



Global Conference on Business and Economics Research (GCBER) 2017
14-15 August 2017, Universiti Putra Malaysia, Malaysia

Modelling the relationship between green marketing strategies and performance outcomes for business sustainability

Zuhairah Hasan^{*a}, Noor Azman Ali^b

^aPutra Business School, University Putra Malaysia, Malaysia

^bFaculty of Economics and Management, University Putra Malaysia, Malaysia

Abstract

This article presents an integrative model on how the commitment of a green industry can give impact to the economic, marketing and environmental performance. The issues become pertinent to the global as it influences the way business practice as it gives detrimental impact to the economy, environment and society. Since many firms are converting to green industry business, the challenge is to ensure the strategy adopted can contribute to the organizational performance. More firms are aligning their activities with the principles of sustainable development. While interest in, and proactive commitment to aligning their business activities to achieve sustainable development, this paper addresses several issues in the green marketing strategies. This article empirically examines on how green marketing strategies influence different dimensions on organizational performance among the ISO 14001 certified firms in Malaysia. This study uses a structured questionnaire derived from the literature and employing a mail survey and distributed to 100 respondents and it reports the empirical results of a survey. The results of testing the hypotheses that predicted that green product, green price, green promotion, green distribution, strategic competency and marketing resources significantly positively affects organizational performance. Management implications to re-orient their marketing strategies are discussed.

Keywords: Green marketing strategy, organizational performance, sustainability

1. INTRODUCTION

Sustainability is one of the most significant current discussion in a modern market and has emerged as an important concept. Based on the review of related literature, it is evident that environmental and sustainability create an urgent attention at almost research discipline such as sustainable marketing (Gordon, Carrigan, & Hastings, 2011), sustainable consumption (Tseng, Chiu, Tan, & Manalang, 2013) and sustainable marketing strategy (Kumar, Rahman, & Kazmi, 2013). Despite many literature discuss on the commitment of the organisation towards sustainability, there is a lack of understanding of how sustainability may be effectively embedded in corporate performance management system (Bocken, Morgan, & Evans, 2013). Concerns have been raised by several researchers in terms of commitment to sustainability. Stoughton & Ludema (2012) reported that the commitment to sustainability is relatively new phenomenon to the organisations. Galpin, Whittington, & Bell (2015) also suggested that firms need systematic approaches to sustainability if they are needed to survive in a long term. Thus, the integrating of sustainability into organisations still appears to be very difficult.

*Corresponding author. Tel.: +6012-3634576
E-mail: zuhairah.phd12@grad.putrabs.edu.my

These days the whole countries are facing the environmental challenges like climate changes, global warming and ozone depletion. Due to the emerging issue of environmental pollution and now has become more serious over the past few years, companies are being encouraged to improve their environmental performance and achieve sustainable development. As countries worldwide become more aware of the importance of environmental protection, adopting a robust environmental management method is a vigorous step for companies that want to gain competitive advantage. Recent developments in green industries, particularly in Malaysia, have heightened the need for effective green marketing strategy. Therefore, due to the challenges of global environmental issues, consumers become concern for environmental protection; hence, the industries responses and emerged as green business by practising green philosophies. Although the abovementioned issue is at the global concerns however, there is a need to study to fulfil the sustainability agenda in Malaysia and the best interest for future generations. Environmental issues have been frequently reported in Malaysian newspapers in recent years. As a result, various guidelines have been introduced by the government to protect the environment and at the same time to promote sustainable development. Various green initiatives are also currently in the pipeline, supported by the government, public and private sectors. The New Economic Model (NEM) which was revealed in 2010 to chart Malaysia's future economic growth puts sustainability as one of the three goals and aspires to place Malaysia as a green hub (Chua & Oh, 2011).

This paper argues that the efforts of the organizations to improve the economic, marketing and environmental performance requires the changes in the marketing strategy, need to be more fully explored. Therefore, this paper will examine the impact of the green marketing strategies on the organizational performance outcomes, and how does it helps the organization to achieve sustainability. In the context of green marketing and this study, the green marketing mix will be referred as green product, green pricing, green promotion and green place/ distribution. The current study also examines the role of strategic competency and marketing resource as part of the green marketing strategies.

