

## The Effect of Responsive and Proactive Market Orientation on Product Innovation and Company Performance: A Case Study on MSMEs in the Culinary Field in D.I. Yogyakarta

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### Abstract

*This study aims to determine the effect of Responsive and Proactive Market Orientation on Product Innovation and Company Performance. The population in this study is the Micro, Small, and Medium Enterprise (MSME) in the Culinary Division at D.I. Yogyakarta and use 200 respondents as a sample. By using convenience sampling technique, the researchers have the freedom to choose any culinary MSME found around D.I. Yogyakarta to be the respondent. Hypothesis testing using Structural Equation Model (SEM) analysis. The findings show that there is a positive influence of responsive market orientation on product innovation performance, proactive market orientation on product innovation performance, product innovation performance on the company's market performance, and the company's market performance on the company's financial performance. The findings of this study contribute to MSMEs that information about market orientation adopted by business actors or companies can affect the performance of new product innovations in the market to improve the company's market performance which then affects the company's financial performance.*

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## 1. Introduction

In Indonesian business sector, the type of business conducted most by people is Micro, Small, and Medium Enterprise (MSMEs). MSMEs play an essential role in the Indonesian economy as it managed to prove its existence in it. We can see that MSMEs covered 99.99% of overall business players in Indonesia or as many as 59.26 million units in 2015 (Annual Report of Kemen KUKM, 2016). MSMEs has stabilized economy by opening employment opportunities and distributing income. However, its low productivity rate has lowered its value added for economic activities. MSMEs low productivity and add value are affected by market growth volatility in its respective fields. It occurs due to low market understandings and information. Market globalization marked with the increase of interdependence nature and integration of

global economy (Hill, 2010) has encouraged the development of marketing science in determining corporate strategies to transform from product-oriented or customer-oriented to market-oriented (Day, 1999).

Market orientation is deemed as an essential concept to determine strategies of a company (Harris, 1996). Market-oriented companies are considered having higher market knowledge and better abilities in communicating with customers. This capability may guarantee a company to gain higher profit than the companies having less market orientation (Day, 1994). Therefore, market orientation profoundly influences the success of companies either in big, medium, or small scales. Unfortunately, most researches about market orientation are limited to big-scale business (Zhang and Duan, 2010). Not many researches discuss market orientation aspect in small and medium industry, especially in Indonesia. Whereas, MSMEs play an essential and strategic role for the Indonesian economy. It can be seen from a large number of industries in every economic sector, its incredible potential to absorb workforce, and relatively significant contribution to GDP. Moreover, MSME is also considered as a business unit which managed to survive in a crisis period where each big business starts to get unstable (The Asia Foundation, 2001).

D.I. Yogyakarta (DIY)'s MSMEs in the culinary field is an appropriate example to see the development and growth of MSMEs in Indonesia since D.I. Yogyakarta has a small area of 3,133.15 square kilometres with around 3,542,078 population (Permendagri Number 39 of 2015). Assistant for Economy and Development of DIY Regional Secretariat, Budi Wibowo, said D.I. Yogyakarta has around 524,395 SMEs dominating economic growth of 98.4%. In a holiday season, Yogyakarta becomes one of main tourist destinations in Indonesia and the business activities in this business field are quite high. The businesses of accommodation, as well as food and drink providers, become main contributors for accommodation and food-drink provision business field in DIY's PDRB.

According to the background, this research aims to empirically test the influence of market orientation against innovation and financial performances of Yogyakarta's MSMEs in the culinary field.

## 2. Literature Reviews

### Market Orientation and Product Innovation Performance

Narver et al. (2004) stated market orientation consists of two important behavioural sets. The first behavioural set is responsive market orientation leading to "*customer-led*" in Slater and Narver (1998) and "*customer compelled*" in Day (1999) in which every company attempts to find, understand, and satisfy the needs expressed by customers (*expressed needs*). Responsive market orientation focuses on empirical analysis from currently existing knowledge and experience. The second behavioural set is a proactive market orientation in which every company attempts to find, understand, and satisfy customers' latent needs (*latent needs*).

