Strategic Implementation of Environmentally Friendly Innovation of Small and Medium-Sized Enterprises in Indonesia

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Abstract:

This study aims to empirically test the influence of market orientation strategies, and value co-creation on green product innovation, and also to test the value co-creation and green product innovation on marketing performance in the context of Micro Small and Medium Enterprises (SMEs) in Yogyakarta, Indonesia.

The study distributed questionnaires to 464 SMEs’ entrepreneurs. By using Structural Equation Modeling (SEM) as analytical tool, the results show that market orientation, value co-creation positively affect green product innovation in the context of small and medium-sized enterprises.

In addition, the results of this study also show that value co-creation, and green product innovation have a positive effect on marketing performance.

Keywords: market orientation, value co-creation, green product innovation, marketing performance.

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1. Introduction

Unstable market conditions caused by political turmoil, declining demand from China and India, weakening world economy, as well as rising demand for clean energy require companies to always design strategies capable of adapting to existing market conditions. Strategic approaches can be designed by companies, such as market orientation strategies, product differentiation, and value creation. Market orientation is a key element for companies in achieving company performance (Han et al., 1998), in which companies with a market orientation culture are believed to have better market knowledge and better ability to connect with customers. This capability is ultimately deemed capable of guaranteeing the company to maximize profits compared to those that do not have a market-oriented culture (Day 1994; Breckova, 2016; Medvedeva et al., 2016). Pelham (1999) states that market orientation is important for small firms to take advantage of their potential benefits, both in terms of flexibility, adaptability, and customer-centric proximity.

However, Porter (1980) also says that there are some generic strategies that may apply to small-scale manufacturing firms in certain industrial sectors, such as differentiation strategies to create unique products or services, create customer loyalty, impose price inelasticity, and apply higher profit margins. Of these strategy formulations, product differentiation strategy is considered to have a valuable effect in improving company performance. This is supported by the opinion of Dirisu et al. (2013) stating that differentiation strategies is more likely to give companies a wider range of more valueable products. Ultimately, product differentiation can also be one of the strategies to deal with unstable market conditions.

In the marketing context, differentiation can be done by creating green products or eco-friendly products. Increasing the issue of destruction and degradation of environmental quality and of increasing demand on renewable energy has making the company begin to switch to produce green products. As revealed by Lin and Huang (2012), consumers are becoming interested in green products in response to the issue of environmental quality degradation. Furthermore, D'Souza et al. (2006) also stated that environmental behaviour and stewardship taken by company has made the issue of green products an important issue for managers and marketers. However, concerns about the impact of environmental protection on corporate competitive advantage are less the focus of attention by academics to date (Chen et al., 2006). Whereas in certain market conditions, most new product releasing begin to involve products that are based on environmental conditions (Pujari et al., 2003).

Empirically, Greeno and Robinson (1992) reveal that businesses that adopt environmental management strategies can solve environmental problems by utilizing innovative environmental technologies. Furthermore, companies can also apply green environmental ideas into the design and packaging of products to enhance the benefits of the differentiation of products they create (Shrivastava, 1995). In other words, companies that implement green product innovation strategies will also be
able to create value directly. Prahalad and Ramaswamy (2004) also explain that value creation and differentiation can collaborate when there is a connection between the network, the information from the consumer, and the capabilities possessed by the firm. This indicates that product differentiation and value creation are interconnected predictors of improving company performance.

Although many previous studies have examined value creation, market orientation and green product innovation in enterprise performance (Narver and Slater, 1990; Vargo et al., 2003; Chen et al., 2006; Dangelico and Pujari, 2010; Pujari et al., 2003; D'Souza et al., 2006; Pociovalisteanu and Thalassinos, 2008; Havlicek et al., 2013; Giannakopoulou et al., 2016; Zaman and Meunier, 2017) many have not proven in a comprehensive way the effects of value creation, market orientation, and green product innovation on corporate performance. Sullivan et al. (2012) state that studies of company performance depend on the sample, context, and variables being measured. Sullivan et al. (2012) further highlight that the company performance is multidimensional and can be measured through several sides, such as effectiveness, efficiency, and adaptation measures. On the other hand, the measurement of company performance can also be seen from various contexts, such as financial performance, and marketing performance.

