Linking green marketing with performance: Environmental marketing model for small business

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Abstract. This study aims to enrich sustainability research and practice by reviewing how green marketing as an environmental marketing strategy influences organizational performance in small businesses. This research also studies how the integration of learning orientation in the organization's internal culture determines the influence of green strategies to increase business value. A review of existing literature illustrates how investigations in this area have evolved in recent years, providing an appropriate framework based on prior studies and suggesting future research. This study collected data from 351 small businesses covering all industries located in Indonesia to meet the research aims. The method used to analyse information is modeling the structural equations of cross-sectional survey data with the SMART-PLS software. The findings indicate that green marketing and learning orientation of the small business is an important driver which in turn, has a positive effect on performance. This provides empirical validation that companies that implement environmentally marketing and have the capability as a learning organization have proven to be effective in making a difference to the company's value. Green marketing has more influence on how organizations increase their performance than organizations-learning orientation. Generally, the results support theoretical predictions, and several interesting findings appear.

1. Introduction
The Global environmental problems like climate change make many organizations respond to increased public awareness about it, including changing customer demands, and also green marketing opportunities [1,2] as an organizational strategy related to organization marketing activities [3]. Responding to this awareness, marketing practitioners are designing, introducing, and commercializing green strategies that allow the organization to reach higher grades of efficiency and also to project a good image in the marketplace [4-6]. Several studies undertaken so far have been published which adopted differing approaches [7] and either insignificant [8].

The issue in the research indicates that a proper interaction among organizational learning and environmental management leads to performance; whereas a miss interaction may result the organization has been operational inefficiency [9]. Over the last 20 years, attention to the environmental problem has proliferated [10] via valuable transformations in organizational learning [11] to the environmental change [12] to entice customers, where organizations often experience tremendous difficulty [13]. The fundamental change in organizations in answer to environmental changes by Senge is called organizational learning [14].
The objective of this research is green marketing on small businesses for several reasons. The majority of small businesses driven by regulatory compliance and they have recognized financial benefits [15], and have started to be adopted by small businesses to improve their business capabilities by creating business networks [16]. Marketing performance as part of organization performance lead to the marketing functions effectiveness to fulfill society’s expectations and customers’ requirements [17]. Green services and products have been the primary strategy of the organization driven by customer requirements and competitive pressures [18] and avoid penalties and fines [19], increase productivity and profitability [20].

This can encourage the organization to send signals to customers and stakeholders so that positive perceptions are created [21] and has a positive impact on the performance of the organization [22]. The hypothesis are: Hypothesis 1. green marketing is positively related to organizational performance. Hypothesis 2: learning orientation is positively related to the organization performance; Hypothesis 3: the interaction green marketing and learning orientation positively related to the organization performance.

This research aimed to give knowledge about learning orientation and green marketing relationships on small business performance in the strategic fit framework. There are a number of steps we have taken to achieve our research goals. First, we review the existing literature on green marketing, learning orientation, and organization performance. Second, we hypothesize how green marketing and learning orientation have an impact on small business performance. Third, we examine the hypotheses by data from small Indonesian business empirically. Then, in the end, we discuss the contributions, limitations, and also future research.

2. Research methodology

2.1. Sample and procedures
Small businesses in this study are organizations were encompassed all industry types located in Makassar, the largest city in Sulawesi Island and Eastern Indonesia. Small business defined in the same way as the Central Bureau of Statistics (BPS) and Law No. 20 (2008) about SMEs that is the organization that has 5 - 19 employees and has net worth from 50 million - 500 Million rupiahs (excluding land and building) in Indonesia. Second, 351 small businesses registered in local government were randomly selected, and pre-commitment techniques were used to increase response rates. Before the formal survey, the telephone inquiry was done, and 228 organizations approved to take part in the survey. After erasing incomplete data, at last, there are had 211 organizations that could be used with a response rate of 60.1%. The sampled reflect various industries so the findings were more generalizable. We interviewed one key informant who is familiar with the organizational learning and knowledge about the environmental strategy, or at least the most knowledgeable about their organization as a whole. Moreover, to raise confidence in the data because using just one informant in each sample small business and avoiding potentially biased data, then we do (a) managing the questionnaires (b) privately identifying qualified respondents (c) Verify the instrument validity and reliability.

