

Sugandini, Dyah; Muafi; Susilowati, Christin; Siswanti, Yuni; Syafri, Wirman

## Article

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## Green Supply Chain Management and Green Marketing Strategy on Green Purchase Intention: SMEs Cases

Dyah Sugandini<sup>1</sup>, Muafi Muafi<sup>2\*</sup>, Christin Susilowati<sup>3</sup>, Yuni Siswanti<sup>1</sup>, Wirman Syafri<sup>4</sup>

<sup>1</sup>Universitas Pembangunan Nasional Veteran Yogyakarta, Indonesia

<sup>2</sup>Universitas Islam Indonesia, Indonesia

<sup>3</sup>Universitas Brawijaya Malang, Indonesia

<sup>4</sup>Institut Pemerintahan Dalam Negeri, Jatinangor, Indonesia

[dini@upnyk.ac.id](mailto:dini@upnyk.ac.id), \*Corresponding author: [muafi@uii.ac.id](mailto:muafi@uii.ac.id), [christin@ub.ac.id](mailto:christin@ub.ac.id), [yuni.siswanti@upnyk.ac.id](mailto:yuni.siswanti@upnyk.ac.id), [ws.sailima@yahoo.com](mailto:ws.sailima@yahoo.com)

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### Abstract:

**Purpose:** This study aims to analyze green supply chain management (GSCM) and green marketing strategies (GMS) to green purchasing intentions (GPI). This study conducts on craft SMEs in the Special Region of Yogyakarta, Indonesia.

**Design/methodology/approach:** This study uses primary data which is obtained through questionnaires. The unit of analysis in this study is organizations and individuals. The sampling technique is purposive sampling, with the criteria of SMEs that conduct environmentally friendly production processes and consumers who have ever bought green products. Data analysis uses structural equation modeling.

**Findings:** The results of the data analysis show that there is an influence of green supply chain management on green marketing strategy, and there is an influence of green marketing strategy on green purchase intention.

**Research limitations/implications:** This study is limited by relatively small sample size. The sample is only environmentally oriented SMEs. Large companies that are also environmentally friendly have not been included as samples in this study, so the results of this study only generalized to SMEs. Future research should accommodate these two types of companies, namely SMEs and companies, so that it can be easier to generalize the findings and allow different tests of GSCM to be applied to SMEs and large companies. This study only analyzed GSCM from two dimensions, namely GP and GCC. Other variables that can be used to explain GSCM are internal environmental, green information systems, eco-design and packaging.

**Practical implications:** GSCM can be started with conducts the right GP and always coordinating with consumers which related to green products. GP (green purchasing) and GCC (green consumer cooperation) as GSCM elements have a strong association in predicting the success of a green marketing strategy. It is expected that SMEs should pay attention to the raw material purchase, so that the problem of environmentally friendly raw materials can be truly obtained to enter the production process and produce environmentally friendly products.

**Originality/value:** This study analyzes the relationship between GSCM practices and organizational performance in the green marketing and business strategies context, where there is still a scarcity of studies in this context. Besides that, there is an increase in awareness of green operations and green marketing in

Asia, but the relevant studies in Asian countries have not been conducted much, especially in Southeast Asia. The result of this study proves that the GSCM model can increase value along the supply chain by emphasizing green supply chain management and green marketing.

**Keywords:** green supply chain, green marketing, green product

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## 1. Introduction

Special Region of Yogyakarta (DIY) has many SMEs crafts such as batik, bamboo, leather, agel fiber, water hyacinth, pandanus, vetiver, rushes, mendong, wood and etc. Most craft SMEs in DIY are home industries or small and medium enterprises (SMEs) (Sugandini, El Qadri, Kustiyadi & Muafi, 2018b). Due to consumer and export demand, there are many craft SMEs which oriented in nature. It means that they use natural raw materials and the production process is environmentally friendly, so that the product result is an environmental friendly product or green products. Environmental management has become a major concern for SME businesses (Sugandini et al., 2018b). The scarcity of natural resources forces business managers to change the supply chain strategy to be oriented with environmental perspective. Supply chain management development plays an important role in choosing the appropriate green strategies to improve environmental, economic and social performance and gain competitive advantage (Mutingi, 2013; Touboulis & Walker, 2016). Green Supply Chain Management (GSCM) is a supply chain which reduce waste and maintain the quality of the environment, eco-efficiency and re-manufacturing process (Srivastava & Srivastava, 2006, Kuei, Madu, Chow & Chen, 2015).