This study addresses the issue on green marketing and attempt to provide an insight into the green marketing strategy practices by ISO 14001 Environmental Management System (EMS) Malaysian certified firms. The implementation of ISO 14001 EMS can be an appropriate initial step for those companies planning to move towards environmentally concern. Industry plays an important role in the process of achieving the sustainable development for the business and for the environment. Previous research points at the importance of green marketing is expanding and many companies are embracing new strategies (Dean & Pacheco, 2014). In this line, Psomas, Fotopoulos, & Kafetzopoulos (2011) stated that the firms can enhance their performance and business efficiency by implementing the ISO 14001 EMS. Thus, this study will measure the organizational performance based on the economic, marketing and environmental performance.

Based on the review of extant literature concerning the green marketing mix, strategic management and its related variables, the paper presents are an attempt to pursue the following objectives;

- To propose a framework explaining the linkage between green marketing strategies and organizational performance.
- To investigate whether strategic competency and marketing resources have impact on organizational performance.

Given the growing importance of sustainability commitment by the organisations, this study therefore set out to examines on how green marketing strategies influences different dimensions on organizational performance among the ISO 14001 certified firms in Malaysia. This study motivated by the challenge facing by many marketers to develop and implement marketing strategies that are greener. The main contribution of this work including the different streams in the literature which are green marketing and strategic management. By integrating both area, the model is expected to create synergistic effects on organizational performance. Next, the use of Resource-based view theory and Stakeholder theory as underpinning theory can also enrich a theory that fits best to illustrate the relationship between green marketing strategy and organizational performance. The next sections will review more relevant literature, highlight on the research gap and the conceptual framework and hypotheses are then developed.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Green marketing strategy

Green marketing refers to the processes and activities undertaken by firms that are concerned about the environment problems through lessen the impact on the environment during the process of planning and implementations of products or services, price, place, promotion (Soonthonsmai, 2007; Chamorro & Bañegil, 2006). Green product is defined as are the ones at incorporate recycled content, energy efficient, green innovation and safe to the environment (Pillai & Patil, 2012; Chen, Lai, & Wen, 2006; Kianpour & Jusoh, 2014). Green pricing programs concerns on pricing practices that includes both economic and environmental costs of production

and marketing, while providing value to the customers (Martin & Schouten, 2012). A study by C. N. Leonidou, Katsikeas, & Morgan, (2013) has proven that green pricing directly positively related to the firms return on assets. Green promotion refers to communications designed to inform stakeholders about the firm's efforts and commitment towards environmental preservation which includes green advertising and eco labelling (Peattie & Martin Belz, 2010). Green place/ distribution involves efficient management logistics and the entire supply chain to reduce its impact on the environment. Juwaheer, Pudaruth, & Noyaux (2012) recommended that effective green marketing strategies should capitalize on green branding, packaging, labelling and advertising to create an upsurge on demands. Green marketing now involves a diverse range of issues that have evolved. A study by C. N. Leonidou et al., (2013) revealed that managers can be confident that greening their marketing programs can have a beneficial effect on their firm's future performance.

Building on prior studies, thus the proposed model is believed to be the first to incorporate strategic competency and marketing resources as important drivers in the implementation of green marketing strategies. The involvement of stakeholder plays a significant role in influencing the organizations and markets. As supported by (Rivera-Camino, 2007), based on the Stakeholder Theory a stakeholder may possess power to impose its will in the organisation. Top management commitment and vision and mission of an organisation are two generic competencies used in the current study. Fotopoulos & Psomas (2010) proved that companies' top management is the driver of the quality management system. Thus, identification of strategic competencies will link up to the performance. Richard and Thompson (2005) believes the strategist should view their organisation as portfolios of strategic competencies which need to be continually reviewed, deployed and developed in ways that enhance the organization's position. Furthermore, the use of stakeholder approach to develop green marketing strategies will assist the firms in achieving their objectives (Polonsky, 1995). This study also will include the firms' resources as part of the green marketing strategies. This study posits that firms' resources (physical and resources) as important factors in adopting green initiatives. Resources based-view by (Hart, 1995) emphasizes the firms' resources will result in a more efficient process and/or product or services and improve organizational performance. The Resources based-view theory has a broad selection of strategically relevant resources that can affect the success of a firm. This theory defines firm as a broad collection of resources possessing a heterogeneous resources. The firms with sufficient resources can easily establish dynamic capabilities for responding to changes (Eisenhardt & Martin, 2000). Therefore, this theory best fit to the current study.

