



Quality Orientation and Innovative Performance

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ABSTRACT Determinants of innovative performance have been employed in many technical and scientific research studies focusing on two major factors: the environmental and the organizational factors. Nevertheless, no explicit reference, according to my knowledge, is placed in literature concerning quality management and its relation with innovative performance. This contribution analyzes the impact of innovative performance on the main accepted components of quality orientation and, therefore, contributes to the literatures of quality management, innovation studies and strategic orientations. Customer focus, team commitment, and continuous improvement have been employed as the dimensions of quality orientation and their effects on innovative performance have been tested by multiple regression analyses using a sample of 38 companies, operating in the manufacturing industries of Izmir Region in Turkey. The structure considered for the research variables was investigated by confirmatory factor analyses. The developed studies revealed significant results impacting both researchers and practitioners.

KEYWORDS: continuous improvement, customer orientation, teamwork, innovative performance.

Introduction

Quality orientation refers to the organizational wide proclivity on continuous improvement and coordinated teamwork and considers the customers as the ultimate value of the organization (Mohr-Jackson, 1996; Kaynak, 2003). Quality Management of organizations deals with satisfying current customers by using teamwork (Hoegl, 2005) and continuous improvement (Kaynak, 2003). In this study, the organizational components employed to explain wide quality orientation are customer focus, continuous improvement, and teamwork. Quality is very commonly referred to as the capacity of meeting and exceeding customers' needs and expectations which add value to organization's products, to managerial processes or to the combinations of any of them. Quality philosophy is a cultural phenomenon to gain and sustain competitive advantage. Besides that, wide organizational quality orientation reflects its outcomes in the degree of organizations' innovative capability. Regardless of the culture, herein this study tries to reveal the effects of the dimensions of quality orientation on the firms' innovative performance.

This brief introduction is on innovative performance in the perspective of firms' quality orientation, section "Quality Orientation and Innovative Performance" is dedicated to the identification of the dimensions of quality orientation through research hypotheses. The section "Methodology and Analysis" covers the methodological aspects of the study while the hypotheses tested are presented in section "Data Purification Procedure and Hypothesis Testing". Finally, the major conclusions reached from the developed study are presented in the last section (section "Conclusion and Implications").

Quality Orientation and Innovative Performance

Quality focused firms have good performance in the process and product improvement and development, those firms which are also engaged in customer orientation show fast responses to market demands (Jaworski and Kohli, 1993). Market based innovations are also intensively discussed in recent studies and found evidence that the major source of innovations is the intelligence generated from current and potential markets, through adopting market orientation (Han, Kim and Srivastava, 1998; Zhou, Yim and

Tse, 2005). Han *et al.* (1998), and Hurley and Hult (1998) revealed that innovation and success of new product development are the result of changing demands of market conditions. Market orientation and organizational performance demonstrate a significant relationship when innovation is employed as an important determinant (Deshpande *et al.*, 1993). Besides that, strategic orientation literature also suggested that team based learning affects organizations' performance (Hult, 1998).

Continuous improvement endeavors can be succeeding by the commitment of functional teams that are engaged in quality management (Calantone *et al.*, 2002). In the following sub sections, the individual effects of customer focus, team commitment and continuous improvement are explained and defined in detail.

Customer Focus and Innovative Performance

Customer focus is the main compound of quality philosophy because all definitions of quality management are anchored in the concept of understanding customers and the degree of their satisfaction (Juran and Godfrey, 1999). Quality culture focusing externally on customer satisfaction and internally on operational excellence provides competitive advantage as quality culture ingrained into firm, itself. To put forward the consumer's needs while assuring the proper product and the specifications that are required by the product's augment, by the configuration and allocation of resources as well as the expertise within the organizational culture are drivers necessary and novel for product design, manufacturing processes and customer service systems, that help organization to satisfy the customer's needs in a consistent fashion (Narver and Slater, 1990; Han, Kim and Srivastava, 1998).

H1: Customer focus dimension of Quality orientation affects firms' innovative performance.

Team Commitment and Innovative Performance

Teamwork requires to be highlighted as an essential component in quality management practices so the members of quality oriented organization should work together efficiently, substitute and communicate with each other effectively. In doing so, members can have better grip on understanding the demand of other members, promote confidence among team and can benefit from coordinated and collaborative actions which will be an outcome. Thus, any member committed to their team within an operating organization (a) monitors their individual and team performances, (b) provides feedback from the possible improvement opportunities or problematic issues about processes, products, services or in their combinations, and (c) backs up their opera-

tions.

The link and association of teamwork and innovativeness is dependent on the degree of team members' size and commitment to their teams' operations and working atmosphere (Hoegl, 2005). The second hypothesis is considered to evaluate how team commitment within an organization affects the overall organizational innovation capability.

H2: Team Commitment dimension of Quality Orientation affects firms' innovative performance.

Continuous Improvement and Innovative Performance

To gain and sustain a competitive advantage, firms should create barriers to their competitors, not to be easily imitated (Barney, 1991). In this process, it is important to recall that: i) any barrier to imitation is never insurmountable; ii) a firm should be able to dynamically adapt to the continuous changes of market demand conditions; iii.) a trade-off between external and internal investment should be implemented. In here, it is important to recognize the vital importance of the investment on the human component within organizations, since it enables a core competence to the continuous self-improvement of positions (Bulut and Culha, 2010). So, in order to cope with the dynamism that is present in the current market status quo, the implementation of continuous improvement is considered critical (Zhou, Yim and Tse, 2005). Continuous improvement, as a tool of quality management, enables a firm to move from incorrect actions to the correct ones in the perspective of the goods to be served (Kaynak, 2003) and, at the same time, it allows firms to be differentiated from their competitors, which also brings incremental and novel improvements within the organizations.