GSCP emphasizes organizations activities to minimize environmental and natural impacts (Sarkis, 2012). GSCM is a supply chain that aims to reduce waste and maintain environmental quality, Eco-efficiency and re-manufacturing processes (Srivastava & Srivastava, 2006). GSCP requires the implementation of systems throughout the supply chain by conducting collaboration in the organization and cooperation between internal and external management (Zhu, Dou & Sarkis, 2010). The scope of GSCM includes the implementation and monitoring of general environmental management programs to create more company control through Rs (Reduce, Re-use, Rework, Re-furbish, Reclaim, Recycle, Re-manufacture, relogistic) which aims to minimize waste. So far, the production process caused environmental damage such as waste, ecosystem disturbances, and natural resources depletion (Fortes, 2009). Supply chain can be defined as collaboration between company networks to achieve certain goals from suppliers to customers (Chan, 2010). Supply chain management is related to the optimal resources allocation for decision making (Chan, 2011).

The aims of this study is to present GSCM models that increase value along the supply chain by emphasizing green supply chain management and green marketing. This study has several theoretical contributions, namely:

1. This study proves that there is relationship between GSCM and green marketing, while some previous researchers state that the relationship between the GSCM and green marketing is impossible. (1) Parast, Delkhak and Jamshidi (2013) argue that is it possible to integrate GSCM with green industry marketing to create green brands and industries? (2) Cronin, Smith, Gleim, Ramírez and Martínez (2011) state that GSCM cannot be equated with green marketing and should be analyzed. This study supports the Rao and Hoults opinion (2005) which states that there is a relationship between GSCM and company performance, one of them is green marketing performance (Chiou, Chan, Letic & Chang 2011). Bai and Sarkis, (2010) also conclude that there is a relationship between green supply chain management activities, green purchases (Green, Morton & New, 1998) and green marketing activities, although green brands have not received sufficient attention.

2. Although there are several studies examine the relationship of GSCM practices and organizational performance (Eltayeb, Zailani & Ramayah, 2011), but the studies that considered this relationship in the green marketing and business strategies context are still limited. Testa and Iraldo (2010) suggest the need to consider the impact of GSCM on business strategies and marketing (De Giovanni & Esposito-Vinzi, 2012; Green, Zelbst, Meacham & Bhadauria, 2012)
3. The awareness of green operations and green marketing in Asia is important, but relevant studies in Asian countries are still limited, especially in Southeast Asia (Laosirihongthong, Adebajo & Keah, 2013).

## 2. Literature Review

### 2.1. GSCM and Green Marketing Strategy

The globalization development and lifestyle changes made company to changes. Industrialization has increased greenhouse gas emissions, global warming and ecological degradation. Consumers more aware of environmental problems and prefer environmentally friendly products. This condition forces companies to carry out environmentally friendly production process and change their supply chain to GSC. Green Marketing Strategy (GMS) is corporate marketing strategy that aims to satisfy customer needs by minimizing environmental impacts (Yazdanifard & Mercy, 2011). Consumers buy toxic-free products which produced minimum levels of pollution and environmental impact. Companies that have successfully adopted GSCM can conduct green marketing so they can generate profit (Sarkar, 2012).

GSCM emphasizes lifecycle costing, asset efficiency, waste reduction, service innovation and recycling. GSCM stimulates product and service innovations, increases asset utilization, and enhances customer relationships and service which focus on reducing waste (green marketing) and costs (van den Broek, 2010). GSCM will improve the company's focus on green marketing strategies, because GSCM starts the supply chain from environmentally friendly suppliers of raw materials, produced with environmentally friendly technology and produces environmentally friendly products. Green marketing is companies' activities that are environmentally conscious and green environmental sustainability (Crane, 2000). Green marketing is a mechanism to increase customer awareness, perception and knowledge of green products and green concepts. These environmentally friendly products are a prerequisite for green marketing (Sugandini, Mujanah, Sudiyarto., Indah, Priyadi & Muafi, 2018a).