2.2 Organizational performance

Empirical studies on the performance measurement are mostly concerned with financial, operational and non-financial performances. To suit with the nature of green marketing strategy, the organizational performance will include environmental performance, marketing performance and economic performance. It relates to the ability manufacturing plant to reduce air emission, disposable waste and the ability to decrease consumption of hazardous and toxic materials (Zhu, Sarkis, & Lai, 2008). Economic performance relates to the manufacturing plants ability to reduce costs associated with purchased materials, energy consumption, waste treatment and financial returns (Zhu et al., 2008). While, marketing also important drivers as it measures the effectiveness of marketing functions to meet customers' requirements (Gonzales & Gonzales, 2005). This paper focused on analysing on how green marketing strategies contribute to optimize different dimensions of organizational performance.

2.3 The research gap and research framework

Environmental issues have been frequently reported that in Malaysia newspaper in recent years. The government realised that environmental conservation plays an integral part in the nations' economy and development. Thus, various green initiatives are also currently in the pipeline. However, in Malaysia, despite the incremental numbers of companies certified for the ISO 14001 EMS, it can be seen that the trend is quite uncertain, as in 2002, there were no companies certified in ISO 14001 EMS, followed by in 2006 a reducing number of companies of 14.55% from 2005, and also a decrease of 1.45% in 2012 (Hasan & Ali, 2015). The statistics infers that the adoption of ISO 14001 EMS among the Malaysian firms is relatively slow. However, it is important to note that, the benefits of implementing ISO 14001 EMS outweigh the difficulties (Peña, Garrido, & López, 2014).

In addition to the global and national issues, the green marketing strategies also affected as it is closely related to the new dimensions of business philosophies. Despite the potential of green product and green marketing strategies, Fraj, Martínez, & Matute (2011) reported green marketing actions have received little attention among firms. Zhu et al. (2008) revealed that manufacturers are still lacking the knowledge, experience and tools to effectively improve their environmental performance from the adoption of green initiatives. This findings also consistent with (Gordon et al., 2011; Gleim, Smith, Andrews, & Cronin, 2013) reported that green marketing has encountered some challenges. Misleading advertisements, false promises, unclear labels, and irregular

performance has increase the confusion among consumers which cause a decreasing number of green products launched. In consequences, it will affect the performance outcome of the organizations. Nyilasy, Gangadharbatla, & Paladino (2013) also added, the consumer scepticism on green product claims has influenced their attitudes towards their green products. The findings is consistent with a previous study by (Royme, Martinez, Oakley, & Fox, 2013) that many customers still view green products claims with scepticism. Green marketing claims must clearly state environmental benefits, ensure comparative differences are justified and use only meaningful terms and pictures. Hence, it is very significant to fulfil the knowledge gap identified and attempt to extend the study by (L. C. Leonidou, Leonidou, Fotiadis, & Zeriti, 2013). With respect to research on greening the marketing mix (L. C. Leonidou et al., 2013) conceptualize green marketing programs as those that are designed to accomplish the firm's strategic goals. This study assumes that the conceptual framework is supported by the underpinning theories of Stakeholder theory and Resource-based view theory. Stakeholder theory and Resource-based view theory explain the factors in the green marketing strategy. In the context of this study a stakeholder may possess power to impose its will on the organisation. Thus, the strategic competence consists of top management and the mission and vision as part of the green marketing strategy is explained by the Stakeholder theory. Based on Resource-based view theory, the marketing resources comprises of physical resources and financial resources is regard as the resource-based view (RBV) of the firm proposes that organizational performance depends on organization specific resources and capabilities. To establish empirical evidence, thus the following hypotheses are developed for this proposed research to be tested.

- H1. Green product positively affects organizational performance*
- H2. Green pricing positively affects organizational performance*
- H3. Green promotion positively affects organizational performance*
- H4. Green distribution positively affects organizational performance*
- H5. Strategic competency positively affects organizational performance*
- H6. Marketing resources positively affects organizational performance*

The next section includes sample and data collection, questionnaire development and data analysis method.

