

Determining Factors for the Success of Green Innovation: Technology, Organizational, and Environmental Readiness On the Performance of MSMEs in Solo Raya

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ABSTRACT: This study examines how prepared MSMEs are for green innovation based on technological, organizational, and environmental frameworks. This study is quantitative. This study involved 156 owners and managers of micro, small, and medium enterprises (MSMEs) in Solo Raya to investigate the influence of technological, organizational, and environmental readiness on company performance. This study used a survey by distributing questionnaires to MSME owners/managers in the Solo Raya area. Partial Least Squares (PLS) method was used together with Smart-PLS software version 3 to analyze the collected data to evaluate the relationship between technology, organization, environment, and financial performance. The results showed that green innovation is significantly influenced by technology compatibility, environmental concern, and government support. In addition, green innovation is also significantly influenced by financial performance. This study also found several limitations, such as the possibility of potential less generalizable to other areas because the study was conducted only on MSMEs in Solo Raya. Despite these limitations, this study makes an important contribution to the understanding of how technological, organizational, and environmental readiness can affect performance in MSMEs.

Keywords: *Green Innovation, Technology Compatibility, Environmental Concern, Government Support, Financial Performance*

ABSTRAK: Penelitian ini mengkaji seberapa siap perusahaan UMKM terhadap inovasi hijau berdasarkan kerangka teknologi, organisasi, dan lingkungan. Penelitian ini bersifat kuantitatif. Penelitian ini melibatkan 156 pemilik dan pengelola usaha mikro, kecil, dan menengah (UMKM) di Solo Raya untuk menyelidiki pengaruh kesiapan teknologi, organisasi, dan lingkungan terhadap kinerja perusahaan. Penelitian ini menggunakan survei dengan membagikan kuesioner kepada para pemilik/manajer UMKM di daerah Solo Raya. Metode Partial Least Squares (PLS) digunakan bersama dengan software Smart-PLS versi 3 untuk menganalisis data yang dikumpulkan untuk mengevaluasi hubungan antara teknologi, organisasi, lingkungan, dan kinerja keuangan. Hasil penelitian menunjukkan bahwa inovasi hijau dipengaruhi secara signifikan oleh kompatibilitas teknologi, Kepedulian lingkungan, dan dukungan pemerintah. Selain itu, inovasi hijau juga dipengaruhi secara signifikan oleh kinerja keuangan. Penelitian ini juga menemukan beberapa keterbatasan, seperti kemungkinan seperti potensi kurang dapat di generalisasikan ke daerah lain karena penelitian dilakukan hanya pada UMKM di Solo Raya. Terlepas dari keterbatasan ini, penelitian ini memberikan kontribusi penting terhadap pemahaman tentang bagaimana Kesiapan teknologi, Organisasi, dan Lingkungan dapat mempengaruhi kinerja pada UMKM.

Keywords: *Inovasi Hijau, Kompabiliti Teknologi, Kepedulian Lingkungan, Dukungan Pemerintah, Kinerja Keuangan*

1. INTRODUCTION

There has been an increase in environmental pollution in the Bengawan Solo river area. The Head of the Environmental Protection and Management Division of the Surakarta City Environmental Service (DLH) appealed to small industries to be guided. This condition shows that green innovation is still included in the "neglected" category in literature or academic research. Thus, this topic has not received enough attention from researchers. Environmental issues cannot be solved by large companies alone, but MSMEs that have a chain impact on community involvement also have an important role. Green innovation practices are the key to how MSMEs can contribute directly to financial performance. With that, these innovative efforts enable MSMEs to comply with increasingly stringent environmental laws and regulations, on the other hand, it also helps them to improve operational efficiency (Zhang, 2020).