### 2.2. Green Purchasing (GP) and Green Marketing Strategy (GMS)

Purchasing is one of the strategic processes that is carried out in a series of operational activities (Olaore & Adebisi 2013). The purchasing function plays an important role in choosing the right product such as buying raw materials, supply of components and parts (Wisner, Tan & Leong, 2012). GP is defined as the idea of purchasing which oriented to environmental awareness, purchasing raw materials that prioritize environmental sustainability, such as reducing sources of waste, promoting recycle and reuse, reducing resources, and using environmentally friendly materials (Min & Galle, 2001; Zsidsin & Siferd, 2001). GP ensures that SCM considers the issue of raw material sources sustainability, quality and delivery (Wisner et al., 2012).

*H1: GP associated with GMS*

### 2.3. Green Customer Cooperation (GCC) and Green Marketing Strategy

According to Vachon and Klassen (2006), GSCM is external supply chain practices, starting from upstream (ie GP or environmentally oriented procurement) to downstream (GCC). Green et al. (2012) defined GCC as company working together with customers to design clean production processes so company can produce environmentally friendly products with green packaging. Based on the natural resource-based view (NRBV) theory, companies are encouraged to incorporate environmental into their strategic planning. Companies that survive on the market must pay attention to environmental pollution. NRBV emphasizes that success in overcoming environmental problems can provide more business competition opportunities. Companies with better GCC can obtain a high ecological reputation from customers. Zhang, Tse, Dai & Chan (2017) state that since China joined the World Trade Organization, Chinese manufacturers became suppliers for companies in developed countries because developed

countries chose suppliers which requiring high environmental standards. Laari, Töyli, Solakivi & Ojala (2016) find that a collaborative environment with customer (GCC) approach is the key to the green marketing strategy success.

*H2: Green Customer Cooperation associated with the Green Marketing Strategy*

## 2.4. Green Marketing Strategy and Intention Behavior

Green marketing strategy is a holistic management process that is responsible for identifying, anticipating and meeting customer demand sustainably. According to Maheshwari (2014) and Sugandini et al., (2018a), Green marketing is a creative opportunity to innovate in different ways to achieve business success through orientation to environmental / ecological issues, product more environmentally friendly, educate customers to be environmentally responsible and consume green products (Grant, 2007). GM is a marketing activity that recognizes environmental concern as the responsibility of business development. Customers' increasing knowledge of green products will increase the demand for green products (Oyewole, 2001). Green customers are individuals who use green products to save the environment for the future. Empirical study explains that in general, customers who have more knowledge and awareness of environmental problems are categorized as green consumers (Andrew-Gilg, 2005). Uthamaputhran, Shazneem and Hasliana (2014) state that there is a relationship between Green Marketing strategy and customer purchase intention towards green products. Maheshwari (2014) states that the success of green marketing efforts conducted by marketers in bringing awareness of green brands to consumers has an impact on consumers' decisions to consume green products.

*H3: Green Marketing strategy associated with Green Purchase Intention*

## 3. Research Model

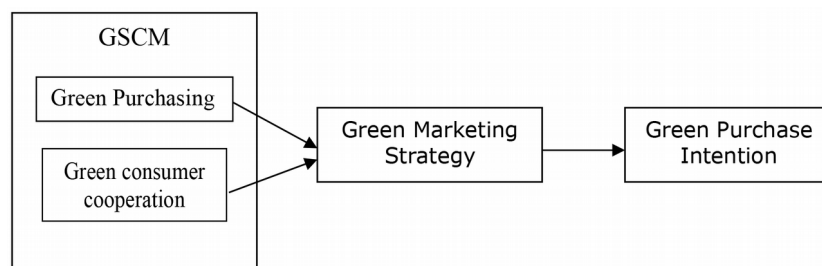


Figure 1. The Relationship between Green Supply Chain Management and Green Marketing Strategy On Green Purchase Intention

The model shows that the consumer intention of Green Purchase antecedents is influenced by the Green Marketing Strategy and GSCM. GSCM in this study uses two dimensions, namely green purchasing and green consumer cooperation (Zhang et al., 2017). Green marketing strategy is company's strategy orientation that leads to green marketing (Papadas, Avlonitis & Carrigan, 2017) and Green Purchase Intention adopts from Lee (2017).