To provide a more detailed explanation of the difference between these two market orientation types, Narver et al. (2004) divides consumer needs into two forms, namely *expressed needs* and *latent needs*. *Expressed needs* and *expressed solutions* are defined as "*the needs and solutions of a customer of which customer is aware and, therefore, can express.*" It means customers know

and are aware of their needs so they can express them. As an example, consumers have expressed needs in the form of "hunger" whose solution is "food." Here, consumers know what they need and the solution of the needs. Different from expressed needs, Narver et al. (2004) define *latent needs* and *latent solutions* as "*needs and solutions of which the customer is unaware.*" Here, consumers are not aware of their needs, so they do not know the solution to meet those needs. It shows that the needs are not really like expressed needs, but customers do not realize or have not realized about these needs. Commonly, a business will firstly pay more attention to expressed needs as the needs realized by customers. However, only fulfilling consumers' expressed needs is not sufficient to attract and maintain consumers since competitors can easily detect expressed needs.

This situation leads to price competition to create *superior value* for consumers. The price competition becomes inevitable when consumers think there is no value difference among the offers provided by producers or, in other words, producers only offer products which can be easily guessed by consumers (Narver et al., 2004). Narver et al. (2004) stated that finding and satisfying consumers' latent needs can be achieved by leading them. Consumer leading implies the existence of proactivity. In this part, proactive market orientation's role is necessary as it not only responds to currently existing needs but also attempts to lead consumers and create solutions for their latent needs. This behaviour distinguishes proactive market orientation and responsive market orientation.

Zhang and Duan (2010) explained in their research that the culture and behaviour of market-oriented companies generate excellent product innovation and innovation performance. Li et al. (2008) explained based on implemented measurement scale; it can be concluded that many of the studies implicitly refer to the dimension of responsive market orientation. Lilien et al. (2002) explained that expressing customers' latent needs, cooperating with main users, and conducting experiments are usually related to innovation. Focusing on future customer needs can also provide information to companies about new markets and technology advance to improve companies' capabilities to integrate development into product innovation.

According to Trott P, (2005; 2008), innovation, in a broad concept, is not only limited to product, but innovation can also take the form of ideas, means, or objects perceived by a person as something new. Innovation is also usually used to refer to the changes perceived as something new by people who experience it. However, in a marketing context and consumer behaviour context, innovation is related to new products or services, referring to the products which indeed have not existed in the market, and 'new' which refers to different things including perfection or improvement of previous products consumers found in the market (Suryani, 2008). Previous research conducted by Narver et al. (2004) also shows that proactive market orientation has a positive relationship with the success of new products. According to the above findings, the following hypotheses are proposed:

H1A: Responsive Market Orientation positively influences Product Innovation Performance.

H1B: Proactive Market Orientation positively influences Product Innovation Performance.

### **Market Orientation and Corporate Performance**

The research conducted by Bodlaj (2010) explained that several previous types of research confirm a positive relationship between market orientation and various corporate performance measures. More updated literature about market orientation, according to Bodlaj's research (2010), shows that both market orientation forms are needed for long-term business performance (Sheth and Sisodia, 1999). Narver et al. (2004) explained that developing by only implementing responsive market orientation may not be sufficient for companies to attract and maintain customers. Hence, companies have to keep improving their proactive market orientation to create and maintain sustainable competitive strengths. Similar with several other types of research, then the writer stated that market orientation indirectly influences financial performance through market performance (for example, Homburg and Pflesser, 2000; Gabrijan et al., 2005). Therefore, the following hypotheses are proposed:

H2A: Responsive Market Orientation positively influences Corporate Market Performance.

H2B: Proactive Market Orientation positively influences Corporate Market Performance.