The above discussion indicates that there are antecedent variations that can measure a company performance. Hence, performance measurement can also be seen from various aspects, including the marketing aspect. Ambler and Roberts (2010) reveal that performance measurement can be narrowly depending on the intended purpose, since every company has a different perspective. Clark (1999) summarizes some previous studies showing that measures of marketing performance have three approaches in terms of financial and non-financial aspect, outcomes from marketing performance, such as satisfaction and loyalty, and multidimensional measurements, such as efficiency and effectiveness. Accordingly, marketing performance can be measured widely. Therefore, in this study we re-analyzed the effects of several antecedents that could measure marketing performance in the context of SMEs. We use market orientation, mutual value creation, green product innovation strategy in measuring marketing performance.

2. Literature Review and Hypothesis Development

2.1 Market Orientation, Green Product Innovation and Marketing Performance

Slater and Narver (1994) define market orientation as corporate culture or characteristics of an organizational trend in delivering the best value to customers on an ongoing basis. Meanwhile, Dobni and Luffman (2000) consider that market orientation is an organizational culture that influences companies in the design of strategy formulas and strategy implementation. Furthermore, Han et al. (1998) state that market orientation can create organizational behavioral principles related to the
company stakeholders (customers, competitors, internal functions) that likely impact on organizational performance.

According to Pleshko and Heiens (2011), companies that have a good level of market orientation and more aggressive marketing strategies tend to have higher market share. On the other hand, market orientation also has a positive impact on all forms of corporate strategy, such as customer differentiation, product differentiation, channel differentiation and overall low cost (Rezabakhsh et al., 2006). In marketing, differentiation strategies are often associated with green products. Differentiation is a product creation strategy by creating new features different from competitors' products. The main reasons behind this strategic implementation are to meet customer needs, create customer loyalty, and improve company performance (Porter, 1980). In a differentiation strategy, companies will emphasize the innovation of their products by creating products that are unique to competing products, such as producing green products or environmentally friendly products.

Green product innovation is a product whose processes or innovations contribute to the environmental sustainability (Doran and Ryan, 2014). In other words, green products are an innovation product that can prevent or reduce environmental burden, monitor environmental issues to avoid or reduce hazardous effect and environmental damage. According to Bei and Simpson (1995), the characteristics of green products consist of raw materials derived from recyclable materials having low levels of pollution, and capable of evoking consumer emotions regarding environmental protection.

Innovation by way of producing green products became one of the strategies considered to improve performance in the manufacturing industry. The study of Laroche et al. (2001) found that there is an increasing number of consumers nowadays willing to pay more for green products. The results of the study Laroche et al. (2001) indicates that products related to the issue of environmental sustainability have a potential market share. Therefore, companies are now beginning to implement green product strategies. Porter and Reinhardt (2007) state that by integrating environmental issues into business strategy and product innovation, the company will be able to create business opportunities more than that of competitor.

Empirically, several studies have proven that green product innovation has a positive effect on marketing performance. Cheng et al. (2014) find that green product innovation has a positive effect on business performance. Furthermore, Brenes et al. (2014) reveal that companies that implement differentiation strategies generally have a good ability to know the target customers, have a broad product range, and have an effective distribution system. A study conducted by Chen et al. (2006) also find that green product innovation has a positive influence on competitive advantage. Thus, companies that implement the green product innovation strategy can affect marketing performance. Therefore, this following hypothesis is proposed:
Hypothesis 1: Market orientation positively affects on green product innovation.
Hypothesis 2: Green product innovation has a positive effect on marketing performance.

2.2 Value Co-Creation, Green Product Innovation, and Marketing Performance

Value is basically a difficult term to understand (Vargo et al., 2008). In other words, values are difficult to explain or interpret. Payne et al. (2008) state that value in term of marketing is the result of joint creation by suppliers and customers. Meanwhile, Gronroos (2011) also conveyed that value is always unique and is a manifestation of experience and relates to events perceived and determined by the customer. Gronroos (2008) further explains that value creation is a process through which the user becomes better. In addition, Vargo et al. (2008) state that value is created jointly through a mutual effort taken together among company, employees, customers, shareholders, government agencies, and other interconnected organizations. Although, the final value is always determined by the customer. Thus, it can be concluded that the value is a competitive advantage owned by the company that emerged when the benefit is able to be perceived by consumers.

