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## Innovation orientation, market orientation and e-loyalty: evidence from Turkish e-commerce customers

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### Abstract

Present study aims to explore the relationship among e-commerce, market orientation, innovation orientation and e-loyalty. E-commerce usage is becoming more and more widespread among customers. E-loyalty is a useful measurement for e-commerce success, since loyal customers tend to make repetitive purchases which lead to increase in financial performance of the firms. Innovativeness is a core capability for today's highly competitive firms including online ones. Market orientation enables firms to explore, define and meet customer needs; which may in turn drive the innovation orientation. Present model based on these concepts was studied on 376 participants (n=376). In light of the major findings, present article aims to provide managerial implications for customer loyalty in the setting of e-commerce.

Keywords: innovation orientation; market orientation; proactive market orientation; responsive market orientation; e-loyalty; e-commerce; e-commerce success

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### 1. Introduction

Porter (2001) argues that, the term "electronic commerce" may soon be redundant as almost all commerce will become electronic. Hence, it is critical to study e-commerce success and explore its factors. E-loyalty is a good indicator for e-commerce success, since loyal customers make repetitive purchases and increase the profitability of the firms in the long run. Innovation is considered as one of the key drivers of the long-term success of a firm in today's competitive markets (Lyon and Ferrier, 2002). Innovations should be in line with customers' current and future needs. Therefore, it could be argued that innovation orientation should be combined with responsive and proactive market orientation. According to Baker and Sinkula (2005), firms with strong market orientation have the basis for rapid adaptation to customers' current and latent needs, which may lead to superior new product success, profitability, market share, and sustainable competitive advantage.

### 2. Literature Review

#### 2.1. Market Orientation: Responsive and Proactive Market Orientation

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Market orientation has been related to innovativeness in several studies (e.g. Agarwal et al., 2003; Han et al., 1998; Hult et al., 2004; Sandvik and Sandvik, 2003) since it improves the chances of the innovations being better adjusted to the market requirements (Jimenez and Valle, 2008). Market orientation has two dimensions which are proactive market orientation and responsive market orientation. According to Narver (2004), responsive market orientation refers to business attempts to discover, to understand, and to satisfy the expressed needs of customers. On the other hand, proactive market orientation addresses the latent needs of customers which the customer is unaware of. A responsive market-oriented firm make innovations by efficiently integrating extent knowledge to satisfy expressed needs of customers, whereas proactive market orientation is the search for new information and knowledge (Tsai et al., 2008).

### *2.2. Innovation Orientation*

Innovation orientation enables a business to learn about and track customer needs; to develop new products or services accordingly, and to implement internal processes that enhance an understanding of customer needs and product development, so that a business can attain and sustain leadership in its target markets (Narver et al., 2004). Both theory and empirical research suggest that there is a positive relation between innovativeness and firm performance. (Jimenez, and Valle, 2008). According to Loiacono et al. (2002) innovativeness, which is among twelve critical aspects of web site, refers using a creative and differentiating approach to the web site. According to Jickul and Gundry (2001), the rise of the e-commerce has created the highly challenging environment for innovative organizational behavior where the market need and the technology can change even while the product or service is still under development. However, Narver et al. (2004) suggests that innovation orientation is more of an “inside-out” process that places greater emphasis on company capabilities and interests while proactive market orientation, is as an “outside-in” process, places greater emphasis on customer needs. According to this point of view, a company may innovate products or services which do not meet the customer current/future needs or expectations. Therefore, innovation orientation by itself may be insufficient and should be combined with market orientation.

### *2.3. Perceived Usefulness*

Davis (1989) defined perceived usefulness as “the degree to which a person believes that using a particular system would enhance his or her job performance”. In their study, Cyr et al. (2007) verified that perceived usefulness has a positive effect on e-loyalty. Bhattacharjee (2001) proposed that satisfaction, perceived usefulness and loyalty incentives are three key factors influencing customers’ decisions to continue using an e-commerce system .

### *2.4. e-Satisfaction*

Ribbink et al.(2004) argue that little is known about the mechanisms involved in generating customer loyalty on the internet, however among several antecedents proposed in the literature, satisfaction stands considerably. In his study on Oliver (1999) found that satisfaction is an essential ingredient for the loyalty, however author also claims that satisfaction does not always lead to loyalty. Shankar et al.(2003) states that it is possible for a customer to be loyal without being highly satisfied (e.g., when there are few other choices) and vice a versa.

Customer e-commerce satisfaction can be defined as the evaluation of the reaction or feeling of a customer in relation to his/her experience with all aspects of an e-commerce system put in place by an organization to market. However, this concept does not capture the quality of the physical product, since not all e-commerce companies are the producers of the goods they sell such as Amazon.com (Molla and Licker, 2001). According to Mukhopadhyay et al.(2008), consumer satisfaction starts with the sales experience and continues up to post-sales services.