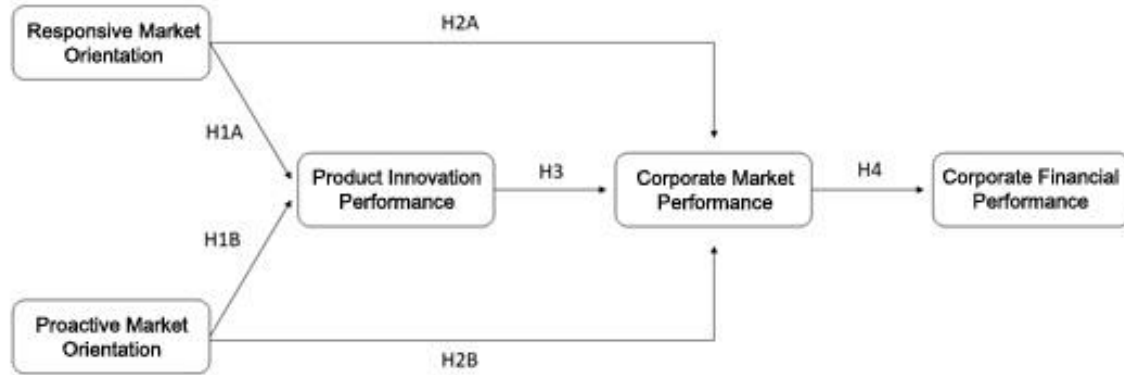
According to Bodlaj (2010), innovation is one of the main boosters of business performance and is essential for corporate competitiveness. Every company has to develop new products to survive in the long term. The companies failing to develop new products have placed themselves in a significant risk since their existing products are vulnerable against change of needs and desires of customers, new technology, shorter products' life cycle, an increase of domestic and foreign competitions (Kotler, 2003). The research of Slater & Narver (2004) stated that business performance is measured from profitability than the determined targets. Several empirical findings confirm a positive relationship between new product performance and business performance (for example, Langerak et al., 2004). Companies can improve their business performances by improving their innovation performances and, therefore, they are suggested to raise their level of novelty since it leads to higher innovation performance (Mateja Bodlaj, 2010). According to this finding, the following hypotheses are proposed:

H3: Product Innovation Performance positively influences Corporate Market Performance.

Business performance can broadly be divided into two groups namely financial and non-financial (Rejc, 2002) in Bodlaj (2010). Financial performance measures in business (for example income, sale growth, additional economic value, and cash flow) are measured with a pause. Market performance measures are an essential group related to non-financial acts. In this research, market performance refers to customer satisfaction and customer loyalty while financial performance refers to sale value, sale growth, and gross profit. Cost decrease with relatively similar product quality will enhance corporate profit regarding corporate performance improvement. Previous researches theoretically or empirically show that market performance has positive impacts on financial performance. Therefore, the following hypotheses are proposed:

H4: Corporate Market Performance positively influences Corporate Financial Performance.

To obtain a deep conceptual overview and frameworks over this research, the following research model is compiled:



Source: Data processed

**Figure 1. Research Model**

### 3. Research Methods

#### Population and Sample

The population of this research is D.I. Yogyakarta's Micro, Small, and Medium Enterprise (MSMEs) in the culinary field. Samples are collected through *Convenience sampling* and *Purposive sampling* methods. Convenience sampling is an unlimited non-probability sampling, in which samples are selected from the members of the population that are easy to find and be interviewed. Purposive sampling is a sample selection method based on certain consideration (Ghozali, 2005). In determining the number of samples, Aderson & Gerbing (1988) suggested a minimum number of sample for SEM analysis is 100 to 200. Considering the proportion of sample number suggested by the experts, the researcher determined that the minimum samples of this research are 230 respondents to anticipate outlier data. In this research, the samples to be used are **200** UMKMs of the culinary field in Yogyakarta whose characteristics are stated in the following table: From 200 UMKMs as respondents, 98% have less than 20 employees, 1% has 20-100 employees, and 1% has more than 100 employees. According to corporate age, 75% have less than five years of operation, 22.5% have 5 to 10 years of operation, and 2.5% have 11 to 15 years of operation. According to the amount of capital, 57.5% UMKMs have less than Rp50 million capital, 27% have Rp50 million to 100 million capital, and 15.5% have over Rp100 million capital (table 1).

