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Investigating Green Marketing Orientation Practices among Green Small and Medium Enterprises*

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Abstract

This study aims to establish the relationship between the Green Marketing Orientation (GMO) variables and the performance of Green Small and Medium Enterprises (GSMEs) across the building and energy sectors in Malaysia, using customer satisfaction as a means of performance measurement. The GMO variables examined include Greening the Process (GTP), Green Supply Chain Management (GSCM), Green Strategic Policy Initiatives (GSPI), Proactive Energy Conservation (PEC) and Green Promotion (GP). The items used to measure these variables were extracted from literature and adapted to the context of the variables based on feedback from Focus Group Discussions and Expert Opinion sessions. This study employs a survey sample of 300 respondents but only 238 completed questionnaires were returned. The results reveal that GTP, GSCM and PEC have a positive impact on Customer Satisfaction but not GSPI and GP. The findings suggest that owners or managers of GSMEs should focus on maintaining and improving GTP, GSCM and PEC in order to create greater satisfaction among their customers. The significance of this study is that it enables the creation of a framework that enables GSMEs to design a pathway towards achieving a cleaner production of goods and services in line with United Nations Sustainable Development Goals.

Keywords: Green Marketing Orientation, Customer Satisfaction, Green Small and Medium Enterprises, Building and Energy Sectors

JEL Classification Code: M31, Q01, P28

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1. Introduction

Green marketing has gathered impetus, in the main, largely due to a shift in the attitudes and behaviour of consumers. It is currently a global phenomenon which is believed to bring positive values to the society (Bathmathan & Rajadurai, 2019) by embracing all activities connected to product modification, production processes and packaging, as well as producing advertising campaigns that are environmentally friendly. Green marketing is a process that accelerates organizational growth with the least negative impact on the natural environment. Society today is closely linked with its environmental practices. As we become more concerned about the natural environment, commercial enterprises have begun to adapt and adjust their behaviour in an effort to accommodate new societal concerns. Contemporary businesses have started to adapt their practices to address the community's fears for the natural environment. With society's close relationship with the environment and its calls to ensure minimal harm to the environment, businesses have been compelled to make sure that their practices meet the community's environmental expectations (Bathmanathan, Rajadurai, & Sohail, 2018).

Some businesses have quickly taken on board projects such as environmental management systems and waste minimization, and have incorporated environmental and waste management issues into all organizational activities. However, over the past ten years or so, there have been increasing concerns about the exploitation of natural resources, environmental damage, decreasing biodiversity, and accelerating climate change (Mishra et al., 2019; Zahari & Esa, 2018). These concerns and the discussions surrounding environmental sustainability have led to a large body of research exploring and predicting their impact, and the reactions of large and listed companies to environmental concerns (Amegbe et al., 2017). The response, however, has not been the same for SMEs. The reputation and image of large corporations are two elements that researchers believe sets apart SMEs from large corporations and thus helps to explain differences in their environmental practices (Cambra-Fierro et al., 2008; Williamson et al., 2006). The existence of such differences suggests that it is imprudent to simply scale down the practices prescribed for large corporations to fit the SME context (Brammer et al., 2012).

2. Literature Review

2.1. Small and Medium Enterprises

Small and Medium Enterprises (SMEs) are considered to be country specific and defined by the geographic regions and the economic settings of a nation. In Malaysia, the definition of Malaysian SMEs refers to sales turnover (RM) and the number of full-time employees (see Table 1). A similar definition also applies to Green Small and Medium Enterprises (GSMEs). There are two main sectors of GSMEs: product-based and services-based. According to the MyHIJAU Directory (2019), both sectors of GSMEs can be divided into 14 types of business activities: additives, alternative fuels, automotive products, automotive services, building and landscape management, building materials, cleaning products, cleaning services, furniture, garden and landscaping, home and lifestyle, office and stationery, office equipment and product, equipment and system (See Table 1).

2.2. Building and Energy Sectors

Driven by a concern for environmental degradation and national energy security policies, the green energy and green building sectors in Malaysia are crucial because these sectors are considered as two of the most important driving forces for national development. For instance, focusing on the green energy sector will also help the government achieve the Renewable Energy Transition Roadmap (RETR) 2035 in which the green energy producers would play a bigger role in achieving the first pillar of RETR, namely environmental targets and policies. Within this pillar, the green energy and green building sectors could contribute to the reduction of greenhouse or other pollutant emissions, the designing of energy efficiency buildings, and an increase in renewable energy in the national power mix to 20% by 2025. Importantly, the growing number of participants in the renewable energy sectors could generate tax revenue of RM1.76 billion for the government and the creation of 52,000 job opportunities in 2020 (Abdullah et al., 2019). Similarly, in 2010, Malaysia considered the green building industry as one of the main drivers of the nation's development and, since then, the government has actively promoted various policies such as the Green Building Index and green building concepts to ensure the availability of quality and affordable houses for all Malaysians (Shafiei et al., 2017).

2.3. Green Marketing Performance

The literature concerning Green Marketing Performance (GMP), views it as the consequence of green marketing strategies and green marketing activities. Organizations engaged in green practices benefit from multiple performance consequences. Researchers have used marketing performance to gauge an organization's performance which includes improved market position, its brand name, zero customer complaints, and customer satisfaction (Hasan & Ali, 2015; Kushwaha & Sharma, 2016). There are researchers who chose to look at economic performance in terms of financial gains, increased investment, cost savings, increased sales volume, increased profitability and risk reduction (Kushwaha & Sharma, 2016; Leonidou et al., 2013).

