

## **Green Marketing Mix As Strategy to Improve Competitive Advantage in Real Estate Developer Companies**

Rina Rahmawati<sup>1</sup>, Djumilah Hadiwidjojo<sup>2</sup>, Noermijati<sup>3</sup>, Solimun<sup>4</sup>

<sup>1</sup> Doctoral Program in Management Science of Economic Faculty, University of Brawijaya, Indonesia

<sup>2</sup> Lecturer in Management Science of Economic Faculty, University of Brawijaya, Indonesia

<sup>3</sup> Lecturer in Management Science of Economic Faculty, University of Brawijaya, Indonesia

<sup>4</sup> Lecturer in Mathematic and Natural Science Faculty, University of Brawijaya, Indonesia

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**ABSTRACT:** *This study examines the relationships among environmental orientation, green marketing mix strategy, and competitive advantage. Data collected from 72 real estate developer companies in East Java, Indonesia. The results indicated that environmental orientation has no positively influence on enhancing firm's competitive advantage, but it has positive and significantly effect to the implementation of green marketing mix strategy. Moreover, green marketing mix strategy is revealed as an excellent strategy to enhance competitive advantage in term of company's green image. These findings provide real estate developer company with useful insights for improving firm competitive advantage through implementation of green marketing mix strategy which strongly environmental orientation adopted.*

**KEYWORDS:** *environmental orientation, green marketing mix strategy, competitive advantage*

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### **I. INTRODUCTION**

A character that marks the twenty-first century is the emergence of a general awareness and understanding of the importance of sustainable development in the society. This concern becomes important and can not be avoided in the construction industry. The extreme climate change and degradation of environmental quality also arise due to the exploitation of natural resources in order to fulfill people needs for residential space. The process of building construction could lead to such negative impacts on the environment both in and around the residence. Over time, the term "green" is used interchangeably with the concept of "sustainability", which means that human's concern for environmental, social and economic impacts (Dobers & Wolff, 2000; Saha and Darnton, 2005). Elkington (1997) stated that this was a challenge to achieve sustainability as a source of unprecedented commercial opportunities for competitive company through technological innovation and increased eco-efficiency. One source that contributes to creating superior business performance is environmental culture (Banerjee, 2002). Culture refers to the norms, values and assumptions. Cultures are distributed among the members of the organization and tend to last a long time. Culture can be assumed, invented, discovered or developed by the managerial team in an attempt to deploy a set of values that will guide employees how to behave in the organization (Fraj et al., 2011).

Organizational culture which environmentally friendly adopted reflects the extent to which the company value-based internalization of environmental preservation throughout the organization as outlined in the mission statement, policies and formal procedures, training and information programs for all employees and managers (Banerjee, 2002; Stone, *et al.*, 2004). According to Banerjee *et al.* (2003), the internal values and beliefs of a company are not only the transformation of the company's environmental impact on the operational and functional level but also the affects of organizational culture. Environmental orientation adopted by the company refers to the extent to which the attitude of the company concerned about the environment, which is integrated into the strategy and operations throughout the company. Environmental orientation adopted by the company refers to the extent to which the attitude of the company is concerned about the environment, which is integrated into the strategy and operations across the enterprise. Environmental orientation around defensive and proactive behavior embodied in environmental management, such as pollution prevention measures (Hart, 1995; Fraj *et al.*, 2011). Resource-based view (RBV) asserted that each company has a different performance because of heterogeneity resources ownership (Fraj *et al.*, 2011). Thus, heterogeneity is a consequence of the development of a rare, valuable, non-substitution and imperfectly imitable resources, as well as the ability to support the development of a competitive advantage over its competitors capabilities (Barney, 2001).

The company is actively implementing environmental management and green marketing will be able to minimize waste production and to increase productivity. Implementation of the appropriate green marketing strategy could also improve the reputation of the company, and of course will encourage high competitiveness of companies (Berry & Rondinelli, 1998; Chen *et al.*, 2006; Porter & van der Linde, 1995; Hart, 1995; Shrivastava, 1995; Chen, 2008).

