



Supply Chain Management and Green Economy on Business Continuity for MSMEs in Buleleng Regency

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Abstract

Purpose: This study aims to analyze the influence of understanding supply chain management and the green economy on the business continuity of MSMEs in Buleleng Regency.

Research methods: This study employs a quantitative approach with purposive sampling. The sample of 57 business actors was selected. Based on the questionnaire results, Supply Chain Management and the Green Economy do not have a significant effect on MSMEs' Business Continuity in Buleleng Regency.

Results and discussion: Micro, small, and medium-sized enterprises (MSMEs) are businesses established by individuals or other legal entities to meet consumer needs. When running a business, they should understand aspects of Supply Chain Management and the Green Economy as indicators of quality entrepreneurial readiness. This condition is driven by MSMEs' continued orientation toward short-term sustainability, limited adoption of formal SCM, and the absence of economic incentives and market pressures that encourage the actual implementation of the green economy. High-quality entrepreneurs gain a competitive advantage by implementing SCM effectively and in an organized manner, while not forgetting environmental stewardship.

Implication: This study provides strategic recommendations for MSME actors and stakeholders to improve MSME Business Continuity by strengthening managerial understanding and business sustainability.

Keywords: business continuity, green economy, supply chain management

Abstrak

Tujuan: Penelitian ini bertujuan untuk menganalisis pengaruh pemahaman manajemen rantai pasokan dan ekonomi hijau terhadap keberlanjutan usaha UMKM di Kabupaten Buleleng.

Metode penelitian: Penelitian ini menggunakan pendekatan kuantitatif dengan pengambilan sampel bertujuan. Sampel yang dipilih adalah 57 pelaku usaha. Berdasarkan hasil kuesioner, Manajemen Rantai Pasokan dan Ekonomi Hijau tidak berpengaruh signifikan terhadap keberlanjutan usaha UMKM di Kabupaten Buleleng.

Hasil dan pembahasan: Usaha mikro, kecil, dan menengah (UMKM) adalah usaha yang didirikan oleh individu atau badan hukum lain untuk memenuhi kebutuhan konsumen. Dalam menjalankan usaha, mereka harus memahami aspek Manajemen Rantai Pasokan dan Ekonomi Hijau sebagai indikator kesiapan kewirausahaan yang berkualitas. Kondisi ini didorong oleh orientasi UMKM yang terus menerus terhadap keberlanjutan jangka pendek, adopsi SCM formal yang terbatas, dan tidak adanya insentif ekonomi dan tekanan pasar yang mendorong implementasi ekonomi hijau yang sebenarnya. Pengusaha berkualitas tinggi memperoleh keunggulan kompetitif dengan menerapkan SCM secara efektif dan terorganisir, tanpa melupakan tata kelola lingkungan.

Implikasi: Studi ini memberikan rekomendasi strategis bagi pelaku dan pemangku kepentingan UMKM untuk meningkatkan keberlanjutan bisnis UMKM dengan memperkuat pemahaman manajerial dan keberlanjutan bisnis.

Kata kunci: keberlanjutan bisnis, ekonomi hijau, manajemen rantai pasokan

INTRODUCTION

The need for consumer goods is currently increasing (Antasari, 2019). This is evidenced by the numerous entrepreneurs who have established businesses across sectors, from food and beverages to clothing and basic necessities. Consequently, numerous MSMEs are distributed across various regions, particularly in Buleleng Regency. MSMEs are businesses established by individuals or business entities to meet consumer needs. In Indonesia, MSMEs underpin the country's economic growth (Maksum *et al.*, 2020).

The activities carried out by MSMEs are not significantly different from those of large companies, encompassing business management, sourcing materials for marketed products, and customer acquisition. These three activities are certainly used as the foundation for building a business (Farida & Setiawan, 2022). This aligns with the concept of Supply Chain Management (SCM). According to (Khedr & Rani, 2024), SCM is a concept related to product distribution patterns that will be able to replace product distribution patterns optimally, where this pattern involves several activities such as planning and demand, raw material planning, product planning, inventory control, storage, product distribution, and management information systems. SCM is important to implement because it helps business actors meet consumer demand, enabling MSMEs to distribute high-quality, low-cost products (Natalia *et al.*, 2024).

