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# The Role of Green Innovation Mediation on Coffee Export Marketing Performance in Central Java Reviewed From Customer Orientation and Competitor Orientation

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## Abstract

*This research aims to explore issues related to market orientation in two dimensions, namely customer orientation and competitor orientation. The main focus of this research is to determine the mediating role of green innovation on the influence of customer orientation and competitor orientation on coffee export marketing performance in MSMEs in Central Java. The sample was 116 Coffee Exporting MSMEs in the Central Java region of Indonesia. Data analysis using PLS-SEM. The results of this research are (1) customer orientation has a significant effect on green innovation (2) competitor orientation has a significant effect on green innovation (3) customer orientation has a significant effect on export marketing performance (4) competitor orientation has no significant effect on export marketing performance (5) green innovation has a significant effect on export marketing performance (6) customer orientation has an indirect effect on export marketing performance through green innovation (7) competitor orientation has an indirect effect on export marketing performance through green innovation*

**Keywords:** *customer orientation, competitor orientation, green innovation, export marketing performance*

## 1. Introduction

Coffee is one of Indonesia main export commodities from plantations. According to data from the International Coffee Organization (ICO), in 2021 Indonesia will be the 4th largest coffee exporting country in the world after Brazil, Vietnam and Colombia with total Indonesian coffee production reaching 765,415 tons per year and total coffee exports reaching 375,555.9 tons per year with the total export transaction value was US\$ 808,158.9 dollars. The five main export destination countries for Indonesian coffee products include the United States (22.94%), Japan (10.46%), Malaysia (7.61%), Egypt (6.45%), and Germany (6.31%). %. Currently Indonesia has two types of coffee, namely Arabica and Robusta. According to data from the Indonesian Coffee Exporters and Coffee Industry Association (AEKI), Robusta is a type of coffee with a land area of 916,053 Ha (73%) and Arabica with a land area of 325,659 Ha (23%). The main

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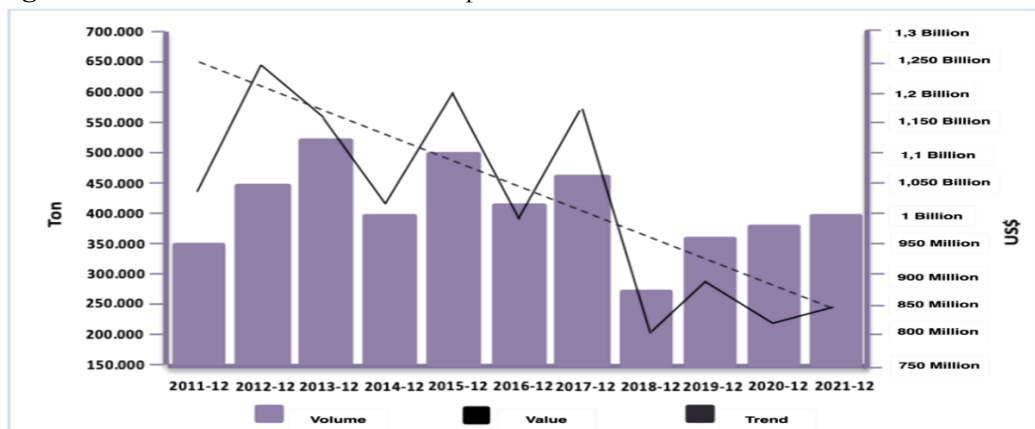
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Robusta coffee producing area is in the Indonesian coffee triangle region which includes the provinces of Lampung, South Sumatra and Bengkulu. These three provinces are capable of producing robusta coffee, almost 50 percent of Indonesia's production. Apart from these three main provinces, Robusta is also cultivated in almost all regions of Indonesia (<https://www.ico.org>).

The sales performance of Indonesian coffee exports to foreign countries over the last 10 years has tended to decline quite significantly. Average export sales from 2012 to 2017 still show a relatively stable trend. In the first 5-year period, the average export sales volume was still recorded at 454.78 tons with a sales value of U\$ 1,120 billion. Different conditions were shown in export sales for the second 5-year period, namely from 2017 to 2021, which showed an average export sales volume of only 370.63 tons or a decrease of -18.5% compared to the first 5 year period. Likewise, the average export sales value from 2017 to 2021 was recorded at U\$ 906.2 billion or a decrease of -19.09% compared to the first 5-year period. Graph 1 and Table 1 below present an analysis of sales trends in Indonesian coffee exports to foreign countries from 2011 to 2021.

**Figure 1.** Chart of Indonesian Coffee Export Sales Trends to Abroad 2011-2021.



Sourcer: BPS, 2022.