**Table 1: Characteristics of Respondents**

Characteristics	Frequency	Percentage (%)
<b>According to Number of Employees</b>		
< 20 Employees	196	98
20 – 100 Employees	2	1
>100 Employees	2	1
<b>According to Corporate Age</b>		
< 5 years	150	75
5-10 years	45	22.5

Characteristics	Frequency	Percentage (%)
11-15 years	5	2.5
<b>According to the Amount of Capital</b>		
< Rp50.000.000	115	57.5
Rp50.000.000- Rp100.000.000	54	27
>Rp100.000.000	31	15.5

Source: Compiled Primary Data, 2018

### Research Variables

Research variables are the components which become objects of research or center of attention in research. The variables in this research are as follows: Independent variable of this research is market orientation covering Responsive Market Orientation (X1) and Proactive Market Orientation (X2). Dependent Variable in this research is corporate performance covering Corporate Marketing Performance (Y1), Corporate Financial Performance (Y2), and Product Innovation Performance (Z). The measurements of those variables are adapted from research instruments previously used by Bodlaj (2010).

## 4. Results and Discussions

### Descriptive Analysis

According to Table 2 above, from 200 respondents taken as samples, most respondents stated that all implemented indicators are Good/Agree (Mean of 4.88). It shows that research respondents on average have a proper assessment of responsive and proactive market orientation against product innovation and corporate performance.

**Table 2. Respondent Classification for All Variables**

Variables	Total Mean of Variables	Mean of Variables	Categories
Responsive Market Orientation	20.02	5.01	Good
Proactive Market Orientation	19.95	4.99	Good
Product Innovation Performance	18.62	4.66	Good
Corporate Market Performance	10.26	5.13	Good
Corporate Financial Performance	9.19	4.60	Good
Mean	15.60	4.88	Good

Source: Compiled Primary Data (2018)

### Results of Validity and Reliability Tests

The researcher conducted a validity test for each *observed variable* or indicator through *convergent validity* approach. Convergent validity can be seen from the measurement model by determining whether each validly estimated indicator measures the dimension of the concept it tests. An indicator shows significant convergent validity if the variable coefficient of the indicator is higher than the double of its error standard (Anderson and Gerbing, 1988) or has higher critical ratio than the double of its error standard. AMOS Program version 24 also facilitates convergent validity assessment by observing critical value or *t-value* from each indicator. The criteria are that if the indicator's *t-value* is  $\geq 1.96$ , it means the indicator is

significant in the level of  $\alpha = 0.05$  (Holmes-Smith, 2001). The results of validity and reliability tests to samples are shown in Table 3.

**Table 3. Results of Validity and Reliability Tests**

Indicators	$\lambda_i$	$\varepsilon_i$	Information	Construct Reliability	Information
Responsive Market Orientation					
OPR_1	0.631	0.023	Valid	0.975	Reliable
OPR_2	0.780	0.046	Valid		
OPR_3	0.619	0.042	Valid		
OPR_4	0.546	0.059	Valid		
Proactive Market Orientation					
OPP_1	0.520	0.053	Valid	0.966	Reliable
OPP_2	0.659	0.053	Valid		
OPP_3	0.503	0.051	Valid		
OPP_4	0.705	0.045	Valid		
Product Innovation Performance					
KIP_1	0.712	0.052	Valid	0.988	Reliable
KIP_2	0.839	0.034	Valid		
KIP_3	0.912	0.033	Valid		
KIP_4	0.971	0.026	Valid		
Corporate Market Performance					
KPP_1	0.902	0.028	Valid	0.984	Reliable
KPP_2	0.882	0.024	Valid		
Corporate Financial Performance					
KKP_1	0.816	0.038	Valid	0.974	Reliable
KKP_2	0.896	0.039	Valid		

Source: Compiled Primary Data (2018)

The Table 3 shows that statistical probability is  $> 0.50$  so all questions in questionnaires on question items of Responsive Market Orientation, Proactive Market Orientation, Product Innovation Performance, Corporate Market Performance, and Corporate Financial Performance variables  $>$  level of significance = 0.05 or above 0.1388 of the table are valid. The coefficient of construct reliability is  $> 0.60$  so all questions in questionnaires on question items of Responsive Market Orientation, Proactive Market Orientation, Product Innovation Performance, Corporate Market Performance, and Corporate Financial Performance variables are reliable.