## 4. Research Method

### 4.1. Research Type

This study uses a survey because it considers several factors that explain the existence of the phenomenon (Simonson, Carmon, Dhar, Drolet & Nowlis, 2001). The data used are primary data obtained through filling out the questionnaire. This study uses a five-point Likert scale ranging from 1 to 5.

### 4.2. Sampling Techniques

The population in this study were all SME managers in craft centers in the Special Region of Yogyakarta (DIY) which included general handicrafts and leather-clothing. The sampling technique is based on purposive sampling. The number of samples in this study is 200 respondents. The number of analysis unit is two. First, organization represented by SME managers. The requirement is SMEs that have been oriented towards environmentally friendly production processes. This unit of analysis is used to obtain data related to GSCM and GMS variables. Second,

individuals. Individual analysis unit is used to obtain data related to the GPB variable. The requirement is individual who has purchased environmentally friendly handicraft products. The distribution of respondents in this study is 100 respondents from SMEs which engaged in the general handicraft industry, and 100 respondents from leather-clothing SMEs. 200 respondents are consumers who already have knowledge of green products and have purchased environmentally friendly handicraft products (general handicrafts and leather-clothing) from DIY. According to Hair, Anderson, Tatham and Black, (1998), the minimum number of samples so that the test data has statistical power is 10 times analyzed parameters. The number of parameters analyzed in this study is 16. So the minimum sample is 160 respondents. The sample unit in this study is individuals.

#### 4.3. Validity and Reliability Test

Cooper and Schindler (2003) state that construct validity shows compatibility between the use of measuring instruments and theory. The construct validity consists of two types of testing, namely the convergence and discriminant validity. Convergent validity shows the obtained value from the questions that measure the same concept which has high correlation, while discriminant validity shows the obtained value from the items that measure different constructs which do not correlate each other. The constructs in this study are measured by one method. Measurement of convergent validity is conduct by looking at all loading of latent construct to the corresponding indicators which has statistical value  $t > 2$  (Purwanto, 2002). Measurement of discriminant validity is conducted by looking at low correlation values between constructs (Nunnally, 1978). The next step is conduct reliability testing to test the consistency of the indicators used in the study. Indicators for all variables show consistency. It can be look at the Cronbach's alpha coefficient which has coefficient  $\geq 0.7$ . Individuals as respondents in this study must have good consistency in giving answers to each question items. Because of multidimensional indicators, the validity test of each latent variable / construct will be tested by looking at the loading factor of the relationship between each observed variable and latent variable. The limit value used to assess an acceptable level of reliability is 0.70. The second measure of reliability is variance extracted which shows the amount of variance from the indicators extracted by the latent construct developed. This variance extracted value is recommended at a level of at least 0.5 (Bentler, 1992).

#### 4.4. Data Analysis Technique

This study uses structural equation modeling (SEM). Direct influence (Path Coefficient) is observed from standardized regression weights, by testing the comparative significance of CR (Critical Ratio). Testing of models developed with various Goodness of Fit criteria. Measurement of goodness of fit model is a relative criterion. The use of several goodness of fit index allows researchers to get an acceptance of the proposed model (Hair et al., 1998). The measurement of goodness of fit model is divided into three types, namely absolute fit measures, incremental fit measures, and parsimonious fit measures. Absolute fit measures measure the level of the model that overall predicts the covariance matrix. In this study, testing of absolute fit measures was conducted by using chi-square statistics ( $\chi^2$  or CMIN), GFI, and RMSEA index.