Table 1: SME definition

Category	Micro	Small	Medium
	Sales turnover:	Sales turnover: RM300k	Sales turnover: RM15 mil
Manufacturing	<rm300k or<="" td=""><td><rm15 mil="" oremployees:<="" td=""><td>≤ RM50 mil or</td></rm15></td></rm300k>	<rm15 mil="" oremployees:<="" td=""><td>≤ RM50 mil or</td></rm15>	≤ RM50 mil or
	Employees: <5	From 5 to < 75	Employees: From 75 to ≤ 200
	Sales turnover:	Sales turnover: RM300k <rm3< td=""><td>Sales turnover: RM3 mil ≤</td></rm3<>	Sales turnover: RM3 mil ≤
Services and other sectors	<rm300k or<="" td=""><td>mil or Employees: From 5 to</td><td>RM20 mil or</td></rm300k>	mil or Employees: From 5 to	RM20 mil or
	Employees: <5	<30	Employees: From 30 to ≤ 75

Source: http://www.smecorp.gov.my/index.php/en/policies/2015-12-21-09-09-49/sme-definition

Human resource performance in the form of employee commitment, employee retention and employee satisfaction is another way of assessing the performance of an organization (Njoki & Susan, 2014). Finally, organizational performance in terms of service quality, innovation, attracting partners to form strategic alliances, credibility, improved public relations and increased capabilities have also been used by several scholars to measure performance (Ozanne & LeCren, 2011).

Despite the various alternatives available to gauge the GMP, customer satisfaction is seen as one of the many dimensions used by researchers to assess the performance of companies. The use of customer satisfaction as a means of reflecting GMP is very popular and is showing a growing trend in the literature (Hasan & Ali, 2015). In this context, the literature over the years has used employees' assistance to customers, the offering of quality products, information adequacy, product delivery and accommodating customer preferences as items to measure Customer Satisfaction (Amegbe et al., 2017; Chahal et al., 2014). Given this trend, this study used Customer Satisfaction as a means of exploring the performance of GSME in Malaysia.

2.4. Green Marketing Orientation

The relationship between marketing discipline and the natural environment is highly significant because organizations consider it to be a relationship that can be employed to achieve their aims (Cherian & Jacob, 2012). This association has been described in such terms as environmental marketing, green marketing (Mishra & Sharma, 2010), sustainable marketing (Fuller, 1999), and greener marketing (Handayani, 2017). Green marketing has become an important strategy for firms to not only survive in the market, but bring about a competitive advantage. Leonidou et al. (2013) state that when a firm is striving to meet its goals, there are a variety of opportunities they can take on board, including green strategies to meet the needs of their diverse stakeholder groups.

The functional level of green marketing strategies has been emphasized and explored in recent studies. The term green marketing appears in managerially focused studies due to its potential to provide benefits to both the commercial and the environmental sectors (Papadas et al., 2017). Fundamentally, green marketing attempts to address the lack of fit between current marketing practices, and the ecological and social realities of the wider marketing environment (Peattie & Belz, 2010). Although there are many green marketing definitions, most of them suggest that the firm's consumers' and society's needs must be met in a profitable and sustainable way, and should be compatible with the natural environment and eco-systems (Papadas et al., 2017). Green Marketing Orientation (GMO) is a multidimensional variable. The precise combination of dimensions can differ from one industry to another and from one geographic

location to another (Chahal et al., 2014). There are several dimensions of GMO that have been examined and discussed in the literature, and the following dimensions cited in the literature fall within the domain of GMO.

2.4.1. Greening the Process

Greening the Process (GTP) involves short-term actions that change the traditional marketing mix into one which is greener. In relation to GTP, the literature sets out the need to pursue environmental actions (Dangelico & Vocalelli, 2017). This dimension includes product-related decisions to lessen environmental degradation (Rajadurai et al., 2018), introduce promotional tools that decrease the negative environmental impact of the firm's marketing communications and promote the products' environmental benefits, actions to improve environmental performance in the supply chain (Zhu & Sarkis, 2004) and changes to pricing policies for green products (Kumar et al., 2013). GSMEs are also encouraged to support government initiatives intended to preserve the natural environment through the use of ecological materials for primary packaging and less polluting transportation methods (Economic Planning Unit, 2016). Such tactics offer flexibility for firms wanting to protect and benefit the natural environment.

GTP can be categorized as the process of implementing green product design innovations and green product-offering innovations (Chahal et al., 2014). Both these forms of innovation place an emphasis on the firm's internal processes and practices in relation to environmental concerns. Green product design innovations relate to product-related environmental benefits such as lower resource consumption and the removal of harmful ingredients (Luthra, Garg, & Haleem, 2014). It is believed that the development of new products or services signals to stakeholders that the organization is one that is green. In this case, the initiatives are more focused on GTP in relation to its environmental practices, including the production methods of its products and services. Green product-offering innovations focuses on the benefits which are not directly related to the products such as providing incentives when consumers embark upon product recovery activities (Kumar, 2016). Instead, product-offering innovations focuses on the monetary and non-monetary incentives, which ostensibly involve service industries such as education, hospitality, healthcare, finance, and telecommunication (Chan, 2013). According to the author, these innovations are measured based on their success and the impact on firm performance (Ozanne & LeCren, 2011). Other studies have linked green innovation to the marketability and the overall performance of a company (Chahal et al., 2014; Dangelico & Vocalelli, 2017; Ottman, 2011). Given the points raised in the literature, the following hypothesis has been created:

H1: GTP has a positive and significant influence on Customer Satisfaction of GSMEs in Malaysia.

