The Influence of Social Impact, and Product Quality on Sustainable Business Growth in the Textile Industry in Bandung

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ABSTRACT

Within the framework of Bandung’s textile industry, this study explores the intricate relationships that exist between social effect, product quality, and sustainable economic success. The survey included a sample of 150 companies with a range of product specializations and sizes. Using partial least squares structural equation modeling, measurement model assessment, discriminant validity analysis, and structural model analysis were carried out (PLS-SEM). Product quality, social impact, and sustainable business growth were found to be significantly positively correlated. The results also confirmed discriminant validity among the latent constructs and showed strong reliability and validity of the measurement model. The suggested structural equation model's applicability is highlighted by the model fit evaluation. It can be shown from the R-Square and Adjusted R-Square values that the model can account for almost half of the variation in sustainable business growth. Future research directions are suggested, and implications for corporations and policy makers are examined.

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1. INTRODUCTION

The textile industry in Bandung is a significant contributor to the region's economy, providing economic growth and employment opportunities [1]. Bandung is known for its vibrant textile industry, characterized by its creative designs, skilled workforce, and diverse range of textile products [2]. The industry has historical significance and continues to be relevant in the present day [3]. Bandung's textile industry has faced challenges, such as limited products and less optimal technological capabilities [4]. However, efforts have been made to develop human resources in MSMEs in Bandung, including the cultivation of entrepreneurial leadership characteristics and the implementation of a learning culture [5]. Private sector actors have played a crucial role in the economic recovery of Bandung, particularly in sectors such as transportation, accommodation, food and beverage, water supply, and trade. Overall, the textile industry in Bandung remains a vital sector, contributing to the economic growth and development of the region.

Industries worldwide are facing unprecedented challenges related to
sustainability and corporate responsibility. Consumers, investors, and regulatory bodies are increasingly prioritizing businesses that demonstrate a commitment to social impact and environmental stewardship. [6]–[9] The negative effects of global climate disruption are putting pressure on companies to behave in a more environmentally friendly manner. However, some companies are only reluctantly adopting sustainability, perceiving it as unattractive and not innovative. To become sustainable and make meaningful use of sustainable technologies, companies require external incentives from core interest groups such as legislators and investors. [10] The modern code of corporate social responsibility calls for a “win-win” situation with overall better life quality, labor conditions, and a healthy economy in a sustainable environment. Corporate sustainability offers benefits such as improved quality, image, and reputation for organizations, but also presents challenges such as high investment costs and lack of consideration for cultural factors, collaboration, and innovation [11]–[16]. Industrial firms face challenges in accounting for environmental and social values, but opportunities lie in the adaptation of digital technologies to support environmental and social accounting and guide the transition towards more sustainable operations.

As the Bandung textile industry navigates this ever-evolving landscape, the imperative for sustainable practices becomes increasingly apparent. This research seeks to investigate various aspects of the interaction between social impact, product quality and sustainable business growth in this pivotal sector. In doing so, it aims to provide valuable insights that can guide businesses to adopt practices that not only align with emerging global standards, but also promote long-term viability and competitiveness.

2. LITERATURE REVIEW

2.1 Social Impact in the Textile Industry

The textile industry’s social impact is a critical dimension in sustainable business practices. Scholars emphasize fair labor practices, ethical sourcing, and community engagement as pillars of social responsibility in the industry. There is a positive correlation between socially responsible practices in textile manufacturing and enhanced corporate reputation, leading to increased customer loyalty and a competitive edge in the market [17]–[19]. As businesses in Bandung navigate the complexities of social impact, understanding the nuances of these initiatives becomes imperative for sustained growth and positive societal contributions.

2.2 Product Quality in the Textile Industry

The quality of textile products is influenced by various factors along the production chain, including raw material selection, production processes, and compliance with quality standards. Consumers value products that meet aesthetic and functional expectations while also adhering to stringent quality benchmarks. Understanding the relationship between quality assurance and sustainable business growth is important in the textile industry [20]–[22]. Previous studies have shown that the implementation of total quality management can improve organizational performance in the textile industry [23]. Additionally, the application of circular economic principles, such as using biomaterials and producing less waste, can help reduce environmental pollution in the textile and fashion industries [18]. Furthermore, the development of new dyes with improved properties can contribute to the sustainability and environmental impact of the textile industry. Overall, considering quality throughout the production process is crucial for both meeting consumer expectations and promoting sustainable business practices in the textile industry.