However, it is not meant that the value can only be perceived by consumers, eliminating companies to also perceive the value. The company can perceive it through the interaction with consumers directly. Gronroos and Helle (2010) explain that the value created by customers can be formed through the support of suppliers, in which they will get the financial value in return. Furthermore, Vargo et al. (2008) assume that value creation occurs when manufacturing firms apply their knowledge, skills, and abilities being integrated with other resources to convert raw materials into a useful or usable by the customer product as an a medium of consumer self-identity. Gronroos et al. (2011) adds that during direct interaction, companies must take advantage of opportunities from interactive processes, thereby creating value with customers as well. This indicates that value creation occurs when it is done by both parties of producers and consumer.

In the context of marketing, value creation becomes a very important factor in creating a product (Ertimur and Venkatesh, 2010). Hence, companies must adjust to market conditions. For instance, the issue of environmental sustainability nowadays becomes a very important issue (Dangelico and Pujari, 2010; Lin and Huang, 2012; Laroche et al., 2001), prompting the increasing interest of consumers in buying green products. As Dangelico and Pujari (2010) stated that, the market for green products nowadays is increasing and the possibility of green product market will increase in the future. This indicates that green product innovation is one of the strategies that can be relied upon by the company at this time.
By creating value on green products, the company will create a valuable brand. Dangelico and Pujari (2010) state that the adoption of a green product innovation strategy demonstrates that the company has compliance with environmental regulations, and ecologically responsible. In addition, the end result of the application of green product innovation is to improve the marketing performance of a company. Dominguez-Péry et al. (2013) state that value creation is the ultimate outcome in the concept of collaboration to optimize business or organizational performance.

The study of D'Souza et al. (2006) find that past experiences of post-use products positively influence perceptions of green products. Furthermore, Dangelico and Pujari (2010) state that the development of green products is seen as a means to enhance competitiveness, reputation and image. In addition, the study of Chakraborty et al. (2014) find that value co-creation affects market share. A study from Sullivan et al. (2012) also reveal that value creation positively affects the sales performance of a company. Furthermore, the study of Luo et al. (2015) also demonstrate that the creation of shared values in a brand community has a positive influence on brands and likely improves relationships among consumers, as well as community commitment and brand loyalty. The results of the studies described above are consistent with the opinion of Töytäri and Rajala (2015) stating that creating superior customer value is central to a company's success in a competitive market. Based on the above explanation, this study propose these hypotheses:

**Hypothesis 3:** Value co-creation has a positive effect on green product innovation.

**Hypothesis 4:** Value co-creation has a positive effect on marketing performance.

**Figure 1. The Research Model**

3. **Research Method**

This study was conducted using quantitative methods. Data collection used survey method to gather information widely from a set of subject matter. This study used primary data taken through questionnaires directly distributed to the respondents. Data retrieval was done by cross-sectional technique, in which it was done in a
Strategic Implementation of Environmentally Friendly Innovation of Small and Medium-Sized Enterprises in Indonesia

Certain point of time. The questionnaires were distributed for approximately two months in Greater Yogyakarta Area, Indonesia. To test the proposed model and hypotheses, this study used the Structural Equation Modelling (SEM) analytical tool using AMOS (Analysis of Moment Structures) software. The study used two existing approaches to SEM, i.e., model testing aimed at testing validity and reliability, and testing of structural models or hypothesis testing.

3.1 Sample

The unit of analysis in this study is small and medium-sized enterprises engaged in producing green products. In order to represent the intended unit of analysis, this study involved the business owner as the respondent. Determination of sample using purposive sampling method with sample criterion is micro small and medium enterprises producing green product in Greater Yogyakarta Area, Indonesia. The sample size in this study were 404 respondents. Of all questionnaires distributed, 29 questionnaires did not meet the criteria that have been determined. Thus, 375 questionnaires could be used in further analysis.

3.2 Measurement Items

The study involved three independent variables (market orientation, value co-creation, green product) and one dependent variable (marketing performance).

The variable of market orientation (MO) items was adopted from measurement developed by Narver and Slater (1990) consisting of gathering information about customer needs (MO1), doing business to be better than competitors (MO2), sharing information about customers (MO3), gathering information from any source obtained to each department within the company (MO4), responding quickly to existing market change information (MO5).

