The Effect of Market Orientation on Firm Innovation among Small and Medium Enterprises in Turkey

Tuba Yumusak
Business Administration
Gazi University
Turkey

Ali Ayci
Institutional Training Director
KOSGEB
Turkey

Kadri Gokhan Yilmaz
Business Administration
Gazi University
Turkey

Aybegum Gungordu
Business Administration
Bartin University
Turkey

Abstract

In this study, the relationship between the innovation as a cornerstone of marketing concepts and market orientation which constantly renews itself against environmental factors are examined. These two concepts are based on consumer wants and needs. Innovation and market orientation reveal the importance of developing business strategies activities and performing activities based on the consumers. In this study, we have reached 1,500 SMEs operating in various fields in all over the Turkey. A positive correlation between innovation and market orientation is obtained by applying a multiple regression analysis. Consequently, we found that market orientation effects business innovation, positively

1. Introduction

The main reason for firms to try to make innovation a part of the organizational culture and embrace new concepts is to improve the performance of their business for new concepts and to use innovation as a tool in order to have a competitive advantage. Marketing concept of market orientation is an important source of competitive advantage for companies. According to the literature (Kohli and Jaworski, 1990; Narver and Slater, 1990; Deshpande, Farley and Webster, 1993), market orientation shows companies' superior skills to understand consumers and predicts their needs. Market orientation is examined in three approaches (Day, 1994:37):

- The approach that puts the consumer preferences first place (Deshpande, Farley and Webster, 1993).
- Cutting-edge skills based approach that requires the acquisition of information about consumers and competitors, and the distribution and usage of information (Kohli and Jaworski, 1990).
- The approach that the regular use of operational resources in creating superior customer value (Narver and Slater, 1990).

Market orientation is a concept based on the needs and wants of consumers. Because consumers reach information quickly, their wants and needs are constantly changing and differentiating. In order to survive and to become successful in this battle, innovation seems to be essential in markets.

2. Literature Review

2.1. Market Orientation

Market orientation, when considered in terms of marketing strategy, provides opportunities for value creation for specific market segments or parts of the business with tangible and intangible assets efficient and effective than its competitors. A market oriented company should focus on the consumers wants and needs. Based on consumer needs, continuous information collection, sharing this information to all organizations and using the information should focus on creating consumer value. Market orientation pulls the company into customer relationship management process. Customer relationship management process involves identifying potential consumers, and improving the long term perception of the proposals that the business offers to consumers (Kerin at al., 2004:17). It can be claimed that in the literature, the approaches of Kohli - Jaworski and Narver - Slater can take the leading. In this study we used the Kohli - Jaworski approach. According to Kohli and Jaworski, market orientation is based on consumer focus, regular marketing, and profitability (Kohli and Jaworski, 1990:3).

Consumer wise requires expertness in enterprise sales force and consumer estimation. Expertise plays a key role by solving the problems in markets. In a business, the target markets needs should be determined by focusing on the needs of market as better than the competitors in the market focus. To achieve the marketing objectives, businesses should obtain consumer satisfaction and the satisfaction obtained should be used as a key to competitive advantage (Saxe and Weitz, 1982:343-344). Marketing is a process for the purpose of obtaining and analyzing the information about the market (existing and potential consumers) and the consumers' current and future needs and requirements. Evaluating consumers' attitudes and behavior and determining the environmental changes that may affect the future size and structure of market. (Cornish, 1997:147).

Firms have not necessarily created an unconditional value. The important thing is to create superior value at a low cost as compared to competitors. Competitive advantage can be accepted as the abilities which show one or more way that the competitors cannot do or will not do. Each of achieving competitive advantages should be reflected as a consumer benefits to consumers. Businesses should focus on creating consumer advantage. The result is high consumer value, consumer satisfaction, and repeated purchases which bring to the firm a high profit (Kotler, 2003: 82-83). Market orientation is defined as a process which involves obtaining information about the current and future consumer requirements, distributing this information across departments and responding company's answer in the light of obtained information (Kohli and Jaworski, 1990:6).