3. RESEARCH METHODOLOGY

In line with this study's main objective of analysing the impact of green marketing strategies on organizational performance, a questionnaire comprising of several sections was developed. The various sections of the questionnaires relate to the green marketing strategies pursued by the firms which consisted green product, green pricing, green promotion, green distribution, strategic competency, marketing resources and its impact on organizational performance. The last part of the questionnaire has focused on the general information of the firms. In this study, the persons' perceptions on green marketing strategies were measured on a seven-point Likert scale (1=strongly disagree to 7=strongly agree) and the range of responses for performance of the organizations was (1=very badly to 5=excellent). Statistically techniques were used to process the data using descriptive and correlation with the statistical programme SPSS 22. The current study is a cross sectional study, using description and hypothesis testing, and the type of investigation is a causal relationship, using questionnaires and in-depth interviews from a few selected ISO 14001 EMS certified firms in Malaysia. The constructs comprise of green marketing strategies and organizational performance. The elements in the green marketing strategies which are green marketing mix, strategic competency, and marketing resources are explained by the Stakeholder theory and Resource-based view theory respectively. The organizational performance consists of environmental performance, marketing performance and economic performance. This research develops a theoretical model with associated hypotheses based on the existing literature with the aim to measure and provide empirical verification of their validity. Therefore, given the focus and the nature of the current research, the quantitative research seems more appropriate.

2.1 Sampling plan

The targeted population of the study includes manufacturing and services sectors located in Malaysia and that have already certified with ISO 14001 EMS, available in the Federation of Malaysian Manufacturers (FMM) directories 2013. The reason for selecting this sector is, ISO 14001 certified firms were selected because they were expected to have embarked on the adoption of green initiatives. The unit analysis of the study is the individual firm and the sampling frame represents all ISO 14001 certified firms in Malaysia. This study seeks information on green marketing strategies pursued by the firms, and organizational performance as an outcome; hence the target respondents must be knowledgeable in respective areas. To increase the validity survey response rate, each company will be contacted earlier, to explain the objectives of the study and the content of the questionnaires. All the questionnaires were given in self-addressed and self-stamped envelopes to facilitate the respondents for

returning the questionnaires by mail. Altogether, 100 responses were received, either through mail or through self-pickup, yielding a response rate of 100%. Continue from this, the descriptive analysis, findings and implications are discussed. More specifically, this study adopted quantitative approach and the cross-sectional survey strategy to test the theoretical model and associated hypotheses developed in this study. Given the aim of conducting tests of statistical significance and making inferences about the population, probability sampling is used in this study. Stratified random sampling will be used as this method. Roscoe's rule (1975) of thumb determined that the sample size suggested that samples within the limit 30 to 500 are adequate for most research (Sekaran, 2006). Meanwhile, based on the Krejcie and Morgan (1970) table for determining the sample size for a known target sample consisting all ISO 14001 EMS 4001 EMS certified firms in Malaysia, where N=2600, the right sample size is approximately about 335 firms. Therefore, a sample of 335 firms should be chosen from the sampling frame.

4. EMPIRICAL FINDINGS

4.1 Section A: Profile of sample firms and respondents

The result showed that most of the firms participated in the surveys were in electricals and electronics (50%). Followed by 26% of respondents from other industries which include latex industry, timber industry and packaging industry. Meanwhile, there were 15% of the respondents from food and consumer product manufacturing, 6% from chemical and another 4% were from transport equipment and automotive industry. The result also showed that the respondents that participate in this study were from IT and telecommunication industry at 3%. Otherwise, the lowest respondents were from plant, machinery and utilities industry and business and services industry which have a percentage of 2%. The survey also revealed the quality initiatives being deployed in respondents' organization. The result showed that the highest quality initiatives deployed was ISO 14001:2004 Environmental Management System at 100% which clearly indicates the significance and high level of awareness amongst firms in Malaysia. Followed by 80% of the firms with ISO 9001 Quality Management System, 69% of the firms also deployed the 5S Programme and 62% under OSH Programme. In addition, the result showed that some organizations deployed Total Quality Management (TQM) with the percentage of 34% and other quality initiatives which include OHSAS 18001 Health and Safety Management System, ISO 27001 Information Security Management, Halal and Kosher with the percentage of 12%. Meanwhile, the fewest quality initiatives being deployed were Eco-Labeling at 11%. Another important characteristic of firms which significance to highlight in this study is the reasons of the firms adopted the ISO 14001 EMS. Based on the range of responses (1=strongly disagree to 5= strongly agree), the highest mean score was 4.36 which indicates that most of firms agreed that the main reason of deploying the ISO 14001 EMS is to satisfy the customers' trend. Followed by 4.35 mean score by which, the firms need to comply with the regulations. The firms also agree with reasons is bases on the voluntarily (mean score of 4.17). The lowest mean score is 3.64, which indicates some respondents agree on the reason which firms adopted the ISO 14001 EMS due to competition pressure. Therefore, the total mean score for ISO 14001 EMS adoption was 4.1300.