According to research conducted (Rennings, 2000), environmentally friendly innovation has multiple external effects in addition to the typical spillover effects in addition to reducing the environmental costs of products. Corporate green innovation requires innovative integration of various internal and external resources through capability development and capital investment (Lampikoski, 2014). Not all companies will get the desired results because green innovation has risks and uncertainties (Roper, 2016). To achieve sustainability, companies must prepare themselves for environmentally friendly innovation by acquiring the capability and independence of company system innovation readiness resources (Lokuge, 2014). However, only a few studies have looked at it from the perspective of environmentally friendly MSME innovation.

This study fills the gap by investigating green innovation readiness in relation to the determinants of green innovation success. The purpose of this study is to fill this research gap. It answers the research question of "how can an organization prepare for green innovation to achieve corporate sustainability." Based on the technology, organization, and environment (TOE) framework, a research model is developed that illustrates how technological, organizational, and environmental readiness influence green innovation, which impacts both short-term and long-term outcomes (Zhang, 2020).

Business practices that are in line with environmental issues require the ability of each MSME to innovate. Green innovation is needed by MSMEs so that circular business continuity can be realized. Green innovation practices certainly require driving factors, this study attempts to uncover what determines the success of MSMEs in carrying out green innovation. This study will use the TOE Technological-Organizational-Environmental framework in testing the determinants of green innovation. The TOE framework was initially used to test technology adoption, but the development of TOE framework research can be used to identify the adoption of green innovation. Technology factors to test the ability of MSMEs to maximize the potential of technology to support green innovation. Organizational factors are used to test how much internal company capacity is in carrying out green innovation practices. Meanwhile, environmental factors are related to external support from the government, society and regulations in adopting green innovation. Furthermore, after knowing the determinants of green innovation practices, this study attempts to uncover their impact on Financial Performance (Yin, 2023).

This research is important to study because: 1) Research related to environmental issues only focuses on large companies, whereas MSMEs have a much greater contribution to environmental problems, so this research will explore MSMEs more; 2) this research will test not only the determinants of green innovation adoption but also test its

impact on financial performance; 3) this research will expand the use of the TOE framework which is usually used for the context of technology adoption, in this research it is used for the context of green innovation adoption. Therefore, this study aims to analyze the mediating role of green innovation in increasing the effectiveness of technological, organizational, and environmental readiness for micro, small, and medium enterprises (MSMEs). Testing this relationship will help understand the complex dynamics that shape the success of green innovation in the context of MSMEs. The data to be sought include specific measurements of technological, organizational, and environmental readiness in MSMEs, as well as their financial performance data after implementing green innovation (Chen, 2012).

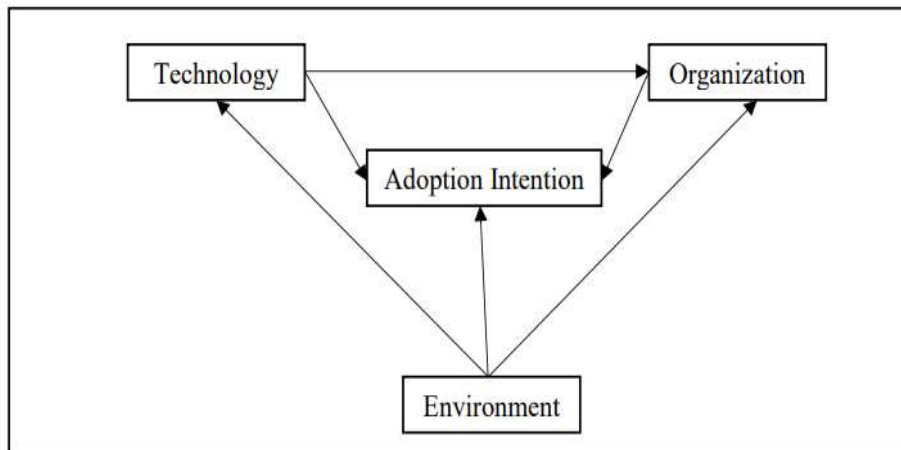
This research is expected to have theoretical contributions related to the development of innovation models that can be integrated with the TOE framework and green organizational culture. This research also contributes to the development of survey instruments in the context of MSMEs so that in the future researchers will not only focus on large companies but also MSMEs. This research is also expected to contribute practically and managerially where factors such as government policy support and the role of the community will greatly determine the success or failure of MSMEs in carrying out green innovation. Furthermore, the government must also make strict regulations related to environmental issues so that the success of green innovation can be achieved more easily (Diaz, 2015);(Pociovălișteanu, 2015).

