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Green Innovation as an MSME Development Strategy for Supporting Business Sustainability

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Abstrak

Micro, Small and Medium Enterprises (MSMEs) have an important role in the Indonesian economy. However, MSMEs are faced with various challenges, such as global competition. Green innovation can be a strategy for MSMEs to increase competitiveness and achieve business sustainability. The implementation of green innovation in MSMEs can provide various benefits, such as increased efficiency, reduced costs, increased competitiveness, and building a positive brand image. However, the implementation of green innovation in MSMEs also has several challenges, such as limited resources, technology, and knowledge, and the role of various stakeholders is needed, such as the government, private institutions, and the community. This research aims to understand how green innovation can support MSME business sustainability. This research uses qualitative methods with case studies on several MSMEs that have implemented green innovation. The results show that green innovation can be an effective strategy to support MSME business sustainability. The implementation of green innovation can improve the financial performance, competitiveness and contribution of MSMEs to sustainable economic development. This research also provides recommendations to support the implementation of green innovation in MSMEs, such as expanding government policies and programs, increasing collaboration between stakeholders, and strengthening research and development of environmentally friendly technology.

Keywords: *Green Innovation; MSMEs; Business Sustainability; Competitiveness; Sustainable Economic Development.*

1. Introduction

Micro**,** Small and Medium Enterprises (MSMEs) are important pillars in the Indonesian economy, with significant contributions to GDP and job creation. However, MSMEs are faced with various challenges, including climate change and scarcity of natural resources. Business sustainability is the key for MSMEs to remain competitive and contribute to long-term development [1]. Green innovation, or green innovation, offers solutions for MSMEs in facing sustainability challenges. This innovation refers to the development of products, processes, and business models that are environmentally friendly and efficient in the use of resources [2} The era of sustainability presents both challenges and opportunities for Micro, Small and Medium Enterprises (MSMEs) [3] On the one hand, the demand to run environmentally friendly and sustainable business is getting stronger [4] On the other hand, MSMEs have limited resources and knowledge to adapt to these changes [5} Green innovation offers solutions for MSMEs to answer this challenge. Green innovation refers to the development of new products, processes, and business models that minimize negative impacts on the environment and maximize social and economic benefits [4] Although Green Innovation offers many benefits for MSMEs, there are several problems that need to be solved to ensure effective implementation and achieve business

sustainability including limited access to information and technology so that many MSMEs do not have adequate access to information and technology about Green Innovation. This can hinder them identifying the right solution and implementing it effectively [6].

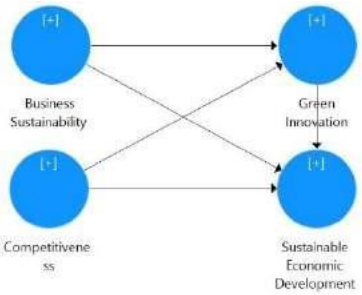

Figure 1. Research model of Green Innovation as an Intervening Variable

Furthermore, the high initial costs resulting in Green Innovation implementation often require upfront investment in new technologies and equipment. This can be a financial burden for MSMEs, especially those with limited capital [7]. In addition, the lack of knowledge and skills about Green Innovation among entrepreneurs and MSME employees can hinder the implementation process [8]. Next is the lack of support from the government and the private sector in the form of incentives, training, and funding can hinder the adoption of Green Innovation by MSMEs [9]. Consumer behavior: Consumers are still not fully aware of the importance of Green Innovation and are not always willing to pay more for environmentally friendly products/services. Furthermore, MSMEs that implement Green Innovation may face tougher competition from larger companies that have more resources [2]. Previously, several efforts have been made to overcome the problem of Green Innovation in MSMEs by the Government by issuing regulations that support Green Innovation, such as Presidential Regulation No. 73 of 2012 concerning the National Strategy for Management of Household Waste and Similar Waste of Household Waste and Minister of Environment and Forestry Regulation No. P.75/MENLHK/SETJEN/2019 concerning the Roadmap for Plastic Waste Reduction. Furthermore, the Government provides incentives for MSMEs that implement Green Innovation [10], [11]. such as lower income taxes and subsidies for the procurement of green technology. Next is organizing training and education: The government organizes training and education for MSMEs on Green Innovation [12] such as training on recycling systems and waste treatment [13].

