



*Research Article / Araştırma Makalesi*

## EXAMINING THE MEDIATING ROLE OF MARKETING CAPABILITIES BETWEEN INTANGIBLE FIRM CAPITAL AND MARKET-FOCUSED LEARNING\*

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### Abstract

The purpose of this study is to investigate the mediating role of marketing capabilities in the relationship between intangible firm capital and market-focused learning. The study was conducted by structured survey method. The research scale was adapted from the scales commonly used in the literature. According to the research results, it has been determined that intangible firm capital affects market-focusing learning and marketing skills. In addition to this, it has also determined that marketing skills affects market-focusing learning and it has partially mediated the relationship between intangible firm capital and market-focused learning. Especially, in the dimensional analysis, it is seen that human capital has a partial mediation effect in this relation. In this context, it can be stated that in the context of the literature contribution, the intangible firm capital will contribute to the improvement of marketing capabilities and market-focused learning. Based on this result, human capital can be considered as an important element for marketing capabilities and market-focused learning.

**Keywords:** Intangible firm capital, marketing capabilities, market-focused learning, market-driven firm.

## MADDİ OLMAYAN FİRMA SERMAYESİ İLE PAZAR ODAKLI ÖĞRENME ARASINDA PAZARLAMA YETENEKLERİNİN ARACILIK ROLÜNÜN İNCELENMESİ

### Öz

Bu çalışmanın amacı, maddi olmayan firma sermayesi ile pazar odaklı öğrenme ilişkisinde pazarlama yeteneklerinin aracılık rolünü incelemektir. Çalışma, yapılandırılmış anket yöntemi yoluyla yürütülmüştür. Araştırma ölçeği, literatürde yaygın şekilde kullanılan ölçeklerden adapte edilmiştir. Araştırma sonuçlarına göre, maddi olmayan firma sermayesinin, pazar odaklı öğrenme ve pazarlama yeteneklerini etkilediği belirlenmiştir. Buna ek olarak, pazarlama yeteneklerinin de pazar odaklı öğrenmeyi etkilediği ve pazarlama yeteneklerinin maddi olmayan firma sermayesi ve pazar odaklı öğrenme ilişkisinde kısmi aracılık etkisine sahip olduğu belirlenmiştir. Özellikle, boyutsal incelemede insan sermayesinin söz konusu ilişkide kısmi bir aracılık etkisine sahip olduğu görülmüştür. Literatürel katkı kapsamında, maddi olmayan firma sermayesinin pazarlama yetenekleri ve pazar odaklı öğrenmenin geliştirilmesinde katkı sağlayacağı ifade edilebilir. Bu sonuca dayalı olarak insan sermayesi, pazarlama yetenekleri ve pazar odaklı öğrenmeye yönelik önemli bir unsur olarak düşünülebilir.

**Anahtar Kelimeler:** Maddi olmayan firma sermayesi, pazarlama yetenekleri, pazar odaklı öğrenme, pazar odaklı şirket.

**JEL Codes:** M00, M31

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## Introduction

The operational significance of tangible firm capital elements is an indisputable fact; thus, investments on tangible firm assets assert critical importance in terms of traditional business practices. However, in the last decade globalization boost information-intensive business practices and the intensifying competition amplified investments on intangible firm capital elements. These investments gradually gain importance for success in business practices as well as sustainable competitive advantage (Görmüş, 2009). In marketing literature variables that are suggested to affect successful business practices and sustainable competitive advantage include intangible firm capital, marketing capabilities and market-oriented learning (Görmüş, 2009; Griffith vd., 2010; Weerawardena vd., 2006; Uzkurt ve Torlak, 2007). Intangible firm capital consists of four basic dimensions, as human, relational, organizational and informational capitals (Griffith vd., 2010).

Human capital is explained as the business knowledge, skills and expertise of firm's employees (Görmüş, 2009). Relational capital is defined as any kind of firm's relational processes comprising her relations with its customers (De Castro et al., 2004; Léger, 2010; Ghane and Akhavan, 2014). Organizational capital is an important part of structural capital and involves not just firm's organizational culture but also business philosophy, organizational structure, procedures, software and hardware, and databases (Sánchez-Canizares et al., 2007; Bontis, 2001). Griffith et al. (2010) inserts firm's policies, norms, etc. into organizational capital. The fourth and final dimension informational capital is explained as information and knowledge sources that the firm possess concerning her products and stakeholders in the market (Griffith and Lusch, 2007; Nguyen and Nguyen, 2011).

Resource-based theory focuses on firm's essential, unique and inimitable resources and capabilities, which constitutes the basis of its sustainable competitive advantage (Jurisch vd., 2014). There is simple yet basic difference between firm's resources and capabilities. Firms' resources consist of all kinds of inputs that are included in the production process, such as equipment, patents, brand names, financial tools, etc. Firms often concentrate on improvements in productivity regarding resources. Firm's capabilities, on the other hand, are defined as the capacity to accomplish a task or an operation, and firm's resources are considered as the basis of firm's capabilities whereas capabilities constitute the source of competitive advantage (Grant, 1991).

Srivastava (2001) suggests a solid link between resource-based theory and marketing in creating value and mentions that customer value is formed in the market. Thus, firms should integrate resource-based approach to create customer value and conserve competitive advantage; and also, try to understand what constitutes value, where it is shaped, how and with which resources it would be created. Succeeding this depends on accurately defining and continuously tracking customer needs and wants as well as acquiring information on competitors' products and strategies. Therefore, there occurs a need for an efficient information system. However, it would only be possible to build such a system by adopting a learning-based culture that gathers, interprets and disseminates essential information about the market (Uzkurt and Torlak, 2007).

