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Intellectual Capital, Innovation and Sustainable Growth in Micro, Small and Medium Enterprises in the Fashion Sector

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Article Info	Abstract
	Purpose - This research examines how intellectual capital, innovation, and sustainable growth correlate in Micro, Small, and Medium Enterprises (MSMEs) within the fashion industry. Moreover, it investigates how innovation's mediating role influences the relationship between intellectual capital and sustainable growth. **Methodology -** This research employed a quantitative correlational approach. Data was gathered via online questionnaires distributed to 200 owners or managers of fashion sector MSMEs in Palembang City through a purposive sampling technique. The researchers analyzed data by employing Structural Equation Modeling (SEM). **Findings** - The analysis reveals that intellectual capital significantly and positively influences Inn, while Inn serves as a partial mediator linking intellectual capital to sustainable growth. The variance in Inn is explained by 79.1%, and the variance in sustainable growth is explained by 92.7% through the research model, highlighting the impact of effective intellectual capital management on fostering innovation and sustainable growth. **Originality** - This research makes a new contribution by integrating intellectual capital, innovation, and sustainable growth in the context of fashion sector MSMEs in developing countries. The research confirms the importance of intellectual capital management as a catalyst for innovation and sustainable growth, especially in MSMEs in Palembang.

1. Introduction

MSMEs in the fashion sector in Palembang are one of the industries that contribute significantly to the local economy. Fashion products produced by MSMEs in the city cover a wide range of clothing, from traditional clothing such as Palembang songket, which is rich in cultural values and artistic beauty, to casual and modern clothing that meets the needs of the daily market. However, amidst these opportunities, fashion sector MSMEs must help maintain competitiveness and business sustainability.

The main challenges faced by MSMEs in the fashion sector include low utilization of intellectual capital (IC) as a strategic asset, limitations in developing relevant innovations (Inn),

and lack of understanding and application of the concept of sustainable growth (SG). In addition, MSMEs often need more support in access to technology, funding, and collaboration with external stakeholders, such as research institutions and universities. This situation has intensified competition in the fashion industry, both from local and international producers. To overcome these challenges, a holistic approach is needed to optimize intellectual capital, innovation, and sustainable growth in this sector. First, the use of technology can increase awareness and application of intellectual capital in business management, such as the digitalization of business processes and knowledge management. Second, comprehensive training and mentoring programs can strengthen the managerial and technical capacity of MSME actors, particularly in integrating technology and innovation. Third, the development of incentives and financial support is essential to encourage investment in intellectual capital development and innovation. Fourth, strengthening cooperation between MSMEs, research institutions, and universities can facilitate knowledge transfer and relevant innovative collaborations. Finally, the growth and sustainability of businesses in the fashion sector require policy support from the government to create a conducive environment. This integrated approach is expected to help MSMEs in the fashion sector, especially in improving their competitiveness and adaptation to dynamic market changes (Al Nuaimi et al., 2024; Zhang & Li, 2024).

The relationship between intellectual capital, innovation, and sustainable growth in the fashion sector of MSMEs in Palembang is examined in this study, providing new contributions in several important aspects. First, this study offers practical guidance for intellectual capital management that is tailored specifically to the needs and conditions of MSMEs in the fashion industry. Second, this study adopts an open innovation approach by providing concrete examples and relevant recommendations for MSMEs in developing new products and services. Third, this research provides specific recommendations for human resource development, especially in utilizing the latest technology and innovation strategies. Fourth, a gap in the literature is addressed by this research through the examination of connections among IC, innovation, and sustainable growth within the specific setting of Palembang, characterized by its unique cultural traits, market dynamics, and challenges (Al Nuaimi et al., 2024; Zhang & Li, 2024).

Intellectual capital is a non-physical asset that includes the skills, insights, competencies, and capabilities of human resources, along with connections to customers and other stakeholders. According to the Resource-Based View (RBV) theory, intellectual capital, as a strategic asset, can enhance the long-term competitive edge of MSMEs (Barney et al. 2020). Intellectual capital consists of three main components, namely human capital, connections with external stakeholder and structural capital. human capital is the improvement of employee knowledge and skills through continuous training, professional development programs, and the creation of an organizational learning culture. Connections with external stakeholders, such as suppliers, customers, and business partners, are represented by relational capital to enhance access to market information and collaboration opportunities. Structural capital is the development of systems, processes, and technologies that support operational efficiency and facilitate innovation, such as the implementation of knowledge management systems or digital collaboration platforms. Characteristics of intellectual capital include being intangible, knowledge-based, strategic, and difficult to measure.