### *2.5. e-Loyalty and Purchasing Intention*

Zeithaml et al.(1996) define loyalty as an intention to stay with an organization. Anderson and Srinivasan (2003) define e-loyalty as the customer’s favourable attitude toward an electronic business resulting in repeat buying behaviour. It is argued that there is a causal link between loyalty and firm’s financial performance, since as loyal customers tend to buy and spend more (Harris and Goode, 2004). Jeong et al. (2003) defines purchasing intention as customer’s likelihood of buying from a particular online store. E-commerce firms depend on people visiting their sites, purchasing their products, and most importantly becoming repeat customers (Smith and Merchant, 2001). Although e-commerce is expanding worldwide, sector analysts have observed that only a small portion of web site visitors return

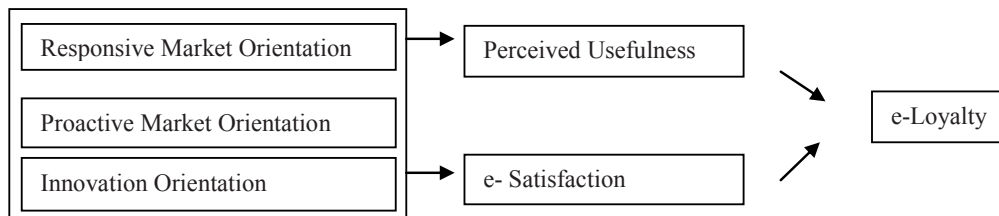
to make purchases. Compared to offline retailing, loyalty becomes more important and also more difficult corporate objective for online firms to obtain (Harris and Goode, 2004). When customer loyalty is high, many customers tend to forgive customer-service mishaps, become less sensitive to price, and disseminate positive word-of-mouth about the business; which in turn make customer loyalty as a source of sustained growth and profit ( Anderson and Mittal, 2000).

**3. Hypotheses**

H1: Market and innovation orientation have an impact on e-loyalty.

H2: Market and innovation orientations accompanied with perceived usefulness and e-satisfaction have impact on e-loyalty.

**4. Model**



**5. Methodology**

Target audience for this research is consisted of adult consumers (18 years old and above) who have engaged in online shopping activity from the same company at least two times a year. Respondents were asked to answer the questions considering the web site they make purchases from most frequently. 205 people responded through online questionnaire and 219 people responded through offline questionnaire. Online response rate was 46%, offline response rate was 92%. Total response rate was 62%. In total 424 questionnaires were collected; however 48 questionnaires were found to be invalid. Total number of valid questionnaires was 376.

The variables of our study were adapted from previous studies which are presented in Table 1. The items in the responsive market orientation, proactive market orientation and innovation orientation scales were modified to be asked to consumers instead of company owners. All constructs were measured using 6 point agreeability scale strongly disagree (1) and strongly agree (6). SPSS statistical package program was used to analyze the data.

Scale	Number of Items	Source
Responsive Market Orientation	3	Narver et al. (2004)
Proactive market orientation	4	Narver et al.(2004)
Innovation orientation	3	Narver et al. (2004)
Perceived usefulness	4	Brown and Jayakody(2009)
e-Satisfaction	4	Anderson and Srinivasan (2003)
e-Loyalty	5	Anderson and Srinivasan (2003)
Purchasing intention	2	Lee and Lin (2005)

Table 1. Scales used in this study

Factor analysis was conducted to organize the data. Bartlett’s Test of Sphericity and Kaiser-Meyer-Olkin Measure of Sampling Adequacy are used to determine the appropriateness of the data. Bartlett’s Test of Sphericity should be significant (p<0.05) and Kaiser-Meyer-Olkin Measure of Sampling Adequacy should be bigger than 0.50. Reliability analysis was conducted for each factor. Acceptable level of Cronbach’s Alpha reliability coefficient was set as 0.70 in order to eliminate the factors with low reliability.

In the first part, responsive market orientation, proactive market orientation and innovation orientation were considered together for the factor analysis. One item from proactive market orientation scale was moved under innovation orientation scale. KMO score was found as 0.850. In reliability analysis one item from innovation orientation was eliminated as it lowers the Cronbach's alpha score. In the second part, perceived usefulness and e-satisfaction were taken together for the factor analysis. KMO score was 0.878. One item from perceived usefulness and another item from e-satisfaction were eliminated due their effect of decreasing the Cronbach's alpha scores. In the last part, factor analysis was conducted to e-loyalty and purchasing intention scales. They became one factor and called as "e-loyalty". One item was eliminated due to factor loading score of 0.314 which is below accepted level (0.50). KMO was found as 0.907. During the reliability analysis, another item was eliminated due to its effect of decreasing the Cronbach's alpha score. After the factor and reliability analysis, Cronbach's alpha scores for the new factors were presented in Table 2.