Furthermore, marketing capabilities, which is a component of firm capabilities, are defined as the integrative processes devised for effectively responding to the changing market needs and competitive environment (Griffith et al., 2010). In the past two decades studies about marketing capabilities have investigated the theoretical links between industry structure and developing firm capabilities. The major perspective in this period can be summarized as "competition leads to capability development".

In this way, firms can engage in learning in order to overwhelm competitive challenges; and thus, beneficial resources and capabilities are developed within the firm (Weerawardena et al., 2006). Therefore, establishing a learning-oriented information system has a crucial role in attaining competitive advantage for firms (Uzkurt and Torlak, 2007).

There are a limited number of studies that examine the ability of firms to develop intangible firm capital, which are considered within marketing capabilities; and these studies mostly focus on defining and deploying technological and marketing capabilities (Griffith et al., 2010). Previous studies examined the relationships between organizational learning, market-oriented organizational culture and creating customer value (Uzkurt ve Torlak, 2007); organizational learning, industry structure, innovation and brand performance (Weerwardena et al., 2006); relational learning, organizational innovation and sustainable competitive advantage (Weerwardena, 2003); intangible firm capital, financial performance and market value (Al Matarneh, 2014); market-oriented firm's capabilities and performance (Vorhies et al., 1999); marketing capabilities, intangible firm capital and firm performance (Griffith vd., 2010). This study aims to identify the mediating role marketing capabilities in the relationship between intangible firm capital components and market-focused learning. In this framework, firstly, the literature was reviewed; then, a quantitative survey was conducted; and finally, the presumed relationships were tested with multivariate data analysis.

## **1. Literature Review**

### **1.1. Intangible Firm Capital**

In traditional business approach, investment in tangible capital was of great significance for businesses. But recently, especially in the conditions of intensive competition, investments in intangible capital are increasing day by day. The investment of companies in intangible capital has become a main element of creating of sustainable competitive advantage (Görmüş, 2009). In this sense, intangible capital such as human capital, relational capital, organizational capital, and informational capital will be explained below.

Human capital (HC) could be considered as the main component of the intellectual capital approach. HC consists of total knowledge, skills, experience and expertise of members of the organizations (Görmüş, 2009). In other words, HC is defined as the business knowledge and skills of a firm's employees. In the studies of Griffith, et. al., 2010, it is stated that HC involves skills, training, experience, expertise and etc. Today in the global intensive competition, firms must increasingly rely on the knowledge, skills, experience and judgement of all their human resources. The whole organization should act in new ways of knowledge-based creativeness and innovativeness in an ever-changing competitive environment (Dess and Picken, 2000).

HC has recently become an agent used to increase effectiveness and efficiency from a sustainable competitive advantage point of view. That's why, HC could be deemed a major constituent for enhancing firms' assets and employees as to amplify competitiveness of firms (Marimuthu, et. al., (2009). Since HC primarily focuses on utilization of tacit knowledge that resides in the minds of employees, employees are seemed the most valuable assets to firms (Busch, et al., 2008). HC is of crucial importance for gaining superior competitive advantage; thus, one of the most important tasks of leaders in the organization is transferring HC into structural capital. When compared with the structural capital, the HC is much more volatile than structural capital, since HC could not be owned, but could only be rented. As far as the structural capital is concerned, it could be owned and traded (Edvinsson, 1997; Görmüş, 2009). HC have four attributes which provide some benefits regarded as adding value in terms of individual and organizational outcomes (Marimuthu, et. al., (2009). The human resources skills and productivity can be raised by applying formal and non-formal education and training.

Firms have close relationships within the business environment in order to effectively operate most of their processes. Their competitive power largely depends on methods for managing these relationships. Firms are not isolated organizations, since they continually interact with their business partners, they are strongly dependent on many agents existed in the business environment in many respects (Martinez Garcia De Leaniz & Rodríguez Del Bosque, 2013; Dorrego et al., 2013). Relational Capital (RC) could be explained as the merit of relations that a firm establishes with its

business partners within the business environment such as customers, sellers, suppliers, agencies and so on (De Castro et al., 2004; Léger, 2010; Ghane & Akhavan, 2014). If firms have substantial relations with business partners, these relations lead firms to understand and manage the business environment (Ghane & Akhavan, 2014). From this point, substantial relations are needed to assess the environment thoroughly by the managers and this includes the steps such as the identification of key features of the agents, major procedures that are deployed, effects of the relationships and risk (Bueno, et al., 2004). According to Johansson (2007), RC could be considered as an element of a corporate strategy for achieving competitive advantage. It is not easy to imitate since it has firm-specific characteristics (McCallum, & O'Connell, 2009). In order to enhance firm value, RC is of great use for firms to create and use knowledge in strategic perspectives (Johansson, 2007). In terms of the long-term activities and returns, RC can have significant impact on innovative and creative outcomes (De Castro et al., 2004). Hence, RC can provide some benefits such as reduced transaction uncertainty, substantial affiliation (Griffith, et al., 2010), lead to future financial performance, improve to value creation process and etc. (Léger, 2010). RC has three major facades such as quality, market reputation and customer satisfaction (Dewhurst, & Navarro, 2004).