## **II. RESEARCH OBJECTIVE AND FOCUS**

This investigation examines the relationship among environmental orientation, green marketing mix strategy and competitive advantage. This study addresses the research objective by analyze and explain the effects of environmental orientation to enhance competitive advantage, environmental orientation to green marketing mix strategy, and the implementation of green marketing mix strategy to enhance competitive advantage. To date there is less empirical studies which assess on green marketing mix strategy (GMM) and competitive advantage (CA) company which influenced by environmental orientation (EO). Thus, there is a research gap to be filled based on the compilation in accordance with the desire of researchers to incorporate all of these models. Banerjee (1999) provide a conceptual framework for green marketing. Conceptual model of the green policy describes the external forces (i.e. customer needs, public concern, stakeholders) and internal forces (i.e. priority management, the need for a competitive advantage, organizational culture). Both are the basic motives for starting green policies consisting in various levels. Green marketing is a corporate response to environmental concerns, social and government. It could also be viewed as a critical business philosophy in order to maximizing financial performance (Chamorro & Bañegil, 2006). Developing environmental initiatives at the operational, managerial, and functional level might contribute to minimize the cost of production (Shrivastava, 1995) and to increase the positive image and reputation of the company in external markets (Miles & Covin, 2000).

Some authors characterized many elements of green marketing and also regard it as a real and complete strategy. Polonsky (1994) consider many factors in green marketing, but Prakash (2002) defined green marketing as green products that produced by the green company, and also manipulated elements of the traditional marketing mix (called 4P's). Implementation of green marketing strategy requires a fundamental approach, a comprehensive and integrated in all functional aspects of marketing, including marketing mix as a whole, such as product design, pricing, location and promotion (Polonsky and Rosenberger, 2001). Green marketing mix strategy includes the development of green-based products, green logistics, green promotion, green pricing and green consumption. By applying marketing strategies and tactics that are environmentally friendly, the company can achieve its main goal to gain a competitive advantage that is different from its competitors. Once, it will be implanted sense of environmental and social responsibility in all of the company's internal staff (Hart, 1995; Shrivastava, 1995). This study develops a research object in the real estate industry in Indonesia, especially in East Java. East Java Province was selected, because it contributes to regional revenue through asset development and property investment in the province and is one of the fastest growing businesses due to a high population growth. However, there is still no research on single-family residential real estate to explore perceptions of the General Manager (GM) and the Owner as a corporate decision makers on the implementation of green marketing mix strategy, which is influenced by environmental orientation to increase company's competitive advantage. This research seeks to develop a model based on some previous research that aims to enrich the results of research to further development. Two dimensions of environmental orientation (EO) which refer to internal and external are used to see its effect on green marketing mix strategy and competitive advantage. There are various results showed by previous studies on the EO in which researcher interested in. Therefore, this study about implementation of green marketing mix strategy based on the EO concept by real estate developer companies in particular single-family residential in East Java Indonesia is conducted.

## **III. RELEVANT LITERATURE, CONCEPTUAL MODEL AND HYPOTHESES**

A conceptual model delineating the hypothesized relationships among all the constructs under investigation is presented in Fig. 1. Some relevant literatures and the rationales for the formulation of these hypotheses are now discussed.

**3.1. Competitive advantage in natural-resource-based view :** Competitive advantage of a company depends on the resources endowment and strategies chosen that empower internal resources. Competitive advantage can respond threats as well the existence of external opportunities (Barney, 1991; Hitt, 1997). Firms should be able to adjust its internal resources and external environment, especially the opportunity, and then use it to reduce the impact of threats to achieve strategic feasibility (Hitt, 1997: 17).

An appropriate combination of internal resources and external environment should become an important input in dealing with preparation of the company's strategy. RBV rationale is differed from other concepts because each company has a certain amount of resources that are unique. Based on the RBV perspective, a competitive advantage is conceptualized as an implementation strategy that has not been used by its competitors, which can help to reduce costs, take advantage of opportunities in the market, and neutralize competitive threats (Barney, 1991). According to Barney (2002), RBV provide broader implications for managers in achieving a competitive advantage. Natural-resource-based view (NRBV) is an extension of Wernerfeld's RBV (1984). NRBV focused on special resources that can provide a competitive advantage based on the company's relationship with its ecological environment. Capabilities ownership facilitate the company's attitude towards the environment in the business activity will affect the company's strategy and competitive advantage.

**3.2. Relationship between environmental orientation and competitive advantage :**The development of property business occurred in the early 1990s where a new paradigm of strategic environmental emerged. Environmentally oriented companies usually have similarities in three areas: entrepreneurship, corporate social responsibility, and commitment to environmental sustainability (Ozanne & Menguc, 2000). There are two main assumptions of the concept of environmental orientation. First, managers should always perform monitoring activities, interpreting and acting on each sector of the environment in order to carry out their functions and to achieve individual and organizational goals,. Second, managers have a limited time and capacity of cognitive processing (Mintzberg, 1973; Kurke & Aldrich, 1983; Hickson, 1987). Corporate environmentalism, refers to the orientation of the company's concern about the natural environment (environmental orientation), is the reference in the corporate decision-making. Thus, the environmental-oriented companies have a proactive outlook on environmental issues to overcome challenges and developed environmental-based marketing strategies. Environmental-oriented company has a total commitment to the natural environment and engage in environmental practices, which facilitate the company's commitment to the environment (Ozanne & Menguc, 2000). Developing competitive advantage should be taken from the stage of designing and implementing marketing strategies. As Barney (1991) stated that manager can create competitive advantages for their firms when they manage resources that are rare, valuable and are hard to duplicate. Competitive advantage comes from the values or benefits created by the company for its buyers.