2.4.2. Green Supply Chain Management

Green Supply Chain Management (GSCM) is considered as a form of integration of the supply chain and environmental concerns within the scope of inter-organizational activities (Brindley & Oxborrow, 2014). Srivastava (2007) describes it as integrating environmental thinking into supply chain management including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumers and the end of life management of the product when it has passed its use-by-date. GSCM also requires integrated marketing to strengthen its competitiveness and ensure effective delivery (Brindley & Oxborrow, 2014). GSCM practices can be listed as energy efficiency, the lessening of greenhouse gases emissions, water conservation and/or processing products, packaging that can be re-cycled, and other green procurement practices.

The literature on GSCM encompasses issues pertaining to ISO certification and the pursuance of environmental management systems which focusses on maintaining production and/or operation systems that do less harm to the environment (Lee & Lim, 2020; Do et al., 2020). This, according to the literature, can be gained through GSME owner commitment to ensure the whole enterprise pursues recyclable and reusable approaches in their production and/ or operations (Chahal et al., 2014; Luthra et al., 2014). Currently, firms have begun to promote and integrate environmentally friendly practices into their lean supply chain operations. Lean processes influence environmental sustainability by virtue of the adoption of environmental management practices, the reduction of waste across the supply chain and improved social sustainability (Govindan et al., 2015). Spear and Bowen (1999) reported that the success of lean implementation relies on the systematic application of scientific approaches and principles to every day organizational activities. The current literature is ostensibly biased towards analyzing the core driving principles of lean practices (Wee & Wu, 2009) with very little linkage to GSCM to GSME performance. In order to address this gap in the literature, this study investigated if GSCM contributed to GSME performance by testing the hypothesis below:

H2: GSCM has a positive and significant influence on Customer Satisfaction of GSMEs in Malaysia.

2.4.3. Green Strategic Policy Initiatives

Green Strategic Policy Initiatives (GSPI) require a firm to put into place a formalized structure to ensure that the firm abides by environmental policies, established by the government, in all its business dealings and strategies and ensure that it operates its business in a sustainable manner. Hutchinson (1996) in his study has suggested a framework that incorporates environmental policies with business strategies. The author also confirms that by incorporating these two, firms can use the outcome to strategically design their roadmap. However, in another study, (Menon & Menon, 1997) linked the environmental causes with social performance objectives and marketing and called it enviropreneurial marketing. Enviropreneurial marketing decisions create long-term, corporate-wide activities for environmental sustainability (Charter & Polonsky, 1999). This has been attained by melding environmental goals and interests with the strategic aim of achieving competitive advantage for today's companies and markets (Saifullah et al., 2017).

GSPI can also be viewed in the context of developing a marketing mix of (and for) a new product such as a product strategy that relates to the strategy of the product and process design (Dubey et al., 2017). This line of thinking entails initiating a company-wide policy to use environment friendly materials when undertaking product improvement or product redesigning initiatives (Chen et al., 2018; Yacob et al., 2019). This concept is also linked to environmental strategy patterns dominated by volunteerism and pollution prevention rather than waste reduction (Buysse & Verbeke, 2003). As highlighted by (Chen et al., 2018), the GSPI has a positive relationship with the performance of green companies, especially among companies in Europe, Canada, USA, Japan, China and Hong Kong. Another study conducted by (Ngniatedema & Li, 2000) also prove that the performance of GSMEs is influenced by GSPI. Li et al. (2017) revealed that GSMEs in the US have found a positive relationship between GSPI and the performance of GSMEs. Similar results have also been found in the past studies (Papadas et al., 2017; Yacob et al., 2019). Given the arguments raised in the literature, a hypothesis can be created as follows:

H3: GSPI has a positive and significant influence on Customer Satisfaction of GSMEs in Malaysia.

2.4.4. Proactive Energy Conservation

Proactive Energy Conservation (PEC) is understood to be an active energy-related innovation to jump-start new practices or products ahead of competitors in order to lower costs, seize opportunities, become a market leader, and/or obtain a competitive advantage (Giama & Papadopoulos, 2018; Yacob et al., 2019). Being proactive is an important element of entrepreneurship, in order to highlight that a company with proactive strategies employs effective preemptive measures or institutes new products to become a leader in the market. Proactive actions of GSMEs in the energy conservation sector include low energy consumption behaviours, using recyclable materials and insisting on suppliers providing evidence of certification of green product testing conformance when purchasing their products (Giama & Papadopoulos, 2018).

In tandem with the growing importance of social environmental awareness, profit focused enterprises must also consider introducing environmental sustainability into their environmental management policies. GSMEs that project a balanced attitude when doing business, i.e. a blend of profit seeking and environmental concerns, tend to be viewed in a positive light by the community in which they operate (Giama & Papadopoulos, 2018; Yacob et al., 2019). This positive perception is known to strengthen a GSME's image, making these GSMEs the preferred choice of new or prospective consumers (Bathmanathan & Rajadurai, 2019).

Studies have found consumers to have a positive relationship with proactive corporate citizenship and customer loyalty (Maignan et al., 2005). The presence of customer loyalty will increase a GSME's repeat buys and thus contribute to increased sales. However, sales can be negatively affected if customers believe that pro-social and environmental claims are exaggerated or untrue (Ottman, 2011). A study by (Giama & Papadopoulos, 2018) shows a positive relationship between PEC and performance in 93 Greek GSMEs. Findings of (Ceptureanu et al., 2018) also confirm that 221 owners of Romanian SMEs showed a positive relationship between PEC and the performance of GSMEs. Similar results have also been found in a study conducted by (Yacob et al., 2019; Zhang & Walton, 2017). Given the arguments raised in the literature, a hypothesis can be created as follows:

H4: PEC has a positive and significant influence on Customer Satisfaction of GSMEs in Malaysia.