**Table 1.** Trend in Indonesian Coffee Export Sales 2011-2021.

No	Year	5 Years period 1(2012-2016)				5 Years period 2 (2017-2021)			
		Vol Year Thousand Tons	%Vol (+/-)	Value (Billion \$)	%Value (+/-)	Vol Year Thousand Tons	%Vol (+/-)	Value (Billion \$)	%Value (+/-)
Baseline Year	2011	346,06	-	1.000,00	-	2016	412,37	-	1.000,00
1	2012	447,01	29,17%	1.2000,00	20,00%	2017	464,16	12,56%	1.200,00
2	2013	532,14	19,04%	1.200,00	0,00%	2018	277,4	-40,24%	806,90
3	2014	382,75	-28,07%	1.000,00	-16,67%	2019	355,8	28,26%	872,40
4	2015	499,61	30,53%	1.200,00	20,00%	2020	375,6	5,56%	809,20
5	2016	412,37	-17,46%	1.000,00	-16,67%	2021	375,5	-0,03%	808,16

Sales Average	454,78	6,64%	1.120,00	1,33%	369,69	1,22%	899,332	-2,40%
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Source: <https://databoks>, 2022

The phenomenon related to export marketing performance as shown in Table 1. is that the development of Indonesian coffee export performance during 2012-2021 tends to fluctuate and experienced a decline starting in 2017. This phenomenon is in the coffee export market competition, one of which is determined by the competitive advantage of a country that is able to compete in the international market.

The performance of coffee export marketing among MSMEs in Central Java is an important indicator of the success of coffee export marketing, and market orientation is one of the factors that determines the level of export marketing performance. In the point of view Narver & Slater (1990) market orientation can be formed from customer orientation and competitor orientation. Customer orientation refers to the marketer's efforts to understand customer desires and competitor orientation refers to the marketer's understanding of the strengths, weaknesses, capabilities and strategies of competitors, both main and potential competitors.

Previous findings provide empirical evidence regarding the positive relationship between market orientation and export marketing performance. Cadogan et al. (2009) stated that an effective way to improve the export performance of manufacturing companies is to implement a market orientation in their export operations. In particular, for most exporting manufacturers, empirical studies show that a higher level of market orientation in a company's export market will influence the level of export success and performance.

Acikdilli (2015) found that export market orientation has an influence on export performance in export companies in Turkey. Market orientation is carried out by understanding and meeting customer needs by providing value that can encourage customer satisfaction and being able to understand competitors' strategies by creating products that outperform competitors. Thus, through sufficient understanding of customers and competitors, it can support companies to improve export marketing performance. Morgan's (2011) research shows that export marketing strategy is key in facing international competitiveness, because this will make a positive contribution to export market performance. Cadogan's (2009) findings show that export market orientation has a positive relationship with export performance.

In the research of Fitri et al. (2022) customer orientation, competitor orientation, and product innovation are determinants of marketing performance, where these three factors have a positive influence on marketing performance. Widyaningsih et al.'s research. (2017) found that product innovation was able to mediate the influence of market orientation on marketing performance in the restaurant industry in Denpasar, Indonesia.

In the last few decades, the world has faced very serious environmental problems. Several countries, including China, have implemented environmental regulations to address environmental problems since 2006 (Dangelico & Pujari, 2010). The Ministry of Environment and Forestry of the Republic of Indonesia has developed a Company Performance Rating Assessment Program in Environmental Management (PROPER), this program aims to encourage companies to implement green (environmentally friendly) economic principles (<https://proper.menlhk.go.id>).

In line with increasingly stringent environmental regulations, consumer production and consumption patterns have changed so that they become more environmentally responsible. Consumers prefer to buy environmentally friendly products (Kumar & Ghodeswar, 2015).

Companies are increasingly oriented towards environmentally friendly markets, to increase their social and environmental responsibility (El-Kassar & Singh, 2018). Green innovation plays an important role in creating competitive advantage in the era of environmental awareness (Chen et al., 2006). Green innovation applied to manufacturing MSMEs will have a significant impact on business performance (Singh et al., 2016).

In line with changes in consumer demand and increasing competition for environmentally friendly coffee products in the international market, implementing market orientation is important for MSME players, especially MSME coffee exporters in Central Java. MSMEs need to adapt company products according to the needs of the export market and develop strategies to be able to compete with export products. Thus, customer orientation and competitor orientation are very necessary in achieving the successful implementation of green innovation. Green innovation allows coffee MSMEs to encourage the development of environmentally friendly products and processes that are more competitive so that they can be used as a strategy to overcome competitors' movements in international markets, which will have an impact on increasing export performance.

Most previous research on the relationship between market orientation and export performance has concentrated on using the overall market orientation construct. This research explores issues related to market orientation in two dimensions, namely customer orientation and competitor orientation. The main focus of this research is to determine the mediating role of green innovation on the influence of customer orientation and competitor orientation on coffee export marketing performance in MSMEs in Central Java.