2. Literature Review

According to Research (Aligarh, 2023) In 1990, Tornatzky and Fleischer first used the concept of Technology-Organization-Environment (TOE) to describe how technology adoption occurs within an organizational unit of analysis. Some examples of TOEs that continue to innovate are (Khayer, 2020; Putratama, 2020; Qalati, 2021; Tajudeen, 2018)The TOE framework explains that the state of technical progress, organizational structure, and industry environment influence how acceptable an information system is. In addition, information system adoption (TOE) is the only theoretical framework that takes into account all the driving forces that can influence information system adoption efforts, according to (Owusu, 2020)The technology development framework (TOE) typically combines a framework of organizational considerations, environmental factors, and technological factors (Qalati, 2021). Technological factors include the organization's relevant internal and external technologies. Organizational factors include size, scope, managerial structure, and internal resources. Industry, competitors, and laws are examples of environmental factors.

Study(Aligarh, Falikhatun, 2023)provides an explanation of Technology-Organization-Environment (TOE) is a structure used to assess organizational components that influence technology adoption (Alsaad, 2019; Awa, 2017; DaMonte, 1987). The approach in this method prioritizes organizational adoption over individual adoption (Khayer, 2020). TOE includes technological, organizational, and environmental factors (Gillani, 2020; Shree, 2021). Technology is related to how companies view the advantages, complexities, and benefits of the technology components used (Hussain, 2021; Naushad, 2020)

Figure 1. TOE framework



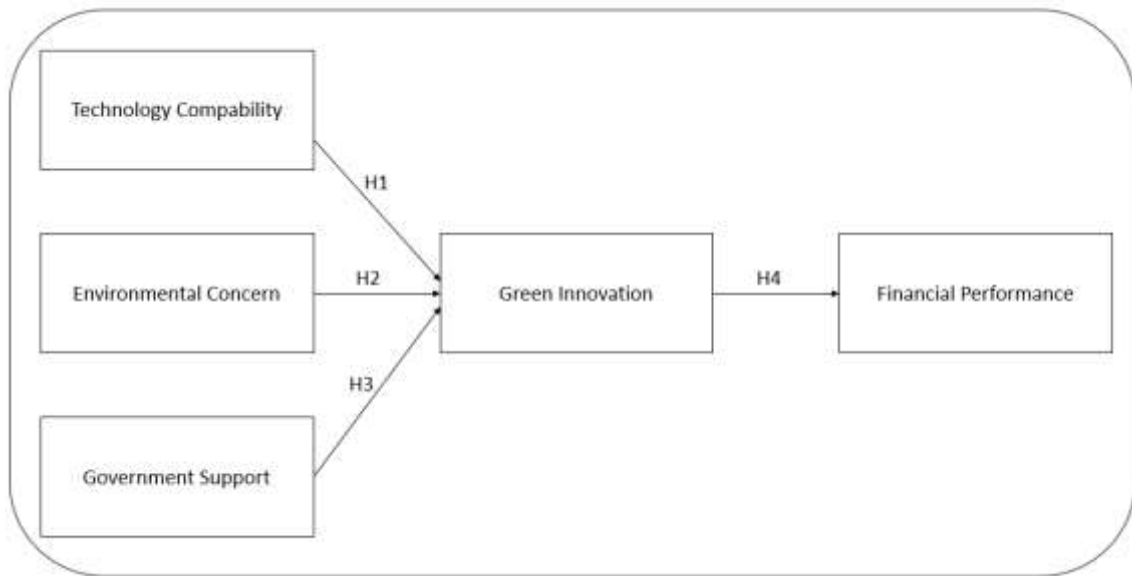
Source: Totnatzky & Fleischer, (1990)

