creative business ecosystem. This research not only fulfills the initial objectives but also facilitates the formulation of sustainability plans for MSMEs through collaborative synergy in the context of globalization.

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