## **2. Theoretical Framework and Hypothesis Development**

### **2.1 Theoretical Framework**

#### **2.1.1 Export Marketing Performance**

Export performance is identified as the result of a company's activities in the export sector. Export activities do not only revolve around how to sell the company's products overseas but are followed by adjusting products, prices or promotional materials to international markets (Keegan, 2016). The choice of approach to measuring export performance depends on contextual factors, the research method is specifically related to the ability of the research design to overcome measurement problems, the export business is specifically related to the characteristics of the export organization and environmental factors surrounding export activities, and the target audience. Export marketing performance indicators are income, strategy and satisfaction (Acikdilli, 2015). Morgan (2011) states that export marketing performance is the level at which company goals, both strategic and economic, related to product exports to foreign markets, are achieved through planning and implementing marketing strategies. Export performance measures are expressed at the export market product business level, include economic and strategic dimensions, and include both objective and subjective measures. Export marketing performance consists of four aspects: 1). The first level of management strategic objectives achieved, 2). Average growth in export sales figures per year for five years, 3). Overall export profitability over five years, 4). Management's perceived success.

#### **2.1.2 Green Innovation**

Green innovation is the creation of new products or improving products significantly. Not only focusing on products, but also focusing on the creation and significant development of

new processes, marketing methods, company methods in business practices (Shashwat, 2019). Green innovation not only has an impact on reducing the impact on the environment, but can provide benefits to society by changing social norms and cultural values.

In the view of Chen et al. (2006) green innovation as an innovation tool related to the creation and development of products or processes, including technological innovation capable of creating energy savings, preventing pollution, implementing waste recycling, environmentally friendly product design or environmental management. Reuvers (2015) defines green innovation as a process of developing, improving or creating a product or process that can provide a significant reduction in environmental impacts. Green innovation is grouped into two (1) Green product innovation, which is creating products or services that significantly reduce the impact on the environment. (2) Green process innovation, is creating new production or delivery methods that are better than previous methods (Chen et al., 2006).

### **2.1.3 Customer Orientation**

Customer orientation is the most urgent and fundamental thing for a company, this is because customers are the most important thing for a company to determine its customer orientation (Cadogan et al., 2009). Customer orientation is a good understanding of buyers, the target of buyers is to be able to create superior value for the company. By creating a good appearance, a company will become stronger and survive (Slater & Nerver, 1990). Customer orientation in the researcher's view can be defined as an activity related to the company's understanding of customer needs, its targets and the company's ability to design products and services that can satisfy customer needs.

### **2.1.4 Competitor Orientation**

Competitor orientation is a company's willingness to monitor the strategies implemented by its competitors. Market orientation is a process and activity related to creating and satisfying customers by continuously assessing customer needs and desires (Uncles, 2000). Competitor orientation means the understanding a seller has in understanding the short-term strengths, weaknesses, capabilities, and long-term strategies of both its current and potential major competitors. Wherever management recognizes its competitors, it will help and dig up various information about what and how competitors run their business as well as the strategy models implemented, so that management can obtain certainty that whatever strategies and activities the company carries out are not preceded by its competitors (Day & Wensley, 2010). Competitor-oriented companies will always spend most of their time tracking competitors' strategy usage and market share and trying to find various strategies to fight them. Companies through market orientation will try to answer three questions, namely who the company's competitors are, what kind of technology the competitors use, and whether the competitors represent an attractive alternative from the target customer's point of view (Zhou et al., 2005).

## **2.2 Hypothesis Development**

### **2.2.1 Effect Customer Orientation on Export Marketing Performance**

Customer orientation (CusO) is a sufficient understanding of target buyers that can create superior value continuously. The seller must understand the buyer's entire value chain, not only now but also its development over time in accordance with internal and market dynamics (Narver & Slater, 1990). Increasing customer value can be done in two ways, namely: (1) by increasing benefits related to the costs incurred by buyers, and (2) by reducing buyer costs related to the benefits received by buyers. Sellers must understand the economic and political

constraints at all levels of distribution (channel). Only with this framework can sellers understand who their potential customers are, both present and future, and what their perceptions are about satisfying their relevant desires. Thus, through sufficient understanding of customers, this can support the company to improve its performance. Based on the review and development of this theory, the research hypothesis can be formulated as follows:

**H1:** *Customer orientation has a positive and significant effect on the export marketing performance of coffee MSMEs*

### **2.2.2 Effect Competitor Orientation on Export Marketing Performance**

Competitor orientation is a company's understanding of the short-term strengths and weaknesses, as well as the long-term capabilities and strategies of current and potential competitors (Li & Calantone, 1998). Like customer analysis, competitor analysis must also be carried out through market understanding. In the export market, competition occurs not only with competing exporters, but also with local producers (Julian & Ahmed, 2005). Thus, companies need to increase their knowledge to understand competitors, as well as prepare the right strategy to be able to win the competition with competitors.