Organizational capital (OC) and customer capital (CC) are significant parts of structural capital. Organizational capital (OC) consists of systems, hardware, software, databases, organizational structure, work philosophy, as well as organizational culture (Sánchez-Canizares, et al., 2007; Bontis, 2001). Griffith, et al. (2010) added firm strategies, rules etc. to the definition of OC. The success of intellectual capital is determined by stronger OC. If firms have a large and strong OC, they could benefit from their intellectual capital at fullest capacity (Bontis, et al., 2000). To improve organizational capital, human capital can be used a main agent since OC is dependent on human capital (Nazari, & Herremans, 2007). Besides, it is possible for firms to develop and deploy customer capital through the use of OC and HC (Chen, et al., 2004). Finally, OC can provide some benefits such as increased efficiency and competitiveness via organizational learning processes (Griffith, et al., 2010).

Informational capital (IC) refers to the stock of information and/or knowledge resources concerning products and services, customers, competitors, suppliers, intermediaries, and industry structure (Griffith & Lusch, 2007; Nguyen & Nguyen, 2011). Knowledge related to market grows through the findings of technical research, marketing research and competitor information (Griffith, et al., 2010).

## 1.2. Marketing Capabilities

Resource-based Theory deals with the unique characteristics of organizations that are looking for achieving sustainable competitive advantage based on beneficial and unique resources and capabilities that are developed in the structural systems (Jurisch, et al., 2014). When define resources and capabilities, there is a key distinction between them. Firm resources can be defined as all inputs into the production process. Firms, generally tries to improve their productivity level. Capability is defined, *“as the capacity of a set of resources to perform some tasks of activity. While resources are the source of a firm’s capabilities, capabilities are the main sources of its competitive advantage”* (Grant, 1991). In terms of value creation process, there is a close relationship between RBV and marketing. According to the Srivastava et al., (2001), *“it is explicitly recognized that customer value commences and occurs in the marketplace”*. That’s why, to create and sustain customer value in the marketplace, firms must try to integrate RBV and marketing and try to find responses such questions as *“what is the source of value, where is the value determined, how is value created, and what is the source of resources? etc.”* (Srivastava, et al., 2001).

## 1.3. Market-Focused Learning

Market-focused learning aims to identify firm’s capacity to learn from markets or the market segments. Weerawardena & O’Cass (2003) defines market-focused learning as *“the capacity of the firm to acquire, disseminate, and use market information for organizational change”*. The literature

suggests that market-driven firms differ in their ability to continuously sense and act on events and trends in the markets (Day, 1994). Furthermore, a market-driven firm is successful in anticipating the changing needs of markets and to answer them with novel products and services (Slater & Narver, 1995).

This ability provides speed and effectiveness of responses to environmental changes and industry-related conditions. In other words, firms need to continuously scan the environment, analyze the market for new opportunities. Information about changing market preferences reduce the risk of marketing practices and enhance successful operations (Kohli & Jaworski, 1990). Therefore, it is possible to suggest that market focused learning is a core competency about firm' environment, which forms the fundamental bases of sustainable competitive advantage (Weerawardena & O'Cass, 2003).

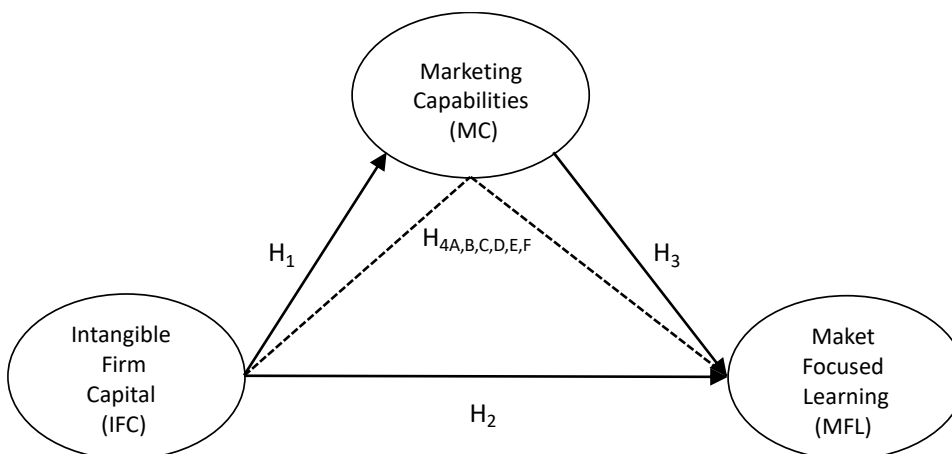
## 2. Research Design and Methodology

This study was designed as a causal research, which deploys measures of intangible firm capital, marketing capabilities and market-focused learning. The study was based on the development and administration of a structured questionnaire. The research questionnaire covered four-dimensional 12 item intangible firm capital scale, as human capital, relationship capital, organizational capital and informational capital (Griffith et al. 2010); 2 dimensions and 8 item (marketing research capabilities and marketing management capabilities) of 6-dimensional marketing capabilities scale (Vorhies and Harker, 2000); and 7 item market-focused learning scale (Weerwardena et al., 2006). For measuring the responses, we used a five-point Likert Scale, where 1= definitely disagree and 5= definitely agree.

Research sample consisted of furniture manufacturing firms operating in İnegöl, Bursa. Key informants were selected to be marketing or export managers, or high-level managers of these furniture manufacturing firms. Data collection was administered through face-to-face interviews with 202 key informants.

After data screening, preliminary data analysis was undertaken to examine the psychometric properties of the scales via measures of central tendency, bivariate Pearson correlations, reliability estimates, and exploratory factor analysis. Then, for hypothesis testing hierarchical regression analysis was conducted. The research model is presented in Figure 1 below.