4.2 Section B: Descriptive Statistical Analysis

Table 1: Cronbach's alpha, mean and standard deviation of major variables.

Variables	Number of items	Cronbach's alpha	Mean	Standard Deviation
Green product	5	0.801	5.86	0.75
Green pricing	5	0.853	5.20	0.92
Green promotion	5	0.943	5.64	0.89
Green distribution	5	0.879	5.58	0.80
Strategic competency	4	0.890	6.08	0.70
Marketing resources	4	0.917	5.52	0.83
Environmental performance	5	0.845	4.08	0.51
Economic performance	5	0.902	3.80	0.62
Marketing performance	5	0.890	4.04	0.55

4.3 Internal consistency of the questionnaire

Reliability is conducted in this study to ensure that the measures of variables have internal consistency (Sekaran, 2003). Reliability is measured in this study using the Cronbach's alpha coefficient. Table 1 provides the values of Cronbach's alpha for all the variables. It appears from the table that the values of Cronbach's alpha range between 0.801 and 0.943. According to Nunally (1978) a coefficient of <0.7 indicates marginal to low internal consistency and a value of 0.70 or more indicates satisfactory internal consistency reliability. These values exceed the minimum values which indicates that the questionnaire is a good indicator of what the researcher wants to investigate. Taking into consideration that the scale used for green marketing strategies is 1-7 (with 4 is the middle point), the table shows that the most adopted green marketing strategies pursued by the ISO 14001 certified firms

in Malaysia is strategic competency (mean=6.08, standard deviation= 0.70), followed by green product (mean=5.86, standard deviation=0.75), and the lowest green marketing strategies practiced is green pricing (mean=5.20, standard deviation= 0.92). This means that, on average, the Malaysian firms focus more on the strategic competency aspects (top management commitment and vision and mission of the organization) as a new contribution factors that influence the performance outcome. On the other hand, green pricing strategies is the lowest attention given by the Malaysian firms. From Table 1 also, it can be concluded that environmental performance is the highest values (mean=4.08, standard deviation= 0.51) and closely followed by marketing performance (mean=4.04, standard deviation= 0.55), and lastly economic performance (mean=3.80, standard deviation= 0.62). The result indicates that, on average, Malaysian firms gain high level of increase in environmental outcomes and moderate on economic outcomes. Note that, the scale used for performance measurement is 1-5. The available empirical evidence suggests that green marketing strategies are associated with environmental performance (significant reduction of disposable waste, polluted air emissions, consumption of hazardous materials, and energy consumption), economic performance (improve in profitability, production efficiency, market share, sales growth) and marketing performance (improvement of corporate reputation, brand image, customer satisfaction and loyalty).

4.4 Multiple regression analysis

From Table 2, result of this study showed less than 0.05 of significant level for green promotion (0.011) and marketing resources (0.000), which indicates there is a relationship between green promotion and marketing resources on environmental performance in this study. There is a relationship between green pricing (0.000), green promotion (0.037) and strategic competency (0.000) on economic performance. Finally, multiple regression analysis showed factors that less than 0.05 significant level for green product (0.056), strategic competency (0.067) and marketing resources (0.030). This indicates there are was an influence of green product, strategic competency and marketing on marketing performance. Beta coefficient for green product (0.149) showed that one unit of increase in green product will increase the marketing performance by 0.149. Thus, it can be concluded that all variables have a significant and positive relationship with organizational performance. This findings coherent with research by (Baker & Sinkula, 2005) that green marketing strategies leads to improve the firms profitability. Firms that developed certain valuable resources will be more likely achieve a superior performance. The next section will detail the hypotheses that are developed to be tested for this research.