The diffusion of innovation theory (IDT) supports the technological innovation adoption (TOE) framework, but with the new environmental context, this framework is considered more complete and new to explain the adoption of technological innovation (Tajudeen, 2018). In this study, innovation is not related to technology; instead, innovation is carried out by MSME actors in an effort to find ideas for their environmentally friendly business practices. In this study, the technology compatibility variable and the environmental concern variable are representations of technological and organizational factors. Organizational factors come from a resource perspective, which states that an organization can gain an advantage in competition by relying on the resources it has, which allows it to remain sustainable (Barney, 1986). Lastly, environmental factors, this study utilizes government support as a factor that drives green innovation.

Diffusion of Innovation Theory (IDT) which was first introduced in 1962, was refined by Rogers in 1995. In addition, this theory explains the diffusion of innovations used in this study to understand how, why, and how quickly innovative concepts and technologies spread in social systems. In this case, the theory of diffusion of innovations takes the opposite approach to studying change. To summarize the various components of the theory and the process of diffusion. Rather than focusing on efforts to persuade individuals to change, this approach sees change as primarily about the evolution or "reinvention" of products and behaviors so that they become more appropriate to the needs of individuals and groups. Diffusion is the process of communicating innovations over time among members of a social system through certain channels (Ahmad, 2015).

Institutional theory argues that organizational processes become institutionalized through a series of adaptive processes that are less influenced by individual members. These adaptive processes lead to (Isomorphism) uniformity or similarity in the way organizations operate that is a result of copying best practices or because of command norms or regulations. Adaptation therefore encourages organizations to adopt similar structures, strategies, and strategies. (DiMaggio, 1983) argues that forces within the organization and the environment drive convergent business practices (Dubey, 2017).

Figure 2. Research Model



3. Hypothesis Development

Technology Compability towards Green Innovation

Technology Compability is something that supports the successful implementation of environmental innovations because it reduces technical barriers and adaptation costs and can help companies integrate green solutions without requiring major modifications, ultimately increasing the tendency of companies to innovate in a more environmentally friendly direction. Diffusion of Innovation Theory (IDT) explains that one of the main factors influencing the adoption of innovation is compatibility, namely the suitability of the innovation with the values, experiences, and needs of potential users (Li, 2017).

Some previous research (Li, 2017) When the research has a positive effect on an innovation, such as green technology, which has a high level of compatibility with existing systems or technologies, users will be more likely to adopt it because with high compatibility as explained by Rogers, high compatibility accelerates the process of innovation diffusion because compatible innovations are more in line with existing needs and structures, thus minimizing resistance to change. This can increase the readiness and confidence of the organization in implementing green innovation (Zhu, 2013). Based on the discussion above, this study aims to test the following hypotheses:

H1. Technology Compability has a positive effect on Green Innovation

Environmental Concern for Green Innovation

Environmental Concern (EC) is a meta-analytic study on the drivers of green innovation found that firms with higher levels of environmental concern tend to be more innovative (ANSWER, 2019). Therefore, concern for the environment is a sufficient condition for employees to be fully involved in environmentally friendly innovation activities (Hojnik, 2016). Because it is in accordance with the values explained in Institutional Theory). So Institutional Theory explains that organizations tend to adopt

certain practices, structures, or innovations in response to institutional pressures, such as social norms, regulations, and stakeholder expectations. In this context, environmental concerns can be viewed as a form of institutional pressure that encourages companies to adopt environmentally friendly practices and green innovations. Previous Research Also Explained by (Chen, 2013) that Environmental concern or concern for the environment is the level of attention and awareness of individuals or organizations towards environmental issues, such as climate change, pollution, and natural resource conservation. When environmental concern is high or the results are positive, individuals or organizations are more likely to support and adopt environmentally friendly practices, including Green Innovation. Based on the discussion above, this study aims to test the following hypotheses:

H2. Environmental Concern has a positive effect on Green Innovation

Government Support for Green Innovation

Government Support (GS) Government support is defined as the level of intensity of government involvement in supporting, assisting, and facilitating micro/medium enterprises that will adopt Green innovation. The finding that "government support" has a significant influence on green innovation can be analyzed through the lens of institutional theory. Institutional theory explains that organizations are influenced by various external pressures from regulations, social norms, and the industrial environment that motivate them to adopt certain practices or innovations. In this case, government support acts as one of the main coercive pressures that encourage companies to carry out green innovation. This research is in line with (Chen, 2006), the study shows that proactive government policies in supporting green innovation significantly increase the adoption of green technologies among companies. Based on the discussion above, this study aims to test the following hypotheses:

H3. Government Support has a positive influence on Green Innovation

Green Innovation on Financial Performance

Green Innovation (GI) namely as the process of developing and implementing new ideas, technologies, products, services, or practices aimed at increasing resource efficiency and reducing negative impacts on the environment. With the aim of supporting environmental sustainability to meet economic and social needs. Green innovation has an influence on financial performance that can be analyzed using institutional theory. Institutional theory emphasizes that companies are influenced by various external pressures, such as social norms, regulations, and industry practices, which encourage them to adopt innovations and practices that can increase their legitimacy and sustainability in the market. In this context, green innovation is not only seen as a response to institutional pressures, but also as a strategy that can improve a company's financial performance. Previous research (Hart, 1996) found that companies that adopted green innovation experienced improvements in financial performance, largely due to improved reputation and consumer loyalty driven by environmentally friendly practices. Based on the discussion above, this study aims to test the following hypotheses:

H4. Green Innovation has a positive effect on Financial Performance

4. METHOD

Sample Selection and Data Sources

In addition to functioning as a target of observation to be tested, the population can also be defined as a collection of research objects that match the characteristics of the researcher. The researcher selected 156 respondents from Solo Raya, including business owners/managers of MSMEs. Population, in addition to functioning as the target of observation to be tested, can also be interpreted as a collection of research objects that are in accordance with the characteristics of the researcher. The researcher chose 156 respondents from Solo Raya, including owners/managers of MSME businesses. This sample was taken with certain considerations where the samples taken must meet the desired criteria so as to provide information. Sampling in this study was carried out using Purposive Sampling.

Instrumentation/Data Collection

This study used a questionnaire during the data collection process. Due to the large number of diverse MSMEs in the area, this study was conducted in Solo Raya and Central Java which are references for the creative economy center of MSMEs in Indonesia. Therefore, the selected respondents, namely MSME owners or managers, will represent all MSME responses. The data used in this study are primary data obtained by distributing questionnaires to research subjects. Respondents can rate the answers they choose using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). This study distributed questionnaires directly during the data collection process. Respondents were selected based on their knowledge of the topic and their willingness to engage with it. The demographic characteristics used in this study were industry, gender, company size, and company age.

Data Analysis/Estimation Model/Variable Measurement

In this study, the Partial Least Squares (PLS) data analysis technique was used, which was carried out using SmartPLS software. The PLS method helps in the analysis of various latent variables, provides accurate estimates, and more often analyzes complex models. (Hair, 2020). In this study, both internal and external models were used (Alkhwaldi, 2023; Ratnasari, 2021).

The variance-based Structural Equation Modeling (SEM) or Partial Least Squares (PLS) approach is the best method because it can test the relationship of multidimensional constructs simultaneously. Other statistical methods, such as multiple regression or multivariate analysis of variance, are limited to analyzing the relationship between each construct separately (Edeh, 2023); Khayer, 2020). In addition, variance-based PLS-SEM is more suitable because the purpose of the research is to develop theory rather than test theory.