In terms of export marketing, export success depends on the degree of MO of the company in foreign markets. In this case, the collection and use of information (key elements of MO) are positively related to export performance (Cadogan et al., 2009). In this context, there is a trade-off between MO behavior for exports and MO behavior for the domestic market. In other words, the tendency of a company's MO behavior is that if MO to the export market increases, then MO to the domestic market will decrease, or vice versa. Based on the review and development of this theory, the research hypothesis can be formulated as follows:

**H2:** *Competitor orientation has a positive and significant effect on the export marketing performance of coffee MSMEs*

### **2.2.3 Effect Green Innovation on Export Marketing Performance**

Green innovation (environmentally friendly) refers to product and process innovation that involves energy savings, pollution prevention, waste recycling, and environmentally friendly product design (Chen et al., 2006). A company supports and innovates environmentally friendly products in order to comply with environmental regulations and increase competitiveness (Dangelico, 2010). A company adopts green innovation to reduce waste generated by the production process. Environmental action which is part of a sustainable program has a very important role in improving environmental, social and economic performance (Kammerer, 2009). A company will generate higher profits by developing, producing, and selling environmentally friendly products that provide environmental and social benefits (Kopnina, 2015). Research by Weng et al. (2015) on manufacturing and service companies in Taiwan empirically proves that green (environmentally friendly) innovation practices improve environmental performance and company performance. Chan et al.'s research (2016) on the manufacturing industry in China revealed that environmentally friendly product innovation drives cost efficiency and company profitability. Environmentally friendly process innovation has a positive effect on organizational performance (El-Kassar & Singh, 2018).

Caldera (2010) found that product and process innovation is related to exports. Pla-Barber and Alegre (2007) found a positive and significant influence of innovation on the export intensity of companies in the French biotechnology industry. Tavassoli (2018) provides evidence from Sweden regarding the positive influence of product and process innovation on the export performance achieved by companies. Based on the review and development of this theory, the research hypothesis can be formulated as follows:



**H3:** *Green innovation has a positive and significant effect on the export marketing performance of coffee MSMEs*

#### **2.2.4 The Influence of Customer Orientation on Green Innovation**

The important role of customers encourages companies to understand and satisfy their needs, which is called customer orientation (Liao, 2018). Ruekert (1992) defines customer orientation as the extent to which a company uses customer information and implements tailored practices to assess customer needs and satisfaction. Based on cultural theory, customer orientation is a company culture that encourages and supports efforts to uncover and satisfy customer needs and preferences (Narver & Slater, 1990).

In today's competitive environment, customers have a wide range of product choices, increasing the importance of supply and demand-driven innovation (Acar et al., 2013). Customer orientation has become a widely studied concept. Many experts have found that customer orientation has a positive effect on green innovation and competitive advantage. When a customer-oriented company seeks to satisfy its customers, corporate culture can encourage company innovation to develop environmentally friendly products. Thus, a company culture that supports efforts to satisfy customers and fulfill customer needs will have a positive impact on increasing green innovation, both in the development of environmentally friendly products and processes (Frambach et al., 2016). Based on the review and development of this theory, the research hypothesis can be formulated as follows:

**H4:** *Customer orientation has a positive and significant effect on the adaptation strategy for coffee MSME export products.*

#### **2.2.5 Effect Competitor Orientation on Green Innovation**

Competitor orientation (ComO) is a company culture to gain sufficient understanding of the short-term strengths/weaknesses, as well as the long-term capabilities and strategies of current and potential competitors (Narver & Slater, 1990). In other words, ComO is a reflection of the company's cultural norms towards its competitors (Li & Calantone, 1998). Thus ComO plays an important role in directing, providing motivation and building knowledge about the company's competitors.

The research results of Tarro et al. (2014), stated that competitor orientation has a positive influence on green innovation. The company's thinking on competitor orientation will create ideas to encourage green innovation. Competitor-oriented companies will have creativity, produce ideas and be full of innovation to reduce the negative impact of environmental pollution so that it is beneficial for many people. Based on the review and development of this theory, the research hypothesis can be formulated as follows:

**H5:** *Competitor orientation has a positive and significant effect on the adaptation strategy for coffee MSME export products*

#### **2.2.6 The Role of Green Innovation in Mediating the Effect of Customer Orientation on Export Marketing Performance**

Aaby & Slater (1989) explained that export marketing performance is influenced by the company's internal and external environment both in the country of origin and in the export destination country. In general, Aaby & Slater (1989) identified three internal company factors that influence export marketing performance, namely: 1) company characteristics; 2) competence; and 3) strategy. Although the literature regarding the relationship between green innovation and export performance at the company level is still small, the relationship between

the two variables continues to grow. Product cycle models of international trade predict that exports in industrialized countries are driven by innovation (Vernon, 1966; Krugman, 1979). In the case of the UK, Wakelin (1998) finds a positive and statistically significant correlation between innovation and exports. Bleaney & Wakelin (2002) found that companies that intensively innovate are more likely to export.

The research results of Meneto & Siedschlag (2020) show that innovation driven by environmental policy can benefit a company's international competitiveness as measured through export participation. In the view of Frambach et al. (2016), customer orientation is related to a company culture that supports efforts to satisfy customers and fulfill customer needs. Customer-oriented companies will have a positive impact on the company's tendency to carry out environmentally friendly innovations. Based on the review and development of this theory, the research hypothesis can be formulated as follows:

**H6:** *Green innovation is able to mediate the influence of customer orientation on the export marketing performance of coffee MSMEs.*

### **2.2.7 The Role of Green Innovation in Mediating the Effect of Competitor Orientation on Export Marketing Performance.**

In the same concept as customer orientation, competitor orientation as part of market orientation proposed by Narver & Slater (1990) is an important part underlying the company's green innovation strategy in relation to improving export marketing performance. Competitor orientation is a company's understanding of the short-term strengths and weaknesses, as well as the long-term capabilities and strategies of current and potential competitors (Narver & Slater, 1990). Like customer orientation, export marketing performance for non-durable goods products, namely coffee products, is greatly influenced by the company's ability to analyze and identify competitors in the export market in the destination country. Competitor analysis studies should also include a range of technologies that can satisfy both current needs and the expected needs of customers.