H3: Continuous improvement dimension of Quality Orientation affects firms' innovative performance.

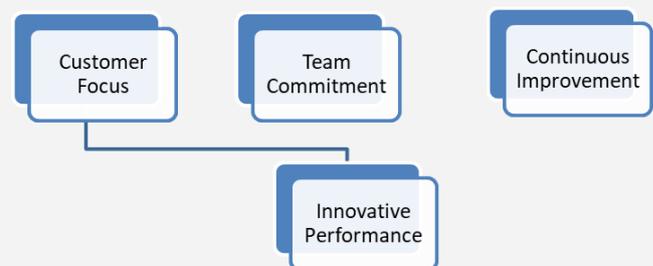


Figure 1. The effects of quality orientation on Innovative Performance.

Table 1 - Descriptive Statistics and Correlations.

Study Variables	Cr. Alpha	Mean	Std. Dev.	1	2	3
Customer focus	.77	4.01	.773	1		
Team commitment	.86	3.84	.905	.551(**)	1	
Continuous improvement	.84	4.05	.732	.614(**)	.603(**)	1
Innovation Performance	.88	3.67	1.129	.351(**)	.396(**)	.362(**)

**p<.005

Table 2 - Results of Multiple Regression Analysis.

Dimensions of Quality Orientation	Standardized Beta, β	t	σ
Customer focus	0.134	2.126	0.034
Team commitment	0.233	3.763	0.000
Continuous improvement	0.148	2.246	0.025

Dependent variable: Innovation Performance.

F=28.655-p<.000

R²=0.195

Methodology and Analysis

Data collection procedures used in the developed studies follow survey methodologies. All scales used in the research questionnaire have been adopted from the existing literature. Translation and back-translation method is used to face validity and to overcome any potential translation problems. Particularly, Likert interval scales are used. In these five points scales, 1(one) represents strongly disagree and 5 (five) represents strongly agree. Besides that, Cronbach alpha reliability tests were used to prove internal consistency. The obtained results are presented in Table 1 and the consistency scores (Cr. Alpha, in table 1) observed were above .70, for all the internal scales used. Also, the means and standard deviations (Std. Dev.) of each factor are calculated and presented in table 1, altogether with the results of correlation analysis. Data purification process and structural validity of the scales was implemented through confirmatory factor analysis, while accounting for sufficient variance in order to allow for further analysis of the variables. Moreover, multiple regression analyses are used to test the formulated hypothesis.

Scales and Sample

The scales used in the questionnaires were adopted from the existing literature. Herein, for the innovative performance five items are used (Jansen, Bosch, Volberda, 2005; Bulut, 2007), while for quality orientation four items are employed for each of the three dimensions, accordingly with Morrow (1997). Companies that are operating in the frontier manufacturing industries of Izmir Region in Turkey are targeted. Industries are machinery manufacturing, electrical equipment manufacturing, and automotive industries. Through a convenient sampling procedure 38 manufacturing companies were considered in the study, involving a total of 127 participants.

Data Purification Procedure and Hypothesis Testing

Data of the research have been submitted to Confirmatory Factor Analyses (CFA). All variables have been loaded significantly to the respected factor and the fit indices have demonstrated satisfactory results: $\chi^2(85)=144.544-p:.000$; CFI:95; IFI:.95 NFI:90 GFI: .87; RMSEA:08. Moreover, unidimensionality tests were conducted through Principle Component Analyses (PCA). Each PCA provided the expected

achievement that every single dimension of quality orientation has a single construct. After obtaining satisfactory results from CFA, regression analysis has been chosen for the hypothesis testing. Multiple regression analysis has demonstrated that quality orientation positively and significantly effects innovation performance. In a detail perspective, the three dimensions of quality orientation presented a joint effect on innovative performance. The results achieved from the performed analysis are presented in Table 2.

Conclusion and Implications

This study tries to reveal the joint effects of quality orientation dimensions as depicted in Figure 1. Considering that the model is simple, the empirical evidence on the link between quality management practices and innovative performance is neglected. Moreover, this is in accordance with the effects of quality management practices on organizational performance which have been proved in the literature. Therefore, it is safe to suggest that, in current competitive environment, firms who are eager to create an advantageous stance should use internal resources which are rare, hard to imitate, irreplaceable and valuable (Barney, 1991). Findings of this research recognize the importance of quality practices to achieve innovative performance. Because of the "fashion" of generating new concepts, in management literature and management practices, either by academia or consultancy worlds, quality management practices have been ignored by both researchers and professionals to reach innovative outcomes. However, as Leonardo Da Vinci once said: simplicity is the ultimate sophistication, very well-known organizational practices helped to achieve competitiveness through innovative performance. This study highlights continuous improvement, team commitment and customer focus for achieving effective outcomes in a simple way where the resources are available and ready to be used.

This innovation performance study seeks to follow the new market appeals concerning both: products (e.g. the number of new products and their speed of delivery) and processes (e.g. number of renewed processes). Accordingly, each of these objectives requires coordination within the organization by taking customers' opinions and demands into consideration by strong tendency for continuous improvement. On the other hand, managers can also employ their customer oriented culture to solve the problems within the business units by influencing them towards a collective goal that is, customer focus, teamwork and continuous improvement. This research provided empirical evidence on the positive and significant effects on innovation performance, however, future studies may concentrate on the degrees of innovation performance (incremental vs radical). Nevertheless,

data gathered for this research have been collected from fast developing economy, Turkey. So, a cross-cultural study can also be employed to widen the findings that are highlighted herein.

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