**Figure 1:** *Research Model*



Research hypotheses were based on previous research in the literature. Literature review shows that previous research have examined the relationships between organizational learning, market-oriented organizational culture and creating customer value (Uzkurt ve Torlak, 2007); organizational learning, industry structure, innovation and brand performance (Weerwardena et al., 2006); relational learning, organizational innovation and sustainable competitive advantage (Weerwardena, 2003); intangible firm capital, financial performance and market value (Al Matarneh, 2014); market-oriented firm's capabilities and performance (Vorhies et al., 1999); human marketing capital, relational marketing

capital and firm-specific marketing capital (Nguyen ve Nguyen, 2011); relational learning process and intellectual capital (Dewhurst and Navarro, 2004); intellectual capital and firm performance (Bontis et al., 2000); marketing capabilities, intangible firm capital and firm performance (Griffith vd., 2010). Respectively, our research hypotheses are as follows;

H<sub>1</sub>: Intangible firm capital has a significant effect on marketing capabilities.

H<sub>2</sub>: Intangible firm capital has a significant effect on market-focused learning.

H<sub>3</sub>: Marketing capabilities has a significant effect on market-focused learning.

H<sub>4</sub>: Marketing capabilities (marketing research capabilities and marketing management capabilities) has a mediating role in the relationship between intangible firm capital (informational, relational, organizational and human capital) and market-focused learning.

## **2.1. Research Findings**

### **2.1.1 Descriptive Findings**

Frequency analysis is used for depicting the profile of responding firms. 51% of the responding firms are small firms (less than 50 employees), and the remaining 49% of them are medium-scaled firms (50 to 250 employees). 96% of the responding manufacturing firms are exporting to various markets. 28% of key informant managers are female whereas 72% are males.

### **2.1.2. Validity and Reliability Analysis**

For assessing validity of the constructs exploratory factor analysis (EFA) for each construct was computed (Bryman and Cramer, 2005). The results of EFA showed that KMO value for intangible firm capital (IFC) is 0,735; for marketing capabilities (MC) is 0,850; and, for market-focused learning (MFL) is 0,830. Barlett test values of each construct is statistically significant ( $p < 0,001$ ). IFC theoretically has 4 dimensions (human, relational, organizational and informational capital), however after EFA our data set exhibits a three-dimensional construct. Informational and organizational capital dimensions congregated under the same construct. MC construct presents a two-dimensional construct, namely marketing research capabilities and marketing management capabilities, as was expected. MFL reveals a single-dimensional structure as the literature suggests. Total variances explained for each construct are as follows; IFC 59%, MC 71% and MFL 52%, which are in the accepted ranges.

For reliability testing of the research data, we used internal consistency values of each dimension of the constructs. All internal consistency values lie between 0,63 and 0,8; all of which, except relational capital and human capital, are at suggested acceptance levels (Hair et al., 1998). EFA results are shown in Table 1.

**Table 1: Preliminary Results**

		Items	Variables				
			$\bar{x}$	$\sigma$	$\lambda$	AVE	$\alpha$
Intangible Firm Capital	Informational and Organizational Capital	Our employees have knowledge about our firm policies	4,43	0,60	0,770	59,10	0,78
		Our employees have knowledge about our industry	4,45	0,62	0,754		
		Our employees have knowledge about how we do things in the firm	4,45	0,63	0,726		
		Our employees have knowledge about our customers and clients	4,35	0,69	0,716		
		Our employees have knowledge about the practices and procedures of our firm	4,43	0,60	0,661		
	Relational Capital	Our employees have quite a lot of business contacts	4,27	0,60	0,830	0,65	
		Our employees have formed quite a lot of business connections	4,03	0,75	0,815		
		Our employees have formed a network of business contacts	3,81	0,81	0,498		
	Human Capital	Our employees had several business education and training	3,87	0,69	0,786	0,63	
		Our employees have valuable business capabilities	4,03	0,59	0,727		
Our employees have valuable business expertise		3,84	0,77	0,577			
Marketing Capabilities	Marketing Management	Our abilities to segment and target-market help us compete	3,84	0,72	0,857	70,71	0,74
		Our marketing management skills give us a competitive edge	3,87	0,69	0,757		
		Our ability to coordinate various departments and groups in this business unit helps us to respond to market conditions faster than our competitors	4,03	0,62	0,655		
	Marketing Research	Our marketing research abilities help us find more new customers than do our competitors	3,94	0,67	0,858	0,80	
		Our marketing research skills help us develop effective marketing programs	3,86	0,78	0,850		
		We use our marketing research information more effectively than our competitor uses their own marketing research information	3,80	0,73	0,538		
Market Focused Learning	Our firm have knowledge about market segments	4,18	0,74	0,791	51,65	0,81	
	Our firm searches for innovative ideas through market information	4,10	0,69	0,776			
	Our firm collects information about markets	4,18	0,71	0,735			
	Our firm's capability to learn allow to compete	4,06	0,68	0,687			
	Our firm shares information with employees	3,94	0,73	0,656			
	Our firm uses customer and competitor information in innovations	3,98	0,77	0,655			

EFA is also a tool for testing convergent and discriminant validity. When factor loadings of items that form a construct are equal or greater than 0,60 then convergent validity is established; or, factor loadings of items that form a construct are lower than 0,30 at other factors then discriminant validity is established (Bhattacharjee, 2012). Another method for testing convergent validity is that all variances extracted and factor loadings of items forming a construct were greater than 0,50. On the other hand, to establish discriminant validity, all respective correlations between constructs should be lower than 0,80 (Yanamandram, 2006). Correlation analysis shows that correlations between constructs are lower than 0,80 (See Table 2). Thus, tests indicate that convergent and discriminant validity are established.