2.2. Innovation

Most researchers describe the marketing concept as a different form of an organization culture. Peter Drucker is one of the first researchers to identify marketing concepts. According to Peter Drucker (1954) "*Firm has only one valid purpose: to create customer... the customer determines what the business is...The business enterprise which its purpose is to create customer, has two basic functions: marketing and innovation*." Deshpande and Webster (1989) identify the marketing concept as different organizational cultures by developing strategies and activities based on the values and beliefs of consumers. Innovation for the enterprise is one of the basic functions in order to reach more consumers.

The concept of innovation is mainly based on the degree of product innovation. Degree of product innovationist dealt with two dimensions. The first dimension is handled by the consumer. Product newness is compatible and determined accordingly customer experience and consumer habits. The second dimension is handled by the firm. Degree of product newness determined by the degree of difference between innovation made by business and the innovation already exist in the market (Gima, 1996). The relationship between innovation and market orientation can be accepted as an important research area for researchers. According to Kohli and Jaworski (1990) and Deshpande et al. (1993), market orientation provides a powerful organizational performance and a successful innovation for firm. Bennett and Cooper (1981) show that there is a negative relationship between market orientation and product innovation. As the reason for the opposite relationship, focusing on the market instead of the real innovations can be emphasized. As a result, firm cannot compete in the market and imitates current products developed by competitors. This study puts forth the positive and strong relationship between market orientation and innovation.

3. Methodology

3.1. Sample and Questionnaire Development

The sample of 1800 firms was randomly selected from the KOSGEB (small and medium industry development organization) database. The questionnaire form was mailed to the president of each firm. Among the original 1800 questionnaires, 1422 questionnaires were returned and found usable. In this survey, the main aim was to determine the relationship between market orientation and firm innovation.

The research model includes the market orientation variable which has dimensions such as intelligence generation, intelligence dissemination, intelligence responsiveness, and also includes the firm innovation variable. Market orientation is measured with the scale of MAKTOR which was developed by Kohl and Jaworski (1993). MAKTOR scale includes 20 items, each rated on a 5-point Likert scale. Innovation is measured by the scale which Deshpande, Farley, and Webster (1993) developed. Innovation scale is also rated on a 5-point Likert scale.

Each of the scales described above was refined in the following manner. The reliability of each scale was estimated by computing its Cronbach's alpha. Items that exhibited low inter-item correlations were eliminated in order to improve the internal consistency of the scales. The reliability of each scale is reported in Table 1. As canbe seen in Table 1, the scales have high reliability coefficients that exceed the levels recommended by Hair (2006).

Table 1: Cronbach's Alpha values of the scales

Item	Cronbach's Alpha
Intelligence Generation	0.846
Intelligence Dissemination	0.709
Intelligence Responsiveness	0.855
Innovation	0.672

3.2. Results

In our study, we use multiple regression analysis to examine the relationship between market orientation and firm innovation. Regression analysis employs a model that describes the relationships between the dependent variables and the independent variables in a simplified mathematical form. In Multiple regression analysis set of independent variables, potentially predictive variables x are used to "explain" the variability of a dependent variable y (Legendre, 1993):

$$Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n + e$$

Where
Y = dependent variable
Xi = independent variables
β_0 = constant (y-intersect)
β_i= regression coefficient of the variable Xi

Market orientation has 3 dimensions which can be defined as intelligence generation, intelligence dissemination and intelligence responsiveness. These 3 dimensions will be used as the independent variables in our study. Firm innovation is the dependent variable. We used SPSS 21 program to analyze the obtained data.

Multiple connections is the strong relationship between independent variables and it occurs as a reason of the high correlations between independent variables. To check whether there is a multiple connection problem we looked at the Collinearity Statistics. If VIF (Variance inflation factor) value is equal or greater than 10 (VIF≥10), multiple connection problem does exist. If Tolerance value is greater than 0.10, multiple connection problem does not exist (Cokluket al., 2012:35-36).