According to the view of Ortigueira-Sanchez et al (2022), innovation is a key capability that can encourage sustainable competitive advantage and explain company heterogeneity in export performance. The company's tendency to carry out green innovation can start from competitor orientation, the company's ability to understand market competition including the strategies of its main competitors is important to achieve better business performance (Guo et al., 2022). To develop green innovation, it is very important to know the company's attention to strategy and competitor advantages. Competitor information will help companies develop strategies to create environmentally friendly innovations that are superior to competitors, so that it will support improving company performance (Ribeiro & Neto, 2021).

Research by Tjahjadi et al (2021) found a positive influence of environmentally friendly market orientation on the performance of MSMEs in East Java, Indonesia through environmentally friendly innovation. To encourage green innovation (environmentally friendly products and processes), MSMEs besides needing to meet customer needs also need to understand their competitors' strategies, this will make a positive contribution to business performance. The implication of these findings is that to obtain better business performance, MSMEs need to adopt an environmentally friendly market orientation and carry out environmentally friendly innovations in their business processes. Based on the review and development of this theory, the research hypothesis can be formulated as follows:



**H7:** *Green innovation is able to mediate the influence of competitor orientation on the export marketing performance of coffee MSMEs*

### 3. Method

This type of research is descriptive research with a quantitative approach where data analysis uses statistical tests. The population is 241 Coffee Industry MSMEs in Central Java (Central Java Province UKM Dinkop, 2023). To obtain a representative sample size, this research used a purposive sampling technique. The sample criteria are Coffee Industry MSMEs that export products. The number of samples that met the criteria was 116 MSMEs, thus the sample used in this research was 116 respondents.

**Table 2.** Operational Definition and Variable Measurement.

Operational Definition of Variables		Indicators	Sources
Customer orientation is an organizational culture to focus on export customer commitment, export customer needs and satisfaction.	1. 2. 3. 4.	Service commitment Commitment to service ethics Understanding customer needs Customer satisfaction	Kandemir (2005)
Competitor orientation is an organizational culture to focus on competitor information, competitor actions, and focus on competitor strategies to create superior customer value for exports.	1. 2. 3. 4.	Competitors' weaknesses/strengths Monitor competitor activity Competitor strategy Competitor new product information	Kandemir (2005)
Green innovation is an effort made by companies to reduce negative impacts on the environment through the creation of new products and processes aimed at increasing sustainable competitiveness.	1. 2. 3. 4. 5. 6.	Use of environmentally friendly raw materials Environmentally friendly packaging Products that are easy or can be recycled Manufacturing processes that reduce waste use. Manufacturing processes that recycle waste. Manufacturing processes that reduce the use of water, oil, or electricity.	Ar (2012) dan Chen et al. (2006)
Export Marketing Performance is defined as the level of achievement of company goals, both economic goals and strategic goals, as a result of implementing coffee export marketing programs and activities.	1. 2. 3. 4.	Increase in export profits Growth in export sales Increasing the frequency of export sales Export marketing area	Julian & Ahmed (2005)

The data source used in this research is primary data. The data collection technique uses a questionnaire by giving a set of written questions to respondents. The questionnaire was

assessed using a 5-point Likert Scale. The data analysis used is SEM-PLS where data processing uses Smart-PLS version 3.

## 4. Results

### 4.1 Outer Model Evaluation

Outer Model Evaluation aims to test the validity and reliability of the constructs in the proposed model.

#### a. Convergent Validity

The convergent validity test is carried out with reflective indicators based on Factor Loading or also known as Outer Loading, which is a value produced by each indicator to measure the variable. The convergent validity value or factor loading value on latent variables with indicators of  $> 0.7$  is considered to have good validity for research, but factor loadings of  $0.5 - 0.6$  are still acceptable as early stage research. The following are the results of testing the convergent validity of this research:

**Table 3.** Convergent Validity Test.

Variables	Outer loading
OPL1	0,913
OPL2	0,896
OPL3	0,839
OPL4	0,917
OPS.1	0,869
OPS.2	0,875
OPS.3	0,776
OPS.4	0,921
IH1	0,844
IH2	0,861
IH3	0,827
IH4	0,868
IH5	0,877
IH6	0,848
KPE1	0,850
KPE2	0,861
KPE3	0,827
KPE4	0,843

Based on the table above, it is known that many of the research variable indicators have an outer loading value of  $> 0.7$ . However, according to the measurement scale, a loading value of  $0.5$  to  $0.6$  is considered sufficient to meet the convergent validity requirements. The data above shows that there are no variable indicators whose outer loading value is below  $0.5$ , so that all indicators are declared suitable or valid for research use and can be used for further analysis.

