

Mediating Role of Entrepreneurial Marketing Between Green Marketing and Green Management in Predicting Sustainable Performance in Malaysia's Organic Agriculture Sector

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The present study aimed to examine the role of entrepreneurial marketing as a mediating variable in the relationship between green marketing, green management, and dynamic capability with sustainable performance in the organic agriculture department of Malaysia. The researcher used the SEM-PLS technique to develop a model showing how green marketing, green management, and dynamic capability influence on entrepreneurial marketing which consequently leads to improvement of factors of sustainable performance for the agricultural firms in the sector of organic agriculture. The research model was more validated by using the model fit indices and all the results were satisfactory. Findings showed that there was a full mediation of entrepreneurial marketing in this model. The direct relationship between green management and sustainable performance in this sector, however, was found to be insignificant. The findings can be interpreted to comment that in the presence of effective marketing strategies and dynamic capability, firm performance in organic agriculture market of Malaysia is highly sustainable and the mediation of entrepreneurial marketing can lead to better impact of these factors as well as of green management on overall sustainable performance. The researcher has used these findings to present specific as well as general implications of the study. Furthermore, limitations of the study are also highlighted so that future researchers can eradicate them in their studies

Keywords: Dynamic Capability, Entrepreneurial Marketing, Sustainable Performance, Green Marketing, Green Management

1. INTRODUCTION

Green agriculture in Malaysia has played a major role in the sustainability of organic crops. It was reported in the study that various environmental concerns have been emerging in the country to investigate the innovations that need to be implemented in the managerial sector of agriculture and the environmental department. Green agriculture is the best practice that could promote sustainability in the natural resources and make it more efficient and fertile to gain better quality crops. The green practices have also helped in various mechanisms to enhance the capacity of soil and increase the diversification of grains by utilizing different practices (Saudi, Obsatar Sinaga, & Zainudin, 2019).

In the context of Malaysia, green agriculture has played a significant role in the marketing sector for increasing the publicity of such crops in the market. The green practices used to produce organic crops and plants have made the agriculture department much more efficient. These crops have been traded to other countries as well so that the quality business of Malaysia can also be enhanced. Planting green crops with the new techniques to utilize the sustainable efforts of farmers has made it beneficial for the country to promote suitable agriculture practices. Green marketing and green management have been encouraged in Malaysia from past years in order to bring sustainability in agriculture department (Asadi, Nilashi, Safaei, Abdullah et al., 2019).

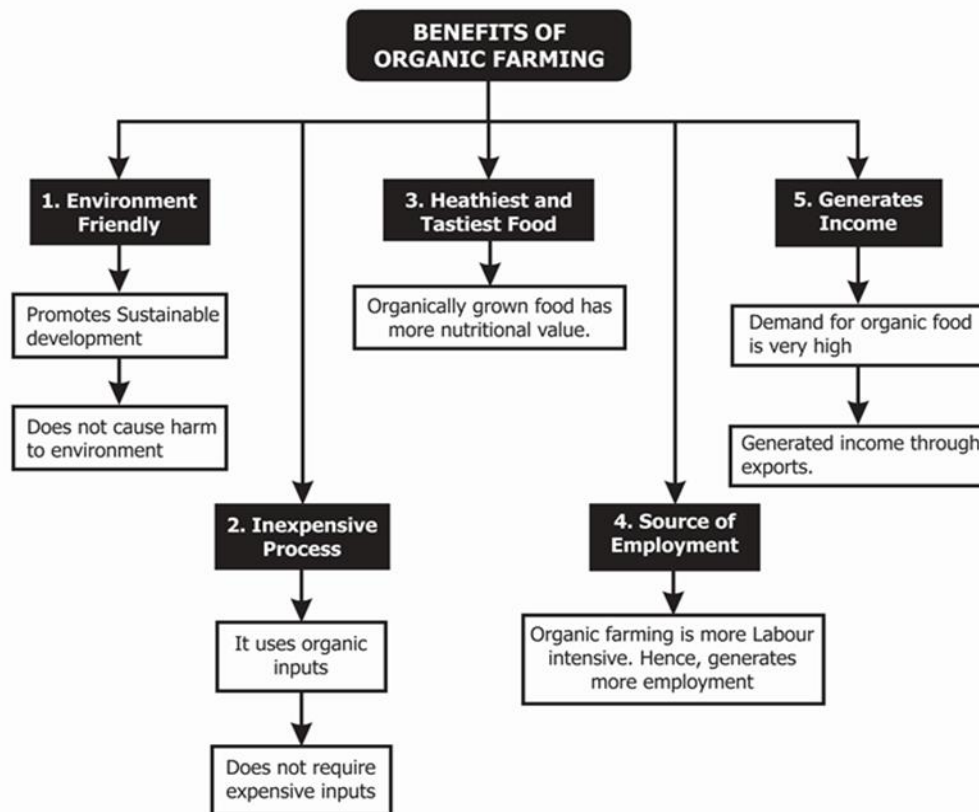
Various studies have suggested that green farming practices have been utilized in the country at a high rate. The farmers have been increasing their attention towards the sustainable programs and the methods of production of green plants due to their increased profit and the benefits in the future. The entrepreneurship of green fields and crops in other countries has been noticed to have a major impact on farmers' income, especially those who live in rural areas. This is because the economic viability has been increased with a wide variety of crops, plants, and grains cultivated.