The outer model is a PLS measurement used to determine the value of indicators that are latent variables (Ratnasari, 2021). These values include validity (convergent and discriminant validity) and reliability (Kasri, 2019). The convergent validity test was assessed through standard factor loading, Cronbach's α , Composite Reliability (CR) with a recommended weight of 0.7, and an average variance extraction (AVE) value of 0.5 which showed good results (Al-Okaily, 2023; Ball, 2020)

Discriminant validity is used to ensure that each concept of each latent variable is different from other variables, assessed using the Fornell-Larcker test (FLT) criteria where the AVE value of each latent variable is greater than the others (Chetioui, 2023;Gunawan, 2023;Rahi, 2021). Reliability testing shows reliability if the loading factor on the latent variable has a weight of >0.6 and the Dillon-Goldstein rho ratio >0.7 (Troise, 2020).

Inner model is an analysis technique used to test hypotheses (Hwang, 2020). This model is oriented on several measurements to assess the hypothesis such as Average Path Coefficient (APC), Average R-square (ARS), Average Adjusted R-square (AARS), Average Block VIF, Average Full Collinearity VIF (AFVIF), Path Coefficient with a significant level of P.

4. Results and Discussion

Results

Respondent Profile

Table 1 presents information about the research respondents. Based on the respondent data, 60.2% were female and 39.7% were male. The majority of respondents were aged 20-30 years, which was 42.3%.

Table 1. Respondent Profile

Characteristics	Category	Total	Presentation
Gender	Man	62	39.7%
	Woman	94	60.2%
Age	20 - 30	66	42.3%
	31- 40	34	21.7%
	41- 50	37	23.7%
	>50 years	8	5.2%
	Type of Business	Food and Beverages	60
	Furniture and wood products	40	25.6%
	Textiles, apparel and leather	37	23.7%
	Paper & Printing	8	5.1%
	Trailers, machinery and repairs	11	7%

Source: Data analysis

Measurement Model Results (Outer Model).

This study tested convergent and discriminant validity. The results showed that all items were valid and met the criteria. As seen in Table 2, the loading factor values of all items were above 0.7. In addition, the reliability test produced a Cronbach's Alpha value above 0.7. Therefore, it can be concluded that all constructs in this study are reliable.

Table 2. Convergent Validity and Reliability

Variables	Indicator	Cross Loading	Cronbach's Alpha	Rho_A	Composite Reliability	AVE
Technology Compatibility	COMP1 To support environmentally friendly businesses, my company/enterprise has used appropriate information technology.	0.898	0.857	0.858	0.913	0.778
	COMP2 To support environmentally friendly businesses, my company/enterprise has used information technology that is able to meet operational needs.	0.898				
	COMP3 To support environmentally friendly businesses, my company/enterprise has used information technology that is able to meet the needs of suppliers and customers.	0.850				
Environmental Concern	EC1 My business always fostering a green (environmentally friendly) culture among employees.	0.802	0.838	0.846	0.891	0.673
	EC2.	0.855				

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	My business always focuses on the protection aspect.environment in running a business.					
	EC3	0.762				
	My business is always oriented towards sustainable business					
	EC4	0.858				
	My business strives to protect the environment and sustainability in the future					
Government Support	GP1	0.907	0.852	0.863	0.910	0.771
	My business/enterprise has complied with environmental regulations/policies.					
	GP2	0.893				
	My business complies with environmental and pollution regulations.					
	GP3	0.833				
	My business is always looking for updates regarding regulations regarding the environment and environmental pollution.					
Green Innovation	GIN1	0.755	0.899	0.903	0.919	
	My business as a whole has used environmentally friendly business practices.					
	GIN2	0.826				
	My business already uses environmentally friendly raw materials					
	GIN3	0.788				
	My business has considered product recycling.					
	GIN4	0.756				
	My business has produced less					

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	pollution/waste during production.				
	GIN5	0.710			
	My business is able to recycle unused materials during production.				
	GIN6	0.758			
	In carrying out business activities, my company/enterprise has paid attention to environmental aspects.				
	GIN7	0.720			
	In carrying out business activities, my company/company has carried out supervision regarding the potential for environmental pollution.				
	GIN8	0.803			
	In carrying out business activities, my company/company has tried to organize the supply chain to remain environmentally friendly.				
Financial Performance	FP1	0.928	0.882	0.888	0.927
	In the last 3 years, my business has experienced an increasing trend in net profit.				
	FP2	0.899			
	In the last 3 years, my business has experienced an increasing trend in sales/turnover.				
	FP3	0.872			
	In the last 3 years, my business has succeeded in reducing the amount of business debt.				