#### b. Discriminant Validity

The discriminant test is measured by looking at the AVE (Average Variance Extracted) value which is greater than 0.5

**Table 4.** Average Variance Extracted Value.

	Average Variance Extracted (AVE)	Results
Customer Orientation	0.795	Valid
Competitor Orientation	0.743	Valid
Green Innovation	0.730	Valid
Export Marketing Performance	0.715	Valid

Based on Table 4 above, each variable in this study shows an AVE (Average Variance Extracted) value, namely  $> 0.5$ . Each variable in this research has its own AVE value for Customer Orientation of 0.795; Competitor Orientation of 0.743; for Green Innovation 0.730; and Export Marketing Performance of 0.715. This shows that each variable in this research can be said to be valid in terms of discriminant validity.

### c. Reliability Test

Composite reliability is the part used to test the reliability value of indicators on a variable. A variable can be declared to meet composite reliability if it has a composite reliability value  $> 0.7$ . Below are the composite reliability values for each variable in this research:

**Table 5.** Composite Reliability.

Variabel	Composite Reliability	Cronbach's Alpha
Customer Orientation	0.939	0.914
Competitor Orientation	0.920	0.883
Green Innovation	0.942	0.926
Export Marketing Performance	0.909	0.867

From the table above, the composite reliability value for all research variables is  $> 0.7$ . This shows that each variable has met composite reliability so it can be concluded that all variables have a high level of reliability. The second reliability test is Cronbach's Alpha, to measure internal consistency in instrument reliability tests. Based on the table above, it shows that the Cronbach alpha value for all variables in this study is above  $> 0.6$ , which means that the Cronbach alpha value meets the requirements so that the entire construct can be said to be reliable.

## 4.2 Evaluation of Inner Model

The purpose of the Inner Model Evaluation is to test the structural model by predicting causal relationships between latent variables

### a. Goodness of Fit Test

The goodness of fit test for this model consists of two tests, namely R Square ( $R^2$ ) and Q-Square ( $Q^2$ ).  $R^2$  value can be categorized into three levels: 0.75, 0.50, and 0.25, which indicates that the model is categorized as strong, moderate, and weak (Ghozali, 2015).  $Q^2$  value in structural model testing is done by looking at the  $Q^2$  value (Predictive relevance).  $Q^2$  value can be used to measure how good the observation values produced by the model and its parameters are.  $Q^2$  value  $> 0$  indicates that the model has predictive relevance, while  $Q^2$  value  $< 0$  indicates

that the model lacks predictive relevance. The following are the results of calculating the R-Square and Q-Square values.

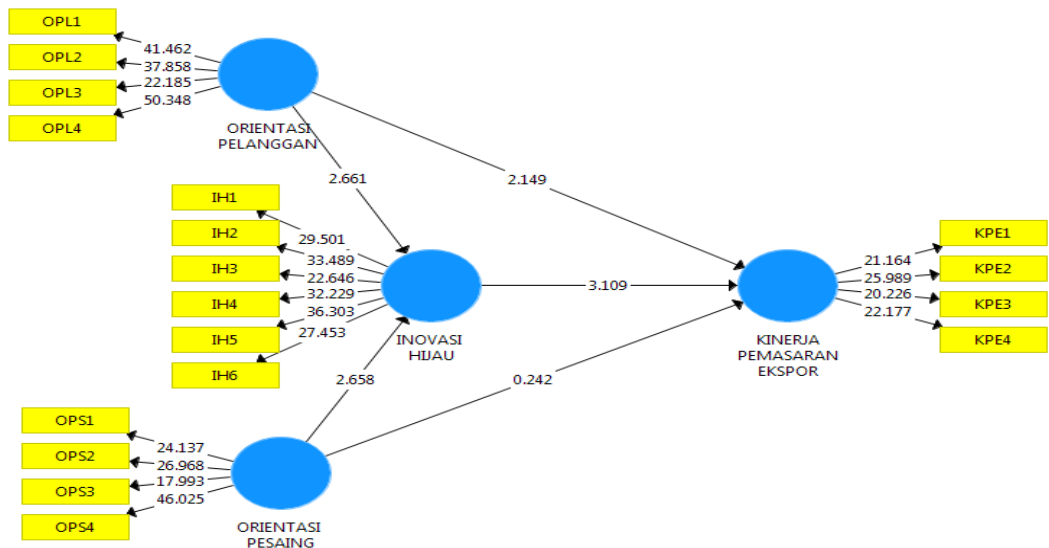
**Table 6.** R-Square and Q-Square Values.

	R-Square	Q-Square
Green Inovation	0.614	0.243
Export Marketing Performance	0.553	0.210

Model 1 with the dependent variable Green Innovation obtained an R-Square value of 0.614 and a Q-Square value of 0.243. Model 2 with the dependent variable Export Marketing Performance obtained an R-Square value of 0.553 and a Q-Square value of 0.210. From the results of these calculations, this research model can be stated to have good goodness of fit.