The significant phenomenon of utilizing green strategies in Malaysian agriculture sector have been appreciated as green marketing provides economic growth and encourages other people to invest in providing the resources to save the crops from further disruption as sustainable practices are in demand to be utilized in agriculture department. At domestic level green practices used in Malaysia for agriculture sector have been playing role in lowering deforestation activities and recycling organic waste in order to promote sustainability. The green marketing has been praised at global level as consumers are demanding for green technology to be used in agriculture. Such practices were not that frequently used before as there was lack of awareness to farmers as well (Abdullah, Sabar, & Mustafar, 2018).

Green marketing can also be stated as the environmental marketing as it has a positive consequence on environment as well as in agriculture department. It must be ensured that the green marketing or management activities must

not mislead as it may have adverse impacts of the practices are not followed according to the regulations. The purpose of this paper is to provide ample of knowledge which can be utilized to solve the issues that can be arise while

utilizing the green marketing and management strategies in their daily activities. The study also discusses the role of business sector in promoting sustainable performance in agriculture sector of Malaysia.



In the context of previous studies, it can be said that there were considerable gaps in analyzing the aspects of green marketing. The extent of familiarity to green methods of agriculture and green management in the farming practices was not known before. Mostly the traditional activities have been noticed in previous studies. In light of these gaps, it is the need of the hour to provide information which provides help in the field of green farming and to introduce new technology in agriculture to enhance the growth of entrepreneurship in the respective field. As the past papers have shown no concept for sustainable growth in agriculture, the respective study is based on finding new means to promote the green marketing and management strategies that could collaborate to enhance environmental sustainability as a whole. The gaps in traditional methodologies are examined and mitigated in the current study with the help of new techniques involved in agriculture department.

In accordance to information provided in background, the objectives of current study includes providing facilities to farmers about green practices in agriculture field so that new technology equipment and techniques are utilized to upgrade the organic agriculture department and to enhance the entrepreneurship in green marketing for attaining economic stability in the country. Green management is basically done to avoid waste and to promote recycling methods for encouraging sustainable activities. The objectives include:

- To explore green management in reducing biodegradable waste
- To study profitability that can be enhanced through sustainability
- To analyze recycling methods that can be considered to promote green agriculture practices

The current study is significant to consider the agriculture sector and to encourage the use of green marketing and sustaining practices in agriculture to promote the sustainability in Malaysia. Green marketing has significant importance in the respective field as consumers are highly demanding for better agriculture products according to modern era. According to a study the green marketing is all about promoting environmental sustainability which is considered to be increasing since last decade. Farmers specifically from rural areas are shifting their traditional methods in green activities to fulfill the demands of consumers (Supaat, Ahamat, & Nizam, 2020).

Sustainable procedures undertaken in agriculture department have a considerable role as it increasingly encourages the competitive environment. The agriculture department can produce the recyclable items in the market in order to improve the practices and to mitigate various gaps that were rising due to traditional methods being used in agriculture for decades in Malaysia. The use of natural resources will be minimized and recycling methods would

be encouraged to gather more profitable outcomes in future. Green marketing and management can also aggravate the long term growth of business in agriculture sector to increase economic stability as well (Firdiansyah, Mohamed, Yusoff Yusliza, Saputra et al., 2021).

In the current paper a standard structure would be followed as initially the research would be providing information about background of the selected topic. In the next part literature review would be discussed. Then the methodology for research that is being used during the study. Next would be the results chapter and in the end discussion and conclusion will be stated for further study.

2. LITERATURE REVIEW

2.1. Green marketing and sustainable performance

Green marketing is defined by Peattie (1995), as the process of satisfying and managing the needs of the customers by considering the process for better profitability and sustainability. Thus the green strategic marketing was designed by (Banerjee, 2017). However, the impact of green marketing is long term on the sustainable performance of a corporate. According to Papadas, Avlonitis, and Carrigan (2017), the importance of environmental management was taken seriously with the impression of “strategic green marketing orientation (SGMO)”. This leads to the importance of environmental factor to be added in the policies of different organizations while many any partnerships. This supports the organizations to partner with the organizations who are serious about their impact on the natural resources that could lead to sustainable development by improving the performance. The green marketing also supports the consumption of green products by the consumers. This helps in improving the sustainable development. For the progress of a country, the economic growth along with the retention of natural resources is especially important. This leads to sustainable development. Thus, focusing on the significance of sustainability, the agriculture center in Malaysia has initiated the project of consuming wastes to utilize through proper channels for different purposes.