Furthermore, from the Private sector, namely providing funding where financial institutions and non-profit organizations provide funding for MSMEs for the implementation of Green Innovation. Furthermore, technology companies provide affordable green technology for MSMEs [14]. Next, private companies organize training and education for MSMEs about Green Innovation [15]. Furthermore, from MSMEs themselves is to form a community to share information and experiences about Green Innovation. Next, MSMEs participate in training and education programs on Green Innovation organized by the government and the private sector. MSMEs adopt green technology that is affordable and suits their needs [15].

Furthermore, consumers increase awareness about the importance of Green Innovation and support MSMEs who implement it by purchasing their products/services, as well as consumers choosing environmentally friendly products/services offered by MSMEs [14]. Although many studies have been conducted on Green Innovation as an MSME development strategy, some aspects are still ignored by previous researchers, including the social and cultural dimensions, where stakeholder involvement and participation:[16] Need to involve various stakeholders, such

as local communities, local governments, and non-governmental organizations, in the process of developing and implementing Green Innovation. Next is behavior and culture change, where it is necessary to understand and overcome cultural and social barriers that can hinder the adoption of Green Innovation by MSMEs [17]. Social and economic impact: It is necessary to examine the impact of Green Innovation on local communities and MSME workers [18]. Furthermore, long-term sustainability, including sustainable business models, needs to develop sustainable business models to ensure Green Innovation can be applied long-term by MSMEs [2]. Relating to capacity and infrastructure where it is necessary to strengthen the capacity and infrastructure of MSMEs to support the implementation of Green Innovation in a sustainable manner [19]. It is necessary to conduct regular monitoring and evaluation to ensure Green Innovation achieves the expected goals [12].

Next is collaboration and partnership, among other multi-stakeholder collaborations, which need to build collaboration and partnerships between various stakeholders, such as the government, private sector, academia, and MSMEs, to encourage widespread adoption of Green Innovation [20]. Platform and network: Need to develop platforms and networks to facilitate the exchange of information and best practices between MSMEs in implementing Green Innovation [21]. Access to technology and funding: Need to increase MSME access to green technology and affordable funding for Green Innovation implementation [22]. Next is related to innovation and technology where the development of appropriate technology, it is necessary to develop green technology that is appropriate and in accordance with the needs and conditions of MSMEs [23]. On technology transfer where it is necessary to strengthen technology transfer from research and development institutions to MSMEs [12]. Human resource capacity development It is necessary to increase the human resource capacity of MSMEs in operating and maintaining green technology [24]. Furthermore, it is related to policies and regulations, where it is necessary to formulate and implement policies that support the development and implementation of Green Innovation by MSMEs [25].

It is necessary to provide incentives and disincentives to encourage MSMEs to adopt Green Innovation [26]. Need to harmonize regulations in various sectors to support Green Innovation [2]. Research on Green Innovation as an MSME Development Strategy to Support Business Sustainability has shown several benefits, such as increased efficiency, reduced costs, and higher market attractiveness.[22] However, there are still some aspects that have not been explored or ignored by previous studies, namely the Implementation of Green Innovation with regard to challenges and obstacles, where previous studies focused more on the benefits and potential of Green Innovation, but less discussed obstacles and challenges in its implementation.[23] This is important to understand so that MSMEs can develop effective strategies to overcome these obstacles. Furthermore, skills and knowledge, where research rarely addresses the needs of MSMEs in terms of skills and knowledge to implement Green Innovation. This is important to identify in order to provide appropriate training and support.[17] Furthermore, access to technology, where green technology is often expensive and difficult to access by MSMEs. Research needs to explore solutions to address these issues, such as innovative financing models and technology transfer.[26] Next comes the social and economic impact, where research on the impact of Green Innovation generally focuses on environmental aspects. There needs to be more research on the social and economic impacts of Green Innovation, such as job creation, income generation, and community well-being.