2.3 Sustainable Business Growth

Sustainable business growth in the textile industry involves economic viability, environmental stewardship, and social responsibility. It encompasses financial success while minimizing environmental impact and promoting positive social change.
The triple bottom line approach, which considers economic, environmental, and social performance, is proposed as an indicator for measuring sustainable business growth [24]. The textile industry is recognized as a sector with significant environmental risks, particularly related to textile effluents [25]. Scholars have emphasized the importance of sustainability, eco-innovation, and circular economy in the internationalization of the textile industry [26]. The industry has faced challenges in incorporating sustainability practices, but there is an increasing focus on sustainability innovation, including ecodesign, life cycle assessment, cleaner production, and supply chain management [27]. The use of digital technologies and the 4th Industrial Revolution can also contribute to sustainability and circular economy activities in the textile industry [28]. Understanding the key drivers and challenges associated with sustainable growth in the textile industry provides a crucial backdrop for our quantitative analysis.

2.4 Gaps in the Existing Literature

While there are many studies on social impact, product quality and sustainable business growth, there are still some gaps. Research that specifically addresses these dynamics in the unique context of Bandung’s textile industry is still very limited. Moreover, few quantitative analyses comprehensively explore the complex relationships among these variables. This research aims to bridge this gap by providing a nuanced understanding of how social impact and product quality intersect to influence sustainable growth, offering insights that are contextually relevant and globally applicable, based on which the research hypothesis is as follows.

H1 : It is suspected that there is a positive and significant influence of Product Quality -> Sustainable Business Growth

H2 : It is suspected that there is a positive and significant influence of Social Impact -> Sustainable Business Growth

3. METHODS

This study utilizes a quantitative research design to investigate the relationship between social impact, product quality, and sustainable business growth in the Bandung textile industry. This study used Structural Equation Modeling with Partial Least Squares (SEM-PLS) as the main analytical tool due to its suitability for exploring complex relationships in small to medium-sized samples [29].

3.1 Sampling

A stratified random sampling approach was applied to ensure representation across different segments of the Bandung textile industry. The target sample size was set at 120 based on the total indicators of this study of 12 and multiplied by ten as suggested in the data processing with SEM-PLS, initially 150 questionnaires were distributed and the 150 questionnaires were returned in full from the participants, which consisted of owners, managers, and relevant stakeholders of the textile companies. Strata will be determined based on factors such as business size, product focus, and involvement in social impact initiatives [29].

3.2 Data Collection

Data is collected through a combination of surveys and structured interviews. The survey instrument will be designed to capture information on social impact initiatives, perceived product quality, and various dimensions of sustainable business growth. Interviews provide a qualitative layer to complement the quantitative data, offering deeper insights into participants' perspectives.

3.3 Survey Instrument

The survey consists of several sections:

- a. Demographic Information: Collects basic details such as business size, length of operation, and main products.
- b. Social Impact Initiatives: Assesses the level and effectiveness of social impact initiatives undertaken by the business, including fair labor
practices, community engagement, and ethical procurement.

c. Product Quality Measures: Evaluates the perceived quality of textile products, taking into account factors such as raw material selection, production processes, and adherence to quality standards.

d. Sustainable Business Growth Metrics: Collects data on economic performance, environmental practices, and social responsibility to measure sustainable growth.

3.4 Data Analysis

The collected data will be analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS). This technique is well suited for exploring complex relationships and latent constructs with a relatively small sample size. The analysis will involve the following steps:

Measurement Model Assessment: Validating the reliability and validity of the measurement model to ensure the accuracy of the observed variables in representing the underlying constructs (social impact, product quality, and sustainable business growth).

Structural Model Estimation: Evaluating the structural relationships between latent constructs, uncovering the direct and indirect influences between social impact, product quality, and sustainable business growth.

Bootstrapping: Uses bootstrapping techniques to assess the significance of the estimated path coefficients, thus providing robustness to the findings.

Model Fit Assessment: Examined the overall fit of the model to determine its suitability in explaining the relationships among the variables.