### 2.1.3. Correlation Analysis

Before the final stage of the analysis, correlation analysis was performed to determine the relationships between the variables. As a result of the correlation analysis, it was determined that there were statistically significant relationships between the variables ( $p < 0,05$ ). The results of the preliminary analysis of the instrument indicate acceptance of the psychometric properties of the scales, providing adequate support to move to the next stage of the analysis involving hierarchical regression to test the hypotheses.

**Table 2:** Correlation Analysis Results

Variables	$\bar{x}$	$\sigma$	1	2	3	4	5
1. Informational and Organizational Capital (IOC)	4,42	0,45					
2. Relational Capital (RC)	4,03	0,55	0,072				
3. Human Capital (HC)	3,91	0,52	0,166*	0,487**			
4. Marketing Management Capabilities (MMC)	3,91	0,55	0,255**	0,184**	0,250**		
5. Marketing Research Capabilities (MRC)	3,86	0,61	0,212**	0,139*	0,163*	0,763**	
6. Market-Focused Learning (MFL)	4,07	0,52	0,090	0,208**	0,342**	0,646**	0,567**

\*\* significant at  $p < 0,01$  and \*  $p < 0,05$

### 2.1.4. Hierarchical Regression Analysis

After the correlation analysis, hierarchical regression was estimated to examine the level of direct effect and mediation effect of the independent variables on the dependent variables. In order to talk about the existence of mediation effect, the independent variable should have a significant effect on the mediator variable, the mediator variable should have a significant effect on the dependent variable and the independent variable should have a significant effect on the dependent variable (Baron & Keeny, 1986). Accordingly, the effects of (1) independent variables on the mediating variable (2) mediating variable on the dependent variable (3) independent variables on the dependent variable were examined.

(1) Regression analysis revealed that Informational and Organizational Capital (IOC) (0,26) and Human Capital (HC) (0,18) dimensions of IFC have an impact on MMC. Results indicate that IFC dimensions do not have a statistically significant effect on MRC.



**Table 3:** *Effect of Independent Variables on Mediating Variable*

Model 1	MMC			Model Summary
	$\beta$	T value	P.	
Constant	1,674	3,712	0,000**	R <sup>2</sup> : 0,12 F <sub>(3,198)</sub> : 8,568 (0,000)
IOC	0,267	3,255	0,001**	
RC	0,084	1,100	0,273	
HC	0,184	2,226	0,027	
Model 2	MRC			Model Summary
	$\beta$	T value	P.	
Constant	2,416	4,633	0,000**	R <sup>2</sup> : 0,05 F <sub>(3,198)</sub> : 3,170 (0,025)
IOC	0,121	1,246	0,203	
RC	0,046	0,524	0,601	
HC	0,186	1,946	0,053	

(2) In the second stage, the effect of the mediating variables on the dependent variable was analyzed. The effect of Marketing Management Capabilities (MMC) and Marketing Research Capabilities (MRC) on Market-Focused Learning (MFL) was tested. It was determined that MMC (0,45) and MRC (0,19) have an effect on MFL.

**Table 4:** *Effect of Mediating Variable on Dependent Variable*

Model 1	MFL			Model Summary
	$\beta$	T value	P.	
Constant	1,519	7,469	0,000	R <sup>2</sup> : 0,44 F <sub>(2,199)</sub> : 80,684 (0,000)
MMC	0,459	6,940	0,000	
MRC	0,198	3,334	0,001	

(3) In the last stage, the impact of IFC dimensions on MFL was analyzed. A statistically significant relationship was detected between only Human Capital (HC) dimension of IFC on MFL. As it can be seen from Table 3, HC has also an impact on Marketing Management Capabilities (MMC). Since the other 2 dimensions of IFC do not have a significant effect on MFL, only the mediating role of HC was tested. As Table 4 shows, there is no significant relationship between IFC dimensions and Marketing Research Capabilities (MRC). Therefore, the mediation effect of MRC was not tested.

**Table 5:** *Effect of Independent Variable on Dependent Variable*

Model 1	MFL			Model Summary
	$\beta$	T value	P.	
Constant	2,485	5,900	0,000	R <sup>2</sup> : 0,12 F <sub>(3,198)</sub> : 9,019 (0,000)
IOC	0,040	0,519	0,605	
RC	0,051	0,724	0,470	
HC	0,309	4,003	0,000	

In order to test the mediation effect, the independent variable, mediator variable and dependent variable were entered the model together. Using hierarchical regression analysis and Sobel test, the mediation effect was tested between HC (independent variable), MMC (mediator variable) and MFL (See Table 6).

**Table 6: Mediating effect of HC on MFL (MMC Mediating Variable)**

Model 1	MFL (without Mediating Variable)			
	$\beta$	T value	P.	Model Summary
Constant	2,740	10,435	0,000**	R <sup>2</sup> : 0,12
HC	0,341	5,141	0,000**	F <sub>(1,200)</sub> : 26,433 (0,000)
Model 2	MFL (with Mediating Variable)			
	$\beta$	T value	P.	Model Summary
Constant	1,133	4,471	0,000**	R <sup>2</sup> : 0,452
HC	0,192	3,547	0,000**	F <sub>(2,199)</sub> : 81,941 (0,000)
MMC	0,56	11,024	0,000**	

In the first model, the mediator variable was not included in the model; while in the second model, the mediator variable was entered into the model. The mediation effect is explained as the decrease in the effect of the independent variable on the dependent variable when the mediator variable is added to the model. In this case, when the effect converts to a statistically insignificant one, it is interpreted as full mediation effect; when the effect decreases but remains statistically significant, it is interpreted as partial mediation effect.