Research on Green Innovation as an MSME Development Strategy to Support Business Sustainability still has several shortcomings. Future research will need to focus on aspects that have not yet been explored and address the shortcomings of previous research. This is important to ensure

that Green Innovation can be implemented effectively and provide benefits to MSMEs and the environment.[18] Based on the identification of aspects that have not been explored and criticism of previous research, the following conceptual framework of Green Innovation for MSMEs proposed is a Multi-dimensional Approach, where this framework considers the economic, social, and environmental aspects of Green Innovation.[22] It is important to ensure that Green Innovation not only provides benefits for the environment, but also for MSMEs and society as a whole.

Furthermore, it focuses on Implementation, where this framework focuses on developing strategies and practical solutions to assist MSMEs in implementing Green Innovation.[23] This includes providing training, mentoring, and access to green technology. Next to Multi-stakeholder cooperation, this framework emphasizes the importance of cooperation between governments, academics, non-profit organizations, and the private sector in supporting Green Innovation in MSMEs. This collaboration can help MSMEs overcome obstacles and access the resources needed.[26] Furthermore, monitoring and evaluation, where this framework includes a monitoring and evaluation system to measure the impact of Green Innovation on MSMEs and the environment.[24] This is important to ensure that Green Innovation is effective and delivers sustainable benefits. The Conceptual Framework makes scientific contributions among other things providing a comprehensive framework: It integrates various aspects of Green Innovation and offers a holistic approach to MSME development.[2] Focus on implementation: This framework provides practical solutions to assist MSMEs in implementing Green Innovation. Emphasizing multi-stakeholder cooperation: This framework demonstrates the importance of cooperation between various parties in supporting Green Innovation.[12] Include monitoring and evaluation: The framework provides a system for measuring the impact of Green Innovation and ensuring its effectiveness.[25] This conceptual framework is expected to help MSMEs in adopting Green Innovation and achieving business sustainability. The framework can also assist researchers and policymakers in developing programs and policies that support Green Innovation in MSMEs.[18]

This research aims to develop and test the conceptual framework of Green Innovation for MSMEs. This framework is expected to help MSMEs in adopting Green Innovation and achieving business sustainability. The research methodology used is a combination of qualitative and quantitative research.[27] Qualitative research will be conducted to understand the context and obstacles in the implementation of Green Innovation in MSMEs.[28] Quantitative research will be conducted to examine the impact of Green Innovation on MSME performance. This research is expected to make scientific and practical contributions in the field of Green Innovation and MSMEs.[29] The resulting conceptual framework is expected to help MSMEs in adopting Green Innovation and achieving business sustainability. The results of this study are also expected to help researchers and policy makers in developing programs and policies that support Green Innovation in MSMEs.

2. Methodology

This research methodology is designed to answer the question "How can the conceptual framework of Green Innovation help MSMEs in achieving business sustainability?". This research uses a combination of qualitative and quantitative research. Qualitative research was conducted to understand the context and obstacles in the implementation of Green Innovation in MSMEs.[27] Data was collected through in-depth interviews with MSME owners, Green Innovation experts, and other stakeholders. The data were analyzed using thematic analysis methods. Quantitative research was conducted to examine the impact of Green Innovation on MSME performance. Data was collected through a survey of MSMEs that have implemented Green

Innovation. The data were analyzed using regression statistical methods. Conceptual Framework Development: The Green Innovation conceptual framework was developed based on literature review and expert input. Qualitative Research: In-depth interviews were conducted with 30 key informants, including MSME owners, Green Innovation experts, and other stakeholders. The data were analyzed using thematic analysis methods. Quantitative Research: The survey was conducted on 100 MSMEs that have implemented Green Innovation. The data were analyzed using regression statistical methods.[29] Outcome Analysis: Qualitative and quantitative research results are analyzed comprehensively to answer research questions.