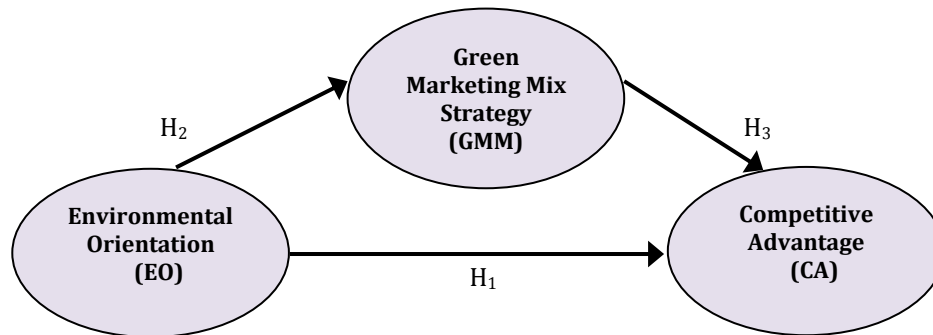


Fig.1 Proposed conceptual model

The concept of customer value is an important factor to consider in gaining competitive advantage. Porter (1985) stated that it is superior (or competitive) means to be different from the other. This means that the company must make a choice of different and special from the series of activities in delivering a unique combination of values. A competitive advantage is based on the internal and external environment of the organization, both in the organization and the organization's relationship with its environment (Saloner *et al.*, 2001). On this basis, the hypotheses is developed (Fig. 1):

**H<sub>1</sub>:** The environmental orientation positively influences the competitive advantage

**3.3. Relationship between environmental orientation and green marketing mix strategy :** The existence of environmental constraints might force companies to build a specific resources and capabilities which are environmentally oriented, to address the environmental challenges to realize environmental based marketing strategy of the company (Karagozoglu, 2001; Baker & Sinkula, 2005; Porter & van der Linde , 1995; Fraj *et al.*, 2011; Menon & Menon, 1997). Organizational success in green marketing lies in reorganizing, restructuring and redesigning processes and systems within the organization.

Banerjee (2002) and Banerjee *et al.* (2003) found that attitudes can be directed through an ecological company that reflected two dimensions, namely the acceptance level ecological ideal in the corporate culture (environmental orientation) and how to expand the environmental issues to be implemented in the strategic planning process (environmental strategy). Environmental orientation and environmental marketing are interrelated concepts, which involve the integration of ecological values of the ideal into the company's internal culture and translating these commitments into specific strategies for communication and operational level. Leadership of an organization is believed to play an important role in shaping the values and orientation of the organization (Menon *et al.*, 1999). Strategic nature of the environmentally-based marketing programs (EBMPs) form that environmental awareness and responsibility are embedded in the corporate culture to the entire organization from top to the bottom level. Coddington (1993) argues that the mindset of the organization is an important determinant of environment-related strategies, policies and practices of the company. According to Petts *et al.* (1999), employee awareness and knowledge about environmental protection are the foundation of the company in achieving the successful implementation of green marketing strategy that will result in improving competitive advantage. Petts *et al.* (1999) argues that in order to address such issues and environmental matters, the company's could build a strong commitment in organization by encouraging the top executive who has a strong support for the strategy-based marketing environment (environmental orientation). Attitudes of middle managers can greatly affect the implementation of green marketing strategies. Instead, the company decided to use a proactive strategy into practice without previously adopted environmental culture (environmental orientation) will not have sufficient expertise to implement the strategy successfully (Christmann, 2000). Based on this theoretical background, hypotheses two is formulated:

**H<sub>2</sub>:** The environmental orientation positively influences the implementation of green marketing mix strategy

**3.4. Relationship between green marketing mix strategy and competitive advantage :** Green marketing is all activities designed to generate and to facilitate any transaction to satisfy human needs and desires by minimizing the adverse environmental inputs (Deshpande, 2011). The term of green marketing is increasingly recognized (Ottman, 1998; Wasik, 1996; Peattie, 2001; Prakash, 2002; Grant, 2007; Dahlstrom, 2010). Polonsky (1994) consider many factors in green marketing, but Prakash (2002) gives an approximation of the marketing mix. According to him, green marketing classify that green products are produced by the green company, and manipulate traditional 4P's of the marketing mix (Product, Pricing, Place, and Promotion). Environmentally-based marketing programs (EBMPs) refers to the company's policies, practices, and procedures in the areas of marketing that focus explicitly on corporate environmentally friendly company. With EBMP the company's goal to create revenue (revenue) by providing the exchange of goods (services) that meet the goals of organizations and individuals.