Scales	Number of Items	Reliability Score (Cronbach's Alpha)
Responsive Market Orientation	3	0,804
Proactive Market Orientation	3	0,768
Innovation Orientation	3	0,833
Perceived Usefulness	3	0,852
E-Satisfaction	3	0,897
E-Loyalty	5	0,938

Table 2. Reliability scores of the scales

## 6. Findings

In the first part of the questionnaire, sample demographics (gender, age, education level, income) were examined. According to the results, our sample is consisted of 207 female participants (55.1%) and 109 male participants (44.9%). In terms of age composition, 109 participants were between 18-23 (29%); 94 participants were between 24-29 (25%); 84 participants were between 30-35 (22.3%); 61 participants are between 36-41 (16.2%); 16 participants were between 42-47 (4.3%) and 12 participants were above 48 years of age (3.2%). In terms of education level, 12.8% of the sample had PhD degree; 17.8% had master degree; 58% had bachelor degree; 5.6% was graduated from vocational school; 5.3% was graduated from high school; and 0.5% was graduated from middle school. In terms of income levels, 22.1% stated to earn less than 600TL, 22.1% between 601-1500TL, 23.1% between 1501-2500TL, 18.9% between 2501-5000TL, 9.8% between 5001-7500TL and 4% stated to earn more than 7501TL monthly. Then, participants were asked to select or type the e-commerce firm name that he/she makes online purchases from most frequently. According to the results, the most preferred e-commerce firms were yemeksepeti.com (14.10%), hepsiburada.com (13.56%), markafoni.com (12.5%); gittigidiyor.com (7.45%). Mostly preferred product category was clothing (21.3%), followed by electronic/computer products (19.1%), food (14.6%), flight/bus tickets (8.8%), cosmetic (7.7%), book/journal (5.3%), cinema/theatre/concert tickets (4.8%). The results are presented in Appendix A.

The relationships between dependent and independent variables were tested by hierarchical regression analysis. There are two models in the analysis and both models were found to be significant. The first model tested the impact of responsive market orientation, proactive market orientation and innovation orientation on e-loyalty. All the variables had significant relationship with e-loyalty. When perceived usefulness and e-satisfaction were included in the second model, R<sup>2</sup> increased to 0.629 from 0.382. In the second model, responsive market orientation, proactive market orientation and e-satisfaction were significant. The results are presented in Table 3.

Independent variables entered	Model 1			Model 2		
	B	SE B	B	B	SE B	$\beta$
Responsive market Orientation	0.355	0.047	0.356*	0.132	0.039	0.132*
Proactive market Orientation	0.250	0.052	0.247*	0.126	0.042	0.125*
Innovation Orientation	0.147	0.050	0.157*	0.056	0.039	0.060

Perceived Usefulness		0.067	0.040	0.069
e-Satisfaction		0.613	0.046	0.572*
Adjusted R <sup>2</sup>	0.382	0.629		
R <sup>2</sup>	0.387	0.634		
Δ in R <sup>2</sup>	0.387	0.246		
Significance of F change	0.000	0.000		
F for Δ in R <sup>2</sup>	78.422	124.443		
F for ANOVA	78.422	128.058		

Note: N=376, \*p<0.05

Table 3 Hierarchical regression results for e-Loyalty

It can be seen that e-satisfaction has a great impact on e-loyalty ( $\beta=0.572$ ). When multiple regression was conducted for the relationship among firm orientations and e-satisfaction (see Table 4), all of three orientations were found to be significant. Responsive orientation had the highest impact ( $\beta=0.366$ ), followed by proactive market orientation ( $\beta=0.178$ ) and innovation orientation ( $\beta=0.152$ ).

When perceived usefulness was included in the second model, it can be seen that only responsive market orientation and perceived usefulness had significant impacts on e-satisfaction; thus perceived usefulness may act as a mediator between proactive market orientation and innovation orientation, and e-satisfaction.

Independent variables entered	B	SE B	B
Responsive market orientation	0.341	0.184	0.366*
Proactive market orientation	0.168	0.050	0.178*
Innovation Orientation	0.133	0.049	0.152*
Adjusted R <sup>2</sup>	0.325		
R <sup>2</sup>	0.330		
F for ANOVA	61.101		

Note: N=376, \*p<0.05

Independent variables entered	B	SE B	B
Responsive market Orientation	0.257	0.043	0.276*
Proactive market Orientation	0.048	0.047	0.051
Innovation Orientation	0.079	0.044	0.090
Perceived Usefulness	0.381	0.041	0.424*
Adjusted R <sup>2</sup>	0.452		
R <sup>2</sup>	0.458		
F for ANOVA	78.295		

