

SME's Go Green: The Moderating Role of Social Media Marketing

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Abstract

SMEs have a strategic role as pillars of the national economy. In fact, the development of SME business capabilities is still limited, especially in responding to the present era of global green norms. This research aims to investigate the transformation of SME's challenges into opportunities in the context of the era of green global norms ie. the impact of environmental strategy on green marketing performance moderated by social media marketing strategies. A quantitative approach was employed in this study. Using the purposive sampling technique, a total of 171 SME managers were obtained. Data analysis was conducted using the PLS-SEM approach and SmartPLS software. Statistical test on the SME's Go Green structural model through the moderating role of social media marketing strategies was carried out. This study verifies that there is a moderating role of social media marketing strategies in the impact of environmental strategies on green marketing performance. This confirms SMEs dynamic capabilities to respond the era of global green norms by empowering social media as an effective brand communicator to improve green marketing performance. However, looking at strategic role of SME and trend of green global awareness this research should also see social media marketing strategies as the main driver in communicating business green-oriented best practices. Nevertheless, the findings of this research could serve as a base for future researches on green dynamic marketing capability.

Keywords: *Social Media Marketing Strategy, Green Marketing Performance.*

INTRODUCTION

The essence of business institutions is increasing competitiveness, namely continuous efforts to maintain their existence amidst the reality of the emergence of competitors. This competitiveness continues to be developed through market orientation, where businesses seek to develop relationships with their customers (Brodie et al., 2011; Van Doorn et al., 2010). Here the concept of business adaptability is the ability to manage its competitive capacity to always excel by following the dynamic trends of customer needs. Businesses that have a competitive capacity are able to meet the expectations of their customers to the point of establishing long-term, sustainable relationships.

One business institution that has attracted the attention of researchers because of its strategic role is Micro, Small and Medium Enterprises (MSMEs). Through the Dimensions search engine, it is known that 1,428 scientific publications indexed by Scopus related to the competitiveness of MSMEs or "SMEs' competitiveness" were produced during the period 2014-2023. The results of data mining using VOSviewer software show the relevance of MSME competitiveness to issues including business independence, regulation, leadership, corporate social responsibility (CSR), and value creation (Figure-1).

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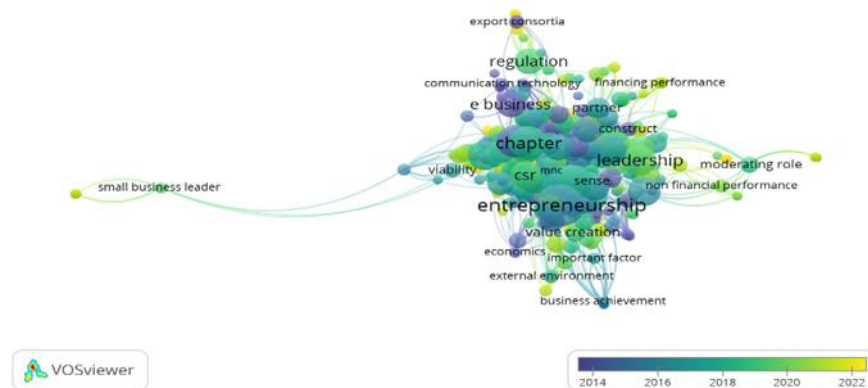


Figure-1: Overlay Visualization keyword “SMEs competitiveness”

Source: Output VOSviewer

The coming of the digital era creates a strategic mindset where managing the competitive capacity of SMEs through market presence can be done using digital technology. The sophistication of digital technology is able to provide social media, which is an effective means of managing social relations between businesses and their markets which are increasingly focused on engagement values. This means that market orientation has shifted to customer orientation in the form of individual consumer engagement mediated by social media. Here the role of green marketing emerges through social media marketing strategy (Mention et al., 2019; Syed et al., 2022; Zhang & Zhu, 2021).

Social media marketing strategies have characteristics i.e. the ability to build social networks (Lestari et al., 2024). The high intensity of social media use indicates that social media is an easy and cheap means of forming an exclusive relational environment (Wangsa, 2022), namely deep and binding relationships (engagement). For businesses, the concept of customer engagement through social media marketing strategies indicates exclusive and segmented relationships to the community (community engagement). The scope of community engagement is a market expansion concept where businesses develop their markets to a level of well-being. Businesses are able to produce products that not only satisfy needs but also bring prosperity. This view emphasizes that businesses have an interest in building relationships with their markets as a whole within society (Lestari et al., 2024). Business-market relations (business to market) are expanded to business-society (business to society). Managing business-to-society relations becomes a business strategy for implementing sustainability values. This context explains that the existence of business is not just profit-oriented but also on managing its legitimacy in the long term.

Relational view of business to society in sustainability values i.e. A business that is able to maintain the continuity of its relationships and market existence is interpreted as the business's responsiveness to changing trends in market demand. In the context of SME business institutions, opportunities to increase competitive capacity through green marketing strategies are still limited (Al-Hakimi et al., 2022; Eweje, 2020; Klewitz & Hansen, 2014).

Thus, this research aims to determine the effectiveness of the performance of green marketing strategies in SMEs through social media marketing strategies based on mutualistic relational interests as a value of community attachment, namely mutually beneficial relationships that can be formed between businesses and their social environment. The context of mutualistic interests here relates to green products (Mardius et al., 2023) which are able to bridge the strategic interests of SME business and the social environment in order to increase competitive capacity in “SME Go Green”.

Theoretical View

This research examines two main aspects in managing business strategy, respectively: (1) Organizational innovative capacity; and (2) Green marketing strategy. Aspects of organizational innovative capacity are related to green environmental strategy through the development of: (1) Green organizational identity; (2) Green creativity; and (3) Green innovation capability. Meanwhile, the performance aspect of green marketing is related to the development of a social media marketing strategy to create community engagement. Therefore, three theories are used in this research, including: (1) Dynamic capabilities; (2) Social exchange theory; and (3) Service dominance logic.