The variable of green product innovation (GI) was measured using measurement items from Sweeney and Soutar (2001). These consisted of 5 items, in terms of typical product-shaping strategies (GI1), product aesthetic development (GI2), natural artistic product design (GI3), exotic display efforts on each product (GI4), and the appearance of natural-featured products (GI5).

The variable of value co-creation (VC) was measured using measurement from Ertimur and Venkatesh (2010) consisting of 4 items, in terms of customer engagement on the company (VC1), joint problem solving (VC2), products generated from the company are the result of the creation of shared experiences (VC3), creation of shared designs with customers (VC4).

Finally, marketing performance (MP) variable was measured using measurement items developed by Bharadwaj et al. (1993) with a total of 4 items. These items consisted of sales revenue (MP1), new customer growth (MP2), market share growth
The measurement scale on this uses an interval scale of ten point Likert scale ranging from 1 (strongly agree) -10 (strongly disagree).

4. Results

Data analysis was performed using structural equation modelling (SEM) with the help of AMOS software. The test estimation uses two SEM approaches, i.e, testing of measurement models conducted through confirmatory factor analysis (CFA) and structural model testing. As a first step in model testing, this study test the measurements that exist in the variables. The measurement test is intended to test the instrument items based on the strength of validity and reliability. The result of estimated loading factor, CR (critical ratio) and AVE (average variance extracted) is shown in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Loading Factor</th>
<th>C.R</th>
<th>AVE</th>
<th>Mean</th>
<th>Std Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Orientation</td>
<td>MO1</td>
<td>.836</td>
<td>.86</td>
<td>.56</td>
<td>.74</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>MO2</td>
<td>.808</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MO3</td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MO4</td>
<td>.502</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MO5</td>
<td>.772</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value co-creation</td>
<td>VC1</td>
<td>.751</td>
<td>.86</td>
<td>.62</td>
<td>.78</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>VC2</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VC3</td>
<td>.768</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>VC4</td>
<td>.801</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Product Innovation</td>
<td>GI1</td>
<td>.729</td>
<td>.85</td>
<td>.53</td>
<td>.73</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>GI2</td>
<td>.752</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GI3</td>
<td>.717</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GI4</td>
<td>.751</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GI5</td>
<td>.704</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Performance</td>
<td>MP1</td>
<td>.800</td>
<td>.89</td>
<td>.68</td>
<td>.83</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>MP2</td>
<td>.821</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MP3</td>
<td>.856</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MP4</td>
<td>.842</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

• MO: Marketing Orientation, VC: Value co-creation, GI: Green Product Innovation, MP: Marketing Performance, CR (critical ratio) and AVE (average variance extracted)

In this study, there are a total of 18 measurement items used to measure the relationship between value co-creation, market orientation, green product innovation, on marketing performance. Based on the results of validity testing based on loading factor, each measurement item has a factor loading value above 0.6. Thus, it can be declared valid because it has value of factor loading above 0.5. These results prove that each indicator has good validity. Meanwhile, reliability test is used
to measure the accuracy, consistency of measuring instruments (Hair et al., 2010). Reliability results can be seen from the C.R value. If the value of CR estimation showing above 0.6, thus the measuring items used are reliable in terms of internal consistency. Furthermore, the testing of AVE value shows that the value is in the range of 0.5. The existing AVE value has met the recommended minimum value of 0.5. Thus, it can be concluded that the measurement items are able to measure the constants in question and do not measure other constants. Based on the results of the calculations that have been described, it is concluded that the existing measurement has good validity and reliability. Therefore, there are no item discarded from the measurement and all can be tested on the further analysis of structural modelling.

4.1 Structural Model Testing

After testing the validity and reliability, then the test continues on testing the goodness of fit. Testing goodness of fit is an estimation to determine the extent to which the constructed model has a match value with the settings used. Based on the results of data done with AMOS, the results show that the research model has met the suitability of the model with the following results: Chi square 131.345; probability 0.127; goodness of fit index (GFI) 0.962; adjusted goodness of fit index (AGFI) 0.949; comparative fit index (CFI) 0.995; Tucker-Lewis index (TLI) 0.994; chi square/degree of freedom ratio (CMIN / DF) 1.152; Root Mean Square Error of Approximation (RMSEA) 0.020. These results indicate that hypothesis testing can proceed. Table 2 shows of the goodness of fit estimation result.