The intellectual capital component plays a strategic role in fashion sector MSMEs to take advantage of market opportunities and face challenges. Factors affecting intellectual capital in fashion sector MSMEs include management commitment, innovative culture, knowledge management system, technology infrastructure, human resource quality, industry characteristics, and economic conditions (Hina et al., 2024; Truong et al., 2024; Yulfiswandi & Alvin, 2024;

Zhang & Li, 2024). Innovation is a crucial element for the survival and success of MSMEs in the fashion sector. In this dynamic industry, innovation covers various aspects, from product development to marketing strategies. Innovation, according to the theory of planned behavior, arises from the interaction between the intention to innovate and the psychological factors that shape individual or organizational choices to embrace new ideas or enhance existing ones.

Three main factors influence innovation: first, attitude towards innovation reflects an individual's or organization's evaluation of innovation, i.e., the extent to which they perceive innovation as useful or beneficial. In the context of MSMEs, a positive attitude towards Innovation can be formed if business actors believe that Innovation will have a positive impact, such as increasing competitiveness, efficiency, or customer satisfaction. This attitude is driven by an understanding of the long-term benefits of Innovation, such as increased market share, a better reputation, or the ability to respond to market changes. A positive attitude towards Innovation among MSME actors will likely result in a strong intention to implement it in their business. Second, subjective norms towards innovation are the social influence felt by MSME actors regarding whether they "should" innovate or not based on the views of important people, such as colleagues, competitors, or even family. In the context of Innovation, subjective norms include social pressure or encouragement provided by the surrounding environment for MSMEs to adopt innovations, and behavioral control of innovation is the belief of MSME actors regarding the extent to which they feel able to implement innovations in their business. This factor involves evaluating the skills, resources, time, and support available to implement innovations. Factors that influence Innovation include competitive pressures, consumer needs, technological developments, and an organizational culture that supports the exploration of new ideas. By effectively utilizing Innovation, MSMEs can improve competitiveness, expand market share, and increase consumer loyalty. (Hina et al., 2024; Truong et al., 2024; Yulfiswandi & Alvin, 2024; Zhang & Li, 2024).

A strategy that integrates social, environmental, and economic aspects is known as sustainable growth. Sustainable profitability, which considers the environmental impacts and social of the business, is included in the concept of sustainable growth. (Cabrita & Landeiro, 2005; Shahbaz et al., 2024).. Drivers of sustainable growth include consumer pressure, government regulation, market competition, access to capital, and support from government and non-profit organizations. Sustainable growth indicators include profitability, market share, environmentally friendly practices, employee welfare, and social contributions. Implementing sustainable growth provides benefits such as improved brand reputation, customer loyalty, operational efficiency, and attractiveness to investors. (Adshead et al., 2024; Sohu et al., 2024).

Based on the Resource-Based View (RBV) theory, intellectual capital, which consists of human, structural, and relational capital, can encourage innovation. Human capital provides expertise and knowledge, structural capital supports system efficiency, and relational capital strengthens external connections that can encourage innovation (Agostini & Nosella, 2023; Martínez-Falcó et al., 2024). Facilitating the sustainable growth of MSMEs within the fashion industry is a crucial role of intellectual capital. Utilizing employee knowledge and skills through intellectual capital can improve operational efficiency and support sustainable growth. (Alkhatib & Valeri, 2024; Truong & Nguyen, 2024). In addition, optimized intellectual capital will create an inclusive work environment that improves employee well-being and adds value to MSME products and services. (Kumar & Sharma, 2024; Shahbaz et al., 2024; Yulfiswandi & Alvin, 2024).