2.4.5. Green Promotion

The literature on Green Promotion (GP) views it as a process which is closely linked to green advertisements whereby the firm uses this method to communicate information about its products, services and credibility. GP is also used as a tool to communicate information about the firm to its consumers through its websites, sustainability reports, eco-labelling and environmental certification (Amegbe et al., 2017; Bathmathan & Rajadurai, 2019; Kumar, 2016). GP is primarily used as a tool for disseminating knowledge, creating awareness of the green characteristics of products and developing the integrity of environmental claims through the use of recycled, reused and remanufactured materials (Chahal et al., 2014; Martinez-Martinez et al., 2019). When it comes to GP, the existing literature is primarily focused on analyzing the essential processes involved in advertising campaigns and environmental labeling (Hasan & Ali, 2015) and not much attention is drawn to empirically link GP to GSME performance, although this idea has been discussed conceptually. To address this gap in the literature, this study investigated if GP is influenced GSME by setting out to prove the hypothesis:

H5: GP has a positive and a significant influence on Customer Satisfaction of GSMEs in Malaysia.

3. Methodology

This study gathered 238 completed questionnaires from the managers or owners of GSMEs located in Peninsular Malaysia. The respondents were recruited from four regions of Peninsular Malaysia - the Northern Region, Central Region, Southern Region and East Coast Region. The sample size of the current study was determined by G*Power analysis which estimated the involvement of 200 respondents. The sampling frame or target population of this study was obtained from the list of GSMEs in the MyHijau directory. To date, there are more than 2000 GSMEs registered with MyHijau (MyHijau, 2020). All respondents were approached personally during the data collection period (November and December, 2019). A total of 300 survey questions were distributed during the data collection period and 238 completed questionnaires were returned. This represented a 79.3% response rate. This study used a cross-sectional approach and a twostage cluster random sampling technique to capture the respondents. The questionnaire consisted of two parts. The first part was for exogenous and endogenous variables and the second part explained the respondent's profile. The multiple measurement items used in the survey were adapted from the work of (Amegbe et al., 2017; Chahal et al., 2014). Table 2 summarizes the GMO variables, which used a 5-point Likert Scale (1 - Strongly Disagree and 5 -Strongly Agree). The items were adapted from (Amegbe et al., 2017; Chahal et al., 2014). The data was tested using partial least squares structural equation modeling (PLS-SEM) (See Table 2).

In addition, Figure 1 sets out the conceptual framework used in this current study. The framework indicates that GTP, GSCM, GSPI, PEC and GP are exogenous variables, while Customer Satisfaction is an endogenous variable. The variables were measured using reflective items that show the direction of causality from the exogenous variables to the endogenous variables (Jarvis et al., 2003). This framework can facilitate subsequent theoretical development in assessing the variable's degree of influence on a range of endogenous variables.

Table 2: Summary of GMO variables and the number of their respective items.

GMO variables	No. of items
Green Promotion	3
Green Strategic Policy Initiative	3
Green Supply Chain Management	5
Greening the Process	4
Proactive Energy Conservation	3
Customer Satisfaction	5

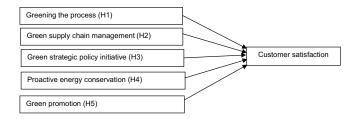


Figure 1: Conceptual framework

4. Findings

The current study recorded that respondents (managers or owners of GSMEs) were represented by the type of business, industry profile and company's age. For instance, 34.0% of the respondents have a partnership form of business, 33.2% were sole proprietors and 32.8% were private limited companies. Additionally, the majority (71.8%) of the respondents represented the energy industry and only 28.2% from the building industry. With regards to the company's age, most of the GSMEs were established more than 10 years ago, (65.6%) followed by 5 years and below (21.4%) and 6 to 10 years (13.0%).

In this study, the measurement of the variables was based purely on the judgment of single individuals (managers or owners of GSMEs). This could result in common method bias. Therefore, this study used two statistical approaches to test this. Firstly, a Harman's single-factor test was applied to determine if there was any common method bias (as recommended by Podsakoff et al., 2012). In this approach, all items (measuring latent variables) are loaded into one common variable and if the total variance for a single variable is lower than 50%, it indicates that common method bias does not affect the data or the results (Podsakoff et al., 2012). For this study, the percentage variance of a single variable was 40.6%, less than the threshold value. Hence, it found that no common method bias was present to affect the data or the results. Secondly, by checking the correlation matrix, as suggested by (Bagozzi et al., 1991), the results of the correlation matrix showed no high correlations between the variables. The majority of correlation coefficients were moderately correlated (Hair et al., 2007). The lowest value was recorded at 0.481 (significant at 0.05 level) and 0.820 was the highest value (significant at 0.05 level). None of the correlation coefficient values achieved more than 0.91 which is considered highly correlated (Hair et al., 2007). Thus, there was no initial evidence of a possible common method bias in this research (Bagozzi et al., 1991) (See Table 3).

To measure this measurement model, several tests were administered. Among them were the item reliability test, reliability test, convergent and discriminant validity tests. In this study, the reflective items with loadings equal to or greater than 0.50 were accepted. The reflective item loadings below the acceptable value (0.40) were removed as suggested

by (Sarstedt et al., 2014). Table 3 shows the loading of the items. It was discovered that all 23 items were above the acceptable benchmark of 0.40. The loadings were between 0.707 and 0.926. The internal consistency of the variables was determined by using the composite reliability (CR) with values between 0.868 and 0.935. A CR of 0.70 or greater is considered acceptable and reliable according to Fornell & Larcker, (1981).