According to Peattie and Crane (2005), the green marketing goes through three distinct phases which include: Phase I: “Ecological green”, Phase II: “Environmental green” and phase III: “Sustainable green”. Pun (2006) also suggested an alternate name for green marketing which was “sustainable marketing”. This helps in innovating innovative ideas for protecting green products by the harsh and cruel environmental changes in today’s world. This leads to an increase in the interest of the consumers to buy more of the green products as they become aware of the advantages of the green environment for better sustainable performance.

The green marketing thus plays an especially vital role in the sustainable performance of an organization. According to “Acquisition-transaction utility theory (ATUT)” introduced by Bei and Simpson (1995), the psychological perception implemented by the strategic marketing encourages the organization to opt for more eco-friendly

resources. This motivates them in buying the resources which are easily recyclable. The consumption of resources is a greater responsibility as it can make or destroy the future of different stakeholders of the company. This led to special objectives and strategies for protecting the resources. Based on above discussion, the following hypothesis is formulated:

H1: Green marketing has significant impact on sustainable performance

2.2. Green management and sustainable performance

Different studies in the past have been conducted to determine the impact of green management on sustainable performance due to the increasing no. of green issues observed in the world. However, the environmental awareness is improved by the approach of green management. Whereas the sustainable development is to meet the needs of present without compromising the resources for the future consumption (Buchert & Stark, 2019). The significance of green management in sustainable performance has gained the interest of many scholars in the past. According to Elkington (1994), the natural resources and the economic performance are all aligned. Yong, Yusliza, and Fawehinmi (2019), also states that the “green uses” observed in the growing economy of Malaysia, were also due to large consumption of green resources. The organizations are responsible for the sustainable performance. According to Yusliza, Norazmi, Jabbour, Fernando et al. (2019), the HR of the organization should be more focused on improving the sustainable performance. According to the “green intellectual capital”, defined by López-Gamero, Zaragoza-Sáez, Claver-Cortés, and Molina-Azorín (2011), the organization should have a sum of good knowledge in order to manage the environmental resources for better sustainable performance (Cain, Zhang, & Yuan, 2017).

According to Tonial, Cassol, Selig, and Giugliani (2019), the activities of sustainability were supported by the “intellectual capital management”. Similarly Chang and Chen (2012), determined the significant impact of green human capital on the sustainable performance. Malaysia has used different resources for improving its sustainable performance. The palm trees are one of such resources. These help in management of pests as well as biomass (Dal Mas, 2019). This leads to the understanding of the importance of environmental management along with the economic growth. According to Huang and Kung (2011), the organizational structures are found to be effective in reducing the violation of the environmental resources. This leads to increase in number of new markets thus resulting in the increase of productivity and building the image of the corporate. Similar is the case with the agriculture center in Malaysia. However, a mediating impact of the trust and the relationship with the customer is observed between the environmental management and the economic growth of the organization (Danese, Lion, & Vinelli, 2019).

According to the “resources base view theory” i.e., introduced by Barney (1991), the resources are

strategically exploited by the organizations to improve the sustainable competitive advantage. However, the “green intellectual capital” also plays a key role in improving the sustainable competitive advantage. This improvement in the sustainable competitive advantage leads to an improved sustainable performance of superior nature. Based on above discussion, the following hypothesis is formulated:

H2: Green management has significant impact on sustainable performance

2.3. Dynamic capabilities of firm and sustainable performance

According to [Albort-Morant, Leal-Millán, and Cepeda-Carrión \(2016\)](#), the dynamic capabilities of a firm have an impact on the sustainable performance by means of different techniques of “relationship-learning”. According to [Pace \(2016\)](#), the adaptation of environment goes through various stages. This motivates the use of technology for this purpose ([Hashim, Raza, & Minai, 2018](#)). According to “Workable systems theory” introduced by [Teecce \(2007\)](#), the dynamic capabilities of a firm help in managing the information and spreading it to the managers for further transfer of information for the competitive purposes. This ultimately leads to competitive advantage which helps in improving the sustainable performance of the firm ([Hong, Zhang, & Ding, 2018](#)).

The two main parts of the dynamic capabilities include: strategies and resources. The resources help in improving the growth of the firm or the organization. This leads to the consideration of the sustainable development. As the natural resources used by the firm should be maintained to prevent their extension in the future ([Mousavi, Bossink, & van Vliet, 2018](#)). The main and the final factor of dynamic capabilities is the strategy. The Porter Five Forces Model is also given consideration for this purpose. Thus, the strategic measures help in improving the routine as well as strategic methods for the dynamic capabilities of the firm which helps in sustainable competitive advantage leading to the better sustainable performance ([Pervan, Curak, & Pavic Kramaric, 2018](#)). Such kind of strategies help in determining effective methods in improving the competition in the market for green products leading to overall sustainable development. This helps not only in the economic growth but also in market development ([Pitelis & Wagner, 2019](#)). Such discussion leads to the formulation of following hypothesis:

H3: Dynamic capabilities of firm has significant impact on sustainable performance