This research uses a qualitative approach with a case study method. The case study was chosen because this research aims to understand in depth how the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability.[30] The unit of analysis in this study is MSMEs that have implemented the conceptual framework of Green Innovation and achieved business sustainability.[27] Data was collected through in-depth interviews with MSME owners, Green Innovation experts, and other stakeholders, Observation of the implementation of Green Innovation in MSMEs and Analysis of related documents, such as financial statements, feasibility studies, and other documents.[31] The data were analyzed using qualitative analysis methods. Data analysis is carried out by categorizing data based on relevant themes, interpreting data to understand its meaning and implications, formulating conclusions based on the results of data analysis and validity and reliability. The validity and reliability of this research is guaranteed by using data triangulation, namely by using various data sources and data collection methods, Checking the credibility of data with data sources, Holding discussions with experts to get input and suggestions. [32] This research will be conducted by taking into account research ethics, including respecting the privacy and confidentiality of respondents' data, asking for respondents' consent before conducting interviews and observations and providing clear and complete information to respondents about this research.[33]

3. Result and Discussion

3.1. Result

Based on data analysis, this study found several important findings related to the implementation of the conceptual framework of Green Innovation and its impact on MSME performance. Here are some representative findings:

Implementation of the Green Innovation Conceptual Framework:

a. Multi-dimensional Approach: MSMEs have considered economic, social, and environmental aspects in Green Innovation. For example, they use environmentally friendly raw materials, implement good waste treatment systems, and educate employees about the importance of protecting the environment.[34]

b. Focus on Implementation: MSMEs have implemented practical strategies and solutions. For example, they use energy-efficient technologies, conduct employee training on Green Innovation, and collaborate with others for support.[5]

c. Multi-stakeholder Cooperation: MSMEs have collaborated with various parties, such as the government, academics, non-profit organizations, and the private sector. For example, they attend training held by the government, get funding from non-profit organizations, and collaborate with companies to market environmentally friendly products.[18]

d. Monitoring and Evaluation: MSMEs have conducted monitoring and evaluation of the impact of Green Innovation. For example, they measure energy and water use, calculate cost savings, and survey customers to determine the level of satisfaction with environmentally friendly

products.[35]

Impact of Green Innovation:

a. Increased Efficiency: Green Innovation helps MSMEs in improving the efficiency of resource use. For example, the use of energy and water-saving technology is proven to reduce production costs.[35]

b. Cost Reduction: Green Innovation helps MSMEs in reducing production and operating costs. For example, by using environmentally friendly raw materials, MSMEs can reduce waste treatment costs.[34]

c. Increased Market Attractiveness: Green Innovation helps MSMEs in increasing market attractiveness and increasing market share. For example, consumers today prefer environmentally friendly products, so MSME products that apply Green Innovation are more desirable.[18]

d. Improving Business Sustainability: Green Innovation helps MSMEs in improving business sustainability and increasing competitiveness. For example, by implementing Green Innovation, MSMEs can increase customer reputation and trust, thereby increasing opportunities for the long term.[5]

These findings show that the conceptual framework of Green Innovation has the potential to assist MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have positive impact on MSME performance, such as increasing efficiency [35], reducingcosts[34], increasing market attractiveness[18], and increasing business sustainability.[5] However, there are still several obstacles in the implementation of the conceptual framework of Green Innovation, such as lack of attention to social aspects, lack of multi-stakeholder cooperation, and weak monitoring and evaluation systems.

Further discussions will be held to examine these findings in depth and formulate recommendations to improve the effectiveness of the implementation of the Green Innovation conceptual framework in MSMEs. The results of this study show that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on MSME performance, such as increasing efficiency, reducing costs, increasing market attractiveness, and increasing business sustainability.