Table 2: Co linearity Statistics

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	2.696	.083		32.636	.000		
Intelligence Generation (x_1)	.073	.033	.097	2.187	.029	.312	3.205
Intelligence Dissemination (x_2)	.016	.027	.021	.582	.061	.464	2.157
Intelligence Responsiveness (x_3)	.210	.034	.257	6.116	.000	.348	2.875

Table 2 shows the VIF and Tolerance values. In this study, independent variables' VIF values are less than 10 and Tolerance values are greater than 0.10. In this respect, it can be claimed that in the study multiple connection problem does not exist.

Table 2 also shows the t values of independent variables. T-values of the coefficient for the independent variables are 0.029, 0.061, and 0.00. It indicates that the coefficients of the independent variables are statistically significant (Nakip, 2006:333). When we look at the t values of independent variables, it is seen that the t value of Intelligence Responsiveness is greater than t values of Intelligence Generation and Intelligence Dissemination (6.116>2.187>0.582). As a result, intelligence responsiveness explains better the change in the dependent variable firm innovation. In Table 2, the coefficients of independent variables are positive. Positive coefficients show that the relationship between independent and dependent variables is in the same direction.

Table 3: Correlation of Variables

Pearson-Correlation	Innovation	Intelligence Generation	Intelligence Dissemination	Intelligence Responsiveness
Innovation	1.000			
Intelligence Generation	.317	1.000		
Intelligence Dissemination	.263	.711	1.000	
Intelligence Responsiveness	.349	.793	.670	1.000

In order to give accurate results of the regression analysis it should not have a high degree of correlation between the independent variables. The high of the relationship between the independent variables reduces the reliability of the regression equation. The relationship between the independent variables should be less than 0.80 for the regression model to be reliable (Can, 2013: 260). In Table 3, correlations of independent variables can be seen. All correlations are less than 0.80. According to this result, we can say our regression model is reliable. In Table 4, F value 68.228 is acceptable at the 0.00 significant level indicates that the model is valid as a whole. Independent variables explain 12.4% changes in the dependent variable.

Table 4: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	89.796	3	29.932	68.228	.000[a]
Residual	622.086	1418	.439		
Total	711.883	1421			

Table 5 shows the Durbin-Watson analysis result. This value is between 1.5 and 2.5 (1.5>1.97>2.5). As a result auto correlation problem does not exist.

Table 5: Model Summary

R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R^2 Change	F Change	Df 1	Df 2	Sig. F Change	
.355[a]	.126	.124	.662	.126	68.228	3	1418	.000	1.970

The relationship between market orientation and firm innovation can be described by a linear model of the form as follows:

$$Y= 2.696 + 0.073.x_1 + 0.016.x_2 + 0.21\ x_3$$

In the model, when the intelligence dissemination (x_2) and the intelligence responsiveness (x_3) are hold constant, the intelligence generation (x_1) explains 7.3% of the firm innovation. In the same way, when the intelligence generation (x_1) and the intelligence responsiveness (x_3) are hold constant, the intelligence dissemination (x_2) explains 1.6 % of the firm innovation. When the intelligence generation (x_1) and the intelligence dissemination (x_2) are hold constant, the intelligence responsiveness (x_3) explainspercentage of the firm innovation. Model shows that the response to intelligence gained from the market makes the biggest impact on the firm innovation. Obtaining the market information makes better impact on the firm innovation rather than intelligence dissemination.

4. Conclusion

The purpose of this study is to show how market orientation explains the firm innovation. Market orientation has 3 dimensions which are intelligence generation, intelligence dissemination and intelligence responsiveness. In the regression model, intelligence generation and intelligence responsiveness make a significant impact on firm innovation. Consequently, obtaining market information and respond quickly to this information has a great importance on the firm innovation. Basic of the market orientation is the consumers in the market. Wants and needs of consumers are unlimited and continuously change. If firms want to be market oriented, they should know that consumers' wants and needs should be satisfied and be on the front. This can be accomplished by innovating the market intelligence. If firms want to be innovative, they must obtain reliable information about the market and should be able to respond quickly to this incoming information.

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