Innovations in the fashion sector, such as the development of environmentally friendly products or energy-saving technologies, can improve competitiveness and expand markets, as well as build business resilience in the long term. (Maziliauske, 2024; Mokbel Al Koliby et al., 2024; Vo Thai et al., 2024; Xin et al., 2024). Intellectual capital encourages the creation of innovation in

MSMEs, which subsequently positively affects sustainable growth. This indirect relationship indicates that innovation serves a significant mediating function in enhancing the impact of intellectual capital on sustainable growth (Alkhatib & Valeri, 2024; Truong & Nguyen, 2024). Referring to the conceptual model described, this study puts forward several hypotheses.

H₁: Intellectual capital is positively correlated with innovation in MSMEs within the fashion industry

H₂: Intellectual capital has a positive relationship with sustainable growth in MSMEs in the fashion sector

H₃: Innovation is positively related to sustainable growth in MSMEs within the fashion industry

H₄: Intellectual capital has a positive relationship with sustainable growth in MSMEs in the fashion sector, which innovation mediates.
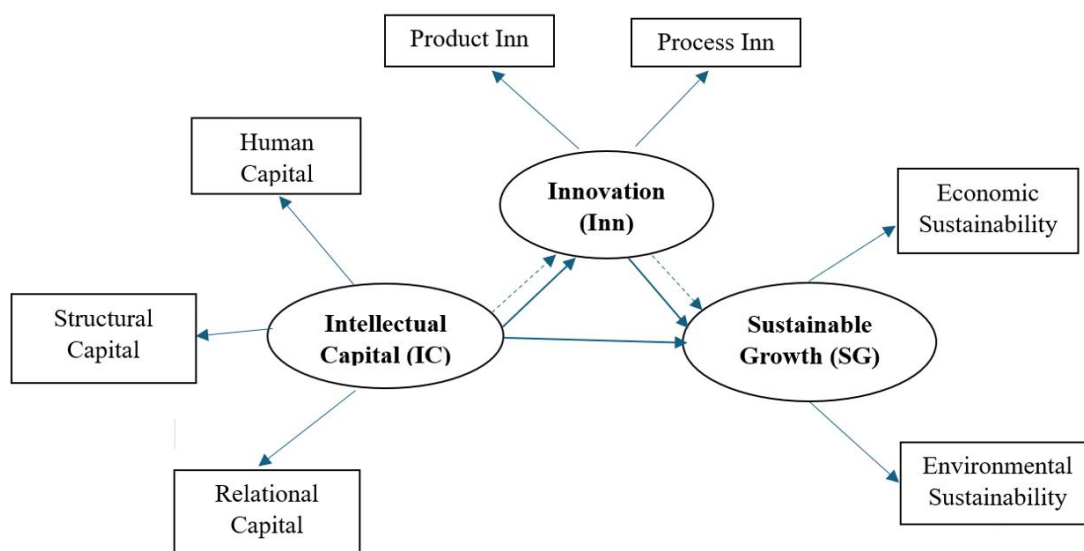

Figure 1. Research Framework

2. Research Methods

This study analyzes the relationship between intellectual capital, innovation, and sustainable growth in micro, small, and medium enterprises within the fashion industry in Palembang. The study employed a quantitative approach with a correlational method, involving MSME owners or managers as the research participants. The primary data were collected via an online questionnaire administered through Google Forms, employing a 5-point Likert scale to assess the responses. (Slamet & Aglis, 2020; Sugiyono, 2019). The target group for this research utilized the approach proposed by J. Hair & Alamer (2022), which recommends a sample size of 5 to 10 times. In this study, the number of indicators used was 39 question items, so the minimum sample calculation was 39 indicators x 5 = 195 respondents. Researchers ultimately selected a sample size of 200 respondents through a non-random sampling technique employing a quota-based sampling strategy. This study employs structural equation modeling (SEM) with the Smart Partial Least Squares version 3.2.9 analysis tool. The analysis process includes evaluating the outer model and inner model and hypothesis testing.

The evaluation of the outer model is conducted to ensure measurement precision, which involves testing convergent validity (via factor loading and Average Variance Extracted or AVE), discriminant validity, and composite reliability. The criteria used in this study include a loading factor > 0.7 for confirmatory research, AVE > 0.5 for good convergent validity, and composite

reliability > 0.7. Inner model evaluation involves analyzing the coefficient of determination (R²), effect size (f²), path coefficient, and Model Fit. Evaluation criteria include R² 0.67, 0.33, and 0.19, which indicate strong, moderate, and weak models. f² and path coefficients of 0.02, 0.15, and 0.35 indicate low, moderate, and high influence on the relationship between variables. (Cahyawati et al., 2023; Gunarto & Tesa, 2023; Legate et al., 2023; Shahbaz et al., 2024; Xu et al., 2024)..