As MSMEs, they must continuously innovate and be creative to maintain business continuity due to rapid technological advancements. When establishing a business, it is crucial to understand the concept and to adhere to effective, efficient principles to reduce production costs and run the business smoothly (Satpathy *et al.*, 2025). Business owners must understand the concept of supply chain management (SCM), which encompasses planning, organizing, and scheduling. The goal of SCM is to integrate the movement of goods with related parties, including suppliers, distributors, third-party service providers, and consumers (Shierly & Ellitan, 2024).

Managing a supply chain involves many people, both inside and outside the company. Furthermore, there is considerable uncertainty along the supply chain and increasingly fierce market competition (Chen *et al.*, 2022). Furthermore, the supply chain involves many parties, including suppliers, distributors, and sellers, which necessitates strong coordination among them. Furthermore, the supply chain can be affected by uncontrollable market and political changes, requiring sound risk management; by technological developments and consumer needs, requiring flexibility to adapt; and by changes in consumer and technological needs (Jodlbauer *et al.*, 2023). Business continuity can lead to issues with inventory and cost management. Therefore, it must be managed carefully and effectively, as it will disrupt the supply chain, leading to inefficiencies and ineffectiveness (Guo *et al.*, 2025).

Besides focusing on understanding SCM, MSMEs must also pay attention to their surrounding environment. The economic development of MSMEs is also linked to their environment. This relates to the concept of a green economy, an economic development model that prioritizes environmental preservation and can provide both short-term and sustainable benefits, as well as reduce inequality for current and future generations (Ardhiyansyah & Juniansyah, 2024).

A green economy is a new concept and approach that focuses on an environmentally friendly economy, resource conservation, and the optimization of new technologies to achieve green development (Khan *et al.*, 2025). In the long term, a

green economy can provide benefits: reducing negative environmental impacts, strengthening global competitiveness, and increasing attention to environmental issues. If implemented, a green economy will receive support from governments and financial institutions that prioritize environmentally friendly investments. Even today, governments continue to support a green economy because it enables the achievement of sustainable development goals, such as reducing carbon emissions, increasing resource efficiency, improving environmental quality, enhancing public welfare, and strengthening Indonesia's position on the global stage (Sambodo *et al.*, 2022).

The economy and the environment are two inseparable aspects in advancing sustainable business development, especially for MSMEs. These two aspects are interconnected. The increase in public consumption and the expansion of product distribution by MSMEs certainly affect the surrounding environment, including increased waste volumes from public consumption, air pollution from vehicle deliveries, and the availability of raw materials for products, especially those sourced directly from nature (Rodríguez-Espíndola *et al.*, 2022). Therefore, regulations regarding inventory and its distribution for production must be structured so that businesses can survive and maintain a good image with the community, investors, and other parties through positive contributions throughout their operations.

The ability of a business to survive and make a positive contribution to the economy, society, and environment in which it operates is called business continuity. The ability to manage the business as a whole is necessary for achieving business continuity. Business continuity encompasses long-term impacts on society, the environment, and the economy. A company must create a long-term business plan that includes strategies to address emergency situations and enhance business continuity. At this stage, the business owner must thoroughly consider what must be done to maintain the company's stability, including inventory management, control, and supply chain. A contact list, technical system diagrams, and emergency response procedures should be included in this plan. To implement a sustainable business, it is important to involve all parties in planning and preparation to gather their opinions and understand their perspectives on the plan. MSMEs must maintain product quality to operate continuously, making business owner satisfaction a top priority.