These fields including environment-based marketing strategy is based on elements of the marketing mix (product, price, place and promotion) and environment-based market choice (Menon *et al.*, 1999). Green marketing strategies can be implemented through a process called greening of marketing mix, a process which is environmentally friendly company. Greening of Marketing Mix includes External Green 7P's and Internal Green 7P's (Peattie, 2001). Green marketing mix strategies including developing green-based products, green logistics, green promotion, green pricing and green consumption. The strategy includes the adoption of eco-marketing orientation as a business philosophy, government intervention, life cycle analysis and work together to gain business success (Polonsky and Mintu, 1997). The ability to segment targeting customers who want environmentally friendly products (green consumer) may also increase competitive advantage (Banerjee *et al.*, 2003; Leonidou *et al.*, 2013). By applying marketing practices, strategies and tactics that are environmentally friendly, the company can achieve its main goal to improve their competitive advantage in the form of differentiation over their competitors, at the same time will also be instilled a sense of environmental responsibility at all internal staff (people) of the organization (Hart, 1995; Shrivastava, 1995). This analysis is leads to hypothesis three:

**H<sub>3</sub>:** The implementation of green marketing mix strategy positively influences the competitive advantage

#### IV. SURVEY MEASURES

Measures used in the survey were first generated from the relevant literature and then fine-tuned by a pre-test using 30 operational managers of real estate developer companies in East Java Province, Indonesia.

**4.1. Environmental orientation (EO) :** Six indicators of EO in this research were adapted from Banerjee's conceptual (Banerjee *et al.*, 2003). Each was coded on five-point scale (1 = "strongly bad" ; 5 = "strongly good").

**4.2. Green marketing mix strategy (GMM) :** Peattie’s (1995) internal green 7P’s items were adapted to determine nine indicators of green marketing mix strategy using five-point scales (1 = “not appropriate at all”; 5 = very appropriate). Respondents were requested to rate their firms’ green marketing mix strategy on each of these indicators.

**4.3. Competitive advantage (CA) :** Hart’s (1995) three relevant items were adapted for measuring the competitive advantage using four indicators, on a five-point scales (1 =”very low” ; 5 = “very high”). Respondents were asked to rate their firms relative to their competitors on each of these indicators.

**V. DATA COLLECTION**

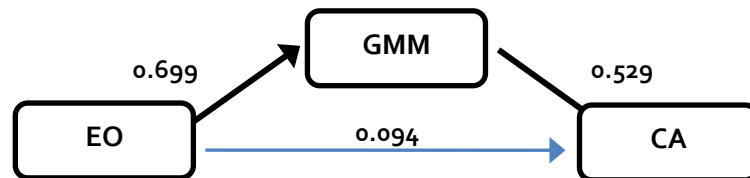
The sampling frame for direct survey was compiled from the *Real Estate Indonesia Institution (REI)* in East Java, Indonesia. Criteria to be considered: the developer was officially registered as a member of REI East Java, which had a minimal operational project scope extent of 20 acres, and developing single-family residential real estate category. 72 real estate developers located in East Java Province were selected. 69 respondents were valid and tested.

**VI. RESULTS**

As shown in Fig.2, the result in examination of hypotheses ( $H_1 - H_3$ ) reported the relationship between environmental orientation, green marketing mix strategy and competitive advantage.

**6.1. Relationship between environmental orientation and competitive advantage ( $H_1$ ) :** Estimation results for the model inner orientation towards environmental direct influence competitive advantage shows the value of the t-statistic of 0.536 and p-value of 0.594 with a standard error  $\alpha = 5\%$ . The result shows that the environmental orientation has no significant influence on competitive advantage.

**6.2. Relationship between environmental orientation and green marketing mix strategy ( $H_2$ ) :** The estimation results of the model for the influence of environmental inner orientation towards green marketing mix strategy shows the value of 13.016 t-statistic and p-value of 0.000 with a standard error  $\alpha = 5\%$ . This suggests a direct effect of environmental orientation towards green marketing mix strategy is significant. The resulting influence is positive, which means the better the environmental orientation, then the implementation of green marketing mix strategy will also increase.