Table 1. Operational Definition of Variables

Variables	Dimensions	Definition	Indicator
IC (Martínez-Falcó et al., 2024)	Human capital	Knowledge, skills and experience possessed by owners or managers of MSMEs	Education level seen from formal education levels such as elementary, junior high, high school or college
			Human resources training and development
			Work experience
	Structural capital	Infrastructure, processes and organizational culture that support MSME performance	Information systems and technology
			Innovative organizational culture
			Efficient technology and business processes
	Relational capital	External relationships built by MSMEs with customers, suppliers and business partners	Loyalty with customers
			Cooperation with suppliers
			Collaboration with business partners
Inn (Zhang & Li, 2024)	Product innovation	Development and introduction of new products or improvement of existing products in MSMEs	New products launched and the degree of product novelty
			New product development speed
	Process innovation	Implementation of new methods, technologies or processes in MSME business operations	Production process efficiency
			Automation of the production process
			Use of new technology
SG (Su & Wu, 2024)	Economic sustainability	Ability of MSMEs to generate profits and long-term growth	Profitability
			Market share
			Business growth
	Environmental sustainability	MSMEs' efforts to minimize negative impacts on the environment	Practical green business
	Social sustainability	Contribution of MSMEs to the welfare of employees and the surrounding community	HR Welfare
			Participation in community development
			Business social responsibility

Source: processed data

Hypothesis testing is done through bootstrapping analysis by paying attention to the t-statistic and p-value. The correlation is considered significant if the t-value> 1.96 and the p-value <0.05 at the 5% significance level. This test is carried out both partially and simultaneously. In addition, the mediation effect was analyzed using the Upsilon(v) effect size value to examine the role of the Inn variable (innovation) in the relationship between intellectual capital and sustainable growth, with the following interpretation: high mediation >0.175, medium mediation >0.075, and low mediation >0.01. (J. Hair & Alamer, 2022; J. F. Hair et al., 2021; Legate et al., 2023). This research seeks to thoroughly understand the contribution of intellectual capital and innovation to sustainable growth in fashion sector MSMEs in Palembang. The findings of this study can guide policymakers and MSME stakeholders in formulating strategies to enhance competitiveness and ensure business sustainability within the fashion industry.

3. Results and Discussions

3.1. Respondent Characteristics

In this research, researchers conducted an in-depth analysis of the characteristics of respondents of MSMEs in the Fashion sector in Palembang, South Sumatra. The research sample consisted of 200 MSME owners or managers spread across the Ilir and Ulu areas of Palembang city. This sample was selected by purposive sampling, ensuring that the respondents met the predetermined criteria and were declared eligible to participate in the study. The characteristics of the respondents are shown in Table 2.

Table 2. Respondent Characteristics

Characteristics	Total	Percentage (%)
Gender:		
Male	36	18.0
Female	164	82.0
Age:		
<20 Years	18	9,00
21-30 Years	133	66,5
31-40 Years	36	18,0
41-50 Years	9	4,50
<60 Years	4	2,00
Education:		
SMP	4	2,0
SMA/K/MA/equivalent	165	82,5
Higher Education	31	15,5
Length of Service:		
1-5 Years	165	82,50
6-10 Years	23	11,50
>15 Years	12	6,00

Source: processed data

The data showed that most respondents were female, accounting for 82.0% (164 respondents), while males were only 18.0% (36 respondents). Most respondents were in the 21-30 age group, accounting for 66.5% (133 respondents) of the total sample. The rest of the age distribution is as follows: <20 years old: 9.00% (18 respondents), 31-40 years: 18.0% (36 respondents), 41-50 years: 4.50% (9 respondents), 60 years old: 2.00% (4 respondents). The

majority of respondents (82.5% or 165 individuals) possessed a high school/MA or equivalent level of education. The distribution of other education levels is junior high school 2.0% with four respondents and college 15.5% with 31 respondents. The majority of respondents (82.50% or 165 people) have worked for 1-5 years in the fashion MSME sector. Other distributions of the length of work are 6-10 years: 11.50% (23 respondents) and 15 years: 6.00% (12 respondents).