Table 2: Multiple regressions

Variables	Environmental performance		Economic performance		Marketing performance	
	Beta	Sig	Beta	Sig	Beta	Sig
Green product	0.217	0.085	0.116	0.116	0.149	0.056
Green pricing	0.084	0.165	0.354	0.000	0.094	0.142
Green promotion	-0.190	0.011	-0.155	0.037	0.098	0.208
Green distribution	-0.139	0.062	-0.040	0.592	0.041	0.596
Strategic competency	-0.041	0.634	-0.034	0.000	-0.169	0.067
Marketing resources	0.374	0.000	0.042	0.667	0.010	0.923
R ²	0.444		0.623		0.464	
F-value	9.074		18.817		9.836	

* p<0.05

** p<0

4.5 Hypothesis testing

Survey findings demonstrate a positive relationship between green product and organizational performance (r=0.443, p=0.00). The result is similar to the previous study stated that green product innovation had a significant and positive relationship with organizational performance (R. Lin, Tan, & Geng, 2013). The researchers supported that the firm will able to improve their market position, affirm their brand name, creates a breakthrough and attract new customers when they have a good product innovation. Therefore, the green product strategy may help the firm in order to enhance the organizational performance and achieve their business target (R. Lin et al., 2013). Hence, hypothesis H1 (*green products positively affects organizational performance*) was supported. Empirical survey findings have proved that there is a positive relationship between green pricing and organizational performance (r=0.513, p=0.00) as suggested by (Eneizan, Abd Wahab, & Bustaman, 2015) green pricing practices consider both economic and environmental costs of production and marketing and at the same time the firm must simultaneously providing value for customer. Hence, H2 (*green pricing positively affects organizational performance*) was supported. In this respect, marketers should ensure the green pricing strategy is reasonable and justified effectively in order to encourage customers towards greener purchasing patterns. The present study has established a positive correlation between green promotion and organizational performance (r=0.410, p=0.00) as

suggested by (Eneizan et al., 2015) that green promotion positively and significantly related to the organizational performance. Green promotion programmes may effectively inform their customers regarding their environmental preservation efforts, commitment and achievement and to reduce the detrimental environmental effects. Hence, H3 (*green promotion positively affects organizational performance*) was supported. Findings also demonstrate a positive relationship between green distribution and organizational performance ($r=0.308$, $p=0.00$). The results is similar to study by Eneizan et al., (2015) reported that green distribution can be used to monitor and improve environmental performance. The study added there are two tactical initiatives that the firms can take to pursue the green distribution program by working with channel partners to develop product re-use or disposal arrangements and ensuring that customers are able to return recyclable materials. Hence, H4 (*green distribution positively affects organizational performance*) should be accepted. The presents survey finding also demonstrate a weak but positive relationship between strategic competency and organizational performance ($r=0.224$, $p=0.00$). Hence, H5 (*strategic competency positively affects organizational performance*) was supported. Based on the survey findings, marketing resources was found to have a significant, positive and moderate relationship ($r=0.632$, $p=0.00$) with organizational performance. Hence, H6 (*marketing resources positively affects organizational performance*) was supported.

5. MANAGERIAL IMPLICATIONS AND RECOMMENDATIONS

This paper has highlighted various aspects of green marketing strategies practiced by ISO 14001 EMS certified firms in Malaysia and shown that organizational performance can be influenced by the effective green marketing strategies. Six determinant factors were addresses (green product, green pricing, green promotion, green place/distribution, strategic competency and marketing resources). Six hypotheses were tested, all the hypotheses were supported in this study. Some major implications concerning green marketing strategies in Malaysia can be drawn from the findings of the present research. In order for the firms to gain the better competitive advantage and achieve success, the firms should govern the implementation of strategies taken by the organization. The monitoring process will ensure the effectiveness of the green marketing strategies, hence enhance the outcome of the organizations. Therefore, managers should put some efforts on quality initiatives monitoring. In this vein, Siddiquee & Mohammad (2007) reported the need to monitoring or controlling of quality management practiced and performance of quality initiatives is significant in ensuring their success. The study recognise that green marketing must be a fully integrated part of firms' strategic marketing plan. Many other companies have failed to gain from green marketing efforts mainly because of lack of commitment and environmental policies not fully integrated into overall planning process. Unlike the previous study, by consolidating the perspective of marketing and strategic management, the model is expected to create synergistic effects of green marketing strategy on the organizational performance. This study is expected to disclose the green marketing strategy as an important factor required to implement the EMS. Thus, it can advance the manager's understanding and expedite in green marketing seriously.

6. CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

In this respect, further research is clearly needed to enhance the effectiveness of green marketing strategies practices in Malaysia. Research should extend on monitoring and controlling the quality initiatives to achieve competitive advantage. It is highly recommended that marketers capitalize on green branding, packaging, labelling and advertising to create upsurge the demand of green products in Malaysia. Future studies could focus on specific industry for instance service industry in Malaysia to provide additional evidence to support existing findings relating to the impacts of green marketing strategies on organizational performance. Considering the rapid and accelerating growth of the green products worldwide, the marketers must seize this opportunity to identify the best green marketing strategy in winning the consumers' needs and wants.

7. LIMITATIONS OF THE RESEARCH

The present study has analysed the impact of green marketing strategies on organizational performance practiced by ISO 14001 EMS certified firms in Malaysia. The study has some potential limitations as focus was only on 100 firms which listed in the FMM directories. The findings need to be further validated as the empirical results have provided a general investigation.

REFERENCES

- Baker, W. E., & Sinkula, J. M. (2005). Environmental Marketing Strategy and Firm Performance: Effects on New Product Performance and Market Share. *Journal of the Academy of Marketing Science*, 33(4), 461–475. <http://doi.org/10.1177/0092070305276119>
- Bocken, N., Morgan, D., & Evans, S. (2013). Understanding environmental performance variation in manufacturing companies. *International Journal of Productivity and Performance Management*, 62(8), 856–870. <http://doi.org/10.1108/IJPPM-03-2013-0042>