Table 3 also explains the results of the convergent validity analysis which was tested using average variance extracted (AVE). The results showed that the AVE range of 0.643 to 0.831 was above the accepted value (Fornell & Larcker, 1981). Thus, the results indicate that these items satisfied the requirement for the convergent validity of their respective variables. Additionally, to check the multicollinearity issue, the variance inflation factors (VIF) were tested in the present study. The VIF values for all variables were below 3.0, showing that multicollinearity was not a serious issue in this study (Diamantopoulos & Siguaw, 2006). In addition, the R² was at 0.479, indicating that the personality traits only influenced the endogenous variable at 47.9 % (See Table 4).

To check the discriminant validity, this study used the Heterotrait-Monotrait ratio of correlations (HTMT). HTMT incorporates two techniques to measure the discriminant validity. The first technique is called the criterion or statistical test. To achieve discriminant validity using the statistical test, the HTMT value should not be greater than 0.9 as recommended by (Henseler et al., 2014). As shown in Table 4, all values has met the required threshold of value lesser than 0.9. The second technique is known as HTMT Inference. This technique was employed to test the null hypothesis (H₀: HTMT≥1) compared to the alternative hypothesis (H₁: HTMT<1). The issue of discriminant validity identified if the confidence interval contains the value of 1. The results of HTMT Inference (second method) shown in Table 4 revealed that the confidence interval value for each construct was below 1. Thus, the discriminant validity was established for the research variables.

Finally, to test the proposed hypotheses, this study tested the structural model and followed suggestions by (Sarstedt et al., 2014) in which all the data was run using 5000 bootstrapped samples. Table 5 shows that only three hypotheses were supported by results (H₁: $\beta = 0.277$, t = 3.089, *p<.01; H₂: $\beta = 0.242$, t = 2.753, *p<.01; H₄: $\beta = 0.208$, t = 2.149, *p<.05). The current study was able to prove the positive impact of GTP (H₁), GSCM (H₂) and PEC (H₄) on Customer Satisfaction. The findings are in line with the work of previous researchers (Kumar, 2015; Yacob et al., 2019; Zhang & Walton, 2017). On the other hand, GSPI (H₂) and GP (H₅) were found to not contribute to customer satisfaction significantly and positively in the case of GSMEs in Malaysia, according to the results H₃: $\beta = 0.107$, t = 0.912; H₅: $\beta = 0.046$, t = 0.379. The results are in line with previous studies by (Chin & Lim, 2018; Zahari & Esa, 2016). Moreover, the f² effect sizes for supported hypotheses were considered small (refer to Table 5). As recommended by (Cohen J., 1988), an f² of 0.02 is considered a small effect, 0.15 a medium effect and 0.35 as a large effect (See Table 5).

Table 3: Loading of measurement items, CR, AVE and VIF

Construct	s/Items	Loadings	CR	AVE	VIF
Customer	satisfaction (CS)		0.935	0.742	
CS1	To ensure satisfaction my employees assist the customers.	0.859			
CS2	Our products are of high quality.	0.882			
CS3	My employees give adequate information about the products.	0.873			
CS4	The company delivers products according to customer specifications.	0.862			
CS5	Customers prefer my company.	0.830			
Green Pro	motion (GP)		0.937	0.831	2.675
GP1	My company designs improved environmentally friendly packaging.	0.916			
GP2	My company publicises the green characteristics of our products.	0.926			
GP3	My company recycles, reuses and remanufactures material	0.893			
Green supply chain management (GSCM)			0.883	0.717	2.153
GSCM1	My company uses the ISO certification of quality.	0.790			
GSCM2	My company redefines operations and production processes.	0.859			
GSCM3	My company uses recyclable or reusable containers.	0.787			
GSCM4	My company requires commitment by senior managers/owners.	0.707			
GSCM5	My company uses environmental management systems	0.857			
Green stra	tegic policy initiative (GSPI)		0.900	0.643	2.235
GSPI1	My company implements insurance planning to cover environmental risks.	0.773			
GSPI2	My company redesigns and improves products.	0.889			
GSPI3	My company uses environmental friendly materials.	0.873			
Greening t	he process (GTP)		0.910	0.716	2.403
GTP1	My company uses cleaner technology.	0.875			
GTP2	My company uses ecological materials.	0.872			
GTP3	My company urges customers to take pro-environmental actions.	0.846			
GTP4	My company selects cleaner transportation methods.	0.789			
Proactive	energy conservation (PEC)		0.868	0.687	2.084
PEC1	My company has low energy consumption.	0.773			
PEC2	My company uses raw materials that can be recycled.	0.887			
PEC3	My company requires suppliers to provide certification of testing	0.823			

Notes: CR = Composite reliability; AVE = Average Variance Extracted; VIF = Collinearity Statistics; R² = .479.

Constructs	cs	GP	GSPI	GSCM	GTP	PEC
CS						
GP	0.646 ^a 0.531; 0.740 ^b					
GSPI	0.693 0.569;0.796	0.879 0.855;0.996				
GSCM	0.675 0.560;0.767	0.800 0.706;0.881	0.856 0.891;0.917			
GTP	0.697 0.595;0.783	0.759 0.661;0.840	0.847 0.768;0.922	0.806 0.719;0.881		
PEC	0.723 0.623:0.808	0.847 0.954;0.958	0.820 0.836;0.977	0.882 0.804;0.951	0.822 0.729;0.902	

Table 4: Heterotrait-Monotrait Ratio (HTMT)

Notes: CS = Customer Satisfaction; GP = Green Promotion; GSPI = Green Strategic Policy; Initiatives; GSCM = Green Supply Chain Management; GTP = Greening the Process; PEC = Proactive Energy Conservation; a The criterion for HTMT ratio is below .85; b The criterion for HTMT upper confidence intervals (CI) is below 1.