Based on the analysis of the respondents' characteristics, implications and recommendations can be proposed. Women's empowerment is the main focus, given their dominance in the industry. Human resource capacity building through managerial and technical skills training is needed, given that the majority of respondents have a secondary education background. Mentoring programs from experienced entrepreneurs can help business sustainability, especially for those who are new to the industry. Finally, encouraging the adoption of digital technology and innovation in business processes is important to improve the competitiveness of fashion MSMEs in the digital era, given the dominance of young businesses. The implementation of these recommendations is expected to encourage sustainable growth and improve the competitiveness of MSMEs.

3.2. Outer Model Test

The outer loading value indicates the validity of questionnaire items. An outer loading value that exceeds 0.6 is still acceptable, but for confirmatory research, the value should exceed 0.7. To enhance validity, the value of average variance extracted should be greater than 0.5. Meanwhile, reliability is assessed using a scale of 0 to 1. In order to be considered reliable, the Cronbach's alpha value must exceed 0.6, while the composite reliability value must exceed 0.7. (Gunarto & Cahyawati, 2022; J. F. Hair et al., 2021).
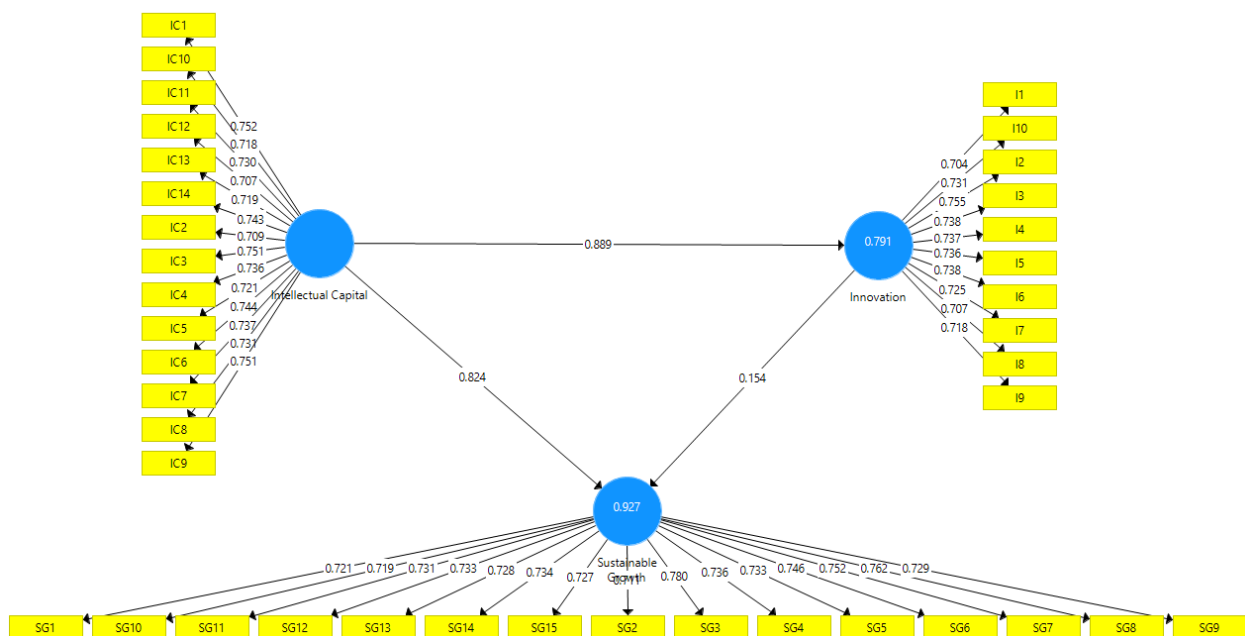

Figure 2. Relationship between Constructs through Smart-PLS Calculation Algorithm

Figure 2 shows the results of the PLS Algorithm calculation, which illustrates the transformation of the path diagram into an outer equation model through the calculation of each indicator between variables to other variables displayed in Table 3.