A study conducted by (Kerekes & Felföldi, 2020) found that the supply chain in SMEs is still not implemented properly, with a conventional approach used due to high costs and the small scale of SME business. Then, in a study conducted by (Puteri & Purnomo, 2024). It was stated that the implementation of the Green Economy still does not fully meet the 10 principles of the Green Economy, due to the study's limitation: a lack of informants who understand the concept of the Green Economy.

The problem becomes more complex when MSME business continuity is more influenced by short-term factors, such as daily cash flow, fluctuations in local demand, and tourism market conditions. In such situations, understanding SCM and the green economy is often considered non-urgent and thus receives less attention from business actors. This indicates a gap between the managerial and sustainability concepts developed in the literature and the operational realities of MSMEs at the local level (Nugraha & Dwiningrum, 2025).

Based on these conditions, it can be concluded that the sustainability of MSMEs in Buleleng Regency is not solely determined by the availability of concepts or policies, but is highly dependent on MSMEs' level of understanding of Supply Chain

Management and the Green Economy, and on how this understanding is translated into daily business practices. Therefore, research on understanding SCM and the green economy in relation to MSME business continuity in Buleleng Regency is crucial to determine the extent to which these two concepts are understood and how they contribute to MSME business sustainability. The results of this study are expected to provide theoretical contributions to the development of locally-based MSME studies, as well as to serve as a basis for formulating more contextually relevant and sustainable policies and MSME mentoring models.

One factor that, in theory, should play a crucial role in maintaining business continuity is Supply Chain Management. SCM emphasizes the integrated, efficient management of the flow of raw materials, information, and products. With a sound understanding of SCM, MSMEs are expected to mitigate supply risks, reduce operational costs, and maintain smooth production and distribution. However, in practice, most MSMEs in Buleleng Regency still operate traditional and informal supply chains, with a heavy reliance on local suppliers and personal relationships. This situation indicates that MSMEs' understanding of the concept and benefits of modern SCM remains limited, resulting in suboptimal implementation and limited support for business sustainability.

The green economy emphasizes a balance between economic growth, environmental preservation, and social welfare. In the context of MSMEs, the application of green economy principles is expected to create resource efficiency, increase product added value, and strengthen long-term business competitiveness. However, for most MSMEs in Buleleng Regency, the green economy is still seen as a normative issue focused solely on environmental concerns, rather than as a business strategy that directly affects business continuity. A limited understanding of the economic benefits of environmentally friendly practices means the green economy has not yet become a primary consideration in MSME business decision-making (Purnamawati *et al.*, 2018).

RESEARCH METHODS

This study employed a quantitative approach using primary data. The primary data for this study were collected through questionnaires administered to participants. Surveys are often used to collect data on attitudes, behaviors, or specific characteristics (Purnamawati & Herliyani, 2025). The questionnaire was then scored using the Guttman scale, with two options: "yes" or "no." In addition, to target respondents specifically, the author used a purposive sampling method to facilitate selection. Purposive sampling is a non-random sampling technique in which researchers select the sample based on specific characteristics that align with the research objectives, ensuring the sample will address the research problems. The criteria set in this study were that MSMEs and their businesses must be located in Buleleng Regency. In data processing, the researcher used SPSS Statistics 23, which is crucial for producing precise, accurate research results. Furthermore, to ensure accurate and precise research results, several testing stages were conducted, including descriptive statistics, validity and reliability tests, normality tests, heteroscedasticity tests, multicollinearity tests, and multiple regression tests (Purnamawati *et al.*, 2025). Therefore, the following hypotheses can be formulated from this research:

H1: Understanding SCM has a positive and significant effect on the business continuity of MSMEs in Buleleng Regency.