Note: N=376, \*p<0.05

Table 4 Multiple regressions results for e-Satisfaction

## 7. Discussion and Conclusion

The results of hierarchical regression analysis showed that responsive market orientation, proactive market orientation and innovation orientation had positive impacts on e-loyalty. Thus, H1 was supported ( $R^2=0.382$ ). Responsive market orientation had the greatest impact among three orientations ( $\beta=0.356$ ), followed by proactive market orientation ( $\beta=0.247$ ), and innovation orientation ( $\beta=0.157$ ). When perceived usefulness and e-satisfaction were added, the model was still significant with an increased R<sup>2</sup> which means H2 was supported as well ( $R^2=0.629$ ). In the

combined model, e-satisfaction had the greatest impact on e-loyalty ( $\beta=0.572$ ). This implies that e-satisfaction is essential for the Turkish online customers to feel loyalty toward a web site, which is consistent with the findings of Oliver(1999).

Since, e-satisfaction was the most significant factor in the model, it is important to find which factors make customers most satisfied. When we analyzed the relationship between firm orientations and e-satisfaction, all of the factors were found significant however responsive market orientation had the greater impact among three ( $\beta=0.366$ ) which was more than sum of proactive market orientation ( $\beta=0.178$ ) and innovation orientation( $\beta=0.152$ ). When perceived usefulness was added into analysis, proactive market orientation and innovation orientation became insignificant while responsive market orientation was still significant. Therefore, it can be argued that perceived usefulness mediated the relationship between proactive market orientation, innovation orientation and e-satisfaction. In other words proactive market orientation and innovation orientation have positive impacts on e-loyalty if only customers think that these orientations bring convenience in their shopping activities.

As a managerial implication, e-commerce firms should adopt responsive market orientation in other words they should be able to meet the current needs of the customers. This is very important for ensuring the satisfaction and loyalty of the customers. Proactive market orientation and innovation orientation were found to have positive impact on customer satisfaction over perceived usefulness. This may imply that in order to satisfy customers with the innovative products and services, first they should be persuaded that the novelties will bring convenience in their shopping activities. As Narver et al.(2004) suggests that innovation orientation is an “inside-out” process that places greater emphasis on company capabilities and interests other than customers’ needs. Results of our study confirm that the innovations should be shaped by responsive and proactive market orientation.

Proactive market orientation were found to have a direct positive impact on e-loyalty (see model 2 in table 3), on the other hand it had an indirect effect on e-satisfaction (perceived usefulness acted as a mediator between them, see model 2 in table 4). This result is interesting that even a dissatisfied customer may become a loyal one. This finding is in parallel with Oliver(1999) and Shankar(2002) suggesting that satisfaction and loyalty need not to be reciprocal. As a managerial implication, innovative and proactive orientation may help e-commerce firms to keep even dissatisfied customers. For example, a customer may feel dissatisfaction because of a shipment delay, however still eager to repurchase from the web site because of the superiority of the products.

There are some limitations in this study as well. Firstly, our sample is a convenience one. In the future, samples should better be selected on a more representative manner. Also, new instruments for innovation orientation may be developed to ensure that respondents have a better understanding on the concept, since respondents usually relate innovativeness with the highly technological products and services. In their study exploring entrepreneurial orientation and small firm growth, Gürbüz and Aykol(2009) concluded that new innovativeness scale should be developed to measure process oriented innovation. Especially, qualitative studies may be more suitable for exploring the impact of innovation and marketing orientations on e-commerce success.

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**Appendix A**

	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Female	207	55.1
Male	109	44.9
Total	376	100
<b>Age</b>		
18-23	109	29
24-29	94	25
30-35	84	22.3
36-41	61	16.2
42-47	16	4.3
>48	12	3.2
Total	376	100
<b>Education Level</b>		
PhD	48	12.8
Master	67	17.8
University	218	58
Vocational School	21	5.6
High School	20	5.3
Middle School	2	0.5
Total	376	100
<b>Monthly Income</b>		
<600TL	83	22.1
601-1500TL	83	22.1
1501-2500TL	87	23.1
2501-5000TL	71	18.9
5001-7500TL	37	9.8
>7501	15	4
Total	376	100
<b>Product Category</b>		
Clothing	80	21,3
Electronic/computer	72	19,1
Food/restraurant coupons	55	14,6
Flight/bus tickets	33	8,8
Cosmetic	29	7,7
Book/journal	20	5,3
Cinema/theatre/concert tickets	18	4,8
Travel/accodomation	10	2,7
Children/baby products	9	2,4
Supermarket	8	2,1
Flower	7	1,9
Health and sport products	7	1,9
Other	28	7,7
Total	376	100

Appendix A. Descriptive Information about the Sample