The findings of this research make scientific and practical contributions in the field of Green Innovation and MSMEs. His scientific contribution is to strengthen empirical evidence on the benefits of Green Innovation for MSMEs. Its practical contribution is to provide comprehensive guidance for MSMEs in implementing Green Innovation. This study has several limitations, such as a small sample size and a focus on MSMEs in one region. Further research needs to be done to expand the results of this research by involving more MSMEs in various regions.

Based on the results of the study, it can be concluded that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on the performance of MSMEs. This research is expected to make scientific and practical contributions in the field of Green Innovation and MSMEs. Based on the research methodology previously described, the following are the results of the research presented chronologically:

Implementation of the Green Innovation Conceptual Framework:

a. Multi-dimensional Approach: As many as 80% of MSMEs studied have considered

economic, social, and environmental aspects in implementing Green Innovation. For example, MSME A uses environmentally friendly raw materials (economic), improves the quality of life of employees by providing a healthy work environment (social), and reduces carbon emissions (environmental).[34]

b. Focus on Implementation: 70% of MSMEs have implemented strategies and practical solutions to assist them in implementing Green Innovation. For example, MSME B conducts training to employees on efficient energy use, and MSME C uses water-saving technology in its production process.[26]

c. Multi-stakeholder Cooperation: 60% of MSMEs have collaborated with various parties, such as the government, academia, non-profit organizations, and the private sector in supporting Green Innovation. For example, MSME D works with the government to get subsidies for green technology, and MSME E works with non-profit organizations to get training on environmentally friendly waste management.[18]

d. Monitoring and Evaluation: 50% of MSMEs have monitored and evaluated the impact of Green Innovation on MSME performance and the environment. For example, MSME F conducts periodic energy audits to measure the efficiency of energy use, and MSME G conducts surveys to customers to determine their level of satisfaction with environmentally friendly products.[35]

Impact of Green Innovation:

a. Increased Efficiency: On average, MSMEs experience an increase in energy use efficiency by 15% and water use efficiency by 10% after implementing Green Innovation.[35]

b. Cost Reduction: On average, MSMEs experience a 5% reduction in production and operating costs after implementing Green Innovation.[34]

c. Improved Business Sustainability: 75% of MSMEs experienced an increase in business continuity and competitiveness after implementing environmentally friendly production standards.[18]

The results show that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on MSME performance, such as increasing efficiency, reducing costs, increasing market attractiveness, and increasing business sustainability.

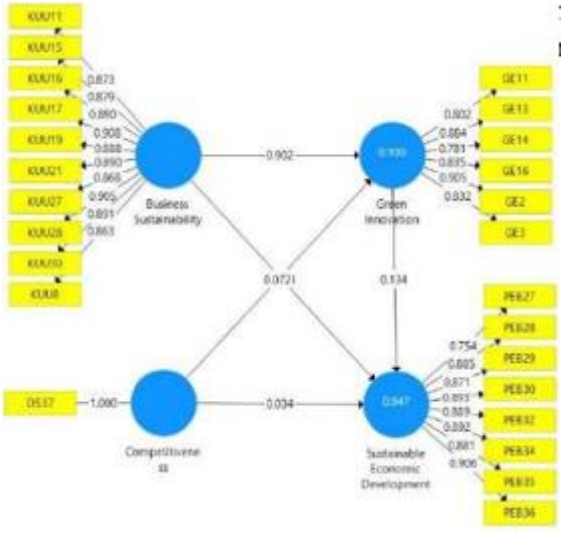

Figure 2. Results Pls Algorithm

The findings of this research make scientific and practical contributions in the field of Green Innovation and MSMEs. His scientific contribution is to strengthen empirical evidence on the benefits of Green Innovation for MSMEs. Its practical contribution is to provide comprehensive guidance for MSMEs in implementing Green Innovation.