H2: Understanding the green economy has a positive and significant effect on the business continuity of MSMEs in Buleleng Regency

RESULTS AND DISCUSSION

From the data obtained, the respondents' answers were summarized and analyzed to determine the importance of understanding SCM and the green economy for MSMEs in Buleleng Regency. All variables in this study have their own question components, where X1 (SCM), X2 (Green Economy), and Y (Business Continuity) each consist of 5 questions.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SCM	57	,00	5,00	2,7895	1,39817
Green Economy	57	,00	5,00	4,3860	1,06493
Business Continuity	57	1,00	5,00	4,3509	1,02628
Valid N (listwise)	57				

Source: data processed

Based on the descriptive test results in Table 1, the study's data show that the SCM variable (X1) ranges from 0 to 5, with an average of 2.79. Based on these values, most respondents agree that SCM influences MSME Business Continuity, as indicated by a standard deviation of 1.40. The Green Economy has a minimum value of 0, a maximum value of 5, and an average value of 4.39. Based on these values, most respondents agree that digital payments influence people's awareness of consumer behavior, as indicated by a standard deviation of 1.06. Buleleng Regency MSME Business Continuity (Y) has the lowest value of 1, the highest value of 5, and an average value of 4.35. Based on these values, most respondents agree that consumer behavior is influenced by digital transformation and payments, as evidenced by a standard deviation of 1.03. A standard deviation value greater than 0.05 means that the distribution of X1, X2, and Y values is increasingly far from the average score, which indicates that the response to X1, X2, and Y varies.

After the validity test, a reliability test is conducted to assess the data's reliability. At this stage, the usual concern is that, even though the data is valid, it may not be reliable. Based on the tests conducted, the results indicate that the research is reliable, as evidenced by Cronbach's Alpha values exceeding 0.6 for each variable. The independent variable, namely SCM (X1), obtained a Cronbach's Alpha result of 0.701, Green Economy (X2) obtained a Cronbach's Alpha result of 0.673, and the dependent variable, namely Business Continuity of MSMEs in Buleleng Regency (Y), obtained a Cronbach's Alpha result of 0.616. In the normality test, the standard for data to be said to be normally distributed must be above 0.05. Based on the research conducted, the significant value is 0.06. The next classical assumption test is the multicollinearity test, which requires that the tolerance value for each independent variable be greater than 0.10. The SCM variable (X1) has a value of 0.913, and digital payments (X2) also have the same value. When viewed from the VIF value, SCM and Green Economy have the same value, namely 1.096. The VIF value is standardized to

10; if the VIF is below 10, the independent variable is said to have no multicollinearity. Therefore, it can be concluded that the tolerance value (0.913) > 0.10 and the VIF value (1.096) < 10, indicating no multicollinearity and that all independent variables can be included in this study (Ghozali, 2011).

Data analysis using multiple linear regression estimates the extent to which several independent variables influence a single dependent variable. The Multiple Linear Regression Test Table in Table 2 presents the researchers' results on the influence of each independent variable. Partial testing was conducted to examine the influence of the independent variables, namely SCM and Green Economy, on the Business Continuity variable of MSMEs in Buleleng Regency.

Table 2. Partial Effect

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	4,244	,602		7,047	,000
	SCM	,017	,105	,023	,164	,870
	Green Economy	,014	,137	,014	,098	,922

a. Dependent Variable: MSMEs

Source: data processed

t-test (Partial Effect)

T-table = $t(\alpha/2 ; n-k-1)$

= $t(0,025 ; 54)$

= 2,005

It is known that the Sig value of X1 against Y is 0.870 > 0.05 and the t count value is 0.164 < t table 2.005 so that H1 is rejected which means there is no influence of X1 on Y. Then for the Sig value of X2 against Y is 0.922 > 0.05 and the t count value is 0.098 < 3.1865 so that H2 is rejected which means there is no influence of X2 on Y.

Table 3. Coefficient of Determination

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,055	2	,028	,025	,975 ^b
	Residual	58,927	54	1,091		
	Total	58,982	56			

a. Dependent Variable: MSMEs

b. Predictors: (Constant), Green Economy, SCM

Through data collection and testing, the following results were obtained: The Importance of SCM and Green Economy to the Business Continuity of MSMEs in Buleleng Regency. In the initial stage of data collection and testing, the researcher distributed a questionnaire to respondents. The 57 responses were then processed and tested to obtain accurate results. Using SPSS 23 as the data processing software, the results showed that Supply Chain Management (SCM; X1) and Green Economy (X2) had no effect on the dependent variable, Business Continuity (Y).