Table 3. Outer Model Test (Validity and Reliability)

Variables	Indicator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability
Inn	I_1	0.704	0.531	0.902	0.919
	I_2	0.755			
	I_3	0.738			
	I_4	0.737			
	I_5	0.736			
	I_6	0.738			
	I_7	0.725			
	I_8	0.707			
	I_9	0.718			
	I_{10}	0.731			
IC	IC_1	0.752	0.536	0.933	0.942
	IC2	0.709			
	IC_3	0.751			
	IC_4	0.736			
	IC_5	0.721			
	IC_6	0,744			
	IC_7	0.737			
	IC_8	0.731			
	IC_9	0.751			
	IC_{10}	0.718			
	IC_{11}	0.730			
	IC_{12}	0.707			
	IC_{13}	0,719			
	IC_{14}	0,743			
SG	SG_1	0.721	0.542	0.940	0.947
	SG_2	0.711			
	SG_3	0.780			
	SG_4	0.736			
	SG_5	0.733			
	SG_6	0.746			
	SG_7	0.752			
	SG_8	0.762			
	SG_9	0.729			
	SG_{10}	0.719			
	SG_{11}	0.731			
	SG_{12}	0.733			
	SG_{13}	0.728			
	SG_{14}	0.734			
	SG_{15}	0.727			

Source: processed data

In this study, all items on the three variables meet the validity criteria with outer loading values ranging from 0.704 to 0.780. The analysis results of the AVE value show that the intellectual capital variable has an AVE value of 0.536, Inn of 0.531, and SG of 0.542, all meeting

the validity criteria. Instrument reliability was assessed using two methods. The three variables showed excellent reliability, with Cronbach's alpha values ranging from 0.902 to 0.940. The analysis of composite reliability values showed that all variables had very high values, ranging from 0.919 to 0.947. Data analysis in Table 3 showed that all variables met the validity criteria, with outer loadings above 0.7 and AVE exceeding 0.5. Reliability was also established, as Cronbach's alpha and Composite Reliability values surpassed the thresholds of 0.6 and 0.7, respectively. Thus, all indicators were deemed suitable for further analysis.

3.3. Inner Model Test

The inner model focuses on evaluating the significance of the relationship between constructs or variables. This significance can be seen from the path coefficients in Figure 3. (J. Hair & Alamer, 2022; J. F. Hair et al., 2021; Legate et al., 2023).
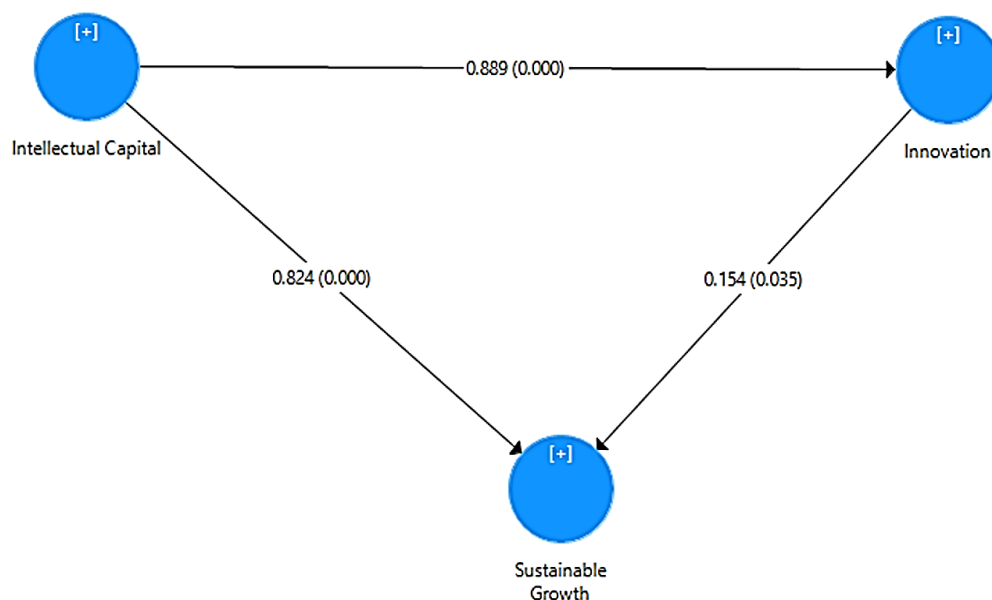

Figure 2. Estimation and Testing of the Inner Model

Table 4 presents the relationships between exogenous and endogenous latent variables, with path coefficients indicating the magnitude of direct influence between variables. In the full model-building stage, the focus shifts from indicator validity and reliability, but indicators can still be eliminated based on statistical significance or theoretical support. Model testing results using bootstrapping in SmartPLS include R-Square, F-Square, and NFI model fit tests.