Table 5: Hypothesis testing

Relationship	Hypothesis	Std. Beta (β)	Std. Error	t-value	Decision	f²	Decision
$GTP \to CS$	H ₁	0.277	0.090	3.089	Supported	0.061	Small
$GSCM \to CS$	H ₂	0.242	0.092	2.753	Supported	0.032	Small
GSPI → CS	H ₃	0.107	0.117	0.912	Not supported	0.005	No effect
PEC → CS	H ₄	0.208	0.097	2.149	Supported	0.020	Small
$GP \to CS$	H ₅	0.046	0.121	0.379	Not supported	0.001	No effect

Notes: CS = Customer Satisfaction; GP = Green Promotion; GSPI = Green Strategic Policy Initiatives; GSCM = Green Supply Chain Management; GTP = Greening the Process; PEC = Proactive Energy Conservation.

5. Discussion

The findings clearly indicate that only three hypotheses $(H_1, H_2 \text{ and } H_4)$ were supported and two hypotheses namely H_3 and H_5 were unable to show positive relationships with Customer Satisfaction. Customer Satisfaction in this study was measured by five items: 1) the employees assist the customers, 2) the product is of high quality, 3) the employees give adequate information, 4) the company delivers products according to customer specifications and, 5) customers prefer this company.

The independent variable contributing to Customer Satisfaction most significantly and positively is GTP. The managers or owners of GSMEs believe that their GTP activities such as using cleaner technology, ecological materials, urging customers to act in an environmentally manner, and selecting cleaner modes of transportation, have a positive effect on Customer Satisfaction. Additionally, the second most significant independent variable creating a positive relationship with Customer Satisfaction is GSCM.

Most GSMEs have undertaken various initiatives within the GSCM variable by obtaining ISO certification of quality, redefining operations and production processes, using recyclable or reusable containers, requiring commitment by senior managers or owners of supply chain management, and using environmental management systems.

The third most significant independent variable contributing to Customer Satisfaction significantly and positively is PEC. The study used three items, namely, 'My company has low energy consumption', 'My company uses raw material that can be recycled' and 'My company requires suppliers to provide certification of testing' to establish this relationship. The findings show that GSMEs must implement PEC to reap the benefits of cost savings. All initiatives taken by GSMEs in relation to the three independent GMO variables mentioned have led to higher levels of Customer Satisfaction and if they maintain or upgrade these elements in the future, many of their current customers will remain loyal to them.

On the other hand, GSMEs need to put on hold their efforts to come up with GSPI because this variable was not found to be a positive and significant contributor to Customer Satisfaction. This is because many of the GSMEs may find that they have limited resources to invest in creating and adhering to policies that may restrict their flexibility to serve their customers in ways they deem befitting of their operations and these policies may even hamper their growth or progress, a view consistent with the findings of (Cambra-Fierro et al., 2008). The items used to measure GSPI included: 'My company implements insurance planning to cover environmental risks', 'My company redesigns and improves products' and 'My company uses environmentally friendly materials.' All these items result in more financial constraint to the GSMEs and there is little necessity for them to invest in this variable since they already have GTP, GSCM and PEC in place. It is appropriate for large companies to have strategic policies in place because of their large customer base but they will need some standard operating procedures to manage their customers satisfactorily.

In addition, GSMEs have to put on hold or cut back on their GP process initiatives. The study has proposed three items such as 'My company designs improved environmentally friendly packaging', 'My company publicizes the green characteristics of our product' and 'My company recycles, reuses and remanufactures material' as some of the items of green promotion. As with the previous variable, GSMEs struggle with financial resources and being required to engage in the GP process may divert their limited resources to activities that eat into their budget that was earmarked to maintain or enhance their customer relationship management activities. Again, it is appropriate for large companies to invest in GP as this can be part of their branding campaign but for GSMEs, having GTP, GSCM and PEC are already sufficient to ensure their Customer Satisfaction without stretching their budgets beyond their means and at the same time maintain their reputation as companies that support sustainability and greening motives in their businesses. This line of argument is consistent with the thoughts of (Cambra-Fierro et al., 2008; Williamson et al., 2006).

Although the GMO variables in the study of Ghana (Amegbe et al., 2017), India (Chahal et al., 2014) and Malaysia were similar, the results were different. The uniqueness of this study is that it shows that the GMO variables contributing to the performance of SMEs can vary according to geographical location and industry. This means that the findings for one country or industry cannot necessarily be applied to another country or industry. These findings were arrived at after comparing the results from GMOs of SMEs in Ghana and India with the findings in Malaysia.

6. Conclusion

This study adds to the green marketing literature by examining the domain of GMO in the context of GSMEs in Malaysia. The findings reveal that only GTP, GSCM and PEC influenced Customer Satisfaction, while the GSPI and GP were unable to demonstrate a significant effect on Customer Satisfaction. By being aware of the factors that influence Customer Satisfaction, the owners or managers of GSMEs could focus on maintaining and improving the significant variables in order to create greater satisfaction among their customers. GMO enables managers to gain a better understanding of how their firms facilitate a green environment and how a greener environment affects business outcomes. This will contribute to the better performance of GSMEs. GMO and its variables can facilitate subsequent theoretical development by assessing the construct's influence on a range of endogenous variables and seeking further involvement by government agencies as well as marketing experts from universities. This study only focuses on two major green SME industries - building and energy, therefore, a similar study could be extended to include other types of GSME industries such as the additives, automotive products and services, cleaning products and services, furniture, garden and landscaping, office and stationery, office equipment and products, equipment and systems, as listed in the MyHijau directory. This would provide a broader understanding of the relevance and applicability of the GMO variables to different industries in Malaysia.