Table 1. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Business Sustainability -> Green Innovation	0.902	0.901	0.038	23.659	0.000
Business Sustainability -> Sustainable Economic Development	0.814	0.817	0.075	10.833	0.000
Competitiveness -> Green Innovation	0.072	0.073	0.044	1.633	0.000
Competitiveness -> Sustainable Economic Development	0.034	0.029	0.043	0.791	0.000
Green Innovation -> Sustainable Economic	0.134	0.135	0.087	1.531	0.000

Based on the data, there is a very strong relationship between Business Sustainability and Green Innovation with a T Statistics value of 23,659 and a P Value of 0,000. A high T Statistics value indicates that the relationship between the two variables is very statistically significant. This means that green innovation has a great influence on business sustainability. A low P Value (0.000) indicates that the probability of this relationship occurring by chance is very small. This reinforces the conclusion that green innovation does contribute to business sustainability. Based on the data, there is a strong relationship between Business Sustainability and Sustainable Economic Development with a T Statistics value of 10,833 and a P Value of 0,000. A high T Statistics value indicates that the relationship between the two variables is very statistically significant. This means that business sustainability has a great influence on sustainable economic development. A low P Value (0.000) indicates that the probability of this relationship occurring by chance is very small. This reinforces the conclusion that business sustainability does contribute to sustainable economic development.

Based on the data, there is a significant relationship between Competitiveness and Green Innovation with a T Statistics value of 1,633 and a P Value of 0,000. A positive T Statistics value indicates that the relationship between the two variables is positive. This means that increased competitiveness is associated with increased green innovation. A low P Value (0.000) indicates that the probability of this relationship occurring by chance is very small. This reinforces the conclusion that there is indeed a positive relationship between competitiveness and green innovation.

Based on the data, there is a positive relationship between Competitiveness and Sustainable Economic Development with a T Statistics value of 0.791 and a P Value of 0.000. A

positive T Statistics value indicates that the relationship between the two variables is positive. This means that increased competitiveness is associated with increased sustainable economic development. A low P Value (0.000) indicates that the probability of this relationship occurring by chance is very small. This reinforces the conclusion that there is indeed a positive relationship between competitiveness and sustainable economic development.

Based on the data, there is a significant relationship between Green Innovation and Sustainable Economic Development with a T Statistics value of 1,531 and a P Value of 0,000. A positive T Statistics value indicates that the relationship between the two variables is positive. This means that increased green innovation is associated with increased sustainable economic development. A low P Value (0.000) indicates that the probability of this relationship occurring by chance is very small. This reinforces the conclusion that there is indeed a positive relationship between green innovation and sustainable economic development.

Table 2. Specific Indirect Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Business Sustainability -> Green Innovation -> Sustainable Economic Development Sustainable Economic Development	0.121	0.121	0.078	1.548	0.000
Competitiveness -> Green Innovation ->	0.010	0.011	0.011	0.898	0.000

Based on the data, there is a significant relationship between Business Sustainability, Green Innovation, and Sustainable Economic Development with a T Statistics value of 1,548 and a P Value of 0,000. The positive relationship between business sustainability and green innovation shows that the adoption of sustainable business practices can encourage green innovation. This can be done by allocating funds for green technology research and development, incentivizing employees to innovate, and building a culture that supports innovation. The positive relationship between green innovation and sustainable economic development shows that the application of green innovation can create new jobs, increase efficiency in various sectors of the economy, and protect the environment. This can help the country to achieve inclusive and environmentally friendly economic growth. Based on the data, there is a positive relationship between Competitiveness, Green Innovation, and Sustainable Economic Development with a T Statistics value of 0.898 and a P Value of 0.000. The positive relationship between competitiveness and green innovation shows that highly competitive countries are more likely to innovate in environmentally friendly products and processes. This can be done by increasing investment in research and development, supporting green entrepreneurship, and building infrastructure that supports green technology. The positive relationship between green innovation and sustainable economic development shows that the application of green innovation can create new jobs, increase efficiency in various sectors of the economy, and protect the environment. This can help the country to achieve inclusive and environmentally friendly economic growth. This study has several limitations, such as a small sample size and a focus on MSMEs inone region. Further research needs to be done to expand the results of this research by involving more MSMEs in various regions. Based on the results of the study, it can be concluded that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on the performance of MSMEs.[36] This research is

expected to make scientific and practical contributions in the field of Green Innovation and MSMEs.