Dynamic Capability

This theory is used to explain aspects of organizational innovative capacity in implementing green environmental strategies through the development of green organizational identity, green creativity and green innovation capability. (Lawson & Samson, 2001; Mendoza-Silva, 2021; Romijn & Albaladejo, 2022; Weber & Heidenreich, 2018).

Dynamic capabilities are a company's ability to integrate, build and reconfigure internal and external resources or competencies to face and adapt to dynamic changes in the business environment (Teece, 2010; Barney, 1991; Ortiz-Avram et al. , 2023). In the context of innovation capability, this capability includes the ability to continuously transform knowledge and ideas into new products, processes and systems for the benefit of the company and stakeholders (Lawson & Samson, 2001). Also, abilities in the form of skills and knowledge needed to effectively absorb, master and improve the technological resources currently available to create new technology (Wang & Ahmed, 2004) or new products and services (Weber & Heidenreich, 2018).

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Social Exchange Theory

This theory is used to explain the relationship between aspects of organizational innovative capacity and aspects of green marketing performance through social media marketing strategies (Cook et al., 2013; Oparaocha, 2016).

Social exchange theory emphasizes interdependent and contingent exchange as the foundation of all social transactions and relationships. The basic assumption of social exchange theory is that different formats of social interaction are built through reciprocal exchange while facilitating reciprocity, psychological contracts and mutual obligations (Cook et al., 2013; Oparaocha, 2016).

Service Dominance Logic

This theory is used to explain aspects of green marketing performance through the role of social media marketing strategies in creating community engagement (Brodie et al., 2011; Hollebeek et al., 2019; Kumar et al., 2019).

Service-dominant logic is the creation of value through exchange mechanisms with the configuration of a number of individual roles (actors). The exchange mechanism is an exchange of reciprocal benefits through competence within a service-for-service exchange framework (Vargo & Lusch, 2017). This logic of service dominance is the theoretical basis for the concept of customer engagement, which is explained as the intensity of individual participation in relation to organizational services and/or organizational activities, whether it is a customer or company initiative (Li et al., 2021)

Green Organizational Identity

Green organizational identity is defined as a collective interpretation of environmental protection and management to give meaning to every behavior. Green organizational identity has an important role in interpretive schemes related to environmental issues (Song & Yu, 2018).

Collective perceptions in green organizational identity form an organizational climate which is explained as a concept of employee perception through providing different values for each individual. Organizational climate influences employee productivity, motivation and behavior (Nwangwu et al., 2021).

Green Innovation Capability

Green innovation is a business effort to create environmental awareness in the form of services delivering green products and their application. Green innovation became a study trend from 2007 to 2019, with the main focus being studies on the benefits of implementing innovation in the manufacturing industry which were published in the reputable international journal (Takalo et al., 2021).

Green innovation or also known as eco-innovation is defined as a process that contributes to the creation of new production and technology with the aim of reducing risks that have a negative impact on the environment. Factors in a green innovation strategy include green creativity and green organizational identity (Song & Yu, 2018). Green innovation which refers to capability (green innovation capability) is the ability of a business to integrate internal and external resources and technology to achieve sustainability values as a competitive advantage (Huang et al., 2020).

Green innovation capability is the result of adaptation to environmental changes when the development of innovation management takes place. One of the essences of green innovation capability is the ability to integrate internal, external and technological resources. This capability is also demonstrated through reducing environmental pollution, while improving environmental performance to achieve competitive advantages based on sustainable values. Green innovation capability is influenced by exploratory and applied dual learning factors, through the role of the moderating variable awareness of environmental protection and government regulations regarding the environment (Huang et al., 2020).

Green Creativity

The definition of green creativity using the perspective of organizational creativity theory can be explained as the development of a number of new ideas about green products, green services, green processes, and green practices that are seen as having the values of authenticity, novelty and usefulness. Organizations with a very strong green organizational identity face external pressures related to environmental issues, so creative responses to such pressures can produce new and useful ideas. This situation can produce capabilities for green creativity (Song & Yu, 2018).

In organizations (Joshi & Dhar, 2020), green creativity is influenced by green training programs both directly and indirectly. Green creativity is also influenced indirectly by green dynamic capabilities through the role of the moderating variable resource commitment to produce superior creative products.

The word "creativity" is the key to achieving competitive market advantage in producing innovative, environmentally friendly products (Arici & Uysal, 2022; Begum et al., 2022; de Medeiros et al., 2022; Takalo et al., 2021), especially in increasing market awareness of the environment. Creativity is the main factor needed to produce unique and useful ideas so that it can improve organizational performance, especially in the craft sector. Green creativity is defined as the development of new ideas about green products, green services, green processes, or green practices that are referred to as original, new and useful (Chen & Chang, 2012 in Joshi & Dhar, 2020).

According to Joshi & Dhar (2020) green creativity is a construct that is often used in studies of sustainable service and industrial growth. Mittal & Dhar (2016) in Joshi & Dhar (2020) explain the positive relationship between leadership and green creativity. Leadership factors play a role in policies to redesign training programs to improve environmental performance and motivate employees to work creatively.

Environmental Strategy

Environmental strategies, or environmental practices (Aragón-Correa et al., 2008; Darnall et al., 2010), are invisible managerial innovations and routines that require organizational commitment to improve the environment and that do not regulated in statutory provisions. Examples of such practices include: (1) Implementation of environmental policies; (2) Use of internal assessment tools such as benchmarking and accounting procedures; (3) Setting environmental performance objectives; (4) Publication of environmental performance information; (4) Implementation of internal and external environmental audits; (5) Various employee training programs to improve environmental quality; and (5) Linking employee compensation to environmental performance.

Social Media Marketing Strategy

Previous research used several related terms, including social media strategy, online marketing, and strategic social media marketing. Social media is a platform where people build networks and share information. The characteristics of social media are that they are dynamic entities, capable of forming interconnectivity, being egalitarian as well as being interactive organisms (Li et al., 2021). Connectivity in social media has a social dimension, impacting social ties (Muller & Peres, 2019), and community engagement to increase company legitimacy in the long term (Bowen et al., 2010). Through this definition of social media, SMMS can be explained as a pattern of various organizational activities.