Table 4. F-Square Test

Variables	Inn	SG
Inn		0,068
IC	3,783	1,952

Source: processed data

Intellectual capital is shown to have a very strong relationship with innovation (F-Square = 3.783). Intellectual capital also has a significant relationship to sustainable growth (F-Square = 1.952). The relationship of innovation to sustainable growth is relatively small (F-Square = 0.068).

R-Square evaluates the model's forecasting capability and determines the extent to which the endogenous variables are accounted for by the exogenous variables in Table 5.

Table 5. R-Square and Model Fit Test (NFI)

Variables	R Square	R Square Adjusted
Inn	0,791	0,790
SG	0,927	0,927
	Saturated Model	Estimated Model
NFI	0,432	0,432

Source: processed data

The model showed strong predictive ability, R² (Inn=0.791 and SG=0.927), and a good fit (NFI=0.432), indicating a fairly good model fit for understanding and strategic decision-making in the development of fashion sector MSMEs.

3.4. Hypothesis Test

This study uses path analysis, which is an extension of multiple regression analysis. Path analysis is used when there are mediating variables in the research model. In this context, innovation acts as a mediator variable between intellectual capital and sustainable growth. The relationship is considered significant and influential if it meets the requirements of t-statistics > 1.96 and p-value < 0.05. (J. Hair & Alamer, 2022; J. F. Hair et al., 2021; Legate et al., 2023). Table 6 is a test of path coefficients and indirect effects.

Table 6. Path Coefficients and Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-statistic (O/STDEV)	P Values	Description
H_1. IC => Inn	0,889	0,890	0,031	28,441	0,000	Significant
H_2: IC =>SG	0,824	0,823	0,078	10,500	0,000	Significant
H_3: Inn => SG	0,154	0,155	0,085	1,820	0,035	Significant
Indirect Effect						
H_4: IC => SG => Inn	0,137	0,138	0,077	1,786	0,037	Significant

Source: processed data

The analysis results show that the first hypothesis (H_1), namely the relationship between intellectual capital and innovation, can be accepted. A t-statistic value *of* 28.441 > 1.96 indicates a significant strength. In contrast, a P-value of 0.000 < 0.05 this value is considered highly significant between the variables as it is far below the 0.05 threshold, confirming the statistical significance of the relationship. This proves that intellectual capital plays a major role in improving the innovation capabilities of MSMEs. This finding emphasizes that effective management of intellectual capital, including human capital, structural capital, and relational capital, can strengthen the innovation capacity of fashion sector MSMEs. Fashion sector MSMEs can use these results to prioritize investment in intellectual capital development. For example, skills training (human capital) or technology optimization in work processes (structural capital) can accelerate product and service innovation.

The statistical analysis results show that the second hypothesis (H_2) has a relationship between intellectual capital and sustainable growth with a T-statistic value of 10.500 > 1, 96 and a P-value of 0.000 < 0.05. These results indicate that intellectual capital not only supports innovation but also promotes sustainable growth. MSMEs can utilize intellectual capital to drive sustainable growth through operational efficiency, strengthening relationships with stakeholders, developing long-term business strategies, and, for example, building collaborative relationships with research institutes or universities for technology transfer and new knowledge.