4. RESULTS AND DISCUSSION

4.1 Demographic Sample

The demographic profile of the participants in the textile industry in Bandung provides valuable contextual information about the composition of the study’s sample. The sample reflects a diverse representation of business sizes, with 45% being small enterprises, 30% medium enterprises, and 25% large enterprises. In terms of years in operation, 20% of the businesses have been operating for less than 5 years, 35% for 5 to 10 years, and 45% for more than 10 years. The primary product focus is varied, with 40% focusing on apparel, 30% on home textiles, 20% on technical textiles, and 10% on other products. A significant percentage of businesses are engaged in social impact initiatives, such as fair labor practices (65%), community engagement programs (50%), and ethical sourcing strategies (40%). The emphasis on product quality measures varies, with a focus on raw material selection (70%), high-quality production processes (55%), and adherence to industry quality standards (60%). Businesses also prioritize monitoring economic performance (75%), demonstrating social responsibility (60%), and implementing environmentally friendly practices (45%) for sustainable business growth.

4.2 Measurement Model

The measurement model assessment involves the evaluation of the reliability and validity of the observed variables representing the latent constructs of Product Quality (PQ), Social Impact (SI), and Sustainable Business Growth (SBG). The analysis includes loading factors, Cronbach’s Alpha, Composite Reliability, and Average Variance Extracted (AVE).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Loading Factor</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality</td>
<td>PQ.1</td>
<td>0.871</td>
<td></td>
<td>0.902</td>
<td>0.931</td>
</tr>
<tr>
<td></td>
<td>PQ.2</td>
<td>0.901</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PQ.3</td>
<td>0.906</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The loading factors for each indicator of Product Quality (PQ) are strong and positive, indicating their contribution to the measurement of the latent construct. The overall internal consistency of the Product Quality construct is excellent, as indicated by a Cronbach's Alpha of 0.902. The Composite Reliability for Product Quality is high at 0.931, reinforcing the reliability of the construct. The AVE for Product Quality is 0.773, suggesting that the observed variables collectively represent the latent construct well. The loading factors for Social Impact (SI) are robust, indicating strong relationships between the observed variables and the latent construct. Social Impact demonstrates excellent internal consistency with a Cronbach’s Alpha of 0.916. The Composite Reliability for Social Impact is very high at 0.941, indicating strong reliability and consistency. The AVE for Social Impact is 0.799, supporting the construct's validity. The loading factors for Sustainable Business Growth (SBG) are notable, indicating the strength of the relationship between the observed variables and the latent construct. Sustainable Business Growth demonstrates good internal consistency with a Cronbach’s Alpha of 0.887. The Composite Reliability for Sustainable Business Growth is 0.922, indicating strong reliability and stability. The AVE for Sustainable Business Growth is 0.747, suggesting that the observed variables account for a significant portion of the variance in the construct.

Table 2. The Acceptability of Discrimination

<table>
<thead>
<tr>
<th></th>
<th>Product Quality</th>
<th>Social Impact</th>
<th>Sustainable Business Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Quality</td>
<td>0.879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Impact</td>
<td>0.586</td>
<td>0.894</td>
<td></td>
</tr>
<tr>
<td>Sustainable Business Growth</td>
<td>0.607</td>
<td>0.717</td>
<td>0.864</td>
</tr>
</tbody>
</table>

The results indicate that the square root of the Average Variance Extracted (AVE) for each construct is greater than the correlations between that construct and all other constructs. This demonstrates discriminant validity, suggesting that Product Quality, Social Impact, and Sustainable Business Growth are distinct and accurately measured constructs within the context of the study. The constructs do not overlap to an extent that would compromise the ability to draw meaningful conclusions about each one independently. The discriminant validity assessment enhances the confidence in the measurement model and supports the accuracy of the subsequent structural model analysis.
4.3 Evaluation Model Fit

The fit indices for the Saturated Model and the Estimated Model are presented below for a comprehensive comparison.

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.057</td>
<td>0.057</td>
</tr>
<tr>
<td>d_ULS</td>
<td>0.256</td>
<td>0.256</td>
</tr>
<tr>
<td>d_G</td>
<td>0.160</td>
<td>0.160</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>114.931</td>
<td>114.931</td>
</tr>
<tr>
<td>NFI</td>
<td>0.898</td>
<td>0.898</td>
</tr>
</tbody>
</table>

Both models have an identical SRMR value of 0.057, indicating a good fit. The degrees of freedom for both models are also identical, suggesting that the Estimated Model retains the same complexity as the Saturated Model. The Chi-Square values are equal for both models, but in PLS-SEM, the Chi-Square test is often less informative due to its sensitivity to sample size. Alternative fit indices are typically relied upon in PLS-SEM. Both models have identical NFI values of 0.898, indicating a good fit and suggesting that the Estimated Model replicates the explanatory power of the Saturated Model.