Li et al. (2021) in an international journal article indexed by Scopus Q1 - Journal of the Academy of Marketing Science entitled "Social Media Marketing Strategy: Definition, Taxonomy, Validation, and Future Agenda" explains that social media marketing strategies utilize the uniqueness of social media because of its ability as a means of building network and share information.

There are three basic shifts in the marketplace resulting from social media. First, social media makes companies and their customers interact or connect. This context produces two related new concepts, including: (1) Social connectedness; (2) Social connectedness (social ties). Second, social media is transforming the way companies and customers interact and influence each other. Social interaction involves "action" through communication or observation so that it influences other people's choices and consumption behavior. Third, the rapid growth of social media can make a contribution to companies in managing relationships with their customers, as well as improving the quality of decision making.

Green Marketing Performance

Green marketing is defined as a holistic management process to identify, anticipate and satisfy the interests of customers and society in a profitable and sustainable manner. Green marketing from a strategic perspective is an embodiment of the social marketing concept which considers four important things in making marketing decisions, including: (1) Consumer desires; (2) Consumer interest; (3) Company compliance requirements; and (4) Social welfare. There are indications that the market is increasingly paying attention to environmental issues, linking them to the products purchased, which is referred to as the phenomenon of consumer environmental consciousness. Therefore, green marketing connects the implications of consumer environmental awareness with the product (product's environmental implications), and the company's responsiveness to changes in market attitudes as well as understanding the potential of green marketing not just about altruistic actions but profit orientation (McDaniel & Rylander, 1993; Nath & Siepong, 2022; Wang et al., 2022).

Research model

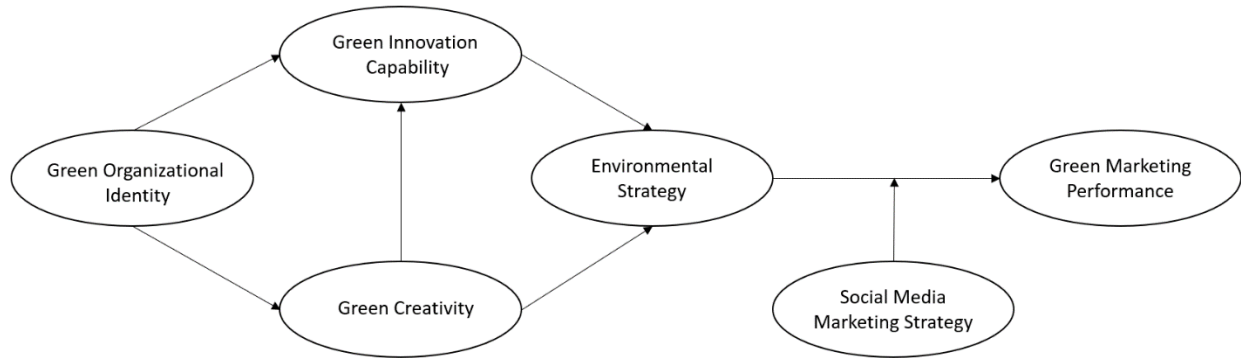


Figure-2: Research Model

Sumber: Song & Yu (2018) ; Huang et al. (2020) ; Li et al. (2021) ; Zhang & Fang (2022) ; Nath & Siepong (2022) ; Ardra & Barua (2022) ; Majeed et al. (2022)

Hypothesis

The relationship between variables in the SME Go Green research model through social media marketing strategies can be explained by the proposed research hypothesis as follows:

H1: Green Organizational Identity influences Green Organizational Capability

H2: Green Organizational Identity influences Green Creativity

H3: Green Innovation Capability influences Environmental Strategy

H4: Green Creativity influences Green Innovation Capability

H5: Green Creativity influences Environmental Strategy

H6: There is a moderating role of Social Media Marketing Strategy in the influence of

Environmental Strategy on Green Marketing Performance

H7: Environmental Strategy influences Green Marketing Performance

H8: Social Media Marketing Strategy influences Green Marketing Performance

METHOD

This research uses a quantitative approach with a predictive model for SME Go Green Through the Moderating Role of Social Media Marketing Strategy. Therefore, PLS-SEM with the help of SmartPLS is applied to predict Go Green capability by measuring the influence of Environmental Strategy on Green Marketing Performance through the moderating role of Social Media Marketing Strategy. The sampling technique used was a purposive sampling technique. A total of 171 SME managers were used as respondents in this research. Data via questionnaires are used to measure the simultaneous influence of SME Go Green using the following constructs: (1) Green Organizational Identity; (2) Green Creativity; (3) Green Innovation Capability; (4) Environmental Strategy; (5) Social Media Marketing Strategy; and (6) Green Marketing Performance.

Concept And Definition

Green Organizational Identity

Green Organizational Identity is a collective interpretation of environmental protection and management to give meaning to every behavior. Indicators in green organizational identity include: (1) Company concern for

environmental management (id-1); (2) Clear objectives of the company's concern for the environment (id-2); (3) Implementation of environmentally friendly behavior carried out by all employees and leaders (id-3).

Green Innovation Capability

Green Innovation Capability is the ability of a business to integrate internal and external resources and technology, through the creation of new production and technology that reduces the risks of negative impacts on the environment, for the achievement of sustainability values as a competitive advantage. Indicators of green innovation capability include: (1) The company's ability to innovate in the role of environmental improvement (cap-1); (2) Access to information related to environmentally friendly activities (kap-2); (3) Innovation that has selling value (cap-3); (4) Innovation is in line with applicable regulations (cap-4).