- Chamorro, A., & Bañegil, T. M. (2006). Green Marketing Philosophy : A Study of Spanish Firms with Ecolabels. *Corporate Social Responsibility and Environmental Management*, 13, 11–24. <http://doi.org/10.1002/csr>
- Chen, Y., Lai, S., & Wen, C. (2006). The Influence of Green Innovation Performance on Corporate Advantage in Taiwan. *Journal of Business Ethics*, 67, 331–339. <http://doi.org/10.1007/s10551-006-9025-5>
- Chua, S. C., & Oh, T. H. (2011). Green progress and prospect in Malaysia. *Renewable and Sustainable Energy Reviews*, 15(6), 2850–2861. <http://doi.org/10.1016/j.rser.2011.03.008>
- Dean, T. J., & Pacheco, D. F. (2014). Green marketing : a strategic balancing act for creating value. *Journal of Business Strategy*, 35(5), 14–22. <http://doi.org/10.1108/JBS-11-2013-0109>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21, 1105–1121.
- Eneizan, B. M., Abd Wahab, K., & Bustaman, U. S. A. (2015). Effects of green marketing strategy 4ps on firm performance. *International Journal of Applied Research*, 1(12), 821–824.
- Fotopoulos, C. V., & Psomas, E. L. (2010). The structural relationships between TQM factors and organizational performance. *The TQM Journal*, 22(5), 539–552. <http://doi.org/10.1108/17542731011072874>
- Fraj, E., Martínez, E., & Matute, J. (2011). Green marketing strategy and the firm's performance : the moderating role of environmental culture. *Journal of Strategic Marketing*, 19(4), 339–355. <http://doi.org/10.1080/0965254X.2011.581382>
- Galpin, T., Whittington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance*, 15(1), 1–17. <http://doi.org/10.1108/CG-01-2013-0004>
- Gleim, M. R., Smith, J. S., Andrews, D., & Cronin, J. J. (2013). Against the Green: A Multi-method Examination of the Barriers to Green Consumption. *Journal of Retailing*, 89(1), 44–61. <http://doi.org/10.1016/j.jretai.2012.10.001>
- Gordon, R., Carrigan, M., & Hastings, G. (2011). A framework for sustainable marketing. *Marketing Theory*, 11(2), 143–163. <http://doi.org/10.1177/1470593111403218>
- Hasan, Z., & Ali, N. A. (2015). The impact of green marketing strategy on the firm's performance in Malaysia. *Procedia - Social and Behavioral Sciences*, 172, 463–470. <http://doi.org/10.1016/j.sbspro.2015.01.382>
- Juwaheer, T. D., Pudaruth, S., & Noyaux, M. M. E. (2012). Analysing the impact of green marketing strategies on consumer purchasing patterns in Mauritius. *World Journal of Entrepreneurship, Management and Sustainable Development*, 8(1), 36–59. <http://doi.org/10.1108/20425961211221615>
- Kianpour, K., & Jusoh, A. (2014). Environmentally friendly as a new dimension of product quality Accordingly , this research tries to answer the following question : Does environmentally friendly have enough potential to be one of products. *International Journal of Quality & Reliability Management*, 31(5), 547–565. <http://doi.org/10.1108/IJQRM-06-2012-0079>
- Kumar, V., Rahman, Z., & Kazmi, A. A. (2013). Sustainability Marketing Strategy : <http://doi.org/10.1177/0972150913501598>
- Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). “Greening” the marketing mix: do firms do it and does it pay off? *Journal of the Academy of Marketing Science*, 41, 151–170. <http://doi.org/10.1007/s11747-012-0317-2>
- Leonidou, L. C., Leonidou, C. N., Fotiadis, T. A., & Zeriti, A. (2013). Resources and capabilities as drivers of hotel environmental marketing strategy : Implications for competitive advantage and performance. *Tourism Management*, 35, 94–110. <http://doi.org/10.1016/j.tourman.2012.06.003>
- Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2013). Perceived Greenwashing : The Interactive Effects of Green Advertising and Corporate Environmental Performance on Consumer Reactions. *Journal of Business Ethics*. <http://doi.org/10.1007/s10551-013-1944-3>
- Peattie, K., & Martin Belz, F. (2010). *Sustainability Marketing – An Innovative Conception of Marketing*. *Marketing Review*.
- Peña, M. L. M., Garrido, E. D., & López, J. M. S. (2014). Analysis of benefits and difficulties associated with firms' Environmental Management Systems: the case of the Spanish automotive industry. *Journal of Cleaner Production*, 1–11. <http://doi.org/10.1016/j.jclepro.2014.01.085>
- Pillai, B. S., & Patil, K. P. (2012). Green marketing. *International Journal of Research in Commerce and Management*, 3(7), 64–75.
- Polonsky, M. J. (1995). A stakeholder theory approach to designing environmental marketing strategy. *Journal of Business and Industrial Marketing*, 10(3), 29–46.
- Psomas, E. L., Fotopoulos, C. V., & Kafetzopoulos, D. P. (2011). Motives , difficulties and benefits in implementing the ISO 14001 Environmental Management System. *Management of Environmental Quality: An International Journal*, 22(4), 502–521. <http://doi.org/10.1108/14777831111136090>
- Rivera-Camino, J. (2007). Re-evaluating green marketing strategy : a stakeholder perspective. *European Journal of Marketing*, 41(11), 1328–1358. <http://doi.org/10.1108/03090560710821206>
- Royne, M. B., Martinez, J., Oakley, J., & Fox, A. K. (2013). The Effectiveness of Benefit Type and Price Endings in Green Advertising. *Journal of Advertising*, 41(4), 85–102. <http://doi.org/10.1080/00913367.2012.10672459>
- Stoughton, A. M., & Ludema, J. (2012). The driving forces of sustainability. *Journal of Organizational Change Management*, 25(4), 501–517. <http://doi.org/10.1108/09534811211239191>
- Tseng, M.-L., Chiu, (Anthony) Shun Fung, Tan, R. R., & Manalang, A. B. S. (2013). Sustainable consumption and production for Asia: sustainability through green design and practice. *Journal of Cleaner Production*, 40, 1–5. <http://doi.org/10.1016/j.jclepro.2012.07.015>
- Zhu, Q., Sarkis, J., & Lai, K. (2008). Confirmation of a measurement model for green supply chain management practices implementation. *International Journal of Production Economics*, 111, 261–273. <http://doi.org/10.1016/j.ijpe.2006.11.029>