#### 4.5. Interpretation of Results

The interpretation of latent extracts measurement result is based on the level of significance of the loading factor or the coefficient of lambda ( $\lambda$ ) which is based on the probability value (p). We considered it is significant if the p value is  $\leq 0.05$ . Furthermore, testing the complete model derived from all constructs and significant indicators to examine the factors that influence the green purchase intention by observing the path coefficient (standardized regression) namely direction, magnitude, and significance. The assessment of significance is based on the probability value (p value  $\leq 0.05$ ).

### 5. Results

#### 5.1. Respondent Characteristics

This study uses primary data. Data collection uses questionnaire by giving written statement to respondent. This questionnaire is closed since the answer is available. Respondents in this study were (1) craft SMEs in DIY and (2) green product consumers.



	Total	Percentage
<b>Gender</b>		
Male	118	59%
Female	82	41%
<b>Types of Business Ownership</b>		
Self ownership	163	82%
Joint venture with friend	9	4.5%
Family business	28	13.5%
<b>Education Background</b>		
Junior Highschool	16	8%
Senior Highschool	49	24.5%
Diploma	34	17%
Bachelor Degree	101	50.5%
<b>Long Business Running</b>		
3-5 years old	14	7%
6-10 years old	31	15.5%
11-15 years old	50	25
16-20 years old	63	31.5%
> 20 years old	42	21%
<b>Number of employees</b>		
1 - 5 years old	64	32%
6 - 10 years old	83	41.5%
11 – 15 years old	27	13.5%
16 - 20 years old	18	9%
> 20 years old	8	4%

Table 1. SME actor respondents' description

The description of green products respondents which produced by craft SMEs can be seen in Table 2.

	Percentage
<b>Gender</b>	
Male	33 %
Female	67 %
<b>Education</b>	
Junior Highschool	6%
Senior Highschool	11%
Diploma	19%
Bachelor	53%
Others	11%
<b>Occupation</b>	
Civil servants	12%
Entrepreneur	3%
Student	60%
Retired	17%
Others	8%

	Percentage
<b>Income level</b>	
< 2.5 million	48%
2.5 – 3.5 million	18%
3.5 – 4.5 million	12%
4.5 – 5.5 million	20%
> 5.5 million	2%

Table 2. Green product consumers respondents' description

## 5.2. Validity and Reliability Testing Results

Testing of construct validity refers to the validity of convergent and discriminant. Convergent validity shows that the values obtained from the questions that measure the same concept have high correlation, while discriminant validity shows the values obtained from the items that measure different constructs do not correlate each other. Measurement of convergent validity conduct by looking at all loading from a latent construct to the corresponding indicators which having CR value  $\geq 2$  (Purwanto, 2002) and the required lamda (standardized factor loading) is greater than 0.4. If this condition is not achieved, the value of the critical ratio or CR that is identical to the t-count greater than 2 also shows that the indicator is significantly a dimension of the factors formed (Hair et al., 1998). The results of testing validity construct can be seen in the following Table 3.

Indicator	Validity				Descriptions
	Factor loading				
GP1 ← Green_Purchasing	.745				Valid
GP2 ← Green_Purchasing	.738				Valid
GP3 ← Green_Purchasing	.775				Valid
GCC1 ← Green_Consumer_Cooperation		.784			Valid
GCC2 ← Green_Consumer_Cooperation		.605			Valid
GCC3 ← Green_Consumer_Cooperation		.664			Valid
GCC4 ← Green_Consumer_Cooperation		.888			Valid
GMS1 ← Green_Marketing_Strategy			.837		Valid
GMS2 ← Green_Marketing_Strategy			.864		Valid
GMS3 ← Green_Marketing_Strategy			.736		Valid
GMS4 ← Green_Marketing_Strategy			.442		Valid
GMS5 ← Green_Marketing_Strategy			.407		Valid
GMS6 ← Green_Marketing_Strategy			.845		Valid
GPI1 ← Green_Purchase_Intention				.646	Valid
GPI2 ← Green_Purchase_Intention				.683	Valid
GPI3 ← Green_Purchase_Intention				.518	Valid

Table 3. Construct Validity Test Result

Based on Table 3, it can be seen that all question items are valid because they have a factor loading greater than 0.4 (Hair et al., 1998). Reliability testing is conducted by testing internal consistency, construct reliability and extracted variance. Reliability test results can be seen in Table 4.