Green Creativity

Green Creativity is the development of a number of new ideas about green products, green services, green processes, and green practices that are considered to have the values of authenticity, novelty and usefulness. Indicators in green creativity include: (1) The role of human resources in creatively creating new environmentally friendly opportunities (kr-1); (2) Realization of environmentally friendly ideas and creative ideas that are motivated through the role of a leader (kr-2); (3) Environmentally friendly creativity through efforts to prevent environmental damage (kr-3).

Environmental Strategy

Environmental Strategy is an invisible managerial innovation and routine that requires organizational commitment to improve the environment. Indicators in environmental strategy include: (1) Environmental strategy that shows openness to positive things related to the environment (str-1); (2) Environmental strategy to demonstrate the strength of business relationships with its customers (str-2); (3) Mandatory environmental strategies in accordance with the current era context (str-3).

Social Media Marketing Strategy

Social Media Marketing Strategy is the application of interactive network platforms to form social ties (Muller & Peres, 2019), and community engagement to increase company legitimacy in the long term (Bowen et al., 2010). Indicators in social media marketing strategies include: (1) Social media marketing strategies that strengthen company relationships with customers (med-1); (2) Digital facilities that facilitate market access (med-2); (3) Social media marketing strategies that increase sales performance (med-3); (4) Social media marketing strategies that increase market share (med-4); (5) Social media marketing strategy that is able to build a supply value chain (med-5); (6) Social media marketing strategy in the role of building company relationships with customers (med-6); (7) Social media marketing strategies that provide benefits (med-7).

Green Marketing Performance

Green Marketing Performance is the performance of a holistic management process that is able to identify, anticipate and satisfy the interests of customers and society in a profitable and sustainable manner (Mehraj & Qureshi, 2022; Nath & Siepong, 2022). Indicators of green marketing performance include: (1) Environmentally friendly marketing strategies that provide benefits for the company (kin-1); (2) Environmentally friendly marketing strategies that provide a positive image of the company (kin-2); (3) Environmentally friendly marketing strategies that comply with regulations set by the Government (kin-3); (4) Environmentally friendly marketing strategies that improve the company's social relations (kin-4); (5) Environmentally friendly marketing strategies that increase market trust (kin-5).

FINDINGS AND DISCUSSION

Measurement Model

The data analysis method used in this research is Structural Equation Modeling Partial Least Square (SEM PLS) using the SmartPLS application version 3.2.9. The SmartPLS application version 3.2.9 is used to process

data in two parts, namely the Measurement Model (Outer Model) and the Structural Model (Inner Model). Structural Equation Modeling Partial Least Square (SEM PLS) was used to test the fit of the model to the data. The results of data analysis are followed by interpretation and drawing conclusions.

Construct Validity

The construct validity of a measurement model with reflective indicators can be measured by the Outer Loadings score and the use of the Average Variance Extracted (AVE) parameter to evaluate internal consistency. In this research, the outer model was tested twice to ensure that all indicators met the provisions in the rule of thumb (Hair et al., 2017). In the first outer model test, it was found that there were still outer loadings and AVE values < 0.50 for several indicators and variables, so several invalid indicators had to be deleted (kin3/0.493 ; kin4/0.450 ; med2/0.492 ; med5/0.375 ; med6/0.316 ; med7/0.433). While in the second outer model test, constructs were still found with AVE values < 0.5. Therefore, the indicators in these constructs need to be validated for their outer loadings. Indicators were found that needed to be removed because their outer loadings were deemed not to have met the rule of thumb (kap3/0.571 ; kr2/0.564 ; med3/0.555 ; str3/0.586).

Convergent Validity

In Hair et al. (2017), convergent validity refers to the extent to which a measure correlates positively with alternative measures of the same construct. This is typically assessed using the Average Variance Extracted (AVE), which should be greater than 0.50. The convergent validity results show that all constructs have AVE values > 0.50 (id/0.612 ; kap/0.547 ; kin/0.566 ; kr/0.572 ; str/0.626 ; med/0.531).

Discriminant Validity

Fornell-Lacker and Cross-loading were applied to assess the discriminant validity of the indicators. Specifically, an indicator's out-loading on a related construct should be greater than its cross-loading (i.e., Fornell-Lacker and Cross-loading) on the other construct. The correlation of constructs with their indicators is higher than the correlation of indicators with other constructs. Based on this, it can be concluded that latent constructs predict indicators in their block better than indicators in other blocks (id/0.783 ; kap/0.740 ; kin/0.752 ; kr/0.756 ; med/1.00 ; str/0.791 ; med/0.729).

Construct Reliability

Reliability tests on the measurement model with PLS reflective indicators were carried out to assess internal consistency. In evaluating internal reliability consistency, the criterion is composite reliability, which provides a reliability estimate based on the intercorrelation of indicators of the variables studied. The composite reliability value for all constructs is above 0.60 (id/0.825 ; kap/0.784 ; kin/0.718 ; kr/0.727 ; str/0.769 ; med/0.688).

Multicollinearity Test

Multicollinearity test is carried out by looking at the VIF value. The results of data processing show that the VIF values of all indicators can meet the required values (id1/1.342; id2/1.436; id3/1.275; kap1/1.145; kap2/1.209; kap4/1.265; kin2/1.020; kin5/1.020; kr1/1.021; kr3/1.021 ; med1/1.005 ; med4/1.005)

Structural Model Evaluation

The calculation results show that the R2 value with the Green Innovation Capability variable is 0.356. This means that the proportion of influence exerted by the Green Organizational Identity and Green Creativity variables contributes 35.6% to the Green Innovation Capability variable. Then, the R2 value with the Green Marketing Performance variable is 0.270. This indicates that the proportion of influence exerted by the Environmental Strategy and Social Media Marketing Strategy variables in this research model contributes an influence of 27% to the Green Marketing Performance variable. Next, the R2 value with the Green Creativity variable is 0.195. This means that the proportion of influence given by the Green Organizational Identity variable in the research model contributes an influence of 19.5% to the Green Creativity variable.