### b. Path Coefficients Test

In the path coefficients test, it is used to show how strong the effect or influence of the independent variable is on the dependent variable. Based on the inner model scheme, it can be explained that the path coefficients of Model 1 are shown from the Customer Orientation path towards Green Innovation of 2,661 and the Competitor Orientation path towards Green Innovation amounting to 2,658. Furthermore, the path coefficients of Model 2 are shown from the Customer Orientation path to Export Marketing Performance of 2,149; Competitor Orientation path to Export Marketing Performance of 0.242; and the Green Innovation path to Export Marketing Performance is 3,109 and the Green Innovation path to Export Marketing Performance is 3,109.



**Figure 2.** Inner Model

Based on the explanation of these results, it shows that all variables in this model have path coefficient values with positive values. This shows that the greater the path coefficient value of an independent variable on the dependent variable, the stronger the influence between the independent variables on the dependent variable.

### c. Hypothesis Testing

Based on the Smart-PLS results, testing the hypothesis for direct effects is by looking at the results of the Path Coefficients calculation, while testing the hypothesis for indirect effects is by looking at the results of the Specific Indirect Effects calculation.

**Table 7.** Hypothesis Testing.

	<b>T</b>	<b>P</b>
	<b>Statistics</b>	<b>Values</b>
Customer orientation->Export Marketing Performance	2.149	0.032
Competitor orientation->Export Marketing Performance	0.242	0.809
Green innovation ->Export Marketing Performance	3.109	0.002
Customer orientation->Green innovation	2.661	0.008
Customer orientation->Green innovation	2.658	0.008
Customer orientation->Green innovation->Export Marketing Performance	1,994	0,047
Competitor orientation-> Green innovation->Export Marketing Performance	2,030	0,043

Based on the table above, the interpretation is as follows:

1) The Effect of Competitor Orientation on Export Marketing Performance

The second hypothesis tests whether competitor orientation influences export marketing performance. The test results show a t statistic of 0.242 and a p value of 0.809, meaning the t statistic value is  $0.242 < t \text{ table } 1.96$  or  $p \text{ value } 0.809 > 0.05$ , so the second hypothesis is rejected, meaning that the competitor orientation variable has no significant effect on export marketing performance.

2) The Effect of Green Innovation on Export Marketing Performance

The third hypothesis tests whether green innovation has an effect on export marketing performance. The test results show a t statistic of 3.109 and a p value of 0.002, meaning the t statistic value is  $3.109 > t \text{ table } 1.96$  or  $p \text{ value } 0.002 < 0.05$ , so the third hypothesis is accepted, meaning the green innovation variable has a significant effect on export marketing performance.

3) The Effect of Customer Orientation on Green Innovation

The fourth hypothesis tests whether customer orientation influences green innovation. The test results show a t statistic of 2.661 and a p value of 0.008, meaning the t statistic value is  $2.661 > t \text{ table } 1.96$  or  $p \text{ value } 0.008 < 0.05$ , so the fourth hypothesis is accepted, meaning that the customer orientation variable has a significant effect on green innovation.

4) The Effect of Competitor Orientation on Green Innovation

The fifth hypothesis tests whether competitor orientation influences green innovation. The test results show a t statistic of 2.658 and a p value of 0.008, meaning the t statistic value is  $2.658 > t \text{ table } 1.96$  or  $p \text{ value } 0.008 < 0.05$ , so the fifth hypothesis is accepted, meaning that the competitor orientation variable has a significant effect on green innovation.

5) The Effect of Customer Orientation on Export Marketing Performance through Green Innovation

The sixth hypothesis tests whether customer orientation influences export marketing performance through green innovation. The test results show the t statistic is 1.994 and the p value is 0.047, meaning the t statistic value is  $1.994 > t \text{ table } 1.96$  or the p value is  $0.047 < 0.05$ , so the sixth hypothesis is accepted, meaning the indirect influence of customer orientation on

export marketing performance through green innovation is significant.

#### 6) The Effect of Competitor Orientation on Export Marketing Performance through Green Innovation

The seventh hypothesis tests whether competitor orientation influences export marketing performance through green innovation. The test results show a t statistic of 2.030 and a p value of 0.043, meaning the t statistic value is  $2.030 > t \text{ table } 1.96$  or p value  $0.043 < 0.05$ , so the seventh hypothesis is accepted, meaning the indirect influence of competitor orientation on export marketing performance through green innovation is significant.

### 5. Discussion

The first hypothesis which states that customer orientation has a positive and significant effect on the export marketing performance of coffee MSMEs is supported. The implication of these findings is that the higher the customer orientation, the more MSMEs will understand customer needs, understand customer priorities, and always strive to provide customer satisfaction. The higher customer orientation will increase the sales volume of export products so that it will contribute to increasing export marketing performance. This finding is in line with Narver & Slater's (1990) theory that customer orientation is related to increasing customer value. Sufficient understanding of customers includes providing value to customers that outperforms competitors, so that this can support companies to improve export marketing performance.