2.4. Entrepreneurial marketing and sustainable performance

According to “theory of R-A,” the organization is capable enough for developing new product or to improve the productivity of the already existing product. This could be done by using different approaches of leverages and by introducing innovations in new available resources ([Jaffar Abbas, Raza, Nurunnabi, Minai et al., 2019; Granada & Mejia, 2020](#)). Most of the organizations focus on their strategies to surpass their competitions in the market. According to [Bhuian, Menguc, and Bell \(2005\)](#), the

entrepreneurial marketing focuses more on finding ways to introduce more entrepreneurs in the market to break the competition with the existing markets by introducing an innovative idea in the market and this helps in attracting more audience. According to [Kocak and Abimbola \(2009\)](#), the EMT has a positive impact on the sustainable performance of the firms, especially in the developing countries. Malaysia also supports such type of marketing for positive and effective outcomes in the process of retaining natural resources ([Eikelenboom & de Jong, 2019](#)).

However, the managing of the resources by the firm in a defined structure can also help it to have a healthy competition with the competitors in the market. But the innovative idea of EMT helped many organizations including the agricultural center of Malaysia in sustainable competitive advantage that helped in improving the sustainable performance of the organization ([Ge, Yang, Jiang, Gao et al., 2018](#)). This explanation leads to the formulation of following hypothesis for this research study:

H4: Entrepreneurial marketing has significant impact on sustainable performance

2.5. Green marketing, green management, dynamic capabilities of a firm, entrepreneurial marketing, and sustainable performance

Many scholars have observed that for a better sustainable performance, varied factors must be kept in mind. These factors include: green management, green marketing, dynamic capabilities of a firm and entrepreneurial marketing ([Al-Jubari, Mosbah, Talib, Khalid et al., 2019; Hong et al., 2018](#)). According to “contingency theory of entrepreneurial marketing,” the leader or manager should be able to change the strategies for the best interest of the firm depending on the need of the hour. Thus, in order to improve the sustainable performance of the firm, this theory motivates the leaders or the managers to change their strategies accordingly ([Khan, Royhan, Rahman, Rahman et al., 2020](#)).

The agricultural center in Malaysia is found to face different issues for sustainable performance. Such issues could be resolved by keeping in mind the significance of entrepreneurship ([Wilden, Gudergan, Akaka, Averdung et al., 2019](#)). Or the green management purpose, the EMT marketing helps in introducing the innovative ideas for attracting the consumers of the green products by differentiating it from other competitors in the market. Similarly, EMT marketing helps in the green management of resources as well as the quality and prices are kept precise depending upon the demand of the product in the market. This improves the sustainable competitive advantage for a better sustainable performance ([Teecce, 2018](#)). However, the dynamic capabilities of the firm are also influenced by the EMT marketing and new strategies are implemented for competitive advantage. This discussion leads to the formulation of following hypotheses:

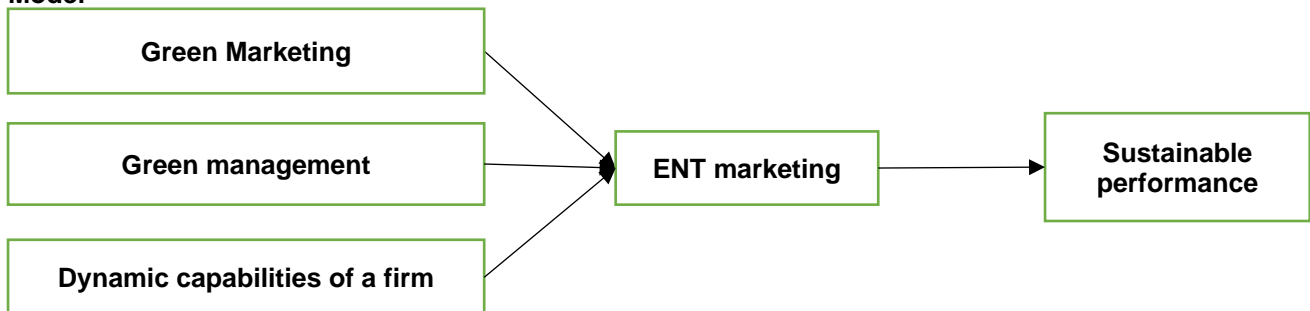
H5a: Entrepreneurial marketing mediates the impact of green marketing on sustainable performance

H5b: Entrepreneurial management mediates the impact of

green management on sustainable performance

H5c: Entrepreneurial management mediates the impact of Dynamic capabilities of firm on sustainable performance

Model



3. RESEARCH METHODOLOGY

3.1 Research Philosophy and Design

The current study is designed as a marketing and management survey on the organic agricultural sector of Malaysia. Some recent studies have shown that people in Malaysia are becoming increasingly aware of the potential advantages to health provided by organic food sources and thus the demand for organic food is increasing, however, productivity and adoption at the farmers' end is low. Therefore, in this study the researcher has selected Malaysia study the impact of innovative marketing and management practices like entrepreneurial marketing, green marketing and green management can have on the sustainable performance and growth of the organic agricultural sector in Malaysia. As for the philosophical paradigm that is driving the current study, the researcher has based the current study on the positivist philosophy which represents a traditional design of research which is generally for quantitative research and is termed as the scientific method for research (Slife & Williams, 1995). The underlying principle of positivism philosophy is objectivism for data collection and analysis i.e., researchers provide interpretations from the collected data in a way that no personal gains are achieved. Thus, structured research techniques are used that facilitate the replication of the research process.