Source: Data analysis

Another analysis is the discriminant validity test. Table 3 shows that all constructs meet the Fornell-Lacker Test (FLT) criteria, where the AVE value of each variable is greater than the other variables. Therefore, it can be concluded that discriminant validity has been achieved.

Table 3. Discriminant Validity

VARIABLES	E.C.	FP	GS	GI	TC
E.C.	0.820				
FP	0.546	0.900			
GS	0.698	0.520	0.878		
GI	0.700	0.500	0.717	0.765	
TC	0.730	0.533	0.653	0.736	0.882

Source: Data analysis

Structural Model Test Results (Inner Model).

Based on the results of hypothesis testing, all hypotheses show a positive and significant influence on green innovation and financial performance, as seen in Table 4.

Table 4. Structural Model Test

Hypothesis	Original Sample	T Statistics	p-Values	Information
H1: TC -> GI	0.377	4.109	0.000	Supported
H2: EC -> GI	0.189	2.014	0.045	Supported
H3: GS -> GI	0.339	3,513	0.000	Supported
H4: GI -> FP	0.500	5,767	0.000	Supported

Source: Data analysis

Discussion

First, H1 The results of the hypothesis testing show that Technology Compatibility has a positive and significant effect on Green Innovation. According to the research (Firdausyi, 2023) If the technological capabilities owned by MSMEs are getting better, it will be able to increase the implementation of MSME green innovation. This research is in line with the Diffusion of Innovation Theory (IDT). This is proven by the test results which show a p-value of $0.000 < 0.05$. because this theory explains that one of the main factors influencing the adoption of innovation is compatibility, namely the suitability of innovation with the values, experiences, and needs of potential users. According to Research (Li, 2017) When an innovation, such as green technology, has a high level of compatibility with existing systems or technologies, users will be more likely to adopt it because with high compatibility as explained by Rogers in 2003, namely high compatibility accelerates the process of innovation diffusion because compatible innovations are more in line with existing needs and structures, thus minimizing resistance to change. This can increase the readiness and confidence of the organization in implementing green innovation (Zhu, 2013). Technological capacity is a characteristic that enables a company to initiate innovative competencies through the use of advanced technology, patents, copyrights, research and development, and specialized knowledge (Liu, 2010). Companies that have better technological capabilities will have the ability to outperform their competitors (Tariq, 2017).

Second, H2 Environmental concern has a positive effect on Green Innovation. This is proven by the test results which show a p-value of $0.045 < 0.05$. According to Research (Elysabeth, 2023) This shows that good environmental innovation is carried out by the company to produce good environmental performance. This will most likely have an impact on environmental performance because the company implements better environmental performance in its production process and innovation in environmentally friendly products reduces negative impacts on the environment. This study is in line with research conducted by (Fang, 2022) which shows the influence of Green Innovation on Environmental performance. This can also be analyzed using institutional theory.

Institutional theory explains that organizations tend to adopt certain practices, structures, or innovations in response to institutional pressures, such as social norms, regulations, and stakeholder expectations. In this context, environmental concerns can be viewed as a form of institutional pressure that encourages companies to adopt environmentally friendly practices and green innovations. In one of his studies (Chen, 2013) has a significant positive impact When environmental concern is high, individuals or organizations are more likely to support and adopt environmentally friendly practices, including Green Innovation. However, environmental performance variables also have a role and impact on a company's competitive advantage. This is what an entrepreneur or UMKM businessman must do to gain a competitive advantage in this tight business competition (Yuha, 2023).