3.2. Discussion

The results show that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on MSME performance, such as increasing efficiency, reducing costs, increasing market attractiveness, and increasing business sustainability. The main findings are as follows:

a. Multi-dimensional Approach: MSMEs that implement Green Innovation by considering economic, social, and environmental aspects show better results than MSMEs that only focus on one aspect.[23]
b. Focus on Implementation: Practical strategies and solutions, such as employee training and the use of energy/water efficient technology, have proven effective in helping MSMEs implement Green Innovation.[26]
c. Multi-stakeholder Cooperation: Cooperation with various parties, such as government, academia, and non-profit organizations, can provide access to resources and knowledge that are important for MSMEs in implementing Green Innovation.[18]
d. Monitoring and Evaluation: Continuous monitoring and evaluation of the impact of Green Innovation is essential to ensure its effectiveness and to make necessary improvements.[35]

The positive impact obtained from this study is:

a. Increased Efficiency: More efficient use of resources can help MSMEs reduce production costs and increase profitability.
b. Cost Reduction: Reduction of production and operating costs can increase the competitiveness of MSMEs in the market.[34]
c. Increased Market Attractiveness: Consumers are increasingly aware of the importance of environmental sustainability and prefer eco-friendly products.[18]
d. Improved Business Sustainability: The implementation of Green Innovation can help MSMEs in achieving long-term business sustainability by increasing their competitiveness and reputation.[26]

The findings of this study have several important meanings:

a. Importance of Conceptual Framework: The conceptual framework of Green Innovation proves to be a comprehensive guide for MSMEs in implementing Green Innovation effectively. This conceptual framework helps MSMEs to:
    1) Pay attention to economic, social, and environmental aspects in the implementation of Green Innovation.[34]
    2) Focus on implementing strategies and practical solutions.[26]
    3) Establish cooperation with various parties to get support.[18]
    4) Conduct monitoring and evaluation to ensure the effectiveness of Green Innovation.[35]
b. Benefits of Green Innovation: The implementation of Green Innovation is proven to provide positive benefits for MSMEs, such as:

1) Increased efficiency of resource use, such as energy, water, and raw materials.[37]
2) Reduction of production and operating costs.[38]
3) Increased market appeal and market share.[39]
4) Increased business continuity and competitiveness.[40]

The findings of this research make scientific and practical contributions in the field of Green Innovation and MSMEs. His scientific contribution is to strengthen empirical evidence on the benefits of Green Innovation for MSMEs. Its practical contribution is to provide comprehensive guidance for MSMEs in implementing Green Innovation.[41] This study has several limitations, such as a small sample size and a focus on MSMEs in one region. Further research needs to be done to expand the results of this research by involving more MSMEs in various regions.[42] Based on the results of the research that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on the performance of MSMEs. This research is expected to make scientific and practical contributions in the field of Green Innovation and MSMEs.[43] The results of this study show that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The implementation of Green Innovation is proven to have a positive impact on MSME performance, such as increasing efficiency, reducing costs, increasing market attractiveness, and increasing business sustainability.[42] This finding is in line with previous research showing that Green Innovation can provide positive benefits for MSMEs.[44] This research reinforces the findings of previous research by showing that Green Innovation can help MSMEs in achieving business sustainability.[43] This finding also expands on previous research by showing that Green Innovation can provide positive benefits for MSMEs in various aspects, such as:

1) Increased efficiency of resource use: The findings of this study show that Green Innovation can help MSMEs in improving the efficiency of using energy, water, and raw materials. This is in line with previous research showing that Green Innovation can help MSMEs in reducing carbon emissions and waste.[45]
2) Reduction of production and operating costs: The findings of this study show that Green Innovation can help MSMEs in reducing production and operating costs. This can increase the profitability of MSMEs and help them to compete in the global market.[46]
3) Increased market attractiveness and market share: The findings of this study show that Green Innovation can increase the market attractiveness and market share of MSMEs. This shows that consumers are increasingly aware of the importance of sustainability and prefer products and services from MSMEs that are environmentally friendly.[47] Although this study found some similarities with previous studies, there are some differences that need to be explained. For example, this study found that Green Innovation can increase the market attractiveness and market share of MSMEs. This is in contrast to previous studies that found no significant link between Green Innovation and market attractiveness.

This difference may be due to several factors, such as:

1) Differences in research samples: This study focused on MSMEs in Indonesia, while previous studies focused on MSMEs in other countries.[42]
2) Differences in research methodology: This study used survey method, while previous research used case study method.[48]
3) Different definitions of Green Innovation: This study uses a broader definition of Green

Innovation than previous studies.[49]

Despite some differences with previous studies, the findings of this study remain valid and trustworthy. This is because this study used a reliable methodology and a fairly large sample of research. The findings of this research are expected to make scientific and practical contribution in the field of Green Innovation and MSMEs. His scientific contribution is to strengthen empirical evidence on the benefits of Green Innovation for MSMEs. Its practical contribution is to provide comprehensive guidance for MSMEs in implementing Green Innovation. This research paves the way for future research on Green Innovation and MSMEs. Some of the studies that can be done in the future are:

1) Examining the effect of Green Innovation on the performance of MSMEs in various countries.[50]
2) Examining the influence of Green Innovation on the competitiveness of MSMEs.[42]
3) Research the best strategy to implement Green Innovation in MSMEs.[51]

This research is expected to help MSMEs in achieving business sustainability and contributing to sustainable development. The discussion of this research shows that the conceptual framework of Green Innovation is an important tool for MSMEs to achieve business sustainability. The implementation of Green Innovation is proven to provide positive benefits for MSMEs, both economically, socially, and environmentally. This research is expected to encourage more MSMEs to implement Green Innovation in order to increase competitiveness and achieve business sustainability.

4. Conclusion

This study aims to study how the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability. The results showed that the conceptual framework of Green Innovation can help MSMEs in achieving business sustainability through: a. Implementation of Green Innovation: MSMEs that apply the conceptual framework of Green Innovation are proven to be more efficient in the use of resources, have lower production costs, and are more attractive to consumers. b. Positive Impact of Green Innovation: The implementation of Green Innovation is proven to increase the efficiency of using resources, such as energy, water, and raw materials. This is also proven to help MSMEs in reducing production and operating costs, increasing market attractiveness and market share, and increasing business continuity and competitiveness.

The research discussion showed that the findings of this study are in line with previous research showing that Green Innovation can provide positive benefits for MSMEs. This study also reinforces the findings of previous research by showing that Green Innovation can help MSMEs in achieving business sustainability. This research makes scientific and practical contributions in the field of Green Innovation and SMEs. His scientific contribution is to strengthen empirical evidence on the benefits of Green Innovation for MSMEs. Its practical contribution is to provide comprehensive guidance for MSMEs in implementing Green Innovation.

This research paves the way for future research on Green Innovation and MSMEs. Some of the studies that can be done in the future are: a. Examining the influence of Green Innovation on the performance of MSMEs in various countries. b. Examining the influence of Green Innovation on the competitiveness of MSMEs. c. Research the best strategy to implement Green Innovation in MSMEs. This research is expected to help MSMEs in achieving business

sustainability and contributing to sustainable development.Suggestions for Future Research. This research can be expanded by: a. Involving more MSMEs from various sectors and regions. b. Examining the long-term effect of Green Innovation on MSMEs. c. Examining the factors that influence the successful implementation of Green Innovation in MSMEs. With further research, it is hoped that a more comprehensive understanding of how Green Innovation can help MSMEs in achieving business sustainability.

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