The third hypothesis (H_3), the relationship of innovation to sustainable growth, yields *a* T-statistic of 1.820 < 1.96 and *a* P-value of 0.034 < 0.05, indicating that the relationship remains statistically significant, although not strong. This suggests that innovation plays a role in supporting sustainable growth, but its impact may be affected by other external factors. MSMEs need to combine innovation with external factors such as government policies, access to technology, and market conditions. For example, local culture-based product innovation, such as Palembang songket cloth, can be combined with government promotional support to expand the market. The fourth hypothesis shows that innovation does not fully mediate the relationship between intellectual capital and sustainable growth with a T-statistic value of 1.786<1.96. However, the P-value is 0.037<0, indicating the statistical significance of the mediation effect. This indicates that intellectual capital has a direct impact on sustainable growth, with Inn's role as a weak mediator. These results emphasize the importance of strengthening innovation as a dynamic capability in MSME strategies. Investment in innovation capabilities, such as digitalization of production and marketing processes, can magnify the impact of intellectual capital on sustainable growth.

The results of this study emphasize that intellectual capital is a strategic asset for MSMEs in the fashion sector. In line with the literature (J. Xu & Wang, 2019; Telles, 2024), In this study, intellectual capital, which includes human capital, structural capital, and relational capital, has a significant impact on innovation and sustainable growth. The results of this study show that intellectual capital has a significant influence on Inn (t-statistic 28.441 > 1.96; p-value 0.000 < 0.05) and sustainable growth (t-statistic 10.500 > 1.96; p-value 0.000 < 0.05), supporting H_1 and H_2. The findings extend previous understanding by showing that intellectual capital as a key driver. The findings support the view that effective intellectual capital management, such as human resources training, process digitalization, and strengthening customer relationships, has a significant impact on innovation and sustainable growth.

However, the relationship between innovation and sustainable growth is less strong (t-statistic 1.820 < 1.96; p-value 0.034 < 0.05), although statistically significant. This suggests that innovation plays an important role, but other factors influence sustainable growth . This finding is in line with research by (Chaparro-Banegas et al., 2024; Huang, 2024 Ma et al., 2024 C. Yang et al., 2024), which shows that innovation is a key element of growth, but its influence depends on government policies, technology access, and market dynamics. Therefore, a holistic approach is required to maximize the impact of innovation. This points to the need for collaboration between MSMEs, the government, and the private sector to create a more conducive innovation environment.

Innovation functions as an intermediary in the connection between intellectual capital and sustainable growth , with a t-statistic value of (1.786 < 1.96), reflecting a weak mediating effect, although the p-value of 0.037 < 0.05 is significant. These findings support studies from (Jordão & Novas, 2024 Salangka et al., 2024 Shahbaz et al., 2024 F. Yang et al., 2024), which show that innovation as a dynamic capability can strengthen the impact of intellectual capital on business performance. These results emphasize the importance of integrating innovation into intellectual

capital strategy to achieve sustainable growth by contributing to sustainable growth through other mechanisms, such as operational efficiency and strategic relationships with stakeholders (Alshahrani et al., 2024; Martínez-Falcó et al., 2024).

4.   Conclusions

The research emphasizes the critical role of intellectual capital in driving innovation and sustainable growth in MSMEs within the fashion sector. Intellectual capital, which encompasses human capital, structural capital, and relational capital, is a key driver in generating value and competitive advantage in the age of a knowledge-based economy. This result aligns with the resource-based view theory, which posits that internal intangible resources are crucial for innovation and organizational excellence. The positive relationship between intellectual capital and Inn suggests that managing collective knowledge, skills, and experience can drive innovation in products, processes, or business models of fashion sector MSMEs. Additionally, the connection between intellectual capital and sustainable growth highlights the significance of MSMEs' capacity to adjust to market dynamics, comprehend consumer preferences, and manage supply chains effectively to attain sustained growth. The findings also indicate that innovation is a mediator in the relationship between intellectual capital and sustainable growth, with innovation utilizing intellectual capital being a key driver of business sustainability. The practical implication of this study is the importance of strategic investment in intellectual capital development by fashion sector MSMEs, including product innovation (e.g., new designs or sustainable materials), processes (adoption of efficient technologies), and business models (e-commerce integration or circular economy). These efforts should align with sustainability principles to ensure growth that is aligned with social and environmental demands. Future research is recommended to integrate new variables such as digitalization, environmental sustainability, or business resilience to global disruption and conduct comparative studies across MSME sectors to explore the varying dynamics of intellectual capital, innovation, and sustainable growth across different industries. This approach can provide comprehensive insights into the drivers of MSME success, thereby supporting the formulation of MSME development policies and strategies at the national and regional levels.

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