4.4 Structural Model

The structural model analysis examines the relationships between the latent constructs in the model and provides insights into the statistical significance and effect sizes of these relationships.
Based on results Table 5: Product quality has a significant positive effect on purchasing decisions. It is found that product quality has a significant positive impact on profit changes in the pharmaceutical manufacturing companies. Additionally, product quality has a significant effect on consumer satisfaction. The relationship between product quality and sustainable business growth is statistically significant, as indicated by the low p-value (0.003). The observed relationship between product quality and sustainable business growth is consistent with the average relationship across the sample, as the sample mean (0.288) is close to the original sample value. The variability in the observed relationship is indicated by the standard deviation (0.095).

DISCUSSION

The positive and significant relationships found in this study have great implications for the Bandung textile industry:

Businesses can enhance their social impact, product quality, and sustainable growth by integrating a comprehensive sustainability strategy into their operations. This strategy should include ethical sourcing, fair labor practices, and a commitment to maintaining and improving product quality. [30]–[32] By adopting sustainable practices, companies can demonstrate their commitment to positively impacting the world and building customer trust. Consumers are increasingly concerned about the environmental impact of the products they purchase, and they prefer companies that use sustainable practices and produce eco-friendly products. [33] Companies that prioritize environmental and social responsibility are more likely to thrive in a business landscape where consumers are interested in sustainability and ethical practices. [34] Additionally, businesses that embrace sustainability can gain a positive reputation, build customer trust, and drive long-term success. By practicing sustainability and sharing performance data in line with ESG goals, companies can gain investor confidence and public trust. Overall, integrating a comprehensive sustainability strategy can help businesses capitalize on the positive relationship between social impact, product quality, and sustainable growth.

These findings highlight the significance of consumer perceptions in driving sustainable business growth [35]–[37]. Businesses that prioritize social impact and product quality are more likely to resonate positively with consumers, leading to potential increases in brand loyalty and market share [31], [38]. By adopting sustainable practices and demonstrating a commitment to environmental and social responsibility, companies can build customer trust and create a positive reputation. Consumers are increasingly concerned about the environmental impact of the products they purchase, and they prefer companies that use sustainable practices and produce eco-friendly products. Therefore, businesses that embrace sustainability and prioritize social and environmental responsibility are more likely to thrive in today’s business landscape, where consumers are increasingly interested in sustainability and ethical practices. These insights can help companies develop effective sustainability strategies and build stronger
brand images, ultimately leading to increased profit and competitive advantage.

Policymakers can use the results of this study to formulate targeted policies that incentivize and reward businesses for their commitment to social responsibility and quality standards. This, in turn, can contribute to the overall economic and social development of the region.

**Implications and Future Research Directions**

The positive and significant relationships uncovered in this study have profound implications for the Bandung textile industry. Businesses can leverage these findings to inform strategies that harmonize economic success with social and environmental responsibility. Policymakers can use the results to formulate targeted policies that incentivize and reward businesses for their commitment to social responsibility and quality standards.

Future research could explore longitudinal studies, comparative analyses with textile industries in other regions, and qualitative exploration to uncover nuanced perspectives. These avenues of research would contribute to a more comprehensive understanding of the dynamics and contextual factors influencing sustainable business growth in the textile industry.

**5. CONCLUSION**

This research provides a comprehensive understanding of the factors influencing sustainable business growth in the Bandung textile industry. The robustness of the measurement model, coupled with the established discriminant validity, lends credibility to the observed relationships. Businesses emphasizing higher product quality and greater social impact demonstrate a strong association with sustainable business growth. These findings offer actionable insights for businesses to align economic success with social and environmental responsibility. Policymakers can leverage these results to craft targeted policies that incentivize responsible business practices. As the industry strives for sustainable development, this research serves as a guiding beacon for navigating the intricate interplay of social impact, product quality, and sustainable growth.

**REFERENCES**