Hypothesis Testing

The results of research hypothesis testing are shown in the following Table-1:

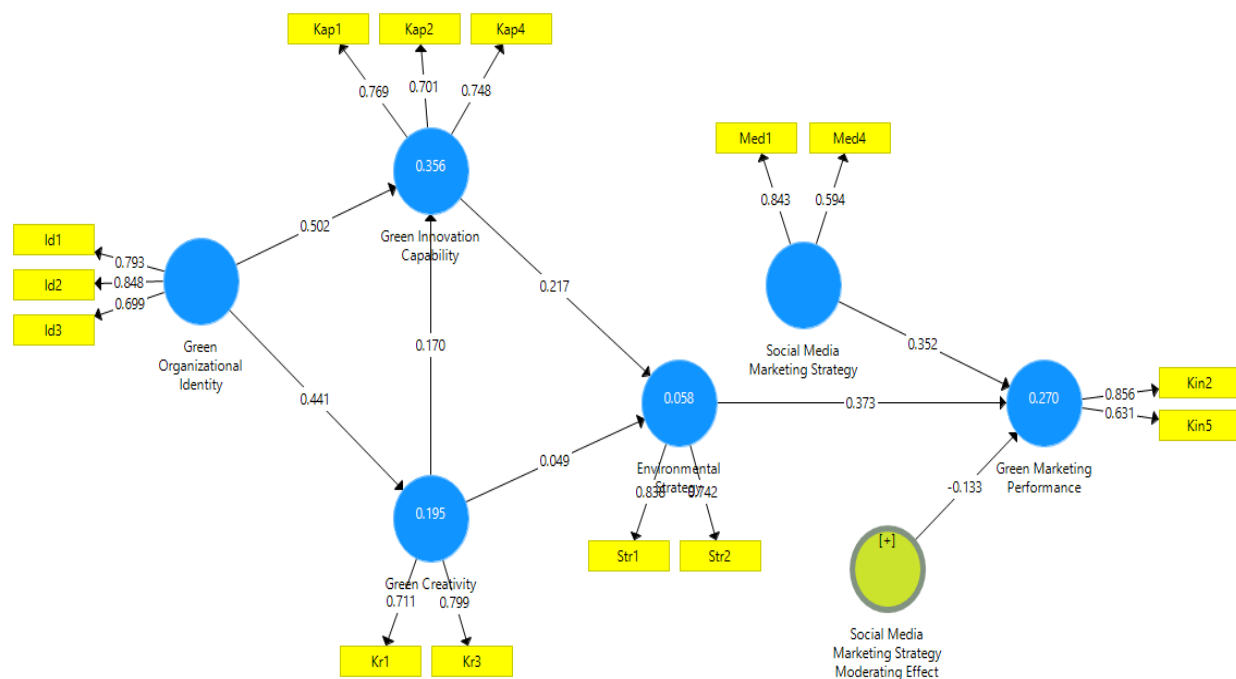
Table-1Hypothesis Testing

Hipotesis	Original sample	STDEV	T stats	P values	Accepted/Rejected
H1: Id → Kap	0,502	0,070	7,205	0,000	Accepted
H2: Id → Kr	0,441	0,056	7,920	0,000	Accepted
H3: Kap → Str	0,217	0,077	2,830	0,003	Accepted
H4: Kr →Kap	0,170	0,067	2,517	0,005	Accepted
H5: Kr → Str	0,049	0,091	0,543	0,294	Rejected
H6: Str → Med→ Kin	-0,133	0,068	1,956	0,025	Accepted
H7: Str → Kin	0,373	0,057	6,579	0,000	Accepted
H8: Med →Kin	0,352	0,065	5,454	0,000	Accepted

Source: Output SmartPLS

The table of hypothesis testing results above shows that almost all of the hypotheses proposed in the research are acceptable (H1, H2, H3, H4, H6, H7, H8). One hypothesis was declared not accepted (H5).

Thus, the complete research model can be presented in Figure-3 below:



DISCUSSION

The MSME Go Green model uses three main pillars in managing business capacity to improve green marketing performance. Each pillar has components which in this research are used as research constructs, respectively: (1) Learning resources (green organizational identity, green creativity); (2) Innovation efforts (green innovation capabilities, environmental strategies, social media marketing strategies); and (3) Performance resources (green marketing performance). The results of data analysis in testing research hypotheses show a significant influence between variables. Simultaneously, through the existing model, the Go Green MSME concept can also be explained as the power of learning resources that businesses can

manage to produce a series of products and innovative efforts that contribute to improving green marketing performance.

The influence of Green Organizational Identity on Green Innovation Capability (H1)

Businesses are able to strengthen their green organizational identity through commitment to environmentally friendly management which, although still carried out on a limited basis, has an influence on green innovation capability (p value = 0.000). The environmentally friendly commitment that has become part of the business identity can be realized in the form of real efforts to innovate. This is consistent with the dynamic capabilities view that is relevant to the concepts of product innovation and green-oriented dynamics (Lawson & Samson, 2001; Mendoza-Silva, 2021; Romijn & Albaladejo, 2022; Weber & Heidenreich, 2018). The significant influence of green organizational identity on green innovation capability also confirms the important concept of business adaptability. The ability of a business to integrate internal and external resources and technology is the result of business adaptation efforts to environmental changes as a manifestation of the strength of green organizational identity (Huang et al., 2020).

The Influence of Green Organizational Identity on Green Creativity (H2)

Green organizational identity that is built through good green-oriented practices produces a green value that is agreed upon, understood and able to be interpreted at the organizational level (p value = 0.000). A fairly strong manifestation of identity is shown by its influence on green creativity. Businesses are able to actualize collective perceptions in green organizational identity to form a climate that influences HR productivity, motivation and behavior (Nwangwu et al., 2021). This becomes an asset and a driving force for creativity that can be directed towards new, practical, solution and green-oriented ideas (Song & Yu, 2018). Creativity as a keyword in increasing business competitiveness can be well understood through the organizational identity that has been formed.