In this study, the researcher has used deductive approach of research to design the methodology for collection and analysis of data as this study does not aim to explore any new theory. Gliner, Morgan, and Leech (2016) stated that the deductive research approach can be linked to development of hypotheses based on theories and literature that has been justified in the past and designing a strategy to evaluate or analyze these hypotheses. It is usually termed as a reasoning mechanism in which the researcher moves the discussion and research direction from a specific reasoning to a broader application (Jackson, 2015). Furthermore, the aims and objectives of the current research support the use of quantitative analysis techniques and methodologies. As this study deals with the formation of hypotheses based on past data and theories and then collection of data that can validate these hypotheses quantitatively, therefore, the researcher has selected quantitative method.

3.2 Data Collection

The sampling frame was the directory of craft MSMEs provided by Department of Cooperatives and SME and Department of Industry and Trade. The directory gave names, address, and phone address of companies. The reasons for choosing craft sub-sector as the research object were: 1) It was one of the largest units in field of creative economy business; 2) It was one of the largest employment contributors in field of creative economy business; 3) It was one of the largest contributors to added value of creative economy; 4) It was one of the products of creative economy mostly consumed by the people; 5) The number of craft enterprises in Malang City was 32.5%, Malang City 60.4%, and Batu City 29.4% of total enterprises in each region. As in the previous studies in developing countries (H. Li & Atuahene-Gima, 2001), data were collected in site because mail and electronic mail system less developed. Several 192 craft SME were identified and agreed to be interviewed. Finally, the total responses that could be used were obtained reached to 130 enterprises representing the level of response of 49.4%.

3.3 Data Instrument and Measures

The questionnaire consists of two parts. The first part of the questionnaire includes a demographic section related to respondents of the company. The second part consists of thirteen indicators: environmental turbulence (2 dimensions), dynamic capability (3 dimensions), entrepreneurial marketing (7 dimensions), and competitive advantage (4 dimensions). The seven-point Likert scale was used to measure the three categories of the construct, the scale from "1" strongly disagrees with "7" strongly agree. The seven-point Likert scale is a valid and appropriate measurement because many previous studies have used seven scales. In this study, the dimensions of environmental turbulence are measured by adapting the indicators suggested by Volberda and van Bruggen (1997). The dynamic capability dimensions were adapted from D.-y. Li and Liu (2014), the entrepreneurial marketing dimensions were adapted from Becherer, Helms, and McDonald (2012) and sustainable competitive advantage dimensions were adapted from Porter (1990), Barney (1991) and Chen, Lai, and Wen (2006).

3.4 Description of Respondents

The demographic distribution of respondents is presented in Table 1. The respondents have been categorized based on gender, age, and education. We find that most of the

respondents have age > 40 years with undergraduate education level

The type of business period, classification and number of workers activity being carried by the respondent units is shown in Table 2.

Table 1: Respondent Profile

Sex		Age				Education			
Distribution	N	%	Distribution	N	%	Distribution	N	%	
Male	55	42.3	Less than 25 years	21	16.2	Up to Junior High School	21	16.2	
Female	75	57.7	26 - 30	35	26.9	Senior High School	34	26.2	
			31 – 35	27	20.7	Diploma	10	7.7	
			36 – 40	31	23.9	Undergraduate	58	44.6	
			41 – 45	11	8.5	Postgraduate	7	5.3	
			Over 45	5	3.8				

Table 2: Business Profile

Period of Business			Business Classification			Number of Workers		
Distribution	N	%	Distribution	N	%	Distribution	N	%
≤ 10 years	95	73.1	Micro (up to 300 million rupiahs)	109	83.9	Micro (1-3 persons)	13	10
10-19 years	23	17.7	Small (300 million ≤ 2.5 billion rupiahs)	21	16.1	Small (4-19 persons)	117	90
20-29 years	5	3.8						
≥ 30 years	7	5.4						

4. RESULTS AND ANALYSIS

To evaluate the model that has been developed in this study, the researcher has used the partial least square (PLS) approach. PLS approach is beneficial for evaluation of model and to find relationship between the variables it aims to minimize the variance error in the model (J. Hair, Hollingsworth, Randolph, & Chong, 2017; Sarstedt, Hair, Ringle, Thiele et al., 2016).