The mediating effect of MMC on the relationship between IFC and MFL was tested with hierarchical regression analysis. In the model where the mediating variable was not included, only HC of the IFC dimensions, was found to have an impact on MFL with an effect size of 0,34 (R<sup>2</sup>: 0,120; F<sub>(1,200)</sub>: 26,433; p<0.01). After the mediator variable was entered into the model, the effect of HC on POE ( $\Delta\beta_1 - \Delta\beta_2$ ) showed a decrease of 0,15, but still statistically significant impact. Accordingly, this decrease indicates that MMC has a partial mediation effect on the relationship between HC and MFL. On the other hand, MMC has an impact Market-focused Learning with an effect size of 0,56. In addition to hierarchical regression, Sobel test was performed to test the mediation effect (Jyoti and Sharma, 2017). The overall effect of IFC on MFL and the mediation effect of MC through its overall effect were also examined. Results showed that IFC has an effect on MC with an effect size of 0,41, and on MFL with an effect size of 0,44. Furthermore, MC was found to have an impact on MFL with an effect size of 0,63.

**Table 7: Intangible Firm Capital, Marketing Capabilities and Market-Focused Learning**

Model 1	MC			
	$\beta$	T value	P.	Model Summary
Constant	2,165	5,240	0,000**	R <sup>2</sup> : 0,08
IFC	0,418	4,194	0,000**	F <sub>(1,200)</sub> : 17,588 (0,000)
Model 2	MFL			
	$\beta$	T value	P.	Model Summary
Constant	2,267	5,692	0,000**	R <sup>2</sup> : 0,09
IFC	0,439	4,566	0,000**	F <sub>(1,200)</sub> : 20,845 (0,000)
Model 3	MFL			
	$\beta$	T value	P.	Model Summary
Constant	1,591	7,836	0,000**	R <sup>2</sup> : 0,433
MC	0,639	12,368	0,000**	F <sub>(1,200)</sub> : 152,971 (0,000)

Hierarchical regression analysis was performed to test the overall mediation effect of Marketing Capabilities. Model 1 (without the mediating variable) indicates that IFC has an impact on MFL with an effect size of 0,44. In model 2, when the mediating variable was entered in the regression estimation, the effect of IFC on MFL have decreased. The impact of IFC on MFL ( $\Delta\beta_1 - \Delta\beta_2$ ) decreased by 0,25. The coefficient of the independent variable is significant at the 0,05 level. Therefore, hierarchical regression indicated that According to these data, it can be stated that MC has a partial mediation effect. The effect size of MC on MFL is 0,60.

**Table 8:** *Intangible Firm Capital and Market-Focused Learning (Marketing Capabilities Mediating Variable)*

Model 1	MFL (without Mediating Variable)			
	$\beta$	T value	P.	Model Summary
Constant	2,267	5,692	0,000**	R <sup>2</sup> : 0,09 F <sub>(1,200)</sub> : 20,845 (0,000)
IFC	0,439	4,566	0,000**	
Model 2	MFL (with Mediating Variable)			
	$\beta$	T value	P.	Model Summary
Constant	0,961	2,894	0,000**	R <sup>2</sup> : 0,449 F <sub>(1,200)</sub> : 81,102 (0,000)
IFC	0,187	2,380	0,018*	
MC	0,603	11,319	0,000**	

### 3. Discussion and Conclusions

This study focuses on the mediating role of marketing capabilities (PMC) in the relationship between intangible firm capital (IFC) and market-focused learning (MFL). A number of research suggest that IFC has an essential role in developing marketing strategy and building competitive advantage. The significant role of IFC in business performance, organizational performance, financial results, and value creation has been investigated in previous studies (Hu et al., 2015). Intangible firm capital substantially contributes to financing an organization's vision (Bontis, 2001). Furthermore, from a macroeconomic point of view, intangible capital is also considered as a critical resource for the development and growth of national economies (Li and Wu, 2018). Griffith et al. (2010) identified the facets of intangible firm capital as human capital, relational capital, organizational capital and informational capital.

Some researchers argue that marketing capabilities exhibits a multi-dimensional structure, which theoretically comprises pricing, product, distribution, marketing communication, sales and marketing practices; as well as marketing planning, marketing research and marketing management capabilities (Vorhies and Harker, 2000; Morgan et al., 2009). This study adopted two dimensions of marketing capabilities, namely marketing management capabilities and marketing research capabilities, which were suggested by Vorhies and Harker (2000).

Griffith et al. (2010) examined the effect of IFC components on firm performance in Japanese and American firms, and concluded that marketing capabilities also affect firm performance in both countries. They found that human capital and relational capital affect marketing capabilities in Japanese firms, whereas organizational and informational capital do not. In case of American firms, on the other hand, while informational capital does not affect marketing capabilities, human, relationship and organizational capital affect marketing capabilities. As a result, it was determined that marketing capabilities have a full mediating effect in the relationship between IFC and firm performance (Griffith et al., 2010). In a similar study Cheng and Krumwiede (2017) examined critical elements of intangible firm capital for developing new service. They defined intangible firm capital

depending on Walsh et al. (2008) as knowledge and skills-based resources, such as market experience, technical knowledge, or customer relations that are essential for firm performance. From a service-dominant logic, the research suggested that the elements of intangible firm capital involve market capital, service delivery capital, interactional capital and learning capital. In different clusters, the impact of market capital, service delivery capital and interaction capital and learning capital on new service success was confirmed (Cheng and Krumwiede, 2017).