The second hypothesis which states that competitor orientation has a positive and significant effect on the export marketing performance of coffee MSMEs is not supported. This can be caused by various factors, including because competitors in international markets have competitive advantages, especially those that already have a large market share. So, the level of export marketing performance produced by coffee MSMEs will be determined by competitive capabilities. In the international market, coffee MSMEs need to develop the ability to determine the right competitive strategy. This finding is in line with research by Julian & Ahmed (2005), analysis of competitors must be carried out through market understanding. In the export market, competition occurs not only with competing exporters, but also with local producers. Thus, companies need to increase their knowledge to understand competitors, as well as prepare the right strategy to be able to win the competition with competitors. A higher competitor orientation will have an impact on increasing export marketing performance.

The third hypothesis which states that green innovation has a positive and significant effect on the export marketing performance of coffee MSMEs is supported. The implication of these findings is that the higher the level of green innovation, it means that the green innovation implemented by coffee MSMEs is able to provide benefits for the company, such as creating environmentally friendly coffee products that meet consumer desires and use fewer resources. The successful implementation of green innovation will have an impact on sales volume thereby making a positive contribution to export marketing performance. Green (environmentally friendly) innovations implemented by coffee MSMEs in Central Java provide strategic opportunities to improve export marketing performance. The better or higher the green innovation, the higher the export marketing performance. This finding is in line with previous research results that green innovation practices can improve environmental performance and company performance (Weng et al., 2015); encourage cost efficiency and company profitability (Chan et al., 2016). This finding is also in line with research by Pla-Barber



& Alegre (2007) and Tavassoli (2018) that environmentally friendly innovation has a positive effect on export performance. The fourth hypothesis which states that customer orientation has a positive and significant effect on the green innovation of coffee MSMEs is supported. The implication of these findings is that the higher the customer orientation, it means that MSMEs will better understand customer wants and needs related to demand for environmentally friendly products. The higher customer orientation will encourage MSME players to carry out green innovation through developing products and processes that are environmentally friendly. This finding is in line with research by Frambach et al. (2016) that customer orientation has a positive effect on green innovation and competitive advantage. When a customer-oriented company seeks to satisfy its customers, corporate culture can encourage company innovation to develop environmentally friendly products. A company culture that supports efforts to satisfy customers and fulfill customer needs will have a positive impact on increasing green innovation, both in the development of environmentally friendly products and processes. The fifth hypothesis which states that competitor orientation has a positive and significant effect on the green innovation of coffee MSMEs is supported. The implication of these findings is that the higher the competitor orientation, the more sensitive MSME players will be to competitors regarding competitors' strengths/weaknesses, competitors' strategies, a higher tendency to monitor competitors' activities and collect information on competitors' new products. A higher competitor orientation will encourage the competitive advantage of coffee MSMEs through the development of environmentally friendly products and processes that are able to outperform competitors. This finding is in line with research by Tarro et al. (2014), that competitor orientation has a positive influence on green innovation. The company's thinking on competitor orientation will create ideas to encourage green innovation. Competitor-oriented companies will have creativity, will produce ideas and will be full of innovation to reduce the negative impact of environmental pollution so that it will benefit many people.

The sixth hypothesis which states that green innovation mediates the influence of customer orientation on the export marketing performance of coffee MSMEs is supported. The implication of these findings is that green innovation implemented by MSMEs provides strategic opportunities for companies to improve export marketing performance. The tendency for MSMEs to carry out green innovation can be formed from the company's orientation towards customers which focuses on meeting customer needs. The higher customer orientation will encourage MSMEs to develop green innovations that are able to satisfy customer needs in international markets, thereby contributing to improving export marketing performance.

The seventh hypothesis which states that green innovation mediates the influence of competitor orientation on the export marketing performance of coffee MSMEs is supported. The implication of these findings is that to improve export performance, coffee MSMEs in Central Java need to develop a green (environmentally friendly) innovation strategy. The implementation of green innovation needs to be supported by information related to competitors' strengths/weaknesses and competitors' strategies, so that competitor orientation will become the basis for MSMEs in implementing environmentally friendly innovation practices.

## 6. Conclusions

The results of these findings conclude that (1) customer orientation has a significant effect on green innovation (2) competitor orientation has a significant effect on green innovation (3) customer orientation has a significant effect on export marketing performance (4) competitor

orientation has no significant effect on export marketing performance (5) ) green innovation has a significant effect on export marketing performance (6) customer orientation has an indirect effect on export marketing performance through green innovation (7) competitor orientation has an indirect effect on export marketing performance through green innovation.

The sample is limited to MSMEs in the Coffee Industry in Central Java. The determinant factors of export marketing performance are limited to customer orientation, competitor orientation, and green innovation so these results cannot be generalized. It is recommended that further research use other research objects with a larger sample size. Apart from that, it is recommended to research the determinant factors of MSME export marketing performance in other sectors and explore the results of previous findings by including new intervening or moderating variables.

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