

IS INTELLECTUAL CAPITAL ANTECEDENT OF ENTREPRENEURSHIP ORIENTATION

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ABSTRACT

Knowledge economy, which is characterized by the complex and dynamic competitive environments, knowledge-based resources (human capital, structural capital and market capital) represent the source of competitive advantage for the firms. In order to be able to seize the opportunities, make product and process innovations, be proactive in the market place, entrepreneurial firms have to reconfigure their intangible assets (Jantunen et al., 2005). The objective of this research is to empirically examine intellectual capital as a competitive knowledge resource of firms, initiate entrepreneurial climate that affect the organizational performance as financial and innovative outcomes. Recent conceptual models suggest that entrepreneurial orientation depends on the acquisition, the integration and the exploitation of knowledge (Hayton, 2002). According to this conceptual framework a model is developed to examine the direct and the mediator relation between intellectual capital and entrepreneurial orientation. To investigate the stated relationships data will be collected from Turkey's Top 500 Industrial Enterprises. Questionnaires are prepared by the researchers based on the measurement instrument used by Subramaniam & Youndt (2005), Bontis (1998) and Dess & Lumpkin (1996) after the preliminary survey that is done for the reliability and validity analysis of the measurement instrument which is modified for cultural differences and for the purposes of this study, will be distributed via mail and the internet site. Data will then be analyzed by the SPSS statistical program.

Keyword: *Intellectual Capital, Entrepreneurship Orientation, Financial and Innovation Performance.*

INTRODUCTION

Fundamental changes have been wrought in the global economy which are changing the basis of firm level competitive advantage, and with it the functions of management. The decreased cost of information flow increases in the number of markets, the liberalization of product and labor markets in many parts of the world, and the deregulation of international financial flows is stripping away many traditional source of competitive differentiation and exposing a new fundamental core as the basis for wealth creation (Teece, 2000, p.3).

With the shift from seller's markets to a buyer's markets and the development of the resource- and knowledge-based view of firms, intellectual capital has been identified as a key resource and driver of organizational performance and value creation (Itami, 1987; Teece 200; Nahapiet and Ghoshal 1998). According to the resourced-based view of the firm, sustainable competitive advantage is derived from control of unique and inimitable knowledge-based resources (Barney, 1991). Teece (1998) claimed that a competitive advantage of firms in today's economy does not result from its market position but difficult-to-replicate the knowledge-based assets and the manner they are devel-

Table 1. Reliability and Factor Analysis of Intellectual Capital

Intellectual Capital	Variance	Loading	Cronbach Alpha
1.Structural Capital	28,18		0,9
Q15		0,804	
Q12		0,788	
Q16		0,77	
Q17		0,753	
Q13		0,739	
Q14		0,709	
2. Human Capital	20,05		0,83
Q3		0,835	
Q1		0,803	
Q2		0,733	
Q4		0,699	
3. Customer Capital	17,65		0,77
Q9		0,769	
Q11		0,714	
Q10		0,713	
Q8		0,671	
Total Variance explained %65,88			
KMO: 0,904			
p: ,000 (Bartlett's Test)			

Table 2. Reliability and Factor Analysis of Entrepreneurial Orientation

Entrepreneurial Orientation	Variance	Loading	Cronbach Alpha
1.Proactiveness	21,66		0,9
Q7		0,869	
Q8		0,815	
Q9		0,762	
Q6		0,754	
Q10		0,603	
2. Risk Taking	20,01		0,86
Q3		0,828	
Q2		0,798	
Q5		0,767	
Q4		0,757	
Q1		0,717	
3. Innovativeness	17,51		0,89
Q16		0,884	
Q15		0,845	
Q14		0,709	
Q17		0,679	
4. Competitive Aggressiveness	17,86		0,76
Q12		0,831	
Q11		0,78	
Q13		0,723	
Total Variance explained %%72,04			
KMO: 0,902			
p: ,000 (Bartlett's Test)			

The relationships between dependent and independent variables were tested by hierarchical regression analyses. As can be seen on Table 4, a positive relationship between intellectual capital and both innovation and financial performance was observed and H_1 was accepted.