<table>
<thead>
<tr>
<th>Goodness of Fit</th>
<th>Result</th>
<th>Evaluation of Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>131.345</td>
<td>Fit</td>
</tr>
<tr>
<td>Probabilitas</td>
<td>0.127</td>
<td>Fit</td>
</tr>
<tr>
<td>GFI</td>
<td>0.962</td>
<td>Fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.949</td>
<td>Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>0.995</td>
<td>Fit</td>
</tr>
<tr>
<td>TLI</td>
<td>0.994</td>
<td>Fit</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>1.152</td>
<td>Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.020</td>
<td>Fit</td>
</tr>
</tbody>
</table>

GFI: goodness of fit index; AGFI (adjusted goodness of fit index); CFI: comparative fit index; TLI: Tucker-Lewis index; CMIN / DF: chi squared/degree of freedom ratio; RMSEA: Root Mean Square Error of Approximation.

4.2 Hypothesis testing

Testing the causality between variables that exist is conducted using the help of AMOS software. Based on the results of structural equation modelling testing, this study yielded several findings. First, the results of the test estimation find that market orientation is more likely to have a significant positive effect on green product innovation with value of parameter estimation 0.329, Critical Ratio (C.R)
5.391, and level of significance (p) 0.00. Thus, it can be concluded that hypothesis 1 is accepted. Second, this study finds the effect of value co-creation ability on green product innovation with the value of parameter estimation 0.162, C.R = 2.928, and p = 0.03. This means that hypothesis 2 is accepted. Hypothesis testing results are presented in Table 3.

Table 3. Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>C.R</th>
<th>p-value</th>
<th>Evaluation of Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Market orientation positively affects green product innovation</td>
<td>5.391</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2: Green product innovation has a positive effect on marketing performance</td>
<td>2.928</td>
<td>0.003</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3: Value co-creation has a positive effect on green product innovation</td>
<td>5.589</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4: Value co-creation has a positive effect on marketing performance</td>
<td>4.635</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

- C.R: Critical Ratio, *p level of 0.00

Third, this study find a significant positive influence of green product innovation on marketing performance with estimated parameter value of 0.55, C.R = 5.589, and p-value = 0.000 and significant at α 0.05. Accordingly, it can be concluded that hypothesis 3 is accepted. Fourth, the results of the analysis also reveal a significant positive influence of value co-creation on marketing performance with the value of parameter estimation = 0.353, CR = 4.635, p-value = 0.000 and significant at α 0.05). Thus, hypothesis 4 stating that value co-creation has a positive effect on marketing performance is accepted.

5. Discussion

The testing results show that all hypotheses in the model are acceptable, in which market orientation, value co-creation positively affects green product innovation. In addition, value co-creation, green product innovation have positive effects on marketing performance. These results correspond to some of the literature and previous empirical studies. First, market orientation has a positive effect on green product innovation. This result is supported by several previous empirical studies as found by Dobni and Luffman (2000) who find that market orientation is likely to affect companies in formulating strategy and strategy implementation. Furthermore, the study of Lee et al. (2015) also demonstrated that market orientation positively influences product differentiation strategies. This indicates that the application of market orientation is likely able to strengthen the green product innovation strategy.

Second, this study highlights that green product innovation has a positive effect on marketing performance. The results of this study are supported by several previous
Strategic Implementation of Environmentally Friendly Innovation of Small and Medium-Sized Enterprises in Indonesia

studies. A study from Lee et al. (2015) find that differentiation strategies have positive effect on financial performance and on non-financial performance. Furthermore, Mosakowski’s (1993) study also reveals that firms will perform better than their competitors when adopting differentiation strategies to support their marketing activities. Nandakumar et al. (2010) further state that differentiation strategy can improve company performance. Cheng et al. (2014) find that business performance is influenced by eco-organizational innovations, eco-process innovations, and eco-product innovation.