**Fig. 2.** The result of SEM PLS. Notes:  $\blackrightarrow$  : significant  $\rightarrow$  : not significant

**6.3. Relationship between green marketing mix strategy and competitive advantage ( $H_3$ ) :** Estimation results for the model of the inner direct influence of green marketing mix strategy to demonstrate the value of the competitive advantage of 3,541 t-statistics and p-value of 0.000 with a standard error  $\alpha = 5\%$ . This suggests that influence of green marketing mix strategy had significant to competitive advantage.

**VII. DISCUSSION AND SUMMARY**

Several findings derived from the analyses merit further discussion. First, EO had no significantly influence to competitive advantage. The most important results of this study are environmental orientation is not a construct that directly impact on improving the competitive advantage, but it seems visible through an implementation of green marketing mix strategies as a mediator. These findings differ from those of Shrivastava’s (1995) that environmental orientation formed as environmental technology orientation had effect on the creation of competitive advantage in chemical companies and manufacturers of consumer goods. The findings support Fraj-Andres *et al.* (2009) that there is no positive relationship between environmental orientation and the company’s competitive advantage. This means that revenues internally to compromise attitude towards environmental protection to achieving better competitive advantage is not enough. This should be accompanied by an effective and appropriate strategy at all stages of organization.

Second, the findings strengthen those of Banerjee *et al.* (2003) by showing that EO exerts a significant and positive influence on GMM (Fig.2). These findings also support the previous studies from other results such as Fraj *et al.* (2011), Wattanasupachoke & Tanlamai (2010) and Fraj-Andres *et al.* (2009). Developers need to consider the expectations of the stakeholders (government, suppliers, employees, customers and communities) towards the implementation of green marketing strategies. Stakeholders are external forces that shape the company's response to environmental issues.



Fig. 3. Research model

Third, GMM positively influence CA (Fig.2). This empirical evidence supports Miles & Covin (2000) that environmental marketing strategies had significantly impact on the reputation and performance of the company as a whole. Specifically, the results show that GMM has the important role to mediate the effect of EO on CA (Fig. 3). These results contribute to a better understanding that environmental orientation only had significant and positive contribution to enhance competitive advantage if mediated by implementation of green marketing mix strategy comprehensively. Green real estate companies are required to have the ability to develop an adaptive and responsive residential area in the tropical-humid climate in Indonesia. Adaptive means that the house can customize its construction to the environment, while its building will be responsive in addressing the challenges of energy efficient.

### VIII. LIMITATION AND CONCLUSION

This study focused on property industrial operating in single area of Indonesia (East Java Province) may restrict the extent to which its findings may be generalized. Moreover, measurement of assessment for each indicator of environmental orientation, green marketing mix strategy and competitive advantage in this study based on the subjective perception of the manager/owner. So, there's no involvement of the other organization's members such as the staff or field workers. Further studies are needed to cover all stakeholders in order to get more comprehensive assessment. Future studies should also include objective measures such as additional social and environmental performance, which will reinforce the perception of subjective and add more validity to these findings. Another limitation is the object of this research development company focused on real estate developers on single-family residential category. Further studies in the field of green property needs to expand its scope to multiple-family residential real estate (i.e condominiums, apartments), offices, hotels and shops, which contribute greatly to environmental damage or pollution occurs. The results show that the marketing environment at the strategic and tactical levels has positively influence to improving the company's competitive advantage. Implementation of environment-friendly marketing strategies effectively allows companies to maximize their economic results. Using environmentally friendly materials, consideration of environmental aspects in pricing, an attempt to communicate environmental awareness activities, the provision of eco-labels in promotional activities, green location of the resident, environmentally friendly public facilities, the providing information about eco-friendly lifestyles, provision of waste recycling facilities, and require management staff to adopt environmentally friendly cultural values on each activity, not only have an impact on reducing operational costs, but also can improve the quality of the product/service innovation capacity of developer's companies.

The real estate developers implemented environmental oriented marketing strategy may gain, as well as improve, its competitive advantage when operated in a high competition of property businesses. Environmental based competitive advantage would become a unique 'weapon' for developer firms in order to overcome their competitors. The firms would also achieve a prominent reputation as a green image firm in the view of buyers, public, and competitor as well. This study has established empirically grounded relationships among environmental orientation, green marketing mix strategy and competitive advantage, which has not been achieved in environmental management research yet. Due to these findings, it is apparent that a strong adopted environmental orientation into implementation of green marketing mix strategy should improve firm's competitive advantage. Increasing the effectiveness of transformation is the critical values for practitioners, and also represents some promising areas for future research.

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