The rejection of the first hypothesis indicates that, in the context of this research, the implementation or understanding of SCM by business actors has not been a primary determinant of maintaining business continuity. Empirically, this condition can be explained by the characteristics of businesses, which are still dominated by micro and small businesses, where supply chain management is carried out simply and informally (Wube & Atwal, 2024). Business actors tend to rely on local suppliers with fixed relationships, personal ties, and distribution limited to the local market. In this situation, modern SCM concepts, such as supplier integration, logistics coordination, and planning-based inventory management, have not been systematically implemented, so the benefits of SCM for business sustainability have not been realized in practice.

Furthermore, business continuity in small businesses is largely determined by short-term factors, such as working capital availability, daily cash flow, and demand stability. While SCM theoretically improves efficiency and reduces operational risk, without the support of these fundamental factors, SCM improvements do not directly impact business continuity. Therefore, the effect of SCM on business continuity is statistically insignificant (Jajja *et al.*, 2025).

The research results also showed that the Green Economy had no significant effect on business continuity, thus rejecting the second hypothesis. This finding indicates that the implementation of green economy principles is not yet perceived as a business strategy that directly contributes to business continuity. In practice, most business actors still view the green economy as a normative concept focused on environmental awareness rather than as an instrument for improving business performance. The implementation of environmentally friendly practices is often perceived as increasing production costs and not providing direct economic benefits. As a result, the green economy has not been prioritized in business decision-making oriented towards short-term sustainability (Liem & Hien, 2024).

Furthermore, the benefits of the green economy are generally long-term, such as resource efficiency, improved business image, and environmental sustainability. Meanwhile, business continuity in micro and small businesses is more oriented towards short-term survival. The mismatch between the time horizon of green economy benefits and business needs means that the influence of this variable on business continuity is not yet significant. Another factor supporting this finding is the lack of market pressure and regulations that encourage the implementation of green economy practices. Consumers have not yet shown price preferences or specific demand for environmentally friendly products, and policies that provide economic incentives for green businesses remain limited. Without such external encouragement, implementing a green economy does not directly enhance business sustainability (Velenturf & Purnell, 2021).

CONCLUSION

Many MSMEs still do not understand the concept of SCM, and many are also unfamiliar with the terminology, having implemented it indirectly. Furthermore, MSMEs have implemented environmental awareness initiatives, indicating that many entrepreneurs recognize the importance of environmental protection. The insignificant influence of SCM stems from the characteristics of MSMEs, which still manage their supply chains simply and informally. Business actors tend to rely on personal

relationships with suppliers and local markets rather than implementing integrated, planned supply chain management. As a result, the strategic benefits of SCM have not been realized in practice to support business sustainability. Meanwhile, the Green Economy has not made a direct contribution to business continuity because it is still perceived as a normative, environmentally oriented concept, rather than a business strategy. The economic benefits of implementing green economy principles are long-term, while MSMEs focus more on short-term business continuity, such as cash flow and demand stability. Furthermore, the lack of strong market incentives and regulations means that green economy practices have not provided significant added value for MSMEs.

Overall, the results of this study confirm that the sustainability of MSMEs is heavily influenced by local context and the preparedness of business actors. SCM and the Green Economy are not yet the primary determinants of business continuity, but rather supporting factors that require strengthening of understanding, capacity, and the business ecosystem to function optimally.

A simple, context-appropriate, and scale-appropriate approach is needed to gradually implement SCM and green-economy concepts and deliver tangible economic benefits. For local governments and relevant stakeholders, efforts are needed to strengthen the MSME ecosystem through: mentoring programs oriented toward practice rather than just concepts, providing economic incentives for MSMEs that implement environmentally friendly practices, and developing MSME clusters or institutions to enable collective, more efficient supply chain management.

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