As can be seen in the research model, EO was assumed to mediate the relationship between intellectual capital and organizational performance. To test mediating effect of EO, three stages multiple regression method was used (Baron and Kenny, 1986). In this method, first the effect of IC (independent variable) on EO (intervening variable) was analyzed. Second, the relationship between independent and dependent variables was tested. If the results in both levels were significant, in the third level independent and intervening variables were tested together to understand their effects on dependent variables. If the effect of independent variable on dependent variable was insignificant or has lower coefficient (beta), this variable can be discussed as an intervening variable. The result of the regression analysis of intervening variable was presented in Table 4 and also H_2 was accepted.

Table 3. Reliability and Factor Analysis of Performance

Organizational performance	Variance	Loading	Cronbach Alpha
1. Financial Performance			
	38,33		0,94
Q7		0,867	
Q2		0,845	
Q9		0,822	
Q10		0,82	
Q8		0,815	
Q4		0,79	
2. Innovation Performance			
	37,44		0,92
Q12		0,875	
Q13		0,852	
Q11		0,812	
Q15		0,793	
Q14		0,773	
Q16		0,768	
Total Variance explained %75,79			
KMO: 0,925			
p: ,000 (Bartlett's Test)			

Table 4: The Three Stages Multiple Regression Analysis of Entrepreneurial Orientation

First Stage Variables	Entrepreneurial Orientation	
Intellectual Capital	.602***	
R²	.362	
Adjusted R²	.359***	
F Value of Model	105.544***	
Second Stage Variables	Innovation Performance	Financial Performance
Intellectual Capital	.299***	.26**
R²	.089	.068
Adjusted R²	.084***	.063***
F Value of Model	18.244***	13.535**
Third Stage Variables	Innovation Performance	Financial Performance
Intellectual Capital	.134	.089
Entrepreneurial Orientation	.275**	.285***
R²	.137	.120
Adjusted R²	.128	.110
F Value of Model	.137***	.120***
F Value of Model	14.739***	12.576***

Independent Variables: Intellectual Capital, Entrepreneurial Orientation

Dependent Variables: Innovation Performance, Financial Performance

*p<0,05 **p<0,01 ***p<0,001

DISCUSSION AND CONCLUSIONS

The goal of the study is to understand the effect of entrepreneurial orientation on organizational performance. In this relationship, the intellectual capital is taken as an antecedent of entrepreneurial orientation to explore the impact of organizational knowledge-resource on entrepreneurial orientation.

Intellectual capital is the knowledge-resources that provide sustainable competitive advantage to the firms. Prior empirical studies have been found that human, structural and customer capital have a significant positive effect on organization performance, thus the results of regression analysis of this research also shows the positive relationship between the intellectual capital and the financial and the innovation performance in Turkish Companies.

Recent conceptual models suggest that entrepreneurial orientation is dependent upon the acquisition, integration and exploitation of knowledge. Last decade strategy researches consistently suggest that internal organizational factors, such as organizational support for new ideas and projects, participation in decision making, tolerance of risk taking play a role in encouraging corporate entrepreneurship. point out that the factor that outside the organization and within the organization interacts, challenging the managers to respond creatively and act in innovative ways. Then it is reasonable to expect that organizational knowledge is an important resource that supports a firm's entrepreneurial behavior. This study's empirical result is consistent with arguments. According to the multiple stage regression analysis, entrepreneurial orientation was found as a mediating variable between intellectual capital and organizational performance. In first level intellectual capital and entrepreneurial orientation was tested. The regression analysis results for intellectual capital on entrepreneurial orientation indicate that there is a positive and significant relationship between intellectual capital and entrepreneurship orientation. In the second level of three stages multiple regression analysis, the intellectual capital effect on organizational performance has been analyzed. Results indicated that; intellectual capital has significant effects on innovation performance and financial performance. In the third level, intellectual capital and entrepreneurial orientation was taken together. As a result, entrepreneurial orientation indicated significant results; entrepreneurial orientation was found as an mediating variable between intellectual capital and organization innovative and financial performance. Thus, entrepreneurship creates and leverage knowledge within the firms and intellectual capital, feed the entrepreneurial process knowledge which is the basis source of entrepreneurial initiatives.

Like all studies, the study has limitations primarily that firms included in our sample were from Turkey's Top 500 Industrial Enterprise. However, in future studies, all type of companies (like small or medium) or different industries (like service industry) would improve comparability between types and industries. Also it would give more detailed knowledge for researchers. On the other hand, to monitor the different culture and country applications of the model, future researchers could use cross-cultural comparability.

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