2.2. Measures
Three main constructs (green marketing, learning orientation, and business performance) in a conceptual model. Green marketing construct was operationalized with the scale used by Leonidou et al [7] with four components, learning orientation was operationalizing with the scale adapted and developed by Falk and Millar [23] with three components, and Organization Performance was operationalized with the scale used by Henseler et al [24] with three components.

2.3. Data analysis approach
The model in this study was tested using the partial least square method of structural equation modeling (PLS-SEM). The use of PLS-SEM for some cause: First, this study uses a Likert scale for perception-based measurement which is an unknown distribution, therefore the PLS-SEM approach is very
appropriate because it does not consider the shape of the distribution of the measured variable, and it is
distribution-free [23]. Second, PLS-SEM was preferable because it assumes that the explication of all
observed measure variance is handy. For further information about the PLS-SEM, see [24].

3. Results and discussion

3.1. Measurement model

Before doing the structural (inner) model tests, the construct reliability and validity were checked. The
reliability of the composite construct surpasses the recommended minimum value of 0.70, so composite
reliability (CR) was confirmed [25]. The standard factor loadings get through the value limit of 0.50,
and the convergent validity was acquired by values of average variance extracted (AVE) [26]. Also, the
Cronbach alpha values were known to be at a good level [27]. Discriminant validity has a satisfactory
level because every construct have to surpass the correlation shared among the construct [25] (Table 1).
The cross-loading analysis result indicates that all items loaded higher than another latent variable in the
model [28]. Therefore, the analysis indicating that all items loaded in this study are clear (Table 2).

3.2. Structural model and test of hypotheses

Table 3 indicates the output of the structural model estimation. A bootstrap resampling method [29] was
used to decide the t-test values. When Table 3 is inspected, it is visible that green marketing (β = 1.031,
t = 11.272), and learning orientation (β = 0.184, t = 2.737), have a positive and significant impact on
performance. In this regard, H1 and H2 are accepted. Organization Performance comprises 89% of the
variation in the model, which means it has a high proportion of variants (R2 = 0.89). Hence, 89% of
changes observed in an organization's performance resulted from their value perceptions. Therefore,
green marketing and learning orientation significantly positively affect performance, and green
marketing has a stronger effect on an organization's performance than learning orientation. The results
of the moderating effect of learning orientation, our estimation showed that learning orientation did not
moderate the relation among green marketing to an organization's performance (β = -0.166, t = 1.287).
Therefore, H3 does not support based on these results. Thus, the interaction between green marketing
and learning orientation does not affect organizational performance.

Table 1. Result of measurement model.

| Construct       | Indicator                  | Path Coefficient | t   | CR   | AVE  | Cronbach | R²   |
|-----------------|----------------------------|------------------|-----|------|------|----------|------|
| Green Marketing | (GM1) Green Product        | 0.781            | 28.562 | 0.806 | 0.512 | 0.677    |      |
|                 | (GM2) Green Pricing        | 0.596            | 10.946 |      |      |          |      |
|                 | (GM3) Green Distribution   | 0.716            | 16.430 |      |      |          |      |
|                 | (GM4) Green Promotion      | 0.756            | 23.520 |      |      |          |      |
| Learning Orientation | (LO1) Commitment to Learning | 0.858       | 20.129 | 0.857 | 0.668 | 0.758    |      |
|                 | (LO2) Shared Vision        | 0.844            | 21.930 |      |      |          |      |
|                 | (LO3) Open Mindedness      | 0.745            | 12.974 |      |      |          |      |
| Performance     | (Perf1) Sales Revenue      | 0.582            | 9.557  | 0.787 | 0.557 | 0.612    | 0.893|
|                 | (Perf2) Market Share       | 0.821            | 36.059 |      |      |          |      |
|                 | (Perf3) Profit             | 0.812            | 25.858 |      |      |          |      |
Table 2. Means, correlation matrix, and discriminant validity assessment.