Construct	Items	Cronbach alpha Coefficient	Construct reliability	Variance extracted	Descriptions
Green_Purchasing	3	0.752	0.918	0.790	Reliable
Green_Consumer_Cooperation	4	0.788	0.972	0.899	Reliable
Green_Marketing_Strategy	6	0.759	0.957	0.799	Reliable
Green_Purchase_Intention	3	0.787	0.899	0.750	Reliable

Table 4. Reliability Test Results

The limit value of acceptable level of reliability is 0.70. (Hair et al., 1998). Variance extracted shows the number of variance indicators extracted by the latent construct developed. High variance extracted value indicate that the indicators have well represented developed latent constructs. The recommended variance extracted value is at least 0.50. The results of the internal consistency reliability testing for each construct using the Conbach's Alpha coefficient have met the required rules of thumb  $\geq 0.7$  (Hair et al., 1998).

Other reliability test performed is construct reliability test and extracted variance. Construct reliability and extracted variance show consistent instruments, which are indicated by the construct reliability value above 0.7 and extracted variance  $\geq 0.50$ . Both tests are still in the internal consistency test corridor which will give researchers greater confidence that individual indicators measure a similar measurement (Hair et al., 1998).

### 5.3. The Results of Testing Green Purchase Intention Using SEM

The results of testing the green purchase intention model using AMOS 21 can be seen in Figure 2, and evaluation of the results of testing the model can be seen in Table 5.

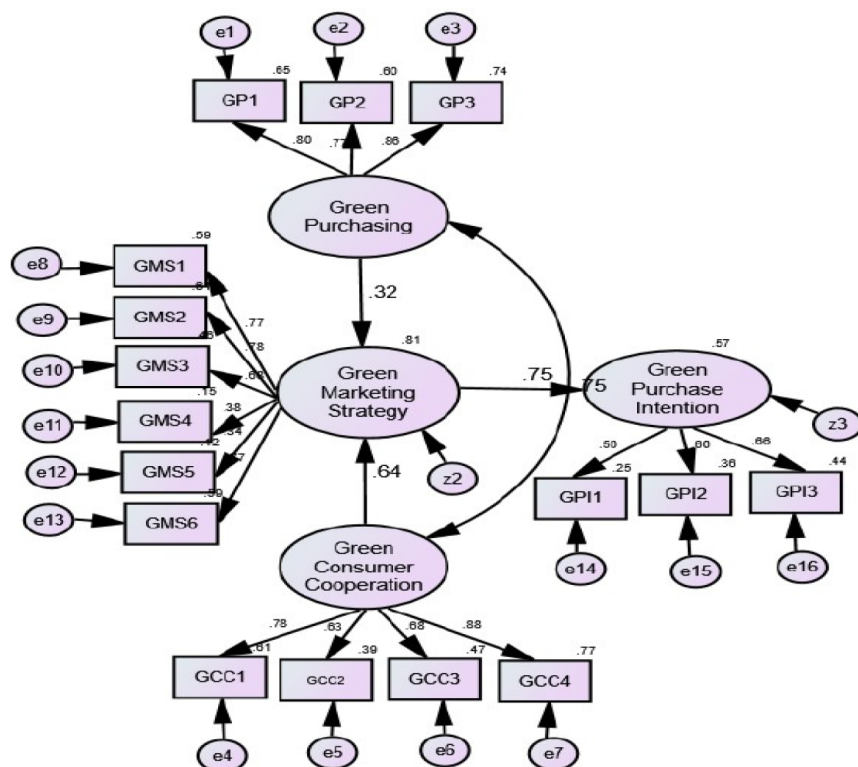


Figure 2. The Results of The Relationship between Green Supply Chain Management and Green Marketing Strategy On Green Purchase Intention