Gabler et al. (2015) also find that eco-capability has a positive effect on market performance and financial performance. Finally, Doran and Ryan's (2014) study show that eco-innovation has a positive impact on company performance. Several previous studies have also found that green product strategy has a positive effect on business performance (Cheng et al., 2014; Chen et al., 2006; Brenes et al., 2014). Thus, this study argue that green product innovation is more likely able to improve marketing performance.

Third, this study also shows that value co-creation positively affects green product innovation. The results of this study are supported by several previous studies. A study from D'Souza et al. (2006) reveal that past experiences of post-use products positively influence the perception of green products. Furthermore, Dangelico and Pujari (2010) also state that the development or innovation of green products, enhancement of image reputation, is seen as a means to enhance company competitiveness. Dominguez-Péry et al. (2013) state that value creation is the end result of collaboration and the company's ability to optimize the company. Furthermore, Salem Khalifa (2004) states that creating and delivering value to customers is seen as the cornerstone of a marketing strategy and competitive strategy. This shows that value creation is one factor that is more likely able to improve green product innovation.

Fourth, the study find that value co-creation has a positive effect on marketing performance. This is in accordance with a study conducted by Sullivan et al. (2012) revealing that the competence of value creation positively affects the company's sales performance. Furthermore, Chakraborty et al. (2014) also reveal that the creation of shared values that include competency alignment, perceived control, process alignment, and expectation alignment have a positive effect on company performance. Some empirical studies have also found that green product strategies affect performance and positive perceptions of firms, (D'Souza et al., 2006; Dangelico and Pujari, 2010).

Based on the discussions described, this study has found a suitable strategy formulation in the context of SMEs. Application of market orientation strategy, and value co-creation can support the company in creating green product innovation. In addition, the application of mutual value creation and green product innovation is a strong predictor in supporting the company's performance. However, this study
argues that there is no possibility of other strategic factors that can improve a company's performance. This is because every company, sector, or market has unique and different characteristics, making it difficult to ensure strategy formulation across different companies, sectors, or markets.

6. Conclusion

Based on the final test results, this study results reveal strong correlations between market orientation, value co-creation and green product innovation. The results also find a strong correlation between value co-creation, green product innovation and marketing performance in the context of SMEs. This study conclude that when companies do market orientation and value co-creation, green product innovation will likely improve. Furthermore, when companies implement a shared value creation strategy and green product innovation, then the performance of marketing will also be higher.

7. Implications

This study has two types of implications, namely academic and practical implications. Based on the findings, market orientation variable, value co-creation, green product innovation can be used as alternative variables in measuring marketing performance in subsequent research. Furthermore, academics may explore some other alternative antecedents that may affect marketing performance. In addition, academics can also use other marketing performance measurement alternatives, such as multi-paradigm measurement. As Clark pointed out (1999), where the measurement of marketing performance can be seen from three sides, financial and non-financial, the outcome of marketing performance, and multidimensional measurement. By using multi paradigm measurement, it is expected that the result of further study can give more comprehensive result.

Practically, the results of this study can be used by managers as a basis in determining business strategy. The results of this study can serve as guidelines in optimizing marketing performance by combining the strategy formulation between market orientation, value co-creation, and green product innovation. Specifically, based on the results, the study has found that green product innovation is able to influence marketing performance. Hence, managers can begin to implement green product innovation strategies to maximize their profits. The adoption of this green product innovation strategy is supported by the increasing market share of green products today. As some experts claim that consumer attitudes of environmental awareness and environmental stewardship have made green products increasingly in demand by consumers (D'Souza et al., 2006 Laroche et al., 2001). Thus, it is concluded that the adoption of green product strategy is significant in influencing the performance of a company.

8. Limitations
This study still has some limitations. First, the study is limited to a few antecedents that may affect marketing performance. As Day (1994) points out that there is a few define organizational orientation attributes, and prove the antecedent composition and its consequences on firm performance. This indicates that the antecedent in measuring the performance of a company varies considerably. This lead to a conclusion that there are other variables that have the potential to be antecedents in addition to market orientation, mutual value creation, and green product innovation. Secondly, the sample in this study is limited to SMEs engaged in producing green products, and only in one region having the same culture. Thus, in order to develop the model can be tested generalization, then the testing requires on different objects and samples.

References:


Strategic Implementation of Environmentally Friendly Innovation of Small and Medium-Sized Enterprises in Indonesia