Moreover, significant relationships were detected between customer orientation, competitor orientation, commitment to learning and value creation efforts; where customer orientation and commitment to learning affect customer value creation efforts (Uzkurt and Torlak, 2007); industry structure has a significant effect on market-focused learning and relational learning, and relational learning and organizational innovation impact brand performance (Weerwardena et al, 2006); marketing capabilities affect organizational innovation intensity and sustainable competitive advantage (Weerwardena, 2003a; Weerwardena, 2003b); network capabilities enable born-global firms to identify market opportunities in a variety of ways (Mort and Weerawardena, 2006); human capital occupies a central role among intangible firm capital elements (Al Matarneh, 2014); highly market-oriented firms possess superior marketing capabilities (Vorhies et al, 1999); as well as significant relationships between human marketing capital, relational marketing capital and firm-specific marketing capital (Nguyen & Nguyen, 2011); the relational learning process and intellectual capital (Dewhurst & Navarro, 2004); human capital, customer capital, structural capital and business performance (Bontis, Chong Keow, & Richardson, 2000) has been confirmed.

**Table 9: Hypothesis Test Results**

Hypothesis	Result	Sobel Test
H <sub>1</sub> Intangible firm capital has a significant effect on marketing capabilities	Accepted	--
H <sub>2</sub> Intangible firm capital has a significant effect on market-focused learning	Accepted	--
H <sub>3</sub> Marketing capabilities has a significant effect on market-focused learning	Accepted	--
H <sub>4</sub> <b>Marketing capabilities</b> has a mediating role in the relationship between intangible firm capital and market-focused learning	Accepted	3,95 (0,000)
H <sub>4A</sub> <b>Marketing management capabilities</b> has a mediating role in the relationship between human capital and market-focused learning	Accepted	3,34 (0,000)
H <sub>4B</sub> <b>Marketing management capabilities</b> has a mediating role in the relationship between relational capital and market-focused learning	Rejected	--
H <sub>4C</sub> <b>Marketing management capabilities</b> has a mediating role in the relationship between informational and organizational capital and market-focused learning	Rejected	--
H <sub>4D</sub> <b>Marketing research capabilities</b> has a mediating role in the relationship between human capital and market-focused learning	Rejected	--
H <sub>4E</sub> <b>Marketing research capabilities</b> has a mediating role in the relationship between relational capital and market-focused learning	Rejected	--
H <sub>4F</sub> <b>Marketing research capabilities</b> has a mediating role in the relationship between informational and organizational capital and market-focused learning	Rejected	--

Results of this research show some similarities with previous studies in several aspects. This study showed that intangible firm capital impact marketing capabilities, as expected. The study also verified that marketing capabilities have a partial mediation effect on the relationship between intangible firm capital and market-focused learning, where Griffith et al. (2010) found as a full mediation effect. In addition, human capital was found to be more effective than other intangible capital dimensions. This result is similar to the result of Al Matarneh, (2014). Furthermore, our findings are consistent with the results of Griffith et al. study (2010) that organizational and informational capital do not have an

impact on marketing capabilities for Japanese firms and informational capital do not have an impact on marketing capabilities for American firms.

The role of market-driven capabilities in competitive strategy has grown significantly in the last two decades, however few efforts have been made to comprehend and operationalize the key constructs in Türkiye. This study contributes to the Capability-based Theory of competitive advantage by testing measures for marketing capabilities and market-focused learning. The study also contributes to the understanding on the role of marketing in the strategy development. For practitioners, the results of the study provide an achievable path for developing competitive advantage by focusing on potential sources of intangible firm capital.

Though the study provides some useful insights about the role of market-driven capabilities in developing sustainable competitive advantage, certain limitations should be recognized. First, the study conducted in the furniture manufacturing sector, although research in other industries is required. In addition, the respondent firms in this study are SME's. Thus, further studies are needed for understanding the role of market-driven capabilities in strategy formation in large firms.

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## References

- Al Matarneh, A. S. (2014). An Empirical test of the effect of intangible capital on financial performance and market value in the Jordanian companies. *Global Journal of Management And Business Research*, 14(2), 8-18.
- Baron R. M. & Kenny D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices*, (2nd ed.). Col, USA: USF Open Access Textbook.
- Bontis, N., Chong Keow, W.C. & Richardson, S. (2000). Intellectual capital and business performance in Malaysian industries. *Journal of Intellectual Capital*, 1(1), 85-100.
- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International journal of management reviews*, 3(1), 41-60.
- Bryman, A. & Cramer, D. (2005). *Quantitative data analysis with SPSS 12 and 13: A guide for social scientist*. London: Routledge Taylor & Francis Group.
- Bueno, E., Salmador, M. P. & Rodríguez, Ó. (2004). The role of social capital in today's economy: empirical evidence and proposal of a new model of intellectual capital. *Journal of Intellectual Capital*, 5(4), 556-574.
- Busch, P., Venkitachalam, K. & Richards, D. (2008). Generational differences in soft knowledge situations: Status, Need for recognition, workplace commitment and idealism, *Knowledge Process Management*, 15(1), 45-58.
- Cheng, Colin C.J. & Krumwiede, Dennis (2017). What makes a manufacturing firm effective for service innovation? The role of intangible capital under strategic and environmental conditions. *International Journal of Production Economics*, Vol 193, 113-122.
- Chen, J., Zhu, Z., & Xie, H. Y. (2004). Measuring intellectual capital: a new model and empirical study. *Journal of Intellectual capital*, 5(1), 195-212.
- Day, G. (1994). The capabilities of market-driven firms, *Journal of marketing*, 33 (October 1994), 37-52.