4.1 Description of Respondents

Table 1 presented below shows the demographic

distribution of the respondents in this study. The researcher has characterized the respondents based on their gender, age group and education level. Gender disparity is not extremely high in the sample as out of 130 respondents fifty-five are male (42.3%) and seventy-five are female (57.7%). It is further found that most of the respondents have ages between 26 to 40 years (71.5%) and rest 16.2% are less than 25 years of age and 8.5% are above 40. As for education level, most of the respondents are in undergraduate programs (67.7%), 5.4% have degrees higher than undergraduate and 26.9% have lower ones.

Table 2: Respondent Profile

Gender		Age				Education			
Distribution	N	%	Distribution	N	%	Distribution	N	%	
Male	55	42.3	Less than 25 years	21	16.2	Up to Junior High School	11	8.4	
Female	75	57.7	26 - 30	35	26.9	Senior High School	14	10.8	
			31 – 35	27	20.7	Diploma	10	7.7	
			36 – 40	31	23.9	Undergraduate	88	67.7	
			41 – 45	11	8.5	Postgraduate	7	5.4	
			Over 45	5	3.8				

Table 2 presents the business profile of the respondents in terms of classification of business type, number of active workers and business period distribution. Results show that 73.1% of the respondents have over one and less or equal to 3 years of experience in the field of organic agriculture, 17.7% have experience between 3 to 5 years, 3.8% have an

experience of 6 to 10 years and rest 5.4% have over 10 years of experience. Furthermore, it is found that 83.9% of the businesses are Micro and 16.1% are classified as small businesses. As for the number of workers, 10% have 1 to 3 persons and rest 90% have around 4 to 19 employees actively working at any given time.

Table 2: Business Profile

Period of Business			Business Classification			Number of Workers		
Distribution	N	%	Distribution	N	%	Distribution	N	%
1 ≥ 3 years	95	73.1	Micro (up to 300 million rupiahs)	109	83.9	Micro (1-3 persons)	13	10
3-5 years	23	17.7	Small (300 million ≤ 2.5 billion rupiahs)	21	16.1	Small (4-19 persons)	117	90
6-10 years	5	3.8						
≥ 10 years	7	5.4						

4.2 Measurement Model by Use of Outer Model

The outer model tests are used for describing the relationship that exists between the construct dimensions and their latent variables. The purpose or using outer model tests is to evaluate the construct reliability and validity. Warp-PLS 6.0 software how to use the PLS method for analyzing the measurement model under three criteria which is discriminant validity, convergent validity, and overall construct validity. The presence of the convergent validity is a measure of the internal

consistency in model i.e., the extent to which some items are suitable for measurement of the same concept and is measured by evaluation of the values of AVE. Discriminant validity is used for showing that the factors that were not related theoretically are not related as per quantitative findings as well and is evaluated by use of Fornell-Larcker Criterion as suggested by J. F. Hair, Ringle, and Sarstedt (2013). The loading factors are also presented in table 3 and they show that the loading factors are above 0.8, indicating that there are no overloading issues in the data.

Table 3: Measurement Model

Construct	Indicator	Loading Factor	CR	AVE
Entrepreneurial Marketing (EM)	Opportunity-Driven	0.801	0.655	0.745
	Proactive	0.822		
	Making Capability	0.815		
	Risk-Taking Orientation	0.877		
	Innovation-Focus	0.965		
	Resources-Leveraging	0.877		
Sustainable Performance (SP)	Value Creation	0.847	0.745	0.891
	Financial Performance	0.832		
	Non-Financial Performance	0.846		
Dynamic Capabilities (DC)	Strategic-Sense Making Capability	0.928	0.799	0.823
	Change Implementation Capability	0.921		
	Timely Decision-Making Capability	0.891		
Green Management (GMG)	Product	0.872	0.821	0.964
	Production Process	0.877		
	Enterprise Management	0.826		
	Environmental Management	0.874		
Green Marketing (GMK)	Green Product	0.872	0.627	0.762
	Green Price	0.827		
	Green Place	0.836		
	Green Promotion	0.854		

Notes: AVE = Average Variance Extracted; CR = Composite Reliability

The results of discriminant validity reflected in table 4 given below clearly show that the self-correlation values of the square root AVE of each construct are higher than

other correlations and no values, except for self-correlation are above 0.8, proving that discriminant validity is present in the data used in this study.

Table 4: Correlations among I. vs. with sq. roots. of AVEs

Constructs	EM	SP	DC	GMG	GMK
Entrepreneurial Marketing (EM)	0.845	0.412	0.344	0.422	0.231
Sustainable Performance (SP)	0.412	0.869	0.321	0.423	0.475
Dynamic Capabilities (DC)	0.344	0.321	0.922	0.291	0.422
Green Management (GMG)	0.422	0.423	0.291	0.895	0.466
Green Marketing (GMK)	0.231	0.475	0.422	0.466	0.966

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

4.3 Structural Model and Overall Model

To evaluation of the overall strength of the model structure, the researcher used the R-Square (R²) determination. R² is used for indicating the variance that is explained by exogenous variables in a study (Strub & Cieszewski, 2012; Vidullatha & Rao, 2016). the table 5 shows the results in terms of R² value, the adjusted R² and

description of the result. If R² and adjusted R² are above 0.67 it is interpreted as high variance, a variance between 0.33 and 0.67 is moderate and below this is low variance (Israeli, 2007). The results shows that environmental marketing variable had high variance explanation ability (82.1%) and dynamic capability had moderate ability (47.8%) in for explanation of variance in model.