### The result of Model Test

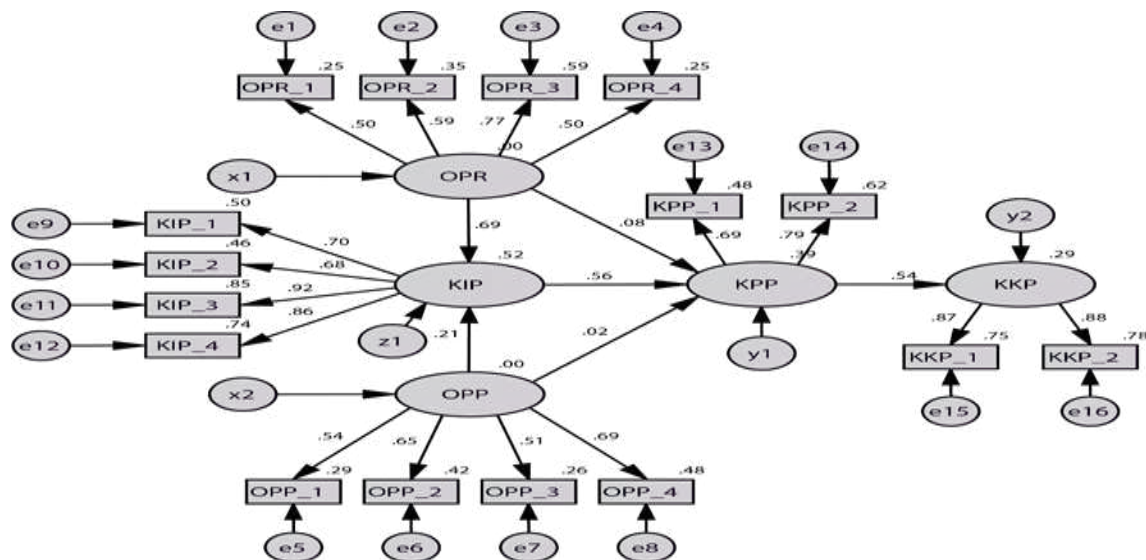
The analysis tool used in this research is *the Structural Equation Model* (SEM). This analysis tool is used to whether Responsive Market Orientation will have positive effects to Product Innovation Performance, Proactive Market Orientation will have positive effects on Product Innovation Performance, Responsive Market Orientation will have positive effects on Corporate Market Performance, Product Innovation Performance will have positive effects in Corporate Market Performance, and Corporate Market Performance will have positive effects on Corporate Financial Performance.

**Table 4. The result of Goodness of Fit Model**

Reference Index Criteria	Reference Value	Test Result	Information
Chi-Square ( $X^2$ )	Probability (P) > 0.05	122.167	Good Fit
CMIN/df	$\leq 2.00$	1.222	Good Fit
Root mean square error of approximation (RMSEA)	< 0.08	0.033	Good Fit
The goodness of Fit Index (GFI)	$\geq 0.90$	0.928	Good Fit
Adjusted Goodness of Fit Index (AGFI)	$\geq 0.90$	0.902	Good Fit
Comparative fit index (CFI)	> 0.9 (approaching 1)	0.980	Good Fit
Parsimonious comparative fit index (PCFI)	> 0.6	0.817	Good Fit
Akaike information criteria (AIC)	AIC < AIC saturated model & independence mode	194.893	Good Fit

Source: Compiled Primary Data. *Structural Equation Modeling* (SEM), 2018

The following is the result of the goodness of fit index test and its cut-off values used in this research which will later be used to test whether a model can be accepted or rejected. According to Table 4, all test results have met required reference value. Therefore, it can be concluded that structural equation model in this research is fit (having compatibility).