| Construct                  | Means | SD   | Construct-Level Discriminant Validity (Correlations) |
|----------------------------|-------|------|-----------------------------------------------------|
|                            |       |      | GM | LO | Perf |
| Green Marketing (GM)       | 2.996 | 1.116| 0.716 |     | 0.746 |
| Learning Orientation (LO)  | 3.967 | 0.750| 0.279 | 0.817 |     |
| Performance (Perf.)        | 3.921 | 0.870| 0.640 | 0.354 | 0.746 |

Indicator – Level Discriminant Validity (Cross-Loadings)

| Item   | GM     | LO     | Perf   |
|--------|--------|--------|--------|
| Green Marketing | GM1 | 0.781  | 0.199  | 0.727 |
|          | GM2 | 0.596  | 0.213  | 0.592 |
|          | GM3 | 0.716  | 0.188  | 0.659 |
|          | GM4 | 0.756  | 0.202  | 0.706 |
| Learning Orientation | LO1 | 0.268  | 0.858  | 0.344 |
|          | LO2 | 0.234  | 0.844  | 0.300 |
|          | LO3 | 0.159  | 0.745  | 0.192 |
| Performance | Perf1 | 0.388 | 0.300 | 0.582 |
|          | Perf2 | 0.799 | 0.253 | 0.821 |
|          | Perf3 | 0.811 | 0.278 | 0.812 |

Table 3. Result of structural model.

| Construct                  | Hypothesis | Path Coefficient | t       | Inference |
|----------------------------|------------|------------------|---------|-----------|
| Green Marketing → Performance | H1 | 1.031 | 11.272 | Supported |
| Learning Orientation → Performance | H2 | 0.184 | 2.737 | Supported |
| Green Marketing x Learning Orientation → Performance | H3 | -0.165 | 1.287 | Not Supported |

The research results show that all key effects were significant and positive. Green marketing and learning orientation significantly positively affect an organization's performance. It provides powerful proof of the positive performance effect of green marketing and learning orientation. In other words, these findings show that green marketing and learning orientation is effective in distinguishing the organization's value offerings. It provides empirical validation that organizations are implementing green marketing programs; this is as important as learning orientation that also must be applied by the organization. The learning orientation's main effect is positive and significant. Generally, these perspectives gestate learning orientation effects as influencing an organization's performance directly as was found here. Higher-order learning requires the capability to dump limiting assumptions and beliefs on the external marketing environment, and the capability to test the fresh method to provide fundamental product category advantages [22]. The research results confirming previous research and recommend that learning orientation is the key to driving performance [24].

This research results show that there are direct effects of both green marketing and learning orientation, and moderating effects of two construct not support, the specific character of these effects need to be explained more specifically. It is a significant issue for future research and need specific research to overcome the cause. Moreover, we conjecture that the implemented green marketing associating with the organization performance tends to be imitative if learning orientation is low, like a small business in general. Research that investigates of this subject can increase our knowledge of how green marketing affects a organization performance with various conditions and characteristics of small business.
4. Conclusion
This research found no direct effect of interaction between green marketing and learning orientation on an organization performance. For future studies, more specific research is required to overcome the cause since this is an important issue. Research that investigates this can increase our knowledge of how green marketing affects an organization performance with various conditions and characteristics of small business. There are several limitations that have to consider when construing the results. First, it still allows for potential bias from key informants, because most data are gathered through a single key informant in every organization. Therefore, studies using a multi-informant would be beneficial to confirm the results. Second, the result of the study is based on data from Indonesia only and must-see carefully when generalized to different contexts.

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