- De Castro, G. M., Sáez, P. L., & López, J. E. N. (2004). The role of corporate reputation in developing relational capital. *Journal of Intellectual Capital*, 5(4), 575-585.
- Dess, G. G., & Picken, J. C. (2001). Changing roles: Leadership in the 21st century. *Organizational Dynamics*, 28(3), 18-34.
- Dewhurst, F. W., & Navarro, J. G. C. (2004). External communities of practice and relational capital. *The Learning Organization*, 11(4/5), 322-331.
- Dorrego, P. F., Costa, R. V., & Fernández, C. F. J. (2013). Product Innovation and Relational Capital: Evidence From Portugal. *Electronic Journal of Knowledge Management*, 11(4).
- Edvinsson, L. (1997). Developing intellectual capital at Skandia, *Long Range Planning*, 30(3), 366-373.
- Ghane, S., & Akhavan, P. (2014). A framework for determining and prioritizing relational capitals: The case of Iran e-business. *International Journal of Commerce and Management*, 24(2), 119-133.
- Görmüş, A. Ş., (2009). Entelektüel sermaye ve insan kaynakları yönetiminin artan önemi, *Afyon Kocatepe Üniversitesi İİBF Dergisi*, 10(1), 57-75.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, 33(3), 114-135.
- Griffith, D. A., Yalcinkaya, G., & Calantone, R. J. (2010). Do marketing capabilities consistently mediate effects of firm intangible capital on performance across institutional environments?. *Journal of World Business*, 45(3), 217-227.
- Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. (1998). *Multivariate data analysis*, (5th ed), New Jersey, USA: Prentice-Hall International.
- Hu, Y., Ke, J., Guo, Z. & Wen, J. (2015). *Relationship between Intangible Capital, Knowledge and maintenance performance in a PSS network: An empirical investigation*. Paper presented at the 7th Industrial Product-Service Systems Conference: industry transformation for sustainability and business, *Procedia CIRP* 30, 378 – 383.
- Johansson, J. (2007). Sell-side analysts' creation of value—key roles and relational capital. *Journal of Human Resource Costing & Accounting*, 11(1), 30-52.
- Jurisch, M. C., Palka, W., Wolf, P., & Kremer, H. (2014). Which capabilities matter for successful business process change?. *Business Process Management Journal*, 20(1), 47-67.
- Kohli, A. K. & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of marketing*, 54(April 1990), 1-18.
- Léger, P. M. (2010). Interorganizational IT investments and the value upstream relational capital. *Journal of Intellectual Capital*, 11(3), 406-428.
- Li, Q., & Wu, Y. (2018). Intangible capital in Chinese regional economies: Measurement and analysis. *China Economic Review*, 51, 323-341.
- Marimuthu, M., Arokiasamy, L., & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from developmental economics. *The Journal of International Social Research*, 2(8), 265-272.
- Martinez García De Leaniz, P. & Rodríguez Del Bosque, I. (2013). Intellectual capital and relational capital: The role of sustainability in developing corporate reputation. *Intangible Capital*, 9(1): 262-280.

- McCallum, S., & O'Connell, D. (2009). Social capital and leadership development: building stronger leadership through enhanced relational skills. *Leadership & Organization Development Journal*, 30(2), 152-166.
- Mort, G.S. and Weerawardena, J. (2006). Networking capability and international entrepreneurship: How networks function in Australian born global firms. *International Marketing Review*, 23(5), 549-572.
- Nazari, J. A., & Herremans, I. M. (2007). Extended VAIC model: measuring intellectual capital components. *Journal of Intellectual Capital*, 8(4), 595-609.
- Nguyen, T.D. and Nguyen, T.T.M. (2011). Firm-specific marketing capital and job satisfaction of marketers. *The Learning Organization*, 18(3): 251 – 263.
- Sánchez-Canizares, S. M., Munoz, M. A. A., & López-Guzmán, T. (2007). Organizational culture and intellectual capital: a new model. *Journal of Intellectual Capital*, 8(3), 409-430.
- Slater, S. C. & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59(July 1995), 63-74.
- Srivastava, R. K., Fahey, L., & Christensen, H. K. (2001). The resource-based view and marketing: The role of market-based assets in gaining competitive advantage. *Journal of Management*, 27(6), 777-802.
- Uzkurt, C. & Torlak, Ö. (2007). İşletmelerin müşteri değeri yaratma üzerinde öğrenme ve pazar odaklı kültürün etkileri. *H.Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi*, 25(1), 239-257.
- Vorhies, D. W., Harker, M., & Rao, C. P. (1999). The capabilities and performance advantages of market-driven firms. *European Journal of Marketing*, 33(11/12), 1171-1202.
- Weerawardena, J. (2003a). The role of marketing capability in innovation-based competitive strategy. *Journal of Strategic Marketing*, 11(1), 15-35.
- Weerawardena, J. (2003b). Exploring the role of market learning capability in competitive strategy. *European Journal of Marketing*, 37(3/4), 407-429.
- Weerawardena, J. & O'Cass, A. (2003). Exploring the characteristics of market-driven firms and antecedents to sustained competitive advantage. *Industrial Marketing Management*, 33(2004), 419-428.
- Weerawardena, J., O'Cass, A., & Julian, C. (2006). Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. *Journal of Business Research*, 59(1), 37-45.
- Walsh, K., Enz, C. A., & Canina, L. (2008). The Impact of strategic orientation on intellectual capital investments in customer service firms. *Journal of Service Research*, 10(4), 300–317.
- Yanamandram, V & White, L. (2006). *Exploratory and confirmatory factor analysis of the perceived switching costs model in the business services sector*, Australia and New Zealand Marketing Academy Conference (ANZMAC 2006), Brisbane, Queensland, 4-6 December.