References

Abdullah, W. S. W., Osman, M., Kadir, M. Z. A. A., & Verayiah, R. (2019). The potential and status of renewable energy development in Malaysia. *Energies*, 12(12), 1-16.

Amegbe, H., Owino, J. O., & Nuwasiima, A. (2017). Green marketing orientation (GMO) and performance of SMEs in Ghana. *American Journal of Management*, 11(1), 99-109.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. Administrative Science Quarterly, 36(3), 421-458.

Bathmanathan, V., Rajadurai, J., & Sohail, M. S. (2018). Generational consumer patterns: A document analysis method. Global Business and Management Research: An International Journal, 10(December), 958–970.

Bathmathan, V., & Rajadurai, J. (2019). Green marketing mix strategy using modified measurement scales: A performance on Gen Y green purchasing decision in Malaysia. *International Journal of Engineering and Advanced Technology*, 9(1), 3612-3618.

Brammer, S., Hoejmose, S., & Marchant, K. (2012). Environmental management in SMEs in the UK: Practices, pressures and

- perceived benefits. Business Strategy and the Environment, 21(7), 423-434.
- Brindley, C., & Oxborrow, L. (2014). Aligning the sustainable supply chain to green marketing needs: A case study. *Industrial Marketing Management*, 43(1), 45–55.
- Buysse, K., & Verbeke, A. (2003). Proactive environmental strategies: A stakeholder management perspective. Strategic Management Journal, 24(5), 453-470.
- Cambra-Fierro, J., Hart, S., & Polo-Redondo, Y. (2008). Environmental respect: Ethics or simply business? A study in the small and medium enterprise (SME) context. *Journal of Business Ethics*, 82(3), 645-656.
- Ceptureanu, E. G., Ceptureanu, S. I., Bologa, R., & Bologa, R. (2018). Impact of competitive capabilities on sustainable manufacturing applications in Romanian SMEs from the textile industry. Sustainability, 10(4). https://doi.org/10.3390/ su10040942
- Chahal, H., Dangwal, R., & Raina, S. (2014). Conceptualisation, development and validation of green marketing orientation (GMO) of SMEs in India. *Journal of Global Responsibility*, 5(2), 312-337.
- Chan, E. S. W. (2013). Gap analysis of green hotel marketing. Journal of Contemporary Hospitality Management, 25(7), 1017-1048.
- Charter, M., & Polonsky, M. J. (1999). Greener marketing: A global perspective on greening marketing practice (2nd ed.). Sheffield, UK: Greenleaf Publications.
- Chen, F., Ngniatedema, T., & Li, S. (2018). A cross-country comparison of green initiatives, green performance and financial performance. *Management Decision*, 56(11). https:// doi.org/10.1108/MD-08-2017-0761
- Cherian, J., & Jacob, J. (2012). Green marketing: A study of consumers' attitude towards environment friendly products. *Asian Social Science*, 8(12), 117-126.
- Chin, Y.-W., & Lim, E.-S. (2018). SME policies and performance in Malaysia. Singapore: ISEAS Yusof Ishak Institute.
- Cohen, J. (1988). Statistical power analysis for the behavioural science. Abingdon, UK: Routledge Academic.
- Dangelico, R. M., & Vocalelli, D. (2017). "Green Marketing": An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165, 1263-1279.
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263–282.
- Do, A. D., Nguyen, Q. V., Le, Q. H., & Ta, V. L. (2020). Green supply chain management in Vietnam industrial zone: Provincelevel evidence. *Journal of Asian Finance Economics and Business*, 7(7), 403-412. https://doi.org/10.13106/jafeb.2020. vol7.no7.403
- Dubey, R., Gunasekaran, A., & Papadopoulos, T. (2017). Green supply chain management: Theoretical framework and further

- research directions. Benchmarking: An International Journal, 24(1), 184-218.
- Economic Planning Unit. (2016). The national SCP Blueprint 2016-2030. Prime Minister's Department, Federal Government Administrative Centre, Malaysia. https://www.oneplanetnetwork.org/sites/default/files/malaysia_the_national scp blueprint 2016 2030.pdf
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fuller, D. A. (1999). Sustainable marketing: Managerial-ecological issues. Thousand Oaks, CA: Sage Publications, Inc.
- Giama, E., & Papadopoulos, A. M. (2018). Carbon footprint analysis as a tool for energy and environmental management in small and medium-sized enterprises. *International Journal of Sustainable Energy*, 37(1), 21-29.
- Govindan, K., Soleimani, H., & Kannan, D. (2015). Reverse logistics and closed-loop supply chain: A comprehensive review to explore the future. European Journal of Operational Research, 240(3), 603-626.
- Hair, J. F., Money, A. H., Samouel, P., & Page, M. (2007). Research Methods for Business. Hoboken, NJ: Wiley.
- Handayani, W. (2017). Green consumerism: An eco-friendly behaviour form through the green product consumption and green marketing. Sinergi: Jurnal Ilmiah Ilmu Manajemen, 7(2), 25-29.
- 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.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hutchinson, C. (1996). Integrating environment policy with business strategy. *Long Range Planning*, 29(1), 11-23.
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical review of construct indicators and measurement model misspecification in marketing and consumer research. *Journal* of Consumer Research, 30(2), 199-218.
- Kumar, P. (2015). Green marketing innovations in small Indian firms. World Journal of Entrepreneurship, Management and Sustainable Development, 11(3), 176-190.
- Kumar, P. (2016). State of green marketing research over 25 years (1990-2014): Literature survey and classification. *Marketing Intelligence and Planning*, 34(1), 137-158.
- Kumar, V., Pozza, I. D., & Ganesh, J. (2013). Revisiting the satisfactionloyalty relationship: Empirical generalizations and directions for future research. *Journal of Retailing*, 89(3), 246-262.
- Kushwaha, G. S., & Sharma, N. K. (2016). Green initiatives: A step towards sustainable development and firm's performance in the automobile industry. *Journal of Cleaner Production*, 121,116-129.
- Lee, C., & Lim, S.Y. (2020). Impact of environmental concern on image of internal GSCM practices and consumer purchasing

