

THE MEDIATING EFFECT OF GREEN INNOVATION ON THE RELATIONSHIP BETWEEN GREEN ENTREPRENEURIAL ORIENTATION AND COMPETITIVE ADVANTAGE OF MSMEs SUSTAINABLE FASHION IN SEMARANG INDONESIA

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Abstract: The Resource Based View states that a business must have a competitive advantage in competing with other businesses. The aim of this study is to determine the effect of green entrepreneurial orientation on competitive advantage with the intervening variable green innovation of sustainable fashion MSMEs in Semarang. The number of respondents was 30 MSMEs. PLS-SEM was used to test the hypotheses. The results found that green entrepreneurial orientation has a significant effect on green innovation and competitive advantage, the study found that green innovation does not mediate the relationship between green entrepreneurial orientation and competitive advantage.

Keywords: Green Entrepreneurial Orientation, Green Innovation, Competitive Advantage, Sustainable Fashion.

1. Introduction

Green Entrepreneurial Orientation (GEO) has an important role in realizing the environmental, economic and social performance of organizations (Asadi et al., 2020). Lumpkin and Dess (1996) state that entrepreneurial orientation is a combination of corporate initiative and competitive aggressiveness while Arruda (1999), states that Green Entrepreneurial Orientation (GEO) is a combination of initiative and environmental orientation. Previous studies show that social orientation and environmental orientation are two important components of GEO (Cohen and Winn 2007).

Barney (1991) states that competitive advantage occurs when a company implements a value creation strategy that is not simultaneously implemented by competitors. Competitive advantage is reflected in several dimensions such as differentiated products, markets, sensing, collaboration with partners, focus on high-value customers, market responsiveness, customers as assets, information transparency, and supply chain leadership (Ramaswami et al., 2006).

With competitive advantage, companies are able to compete with others, as stated by Barney (1991) in the Resources Based View (RBV) theory which states that a company's competitive advantage can be obtained from four things, namely uniqueness, not being easily imitated, not easily replaced and having product value. or services offered. Competitive advantage is not only a concern for large companies, MSMEs also need to have competitive advantages in order to compete (Gilmore and Cummin, 2014; Setyawati 2015; Qiu et al., 2019).

Several studies show factors that influence competitive advantage, such as Qiu et al., (2019), which explains green innovation and green dynamic capability, GEO (Pratono et al., 2019). Competitive advantages are not only owned by large companies but also MSMEs, especially those operating in the field of sustainable fashion, which currently do not have many numbers. These business actors basically have environmentally friendly practices. The impact of green product innovation on firms' competitive advantage remains controversial in the literature. Several studies support the view that green innovation has a significant impact on competitive advantage. For example, Dangelico et al., (2017) show that green product innovation occupies an increasingly strategic position in global manufacturing companies. Some companies have invested heavily in building sustainability programs not only to save costs and reduce risks but also to generate revenue. Research by Irmawati et al (2021) shows that green innovation influences the competitive advantage of Sustainable Fashion MSMEs in Semarang.

Problem Study.

1. Does Green Entrepreneurial Orientation affect Competitive Advantage?
2. Does Green Entrepreneurial Orientation affect Green Innovation?
3. Does Green Innovation affect competitive advantage?
4. Does Green Entrepreneurial Orientation affect competitive advantage through Green Innovation as a mediating variable?

2. Literature Review

Competitive advantage

Majeed (2011), states that competitive advantage is very important and has an influence on improving the performance of a business. Innovation in every field of company activity plays a central role in shaping a company's competitive advantage.

The competitive advantage of MSMEs is a competitive advantage that is not the same as superior performance, while competitive advantage comes from the term relationship (Ma, 2000). Competitive advantage is a relationship or series of various company resources. The importance of competitive advantage within an organization is not limited to external factors. The internal source of a company's competitive advantage is considered an important factor that is no less important for achieving success (Wang, Lin, & Chu, 2011). Competitive advantage comes from many activities that may come from outside the company to create design, carry out production and marketing, supply, and other support to produce its products. Each of these activities can contribute to the relative costs of the company's position and serve as a means of differentiation (Tilley, 2003).

Green Innovation

Green Innovation is seen as a company's business opportunity in facing increasingly serious environmental problems (Bocken et al., 2014; Zhu et al., 2012) and is valued by top management as a means to improve company performance in addition to Green Innovation related to environmental sustainability (Chiou et al., 2011). There are three important things in green innovation, namely:

First, green innovation emphasizes products that use fewer resources or less energy throughout their life cycle (Kamerer, 2009). It is considered to help companies save energy, reduce consumption and raw material costs, increase resource utilization rates, develop new markets, increase opportunities to enter new markets, and establish driving advantages in the whole life process products to improve a company's economic and social performance and achieve

mutually beneficial outcomes between the company and the environment (Porter & van der Linde, 1995).