The Influence of Green Innovation Capabilities on Environmental Strategy (H3)

Green innovation capability which influences environmental strategy (p value = 0.003) indicates the business's ability to manage and apply knowledge as a strategic asset that can be operationalized in environmental strategy. Previous studies stated that green innovation capabilities that are operationalized into environmental strategies become the strength for businesses to adapt to applicable regulations. In Zhang et al. (2020) stated that the ability of businesses to adapt to regulations (regulatory compliance) is a business effort to balance profit and social interests. This environmental strategy supported by green innovation capabilities is also implemented in the form of branding through corporate social responsibility (Hussain et al., 2022).

The Influence of Green Creativity on Green Innovation Capability (H4)

Green creativity through managing learning resources, namely human resources that are able to be motivated and directed towards business capacity to respond to global green norms, is the main support for green innovation capability (p value = 0.005). Creativity that is able to develop innovation capability capital indicates a business's ability to carry out efficiency in environmentally oriented good practices (green practices). This argument is also confirmed by Yousaf (2021) through a study of green innovation through the role of green practices and green value creation. Relevant to the dynamic capabilities view where businesses are required to produce unique, inimitable and irreplaceable products (Teece, 2010; Barney, 1991; Otiz-Avram, 2024), creativity becomes the main pillar through the existing human resource capacity to pouring creative ideas into such products. In this context, creativity can then be developed into green innovation capabilities.

The Influence of Green Creativity on Environmental Strategy (H5)

In this research, no influence of green creativity on environmental strategy was found. Green creativity as a strategic business asset has not yet been implemented directly into environmental strategy, but is a support for green innovation capabilities. Creativity is still positioned as an important component that is able to drive green innovation capabilities. Strategic resources in the dynamic capabilities view are produced through a process of integration, formation and rearrangement of existing resources (Teece, 2010). This dynamic

capabilities view places green creativity as a strategic resource that still needs to be developed before being applied at the strategic level. Through testing Hypothesis-5 (H5), it is known that MSMEs have not been able to align green creativity with environmental strategy at the corporate level. Green creativity initiatives are still partial and have not been placed as part of a coherent strategy (Baah et al., 2024; Song & Yu, 2018).

The moderating role of Social Media Marketing Strategies in the influence of Environmental Strategies on Green Marketing Performance (H6)

The moderating role of social media marketing in the influence of environmental strategies on green marketing performance (p value = 0.025) shows that social media marketing is able to contribute to the effectiveness of environmental strategies in improving green marketing performance. The results of testing Hypothesis-6 (H6) also indicate that the implementation of social media by MSMEs has become a platform for forming relational networks that can support marketing efforts. Relevant to social exchange theory which emphasizes interdependent and contingent exchange as the foundation of all social transactions and relationships (Cook et al., 2013; Oparaocha, 2016), MSMEs are able to maximize social media marketing strategies in facilitating interactivity to strengthen relationships with their markets. The moderating role of social media marketing strategies places social media as an effective means for MSMEs to create community engagement (Brodie et al., 2011; Hollebeek et al., 2019; Kumar et al., 2019). This context also emphasizes the ability of business resources to allocate economic value as part of developing organizational innovative capacity.

The Influence of Environmental Strategy on Green Marketing Performance (H7)

The results of testing Hypothesis-7 (H7) show that environmental strategy significantly influences green marketing performance (p value = 0.000). Managerial innovation in the form of environmental strategies (Correa et al., 2008; Darnall et al., 2010) can be implemented by MSMEs to improve green marketing performance. Environmental strategy is a set of measurements, investments and projects to reduce the impact of industry on natural resources (Dragomir & Dragomir, 2020). This context is relevant to a study conducted by Hasan & Ali (2017) where environmental strategies have an impact on optimizing marketing performance while reducing costs and increasing profitability. Environmental strategies that have an impact on improving green marketing performance are supported by the business's green innovation capabilities. The results of this hypothesis test were also confirmed by Li (2022) using a dynamic capabilities perspective (Teece, 2010; Barney, 1991; Ortiz-Avram et al., 2023) regarding business capabilities to integrate green resources with organizational learning capabilities and environmental insight capabilities.

The influence of Social Media Marketing Strategy on Green Marketing Performance (H8)

There is a significant influence of social media marketing strategy on green marketing performance (p value = 0.000). Businesses are able to implement interactive social networking platforms (Muller & Pere, 2019) to improve green marketing performance. Social media as a marketing strategy can be used to increase the effectiveness of the performance of holistic management processes in identifying, anticipating and satisfying market interests in a profitable and sustainable manner (Mehraj & Qureshi, 2022; Nath & Siepong, 2022).

CONCLUSION

Social media marketing strategies are becoming an effective means through customer engagement functions to communicate environmental strategies implemented by businesses to improve green marketing performance.

An environmental strategy that is able to improve green marketing performance with the moderating role of marketing strategy is built upon strategic integration: (1) Green organizational identity that is able to form green innovation capability resources; (2) Green creativity is needed as a basic capability in the form of organizational creative thoughts and ideas that influence green innovation capability; (3) Green innovation capabilities that can be implemented effectively in environmental strategies.

Businesses are able to transform the challenges of global green norm pressure into opportunities through empowering green dynamic capabilities (green organizational identity, green creativity, green innovation and environmental strategy) to improve green marketing performance.

Implikasi

The findings in this research provide implications for changing mindsets that are relevant in the context of global attention to green orientation. First, transforming challenges into opportunities is not an inevitability but effective business management ie. confidence in a business's ability to allocate strategic resources to increase its competitiveness. Second, global green norms provide clear direction for businesses to build a green ecosystem ie. has the impact of increasing market awareness of environmentally friendly products.

Limitation

This research was conducted with a limited amount of data and scope. Further research needs to be carried out with a larger amount of data and an expanded scope not only at organizational level but also market capacity.