Goodness of fit type model	Goodness of fit index models	Recommended value	Results	Descriptions
Absolute fit measures	Chi-Square Statistic ( $\chi^2$ or CMIN) P GFI RMSEA	Small $\geq 0.05$ $\geq 0.90$ $\leq 0.08$	308.148 0.784 0.942 0.012	Moderate Good Good Good
Incremental fit measures	AGFI CFI	$\geq 0.90$ $\geq 0.90$	0.885 0.941	Good Good
Parsimonious fit measures	Normed $\chi^2$ (CMIN/DF)	$1 \leq \text{Normed } \chi^2 \leq 5$	3.081	Good

Table 5. Goodness of Fit Index Evaluation Criteria

From Table 5 it can be concluded that the Green Purchase Intention model is acceptable. To test the hypothesis influence between Green Purchasing, Green Consumer Cooperation, Green Marketing Strategy and Green Purchase Intention variables presented by the coefficient path that shows the causal relationship between these variables. These relationships are shown in Table 6.

Path	Estimate	C.R.	P	Hypothesis
GP $\rightarrow$ GMS	0.318	3.394	***	H1: Supported
GCC $\rightarrow$ GMS	0.635	6.254	***	H2: Supported
GMS $\rightarrow$ GPI	0.755	7.04	***	H3: Supported

Table 6. Path Coefficient (Standardize Regression) between Variables

Hypothesis testing is conducted by comparing the probability value (p) it is significant if the p value is  $\leq 0.05$ . With these criteria, all the paths shown in Table 6 above are significant. GP has a significant positive effect on GMS of 31.8%. GCC has a significant positive effect on GMS of 63.5%. GMS has a positive effect on GPI of 75.5%.

## 6. Discussion

The study results indicate that the green purchase intention model can be accepted, it means that this model can be explained by green purchasing, green consumer cooperation and green marketing strategy. Furthermore, the result proves that green purchasing has a positive effect on green marketing strategy (H1 accepted). The result of data analysis shows that SMEs have implemented green purchasing through the selection of suppliers which are concern with the environment, conduct environmental audits to suppliers' partners, and have suppliers which supply environmentally friendly raw materials. The implementation of green purchasing causes SMEs to have specific policies to choose partners, use renewable energy sources for products / services, participate in every pro-environment activity and have a target market for consumers who are pro-environment. The craft SMEs which are become the object of research have products that are also environmentally friendly, because it uses natural raw materials and pro-environment production processes as well, such as batik, knitting, leather craft, water hyacinth craft and others.

The results of this study support the findings of Olaore and Adebisi (2013) which state that purchasing decisions for green raw materials is one of the strategic processes carried out in a series of operational and influential activities on green marketing strategies. Wisner et al. (2012); Min and Galle (2001) also state that companies that decided to conduct green marketing must also implement a green supply chain, from the purchasing to the distribution of green products to consumers. So that the decision to purchase green raw materials will greatly influence the success of the company's green marketing strategy. The purchasing function plays an important role in the selection of raw materials, supply of components and parts (Zsidisin & Siferd, 2001)

The second hypothesis which states that there is association between green consumer cooperation to green marketing strategy is accepted. The results of this study indicate that the collaboration between SMEs and customers regarding clean production processes, environmentally friendly packaging, eco label design and good

logistical resources encourages companies to establish green marketing strategies. The green marketing strategy conducted by SMEs in DIY Indonesia can be seen from the concentration of SME marketing strategy planning that has led to environmentally friendly products. In addition, SMEs in DIY have applied green business and always interacted with suppliers and distributors who are also oriented with environmentally friendly products, even these SMEs have targeted consumers who like green products. The results of this study support the findings of Vachon and Klassen (2006); Green et al. (2012); Zhang et al. (2017) and Laari et al. (2016). Vachon and Klassen's (2006) show that collaboration with green product customers (GCC) can increase the success of a green marketing strategy. According to Zhang et al. (2017) and Laari et al. (2016), Good GCC made companies easily improve green marketing performance through a well-designed green marketing strategy. Zhang et al., (2017) state that based on natural resource-based view (NRBV) theory, companies which survive in competition must be concerned with environmental pollution. NRBV emphasizes that success in overcoming environmental problems can provide more business competition opportunities (Laari et al., 2016; Muafi, 2017).