Second, green product innovation emphasizes reducing the use of toxic substances during product design (Kammerer, 2009). This means that innovative green products are significantly superior to conventional products or competitors in terms of green performance/environmental performance (Peattie, 1992). This will effectively ensure the harmlessness of the final product to consumers, enhance the company's green reputation and green benefits, reduce waste disposal costs, strengthen the regulatory environment, increase consumer responsiveness to the external environment, and build the company's competitive advantage in the global market by improving product quality (Chiou et al., 2011).

Third, green product innovation emphasizes extending the lifespan of obsolete products or developing recycling programs. Finally, leading companies that implement green innovation can sell environmental technology or services, thereby improving the company's image and even creating fresh markets to gain competitive advantage (Chang, 2011; Chen et al., 2006). Therefore, the implementation of green innovation has contributed to gaining a valuable, rare, inimitable, and irreplaceable resource. Companies can also gain more profits and markets than competitors, thereby increasing the core competitive advantage of the company. design (Kammerer, 2009). This means that innovative green products are significantly superior to conventional products or competitors in terms of green performance/environmental performance (Peattie, 1992). This will effectively ensure the harmlessness of products to consumers, enhance the company's green reputation and green benefits, reduce waste disposal costs, strengthen the regulatory environment, improve consumers' responsiveness to the external environment, and build the company's competitive advantage in the global market by improving product quality (Chiou et al., 2011).

Green Entrepreneurial Orientation

The concept of Green Entrepreneurial Orientation (GEO) is based on the foundations: green entrepreneurship theory and entrepreneurial orientation theory (Guo et al. 2020). Green Entrepreneurial Orientation (GEO) follows the triple bottom line principle aimed at company development. According to Luo et al. (2005) the importance of providing green innovation through appropriate resource allocation that reduces harmful impacts on the environment. In particular, some researchers state that Green Entrepreneurial Orientation (GEO) includes two aspects: environmental orientation and social orientation (Guo et al. 2020; Cohen and Winn 2007). Furthermore, Becker (2010) argues that GEO consists of: social and innovative orientation. In particular, as a strategic step, Green Entrepreneurial Orientation (GEO) can facilitate the production of green innovative products that will help to improve sustainable business performance (Guo et al. 2020; Teece 2016). Thus, the main goal of GEO is to promote sustainable production processes and introduce green products and services (Bos-Brouwers 2009). Green innovation allows companies to develop and produce products that have a good impact on the environment (Huang and Li 2017). Green innovation and environmental innovation also refer to business contributions to sustainable development, while enhancing a company's competitive advantage (Huang and Li 2017).

3. Method

The population in the research is sustainable fashion MSMEs located in Semarang, the exact number of which is not known. The sample is part of the population, in this study purposive sampling was used with the criteria being sustainable fashion SMEs that use raw materials and production or marketing processes based on environmental friendliness. Because the

population size is not yet known, the sampling technique used is the snowball sampling technique with up to a sample size of 30 respondents. The data collection method was carried out using a questionnaire. The instrument scale used is 1 to 5 or strongly disagree to agree.

4. Result and Discussion

Table 1. Respondent Descriptive

		Amount	percentage
Gender			
	Man	5	16.67
	Woman	25	83.33
Age			
	31-40	10	33.33
	41-50	15	50
	51-60	5	16.67
Level of education			
	High School	3	10
	Diploma	12	40
	Bachelor	15	50

The first step in the analysis was to test convergent and discriminant validity. The convergent validity test looks at the outer loading results, it is said to be valid if the value is greater than 0.7. Following are the results of the first outer loading.

Tabel 2 Outer Loading and AVE

	COMPADV	GEO	GIN	AVE
CA1	0.779			
CA2	0.781			0.604
CA3	0.772			
GEO 1		0.879		
GEO 5		0.862		
GEO2		0.900		0.777
GEO3		0.877		
GEO4		0.890		
GIN1			0.896	
GIN2			0.868	0.770
GIN3			0.867	

Based on the table above, it is known that there are several statement items whose values are below 0.7, such as GIN4, GIN5, GIN 6 and after deleted, the all item have met the convergent validity standard value because all factors have a value of more than 0.7. Thus, it can be concluded that all constructs are valid and AVE value is more than 0.5 so is valid.

A construct is said to be valid by comparing the root value of the AVE (Fornell-Larcker Criterion) with the correlation value between latent variables. The root value of AVE must be greater than the correlation between latent variables. If the square root value of AVE for each construct is greater than the correlation value between the construct and other constructs in the model, then the model is said to have good discriminant validity.

Table 3. Fornell–Larcker

	COMPADV	GEO	GIN
COMPADV	0.777		
GEO	0.763	0.882	
GIN	0.490	0.620	0.877

Based on these results, it shows that the COMPADV C correlation value of 0.777 is greater than GEO 0.763 and GIN 0.490. Likewise for other variables. The results show that the variable construct above has good discriminant validity.