REFERENCES

- Akbari, M., Padash, H., parizi, Z. S., Rezaei, H., Shahriari, E., & Khosravani, A. (2022). A bibliometric review of green innovation research: identifying knowledge domain and network. *Quality & Quantity*, 1–31. <https://doi.org/10.1007/s11135-021-01295-4>
- Al-Ghazali, B. M., Gelaidan, H. M., Shah, S. H. A., & Amjad, R. (2022). Green transformational leadership and green creativity? The mediating role of green thinking and green organizational identity in SMEs. *Frontiers in Psychology*, 13, 977998. <https://doi.org/10.3389/fpsyg.2022.977998>
- Arici, H., & Uysal, M. (2021). Leadership, green innovation, and green creativity: a systematic review. *The Service Industries Journal*, 42, 280–320. <https://doi.org/10.1080/02642069.2021.1964482>
- Baah, C., Agyabeng-Mensah, Y., Afum, E., & Lascano Armas, J. A. (2024). Exploring corporate environmental ethics and green creativity as antecedents of green competitive advantage, sustainable production and financial performance: empirical evidence from manufacturing firms. *Benchmarking: An International Journal*, 31(3), 990-1008.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, 120–199. <https://doi.org/10.1177/014920639101700108>
- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252–271.
- Campbell, A., & Goold, M. (1995). Corporate strategy: The quest for parenting advantage. *Harvard Business Review*, 73, 120–132. [https://doi.org/10.1016/0024-6301\(95\)91637-7](https://doi.org/10.1016/0024-6301(95)91637-7)
- Chen, H. C., & Yang, C. H. (2019). Applying a multiple criteria decision-making approach to establishing green marketing audit criteria. *Journal of Cleaner Production*. <https://www.sciencedirect.com/science/article/pii/S0959652618333602>
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-009-0223-9>
- Chiou, T.-Y., Chan, H., Lettice, F., & Chung, S. (2011). The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan. *Transportation Research Part E-Logistics and Transportation Review*, 47, 822–836. <https://doi.org/10.1016/J.TRE.2011.05.016>
- Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). Social Exchange Theory. In J. DeLamater & A. Ward (Eds.), *Handbook of Social Psychology* (pp. 61–88). Springer Netherlands. https://doi.org/10.1007/978-94-007-6772-0_3
- Dabić, M., Maley, J., Dana, L.-P., Novak, I., Pellegrini, M. M., & Caputo, A. (2020). Pathways of SME internationalization: A bibliometric and systematic review. *Small Business Economics*, 55(3), 705–725.
- Dragomir, V. D., & Dragomir, V. D. (2020). Theoretical aspects of environmental strategy. *Corporate environmental strategy: theoretical, practical, and ethical aspects*, 1-31.
- de Medeiros, J. F., Garlet, T. B., Ribeiro, J. L. D., & Cortimiglia, M. N. (2022). Success factors for environmentally sustainable product innovation: An updated review. *Journal of Cleaner Production*, null, null. <https://doi.org/10.1016/j.jclepro.2022.131039>
- Eiadat, Y. H., Kelly, A., Roche, F., & Eyadat, H. (2008). Green and competitive? An empirical test of the mediating role of environmental innovation strategy. *Journal of World Business*, 43, 131–145. <https://doi.org/10.1016/J.JWB.2007.11.012>
- Eweje, G. (2020). Proactive environmental and social strategies in a small- to medium-sized company: A case study of a Japanese SME. *Business Strategy and the Environment*, 29(7), 2927–2938. <https://doi.org/https://doi.org/10.1002/bse.2582>
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50. <https://doi.org/10.2307/3151312>