Source: Output, data processed

**Figure 2. Structural Equation Model**

### The result of Hypothesis Test

The calculation using a statistical computer program, AMOS 24, shows that probability values among the influences of Responsive Market Orientation to Product Innovation Performance, Proactive Market Orientation to Product Innovation Performance, Product Innovation Performance to Corporate Market Performance, and Corporate Market Performance to Corporate Financial Performance is < Level of Significance = 0.05. Meanwhile, the probability values between the influences of Responsive Market Orientation to Corporate Market Performance and



Proactive Market Orientation to Corporate Market Performance are > Level of Significance = 0.05. This research concludes that there are influences among Responsive Market Orientation to Product Innovation performance, Proactive Market Orientation to Product Innovation Performance, Product Innovation Performance to Corporate Market Performance, and Corporate Market Performance to Corporate Financial Performance. However, this research also concludes that there are no influences among Responsive Market Orientation to Corporate Market Performance and Proactive Market Orientation to Corporate Market Performance. These results indicate a mediation role of innovation performance connecting responsive market orientation and proactive market orientation with corporate market performance as shown in Table 5 below.

**Table 5. Result of Estimated Structural Equation Model (SEM)**

Hypotheses	Regression Route	Coefficient of Regression	Error Standard	t-calculation	Prob.	Information
H1A	OPR-KIP	2.066	0.368	5.606	0.000	Significant
H1B	OPP-KIP	0.382	0.135	2.828	0.005	Significant
H2A	OPR-KPP	0.148	0.242	0.610	0.542	Not Significant
H2B	OPP-KPP	0.022	0.095	0.230	0.818	Not Significant
H3	KIP-KPP	0.331	0.078	4.227	0.000	Significant
H4	KPP-KKP	0.830	0.128	6.478	0.000	Significant

Source: Compiled Primary Data. *Structural Equation Modeling (SEM)*, 2018

## 5. Conclusion and Suggestion

From six hypotheses regarding the influences of responsive and proactive market orientations to product innovation performance and corporate performance covering market and financial performance, responsive and proactive market orientations have influences over product innovation performance. Therefore, it takes consistency to adopt one of the market orientations since both of them influence innovation performance in producing new products to succeed in markets. Meanwhile, the hypotheses testing the influences of responsive market orientation and proactive market orientation to market performance are not proven. The hypotheses testing the influence of product innovation performance to market performance and influence of market performance to financial performance are proven as significant.

Our study provides several guidelines for managers involved in new product development. First, research finding shows that market orientation is an important determinant of new product performance and it even has a more prominent role in product innovation than market orientation since market orientation highlights customer focus and competitor leading companies to explore products' market trends better. To generate greater customer profit, business with higher market orientation level tends to have competent capabilities to improve product innovation performance. Therefore, in the case of strategic resource shortage, producers have to prioritize the implementation of market orientation strategies. Second, our research determines the importance of both market orientation types for producers during the product innovation process. The implication is that management can influence the efficiency and effectiveness of new

product development by investing in organizational programs which improve companies' market-oriented culture.

Appropriate behaviour for MSMEs adopting responsive market orientation is to always focus on empirical analyses from knowledge and experience to meet currently existing customer needs (expressed needs). According to feedback from customers, companies can improve products by focusing on product improvement areas as customers suggested. Meanwhile, appropriate behaviour for proactive market orientation is that each company keeps attempting to find, understand, and satisfy customers' latent needs (latent needs) and focusing on innovation at all organizational levels. Therefore, a business player or company must be able to synchronize owned resources to be used to create effective and efficient strategies in creating good product innovations.

Market performance improvement can be achieved by using and creating new products which meet the desires and needs of target people. It is essential to maintain existing customer to establish loyalty to the products by maintaining or improving its qualities. Therefore, corporate financial performance can be achieved if product innovation performance influencing corporate market performance can be improved.

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