- behavior. Journal of Asian Finance Economics and Business, 7(6), 241-254. https://doi.org/10.13106/jafeb.2020.vol7.no6.241
- 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(2), 151-170.
- Li, S., Ngniatedema, T., & Chen, F. (2017). Understanding the impact of green initiatives and green performance on financial performance in the US. *Business Strategy and the Environment*, 26(6), 776-790.
- Luthra, S., Garg, D., & Haleem, A. (2014). Green supply chain management: Implementation and performance: A literature review and some issues. *Journal of Advances in Management Research*, 11(1), 20-46.
- Maignan, I., Ferrell, O. C., & Ferrell, L. (2005). A stakeholder model for implementing social responsibility in marketing. *European Journal of Marketing*, 39(9-10), 956-977.
- Martinez-Martinez, A., Cegarra-Navarro, J. G., Garcia-Perez, A., & Wensley, A. (2019). Knowledge agents as drivers of environmental sustainability and business performance in the hospitality sector. *Tourism Management*, 70, 381-389.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: The emergence of corporate environmentalism as market strategy. *Journal of Marketing*, 61(1), 51-67.
- Mishra, M. K., Choudhury, D., & Rao, K. S. V. G. (2019). Impact of strategic and tactical green marketing orientation on SMEs performance. *Theoretical Economics Letters*, 09(05), 1633-1650.
- Mishra, P., & Sharma, P. (2010). Green marketing in India: Emerging opportunities and challenges. *Journal of Engineering, Science and Management Education*, 3(1), 9-14.
- MyHijau. (2020). *MyHijau Directory*. Retrieved from https://dir.myhijau.my/directory
- Ngniatedema, T., & Li, S. (2000). Green operations and organizational performance. *International Journal of Business and Social Science*, 5(3), 50-58.
- Njoki, G. C., & Susan, W. K. (2014). Challenges facing implimentation of green procurement in manufacturing sector inkenya: Acase study of Unga Limited Kenya. European Journal of Business Management, 22(1), 161-173.
- Ottman, J. A. (2011). The new rules of green marketing paradigm: Strategies, tools, and inspiration for sustainable branding. Sheffield, UK: Greenleaf Publishing.
- Ozanne, L. K., & LeCren, N. (2011). Consequences of corporate environmental marketing strategies in New Zealand organisations. *Marketing Intelligence and Planning*, 29(2), 156-177.
- Papadas, K. K., Avlonitis, G. J., & Carrigan, M. (2017). Green marketing orientation: Conceptualization, scale development and validation. *Journal of Business Research*, 80(May), 236-246.
- Peattie, K., & Belz, F. M. (2010). Sustainability marketing: An innovative conception of marketing. *Marketing Review St. Gallen*, 27(5), 8-15.

- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539-569.
- Polonsky, M. J. (1995). A stakeholder theory approach to designing environmental marketing strategy. *Journal of Business & Industrial Marketing*, 10(3), 29-46.
- Saifullah, K., Kari, F. B., & Ali, A. (2017). Linkage between public policy, green technology and green products on environmental awareness in the Urban Kuala Lumpur, Malaysia. *Journal of Asian Finance Economics and Business*, 4(2), 45-53. http:// dx.doi.org/10.13106/jafeb.2017.vol4.no2.45
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105-115.
- Shafiei, M. W. M., Abadi, H., & Osman, W. N. (2017). The indicators of green buildings for Malaysian property development industry. *International Journal of Applied Engineering Research*, 12(10), 2182-2189.
- Spear, S., & Bowen, H. (1999). Decoding the DNA of the Toyota Production System. *Harvard Business Review*, 77(5), 1-12.
- Srivastava, S. K. (2007). Green supply-chain management: A state-of-the-art literature review. *International Journal of Management Reviews*, 9(1), 53-80.
- Wee, H. M., & Wu, S. (2009). Lean supply chain and its effect on product cost and quality: A case study on Ford Motor Company. Supply Chain Management: An International Journal, 14(5), 335-341.
- Williamson, D., Lynch-Wood, G., & Ramsay, J. (2006). Drivers of environmental behaviour in manufacturing SMEs and the implications for CSR. *Journal of Business Ethics*, 67(3), 317-330.
- Yacob, P., Wong, L. S., & Khor, S. C. (2019). An empirical investigation of green initiatives and environmental sustainability for manufacturing SMEs. *Journal of Manufacturing Technology Management*, 30(1), 2-25.
- Zahari, A. R., & Esa, E. (2016). Motivation to adopt renewable energy among Generation Y. *Procedia Economics and Finance*, 35(October 2015), 444-453.
- Zahari, A. R., & Esa, E. (2018). Drivers and inhibitors adopting renewable energy: An empirical study in Malaysia. *International Journal of Energy Sector Management*, 12(4), 581-600.
- Zhang, J. A., & Walton, S. (2017). Eco-innovation and business performance: The moderating effects of environmental orientation and resource commitment in green-oriented SMEs. *R&D Management*, *47*(5), 26-39.
- Zhu, Q., & Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. *Journal of Operations Management*, 22(3), 265-289.