The third hypothesis which states that there is an association of green marketing strategy on the green purchase intention is accepted. The result indicates that the seriousness of SMEs in implementing green marketing strategies can increase consumers' intention to buy green products. The success of a green marketing strategy increases consumers' intention to buy green products. Consumers recognize that SMEs have implemented a green marketing strategy. This is indicated by SMEs provide environmentally friendly products and the products packaging are made from recycled paper and can easily recycled. This SME in DIY does not use plastic-based packaging as a form of environment protection.

By implementing the suitable green marketing strategy, green product customers are easier to consume green products and recommend green products to other consumers. Furthermore, green products consumers are more responsible for environmental preservation. The results of this study support the findings of Maheshwari (2014) which states that green marketing strategy is responsible for meeting the sustainability demands of green customers. Green marketing educates customers to be environmentally responsible and consume green products (Grant, 2007). GMS conducted by companies to increase customer knowledge about green products and green products demand (Oyewole, 2001). The success of green marketing strategies increases knowledge and awareness of environmental problems and increases the purchase intention of green products (Andrew-Gilg, 2005; Uthamaputhran et al., 2014). Maheshwari (2014) also states that the success of a green marketing strategy has an impact on green brand awareness and purchase intentions of green products. In addition, Papadas et al., (2017) state that in a green marketing strategy, the company focuses on environmentally friendly suppliers, use renewable resources, and have green consumer targets. Green marketing strategies can increase consumer buying intentions on green products (Lee, 2017).

## 7. Practical Contribution

This study offers some suggestions for practitioners based on research findings, namely:

1. Although all GSCM can be effective in achieving high green marketing performance, practitioners must understand each SMEs characteristics. Because each SMEs in DIY has different product characteristics and raw materials and different production processes.
2. GSCM which is conducted by the company can be started by conduct the right GP and always coordinating with consumers which related to green products. GP and GCC as GSCM elements have a strong influence in predicting the success of a green marketing strategy. It is expected that SMEs should pay attention to the purchase of raw materials, so that the issue of environmentally friendly raw materials can be truly obtained to enter the production process and produce environmentally friendly products.
3. The intention to buy green products is influenced by the green marketing strategy which is carried out by SMEs. SMEs should set green consumers as their target market, so when designing marketing strategies, SMEs begin to make policies related to partners to supply environmentally friendly raw materials, use renewable natural resources, conduct environmentally friendly production processes, environmentally friendly packaging and eco design. The suitable green marketing strategy can produce products that are truly environmentally friendly and can compete in the global market.

## 8. Limitation and Future Research

Although this study offers several important contributions, research also has several limitations, namely:

1. We need to reclarify the association of GSCM on Green marketing strategy. although the results of this study support (Rao & Hoult, 2005; Chiou et al., 2011; Bai & Sarkis, 2010; Green, et al., 1998), but there are other studies that find different results (Parast et al., 2013; Cronin et al., 2011).
2. This study is limited by small sample size. The sample in this study is only environmentally oriented SMEs. Large companies that are also environmentally friendly have not been included as samples in this study, so the results of this study can only be generalized to SMEs. Future research should accommodate these two types of companies, namely SMEs and large companies so that it can be easier to generalize study findings and allow different tests of GSCM to be applied to SMEs and large companies.
3. This study only analyzes GSCM from two dimensions, namely GP and GCC. Other variables that can be used to explain GSCM are internal environmental management, green information systems, cco-design & packaging, investment recovery (Al Khattab, 2015); Reverse logistics, legislation and regulation (Laosirihongthong et al., 2013).
4. Another variable that also needs to be considered in predicting success in green marketing strategy (GMS) is social control, environmental dynamism (Zhang, et al., 2017); consumer values / beliefs, attitudes towards environmentally friendly products, consumer awareness, marketing efforts, trust and product performance (Maheshwari, 2014).

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