Table 5: Value of Determination Coefficient (R-Square (R²))

Variable	R-Square (R ²)	Adjusted R-Square	Description
Entrepreneurial Marketing (EM)	0.821	0.752	High
Sustainable Performance (SP)	0.478	0.446	Moderate

4.4 Goodness of Fit Test using Fit Model and Quality Indices

Table 6 presented below represents the model fitness tests that have been conducted in this study for the purpose of evaluating the quality dimensions in the model. according to

the results it is seen that all the model quality dimensions for the more research model work with insert described limitations and thresholds. Therefore, it can be conducted that the model was a good fit, all the model provisions were satisfied, and the data supports the proposed model.

Table 6: Goodness of Fit Test (Fit Model and Quality Indices)

Fit Model and Quality Indices	Computation Result	Probability
Average path coefficient (APC)	0.345	P < 0.001
Average adjusted R-squared (AARS)	0.599	P < 0.001
Average R-squared (ARS)	0.595	P < 0.001
Average block VIF (AVIF)	1.954	Acceptable if less or equal to 5, ideally less than 3.3
Average full collinearity VIF (AFVIF)	2.523	Acceptable if less or equal to 5, ideally less than 3.3
Tenenhaus GoF (GoF)	0.644	Small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36
Sympson's paradox ratio (SPR)	0.994	Acceptable if ≥ 0.7 , ideally 1
R-squared contribution ratio (RSCR)	1.000	Acceptable if ≥ 0.9 , ideally 1
Statistical suppression ratio (SSR)	0.924	Acceptable if ≥ 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)	0.949	Acceptable if ≥ 0.7

4.5 Hypothesis Testing

Hypothesis tests are presented in the form of path coefficients, effect sizes and P-values in the Table 7 below. Effect sizes of 0.02 and below are low, 0.15 is moderate, and 0.35 and above are high. The direct relationships between the pair's green management and entrepreneurial marketing, green management and sustainability performance, and dynamic capabilities and entrepreneurial marketing are found to be insignificant with moderate effect sizes. The direct relationship between green marketing and entrepreneurial management is significant with an effect size of 0.547. Similarly, the direct relationship between green between marketing and sustainability performance is also significant with an effect size of 0.456. Furthermore, the relationship between dynamic capabilities and sustainability performance is

also significant with a low effect size of 0.49. The impact of entrepreneurial management on sustainability performance has a moderate effect size of 0.244 and the relationship is significant. As for the moderation relationships all three hypotheses are found to be accepted indicating that a complete mediation intrapreneurial marketing exists between the dependent and independent variables in the model. The effect size is moderate for the mediation entrepreneurial marketing between green management and sustainability performance (0.324) whereas for the other two variables the mediation has shown high effect sizes i.e. 0.356 for the mediation of entrepreneurial marketing between green marketing and sustainability performance and 0.756 for the mediation of entrepreneurial marketing between dynamic capabilities and sustainability performance.

Table 7: Result of Hypothesis Testing Analysis

	Path Coefficients (β)	P Values	Effect Sizes	Decision
GMG -> EM	0.045	0.245	0.145	Not Accepted
GMG -> SP	0.124	0.105	0.213	Not Accepted
GMK -> EM	0.789	< 0.001	0.547	Accepted
GMK -> SP	0.456	< 0.001	0.456	Accepted
DC -> EM	0.045	0.245	0.321	Not Accepted
DC -> SP	0.124	< 0.001	0.049	Accepted
EM -> SP	0.045	< 0.001	0.244	Accepted
GMG -> EM -> SP	0.124	< 0.001	0.324	Accepted
GMK -> EM -> SP	0.789	< 0.001	0.356	Accepted
DC -> EM -> SP	0.456	< 0.001	0.756	Accepted

5. Discussion

The better understanding of significance of sustainable development has encouraged the increased consumption of green products by the people. For this purpose, the sustainable performance of organic agricultural sectors, is effective. This research study was conducted for determining the impact of different variables including green management, green marketing, dynamic capabilities of a firm and EM on the sustainable performance. For this

study, a model was developed based on the above-mentioned variables and was assessed by using the SEM technique for the proposed hypotheses. For sample collection, different Organic Agricultural Sectors in Malaysia were selected in a time-series method.

First, the results obtained from this research study showed that the green marketing has a significant impact on the sustainable performance. Different scholars in the past studies have also supported this argument. According to

Sahoo and BG (2020), the green marketing plays an important role in promoting the green products (Verma, Dixit, & Singh, 2018). Even many tourists are also found to be drawn towards such products. This helps in economic growth as well as sustainable development. A study was performed by Bailey, Mishra, and Tiarniyu (2018) to understand the significance of “GREEN scale”. This scale helped in determining the consumer behavior of for buying the green products that could be improved by the sustainable performance.

