

CHAPTER V

CONCLUSION, IMPLICATION, LIMITATION, AND RECOMMENDATION

A. Conclusion

After a comprehensive measurement using SmartPLS 4, the findings were interpreted in the previous section. This section presents the research conclusions regarding the influence of Eco-Design on Sustainability Performance through the mediating role of Green Product Innovation in Tea N Tales Artisan Tea Production. The role of Green Product Innovation as a mediating variable represents a developmental approach to understanding the relationship between Eco-Design and Sustainability Performance. The findings indicate that the direct influence of Eco-Design on Sustainability Performance is statistically insufficient. However, when Green Product Innovation acts as a mediating variable, the influence of Eco-Design on Sustainability Performance becomes sufficient. This highlights the important role of Green Product Innovation in strengthening this relationship. Further discussion of the conclusions is presented below:

- 1) Eco-Design has a statistically insignificant influence on Sustainability Performance. This indicates that the application of the Eco-design concept to product materials does not influence the implementation of Sustainability Performance in the environmental, economic and social spheres at Tea N Tales.
- 2) Eco-Design has a statistically significant positive influence on Green Product Innovation. This indicates that the more Tea N Tales implements the Eco-design concept in its product materials, the more it can encourage the creation of Green Product Innovation. Eco-friendly product design can also be interpreted as an effort to reduce the use of materials that are harmful to environmental sustainability. This approach can effectively stimulate the

development of Green Product Innovation.

- 3) Green Product Innovation has a statistically significant positive influence on Sustainability Performance. This indicates that the ability to create Green Product Innovation can contribute to Sustainability Performance across the environmental, economic, and social dimensions of Tea N Tales.
- 4) Eco-Design has a statistically significant positive influence on Sustainability Performance through the mediating role of Green Product Innovation. This indicates that the increasing application of Eco-design principles to product materials effectively contributes to Tea N Tales' Sustainability Performance by stimulating the role of Green Product Innovation, which supports the relationship of influence. Eco-design plays a strategic role in developing environmentally friendly products and can significantly enhance Sustainability Performance across the environmental, economic, and social dimensions of Tea N Tales through the mediating influence of Green Product Innovation.

B..Implication

1) Theoretical

This section examines the research contribution to existing literature by offering novel empirical insights and a discussion of the variable that does not align with prior findings in terms of the first hypothesis, as presented below:

Every hypothesis examined in this study contributes to evaluating the alignment or inconsistency between the theoretical arguments and the research findings. This study includes four hypotheses tested for their relevance to the grand theories applied. As a result, the study offers theoretical contributions through empirical testing, enriching the literature on green innovation, green strategic management, and sustainability strategies.

A key novelty of this study lies in the discovery of the mediating role of Green Product Innovation in the relationship between Eco-design and Sustainability Performance. Research in the context of artisan tea remains limited, making this study particularly valuable by offering a new perspective on how environmentally friendly product design contributes to the creation of Green Product Innovation, which in turn supports sustainable performance in artisan tea production. This opens opportunities for further research focusing specifically on artisan tea businesses while also contributing to the advancement of green innovation literature, particularly concerning green product innovation.

Based on the hypothesis testing, Eco-design and Green Product Innovation are Valuable, Rare, Inimitable, and Non-substitutable (VRIN) internal capabilities of the company, thereby providing a sustainable competitive advantage that is difficult for competitors to replicate. This supports the Resource-Based View (RBV) theory proposed by Barney (1991). A related and relevant framework for this study is the Natural Resource-Based View (NRBV), introduced by (S. Hart, 1995). The study demonstrates that the design, development, and selection of product materials are strongly oriented toward environmentally friendly principles, suggesting that this implementation can enhance a company's competitive advantage within the artisan tea industry. One notable finding, however, is that the influence of Eco-design on Sustainability Performance is statistically insignificant, contrasting with several prior studies (Foo et al., 2018; Rehema et al., 2020).

Refers to the grand theory of this research, the ownership of Rainforest Alliance certification may encourage companies to be more proactive in adopting environmental standards. Tea companies must align their practices accordingly. This finding aligns with Institutional Theory, as proposed by (DiMaggio & Powell, 1983).

2) Practical

The practical implication refers to the actual implementation that will probably be applied in the Tea N Tales and Societal & Cultural based on the research result. As presented below:

a. Tea N Tales

1. These research findings may provide recommendations for optimizing Eco-design practices to produce Green Product Innovation that aligns more closely with the principles of planet, profit, and people.
2. Encourage the enhancement of knowledge and skills among Research & Development employees, as well as among those who are not directly involved in the Eco-design process.
3. Inspire and recommend that Tea N Tales collaborate with other parties who share a focus on creating Green Product Innovation that delivers Sustainability Performance value. This could include initiatives such as developing more environmentally friendly and functional packaging, converting tea waste into paper, and similar efforts.
4. The findings may also encourage Tea N Tales to create new flavour variants inspired by folklore or Indonesian history, incorporating environmental themes into the product concepts.
5. Provide brief background information about Tea N Tales on the product packaging.
6. Encourage improvements in product design and packaging to enhance eco-friendly appearance.

b. Societal & Cultural

1. Enhance the prestige of Indonesian tea in both local and

international markets by promoting locally produced tea with rich flavors and premium quality, while maintaining environmental sustainability, profitability, and the quality of life of local communities.

2. Promote the taste of Indonesian tea through the adaptation of philosophical folklore and historical narratives, highlighting the cultural richness behind each flavour.

C. Research Limitation

Every research conducted faces limitations that are sometimes unpredictable and uncontrollable. It can affect research results. The researcher attempts to reduce these uncertainties, but some are unthinkable and neglected. These must be solved by the researcher. The whole research process also embeds several limitations, as follows:

- 1) The scope of this research is limited to managers and employees from the Research and Development, Production, Marketing and Sales, and Finance departments. As a result, the sample size is relatively small, with fewer than 100 respondents (<100). To enrich the research perspective, future studies need to consider external perspectives, such as consumers and other stakeholders.
- 2) This research presents findings that differ from previous studies, particularly concerning the influence of Eco-design on Sustainability Performance. These variations may stem from contextual differences, sample characteristics, or the unique operational strategies employed by Tea N Tales.
- 3) Online interviews were conducted to reach the study respondents because there was not sufficient time to conduct in-person interview sessions.

D. Research Recommendation

Recommendations are formulated to improve or develop future research. The following recommendations can be implemented:

- 1) Consider incorporating external perspectives, such as those of consumers and other stakeholders in order to enrich the research viewpoint.
- 2) Measure Eco-design across the entire product lifecycle, including packaging, post-consumption products, and other stages. The aim is to determine its significance in influencing a product's lifecycle. This measurement can serve as a basis for evaluating potential improvements in the company's Eco-design process.
- 3) Examine Green Product Innovation as an independent variable to identify the dominant and significant influence of both Green Product Innovation and Eco-design.
- 4) Consider involving other mediating variables, such as Organizational Support or Commitment, Brand Stories, etc.
- 5) Consider determining the supply chain material of Eco-design.
- 6) Broaden the research scope by involving several artisan tea companies or collaborating with larger conventional tea companies in the market.