Third, H3 Government Support has a positive effect on Green Innovation which can be analyzed through the lens of institutional theory. This is proven by the test results showing a p-value of $0.000 < 0.05$. Institutional theory explains that organizations are influenced by various external pressures from regulations, social norms, and the industrial environment that motivate them to adopt certain practices or innovations. In this case, government support acts as one of the main coercive pressures that encourage companies to carry out green innovation. The research conducted (Horbach, 2008) also found that government support has proven effective in increasing the frequency and intensity of green innovation in the industrial sector. Therefore,

government policies, such as subsidies and strict environmental regulations, are key factors that encourage German companies to innovate in green technologies.

According to Thomas (Products & Entrepreneurship, 2024) research conducted by the Government Institute for Entrepreneurship in 2018 showed that government support and policies can help more entrepreneurs. This study will evaluate various government programs and policies that support entrepreneurial businesses. (Acs, 2013) suggests that government support can include a variety of policies, such as fiscal incentives, research and development funding, which encourage innovation and business growth. In entrepreneurship, (Welter, 2019) talked about how important government support is to create an environment that supports new businesses growing and gives entrepreneurs access to the resources they need. (Audretsch & Belitski, 2013) evaluate how government policies impact entrepreneurship and innovation. They highlight that government support can play a significant role in shaping an environment that supports economic growth.

Fourth, H4 Green Innovation has a positive effect on Financial Performance. This is proven by the test results showing a p-value of $0.000 < 0.05$. This can be analyzed with institutional theory, in this theory companies are influenced by various external pressures, such as social norms, regulations, and industry practices, which encourage them to adopt innovations and practices that can increase their legitimacy and sustainability in the market. In this context, green innovation is not only seen as a response to institutional pressures, but also as a strategy that can improve the company's financial performance. Previous research (Hart, 1996) found that companies that adopted green innovations experienced improvements in financial performance, largely due to the increased reputation and consumer loyalty driven by environmentally friendly practices.

It can be concluded that H4 is supported. According to the research (Fabiola, 2022) To achieve company goals, green innovation is one way to maximize profitability. (Agustia, 2019). In practice, Green Innovation is the development of environmentally friendly products or procedures that are efficient, with a focus on reducing the use of resources or energy. This allows companies to reduce costs and increase profits, which in turn will have an impact on improving the company's financial performance (Küçükoğlu, 2015). Research conducted by (Dewi, 2020), also shows that Green Innovation has a positive effect on improving financial performance.

5. CONCLUSION

This finding answers related questions environmental issues that only focus on large companies, whereas UMKM has a lot to contribute to environmental problems, so this study will explore UMKM more. And when the study explores UMKM The results of the study showed that all hypotheses were supported, so these results are consistent with previous studies. This study reveals that after testing the adoption of green innovation, the resulting impact has a significant effect on financial performance.

This study also contributes to the Diffusion of Innovation Theory (IDT), which states that technological expertise is one of the determining factors for achieving success in the digital era. The ability to adapt quickly to rapid technological and environmental changes will greatly determine the competitiveness of small businesses. This is also relevant to institutional theory, which emphasizes the ability to respond and handle rapidly changing environments. The ability of small businesses to identify technological opportunities related to customer needs and optimize internal resources to take

advantage of potential digital platforms, such as social media and e-commerce (Prakasa, 2024).

The findings of this study provide guidance on how companies can do so to be better prepared for green innovation and make the most of it. To cope with the changes that occur, it is important for companies implementing green innovation to evaluate their organizational, technological and environmental readiness, and formulate appropriate strategies. This proactive approach (for example, reducing employee resistance by increasing environmental awareness) helps companies mitigate risks in green innovation. Companies at different levels of green innovation readiness can adjust the way they implement green innovation. For companies with relatively low levels of readiness, gradual implementation is preferred, while those with relatively high levels of readiness may be more ambitious. Self-assessment of a company's green innovation readiness helps it establish a mechanism to track the evolution of technology, internal resources and external conditions related to green innovation. Following a possible management approach, this allows organizations to formulate innovation implementation strategies.

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