- Gu, S. (2022). Green innovation; a way to enhance economic performance of Chinese hotels. *International Journal of Innovation Science*, null, null. <https://doi.org/10.1108/ijis-07-2021-0128>
- Hair, J. (1972). Multivariate data analysis. *International Statistical Review*, 40, 394. <https://doi.org/10.2307/1402480>
- Hart, S. (1997). Beyond Greening: Strategies for a Sustainable World. *Harvard Business Review*, 75, 66–76. <https://www.semanticscholar.org/paper/02a0fdcab33c71c859175dca48a97da576e2b3b6>
- Hasan, Z., & Ali, N. A. (2017, August). Modelling the relationship between green marketing strategies and performance outcomes for business sustainability. In *Proceedings of the Global Conference on Business and Economics Research (GCBER)* (pp. 14-15).
- Huang, S.-Z., Chau, K. Y., Chien, F., & Shen, H. (2020). The impact of startups' dual learning on their green innovation capability: the effects of business executives' environmental awareness and environmental regulations. *Sustainability*, 12(16), 6526.
- Huang, Y.-C., & Chen, C. (2021). Institutional pressure, firm's green resources and green product innovation: evidence from Taiwan's electrical and electronics sector. *European Journal of Innovation Management*, null, null. <https://doi.org/10.1108/ejim-04-2021-0217>
- Indrajaya, N., Perizade, B., Wahab, Z., & Shihab, M. S. (2023). Green Marketing Strategy: Factors Influencing Green Purchase Intention in the Decision to Use a Solar Power Plant (PLTS) in Palembang City. In *Proceedings of the 1st Bengkulu International Conference on Economics, Management, Business and Accounting (BICEMBA 2023)* (Vol. 268, p. 171). Springer Nature.
- Indrajaya, N., Perizade, B., Wahab, Z., & Shihab, M. S. (2023). The Role of Environmental Attitude in Purchasing Decisions for Green Energy Products. *Migration Letters*, 20(S12), 425-436.
- Khan, S. J., Dhir, A., Parida, V., & Papa, A. (2021). Past, present, and future of green product innovation. *Business Strategy and the Environment*, null, null. <https://doi.org/10.1002/BSE.2858>
- Lestari, R. B., Shihab, M. S., & Andriana, I. (2024). Social Media Marketing and Its Impact on SMEs' Business Performance. *KnE Social Sciences*, 503-515.
- Li, F., Larimo, J., & Leonidou, L. C. (2021). Social media marketing strategy: definition, conceptualization, taxonomy, validation, and future agenda. *Journal of the Academy of Marketing Science*, 49, 51–70.
- Li, H. (2022). Green innovation, green dynamic capability, and enterprise performance: evidence from heavy polluting manufacturing enterprises in China. *Complexity*, 2022(1), 7755964.
- Lin, R. J., Tan, K. H., & Geng, Y. (2013). Market demand, green product innovation, and firm performance: evidence from Vietnam motorcycle industry. *Journal of Cleaner Production*. <https://www.sciencedirect.com/science/article/pii/S0959652612000029>
- Mardius, P. R., Sulastri, S., & Shihab, M. S. (2023). Factors that Mediate the Effect of Eco-Label on Green Purchase Behavior Generation Z of Green Cement Products in Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 6(1), 533-546.
- Mehraj, D., & Qureshi, I. H. (2022). Evaluating the emerging opportunities and challenges from green marketing practices among Indian manufacturing industries. *Business Strategy & Development*, 5(3), 142-152.
- Nath, P., & Siepong, A. (2022). Green marketing capability: A configuration approach towards sustainable development. *Journal of Cleaner Production*. <https://www.sciencedirect.com/science/article/pii/S0959652622013403>
- Oparaocha, G. O. (2016). Towards building internal social network architecture that drives innovation: a social exchange theory perspective. *Journal of Knowledge Management*, 20(3), 534–556. <https://doi.org/10.1108/JKM-06-2015-0212>
- Oxborrow, L., & Brindley, C. (2013). Adoption of “eco- advantage” by SMEs: Emerging opportunities and constraints. *European Journal of Innovation Management*.
- Riva, F., Magrinos, S., & Rubel, M. R. B. (2021). Investigating the link between managers' green knowledge and leadership style, and their firms' environmental performance: The mediation role of green creativity. *Business Strategy and the Environment*, 30(7), 3228–3240. <https://doi.org/https://doi.org/10.1002/bse.2799>
- Ruan, R., Chen, W., & Zhu, Z. (2022). Linking Environmental Corporate Social Responsibility with Green Innovation Performance: The Mediating Role of Shared Vision Capability and the Moderating Role of Resource Slack. *Sustainability*, 14(24). <https://doi.org/10.3390/su142416943>
- Shrivastava, P. (1995). Environmental technologies and competitive advantage. *Southern Medical Journal*, 16, 183–200. <https://doi.org/10.1002/SMJ.4250160923>
- Song, W., & Yu, H. (2018). Green Innovation Strategy and Green Innovation: The Roles of Green Creativity and Green Organizational Identity. *Corporate Social Responsibility and Environmental Management*, 25(2), 135–150. <https://doi.org/https://doi.org/10.1002/csr.1445>
- Teece, D. J. (2010). Technological innovation and the theory of the firm: the role of enterprise-level knowledge, complementarities, and (dynamic) capabilities. In *Handbook of the Economics of Innovation* (Vol. 1, pp. 679–730). Elsevier.
- Takalo, S. K., Tooranloo, H. S., & Parizi, Z. S. (2021). Green innovation: A systematic literature review. *Journal of Cleaner Production*, 279, 122474. <https://doi.org/10.1016/j.jclepro.2020.122474>
- Van Doorn, J., Lemon, K. N., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. C. (2010). Customer engagement behavior: Theoretical foundations and research directions. *Journal of Service Research*, 13(3), 253–266.

- Vargo, S. L., & Lusch, R. F. (2017). Service-dominant logic 2025. *International Journal of Research in Marketing*, 34(1), 46–67.
- Wang, S., Liu, M., & Pérez, A. (2022). A bibliometric analysis of green marketing in marketing and related fields: From 1991 to 2021. *Asia Pacific Journal of Marketing and Logistics*, null, null. <https://doi.org/10.1108/apjml-07-2022-0651>
- Wang, X., Zhao, Y., & Hou, L. (2020). How does green innovation affect supplier-customer relationships? A study on customer and relationship contingencies. *Industrial Marketing Management*, 90, 170–180. <https://doi.org/10.1016/j.indmarman.2020.07.008>
- Wangsa, I. H. S., & Tyra, M. J. (2021). Konsepsi Persepsi Manfaat Dalam Keterlibatan Konsumen Terhadap Kebaruan Produk. *Jurnal Bisnis Perspektif*, 13(1), 1-16.
- Wangsa, I. H. S. (2022). Conceptualizing Consumer's Learning Adoption of New Values. *Jurnal Manajemen & Bisnis (MEBIS)*, 7(2), 114-127.
- Wangsa, I. H. S. (2022). Kajian Teoritis Perilaku Konsumen Media Sosial. Penerbit Anugrah Jaya. ISBN 978-623-5438-17-7
- Zhang, M., Zeng, W., Tse, Y. K., Wang, Y., & Smart, P. (2020). Examining the antecedents and consequences of green product innovation. *Industrial Marketing Management*, null. <https://doi.org/10.1016/j.indmarman.2020.03.028>
<https://www.bps.go.id/publication/download.html?nrbvfeve>
<https://www.ekon.go.id/publikasi/detail/3407/pemerintah-dorong-umkm-tingkatkan-daya-saing-untuk-masuk-pasar-global>
- Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup
<https://peraturan.bpk.go.id/Home/Details/38771/uu-no-32-tahun-2009>
- Undang-Undang Republik Indonesia Nomor 3 Tahun 2014 tentang Perindustrian
<https://peraturan.bpk.go.id/Home/Details/38572/uu-no-3-tahun-2014>
- Peraturan Presiden Nomor 59 Tahun 2017 tentang Pelaksanaan Pencapaian Tujuan Pembangunan Berkelanjutan
<https://peraturan.bpk.go.id/Home/Details/72974/perpres-no-59-tahun-2017>
- Peraturan Pemerintah Nomor 7 Tahun 2021 tentang kemudahan perlindungan dan pemberdayaan koperasi dan usaha mikro, kecil, dan menengah.