Table 4. Cross Loading

	COMPADV	GEO	GIN
CA1	0.779	0.547	0.468
CA2	0.781	0.698	0.360
CA3	0.772	0.497	0.315
GEO 1	0.629	0.879	0.630
GEO 5	0.651	0.862	0.547
GEO2	0.637	0.900	0.525
GEO3	0.762	0.877	0.512
GEO4	0.676	0.890	0.515
GIN1	0.369	0.504	0.896
GIN2	0.481	0.571	0.868
GIN3	0.429	0.548	0.867

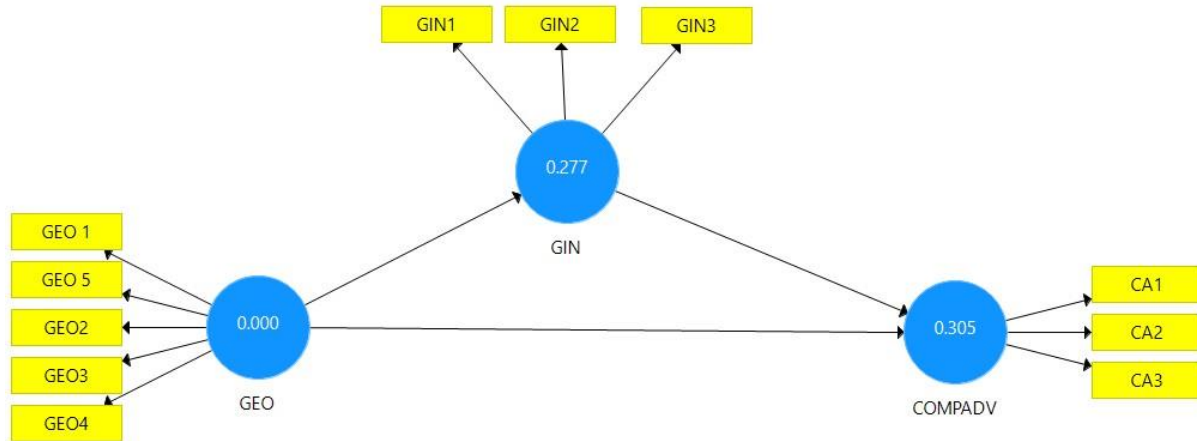
The standard value for each construct must be greater than 0.7. Based on Table 5, the cross-loading value for each construct has a value of more than 0.7. This shows that the manifest variable in this study has correctly explained the latent variable and proves that all the items are valid.

The Reliability Test in Smart PLS is seen from the Composite Reliability and Cronbach alpha values, the results can be seen below.

Table 5 Cronbach Alpha dan Composite Reliability

	Cronbach's Alpha	rho_A	Composite Reliability
COMPADV	0.714	0.785	0.821
GEO	0.928	0.929	0.946
GIN	0.851	0.854	0.909

Based on the convergent and discriminant analysis, the research model can be seen below:



The results of hypothesis testing can be seen in the table below by looking at the T statistics and p value. If the t statistics value is > 1.96 and the p value is < 0.05 then the hypothesis is accepted. Here are the results.

Table 6. T statistics results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
GEO -> COMPADV	0.745	0.763	0.124	5.995	0.000
GEO -> GIN	0.620	0.629	0.139	4.470	0.000
GIN -> COMPADV	0.028	0.005	0.209	0.135	0.893

Based on the table above, it is known that the hypothesis which states that GEO has a significant effect on COMPADV can be accepted with a t-statistics value greater than 1.96 and a p value of 0.000 smaller than 0.05. the second hypothesis which states that GEO has a significant effect on GIN can be accepted with a t-statistics value greater than 1.96 and a p value of 0.000 smaller than 0,05. Meanwhile the third hypothesis which states that GIN has a significant effect on COMPADV is rejected because the t-statistics value is <0.96 and the p value is 0.893 which is > 0.05.

Table 7 Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
GEO -> GIN -> COMPADV	0.017	0.006	0.140	0.125	0.901

Based on the table above, it is known that the hypothesis which states GEO affect COMPADV through GIN as a mediating variable is rejected because of t-statistics value smaller than 1.96 and a p value of 0.901 bigger than 0.05.

Discussion

The first hypothesis that green entrepreneurial orientation has a positive and significant effect on competitive advantage, this is in line with research conducted by Ullah and Danish (2020).

The second hypothesis that green entrepreneurial orientation has a positive and significant effect on green innovation, this is in line with research conducted by Muangmee et al (2021) who also researched SMEs and is also supported by research by Ullah and Danish (2020).

Regarding the third hypothesis that green innovation has a positive and significant effect on competitive advantage, it is rejected, this is not in line with research conducted by Muangmee et al (2021) which also researched SMEs and is also not supported by research by Ullah and Danish (2020).

The fourth hypothesis that green entrepreneurial orientation affect competitive advantage through green innovation as the intervening variable being rejected, this is not supported by Ullah and Danish (2020) even though the dependent variable is performance but shows the existence of a green innovation mediating variable.

5. Conclusions

Green entrepreneurial orientation has a positive and significant affect competitive advantage. Green entrepreneurial orientation has a positive and significant affect green innovation. Green Innovation has a positive and no significant affect Competitive Advantage. Green entrepreneurial orientation affect Competitive Advantage through Green Innovation as the intervening variable is rejected.

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