Second, the study showed that the relationship between green management and sustainable performance is not significant. However, many other studies have showed the opposite results. According to, Jawad Abbas (2020), the green management has a significant impact on the sustainable performance of a corporate. Similarly according to Pham, Thanh, Tučková, and Thuy (2020), the environmental structure of a firm is highly influenced by its management which influences the sustainable performance of the firm.

Third, the findings of the study indicated that the dynamic capabilities of a firm have a significant impact on the sustainable performance. This is also supported by many other research studies conducted in the past. One of such study indicated that the capability of a firm in order to understand the market helps in supporting the supply chain of that firm which leads to a better sustainable performance (Aslam, Blome, Roscoe, & Azhar, 2018). According to Queiroz, Tallon, Sharma, and Coltman (2018), the dynamic capabilities of a firm should be developed with the changing environment for better sustainable performance.

Forth, the showed that the EM has a significant relationship with the sustainable performance. Such relationship is also encouraged by past studies. According to Kocak and Abimbola (2009), the EMT has a positive impact on the sustainable performance of the firms, especially in the developing countries. According to Baggio and Valeri (2020), the EM has a significant impact on the sustainable performance as it promotes the technical market as well in order to have a better marketing strategy to achieve the desired goals.

Fifth, the results obtained from the study showed that the green management, green marketing, and the dynamic capabilities, all have a significant impact on the sustainable performance when EM is implemented. Such findings have been promoted by different past studies as well. According to various academia, for a better sustainable performance, several factors must be kept in mind. These factors include green management, green marketing, dynamic capabilities of a firm and entrepreneurial marketing (Hong et al., 2018). The “contingency theory of entrepreneurial marketing” plays a vital role in this regard. According to this theory, the leader or manager should be able to change the strategies for the best interest of the firm depending on the need of the hour. Thus, to improve the sustainable performance of the firm, this theory motivates the leaders or the managers to change their strategies accordingly (Khan et al., 2020).

6. Conclusion

This research study helped in developing as well as assessing a model that shows the impact of green marketing, green management, dynamic capabilities of a firm and entrepreneurial marketing on sustainable performance. This developed model was examined by considering the samples of Organic Agricultural Sectors in Malaysia. The results obtained from this research study showed that the green marketing support the sustainable performance whereas, the relationship between the green management and sustainable performance is not significant. However, the implementation of entrepreneurial marketing is also found to have a significant impact on the sustainable performance. The findings of this research study also showed that the dynamic capabilities of a firm have strong relationship with the sustainable performance, but such capabilities are found to have no significant relationship with the EM. Thus, from the obtained results of this research study it was concluded that the green management shows a significant impact on the sustainable performance of the sector when EM is implemented. Similarly, the green marketing also shows a significant impact on the sustainable performance of the sector when EM is implemented and the strong relationship between dynamic capabilities of the firm and the sustainable performance is also observed due to the implementation of EM. The findings of the research study have played a significant role in future research as well as implications for the development of Organic Agricultural Sectors.

7. Limitations and future research indications

The results obtained from this research study showed that the green management has no significant impact on the sustainable performance directly. However, this study was only performed for certain number of agricultural sectors in Malaysia. Only some of the characteristics of these sectors are determined for this purpose. Therefore, the future research study could be conducted by considering a waste area of agricultural field in Malaysia.

To improve the sustainable performance in the Organic Agricultural Sectors of Malaysia, only four different variables are considered for this research study. Different dimensions as well as indicators for these variables are considered were considered by the researcher to determine their impact on the sustainable performance. However, many other variables could also be determined for improving the sustainable performance. Different methods should be considered for improving the sustainable performance by taking into count many other central variables.

This research study only provides the results for determining the impact of certain variables on the sustainable performance in Organic Agricultural Sector in Malaysia. However, the cross-sectional studies should also be conducted that would help in determining the impact of these variables as well as other variables on the sustainable performance of the agricultural sectors not only in developing countries but also in other developed countries around the world.

8. Implications

The consumption of green products is increasing day by day in the modern world to maintain sustainable development in the world. This led to the introduction of many Organic Agricultural Sectors around the globe. Such sectors promote the use of such products. For this purpose, the managers working at such firms should maintain the sustainable performance. This research study shows that how different variables such as green marketing, green management as well as dynamic capabilities of the firms along with the EM could have an essential impact on the sustainable performance. This encourages the managers to optimize their capabilities of implementing the EM for effective sustainable performance. They also need to improve the green marketing as well as dynamic capabilities of the firm for better sustainable performance. The results obtained from this research study provides knowledge as well as understanding for managing different strategies as well as better planning for improving green marketing and developing better dynamic capabilities along with improved EM to improve the sustainable performance of the firm.

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