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# LONGITUDINAL RESEARCH: INFLUENCE BETWEEN MARKET ORIENTATION, INNOVATIVENESS AND BUSINESS PERFORMANCE

### Helena Šlogar

PhD, Assistant Professor, Libertas International University, Trg J. F. Kennedy 6b, 10000 Zagreb, Croatia; e-mail: hslogar@libertas.hr

#### **ABSTRACT**

The aim of this study is to conduct a longitudinal reasearch into the influence between market orientation, innovativeness and business performance. The study endevours to examine possible changes in the model of the influence of market orientation on innovativeness and business performance in the 2016-2019 period in Croatian companies. To analyse data, we used regression and covariance analysis. The results show that the influence of market orientation, competitor orientation and interfunctional coordination on innovativeness and business performance did not exhibit statistically significant differences in the 2016-2019 period in Croatian companies. At the same time the influence of customer orientation on innovativeness, product innovation, business system innovativeness and on business performance showed a significant statistical change. Empirical results provide consequential theoretical implications and implications for the management in implementing market orientation, which would allow for the increase in company competitiveness on the market.

**Key words:** innovativeness, market orientation, customer orientation, competitor orientation, interfunctional coordination

JEL Classification: O3. M3.

#### 1. INTRODUCTION

A quarter of a century has passed since the change in the Croatian economic system and the introduction of a market economy. Although Croatia gained a full membership in the European Union in 2013, companies have been faced with many challenges of government regulation and bureaucracy, introduction of new technologies, innovativeness, access to information, lack of funding, limited human resource capacity and low productivity. Better cooperation between research and business sector would likely enhance investment in technology equipment. This

would create more innovative products which are crucial for competitiveness and are a prerequisite for strengthening the growth capacity of companies (Singer et al., 2018). Narver and Slater (1990) worked on the development model for measuring market orientation and analysing its effects on business profitability.

The authors brought out three components for measuring market orientation by using the MKTOR scale: customer orientation, competitor orientation and interfunctional coordination (Narver and Slater, 1990). The literature on the subjects reveals that the market orientation has attracted the keenest interest of scientists and is most likely one of the major research areas in the field of marketing (Božić, 2006; Božić and Rajh, 2008; Sheppard, 2011). In today's competitive environments companies need to quickly adjust to changeable customer requirements and offer high-quality products to meet their needs and wishes. Thus innovativeness stands out as a crucial factor of sustainable competitive advantage (Baregheh et al., 2009). Innovativeness can refer to new production processes of products or services, new organisational or management structures, new marketing techniques, and often to intelellectual property, new technology etc. The main purpose od this study is to emiprically test a framework that identifies the relationships between market orientation, innovativeness and business performance of companies operating in Croatia in the two observed periods, 2016 and 2019.

A large body of research has examined the relationship of market orientation and other concepts, such as learning orientation (Calantone et al., 2002); innovativeness (Deshpandé et al.,1993; Candemir and Zalluhoğlu, 2013); eco-systems (Kumar et al., 2011), as well as the impact of market orientation on business performance (Rahab, 2012; Bamgbade et al., 2017). For more than three decades scientists have been intensively evaluating, albeit with mixed results, whether market orientation is positively connected with business performance (Hult et al., 2004; Kumar et al., 2011; He and Wei, 2011). This brings us to the questions of whether there is a direct impact of market orientation on innovativeness and business performance, and did the model dynamics change from 2016 to 2019. We look into this impact following the guidelines of Oslo Manual (2005), in order to have a better understanding of the changes in company innovation processes.

The author expects that the influence of market orientation on innovativeness and / or business performance will change in a three-year period due to the accession to the European Union and increased export activities of Croatian companies. This paper offers a better understanding of market orientation through its influence on product innovation, process innovativeness and system innovativeness, which are the key factors of business performance. The rest of this paper is organised in the following way: First the literature is introduced on the influence between market orientation, innovativeness and business performance. After defining the hypothesis, the methodology and the results of the research are described. The conclusion is based on the theoretical and practical implications of the research.

#### 2. LITERATURE REVIEW

Basically, market orientation refers to the way that marketing concept is implemented in business operations. Marketing activities include innovativeness in perceiving the market situation and

the knowledge of the latest technologies on the market, which allows the company to develop new forms of business operations, together with its customers. In todays dynamic surroundings, characterised by rapid changes in the methods of work and in the models of cooperation, company survival is questionable for those who do not pay enough attention to developing innovations. It is expected of companies to attract new buyers and to establish even stronger cooperation with the existing buyers, based on their satisfaction. Customers are offered innovative modular products, whose sale supports company's recognisibility and business growth.

The study Deshpandé et al. (1993) gives the example of Japanese companies and states that customer orientation and innovativeness have to be a constituent part of corporate culture since they impact business performance. On the other hand, Calantone et al. (2002) argue that competitiveness is not based only on technological development, but also on understanding the needs of clients and on behaviour of competitors. Frambach et al. (2003) state that the companies which are competitor oriented will use the possibility of developing marketing plans for new products to overtake competitors.

In the study Hooley et al. (2000), market orientation scale is tested in the context of the transition economies of central Europe and found to be both valid and reliable. A meta-analysis was conducted in 23 countries spanning five continents and findings suggest that the relationship between market orientation and business performance is positive and consistent worldwide (Cano et al., 2004). Hult et al. (2004) state that market orientation is the key precursor of innovativeness and point to a direct relation between innovativeness and business performance in American companies through various market instabilities. In the case of small and medium-size enterprises that operate in Turkey, it was established that market orientation has an indirect impact on business performance through learning orientation and innovativeness (Keskin, 2006). Furthermore, Akman and Yilmaz (2008) found that customer orientation, as a component of market orientation, impacts innovativeness in the software industry. Li et al. (2008) reveal that in high tech companies in Taiwan market orientation boosts various kinds of innovation competencies of managers.

When making key strategic decisions in reaching international markets, Chinese production companies are trying to choose culturally distant markets, which help them use the benefits of the market orientation concept (He and Wei, 2011). Furthermore, Jiménez-Zarco et al. (2011) explore the importance of market orientation in Spanish service sector and reveal that the dimensions of market orientation will change depending on the level of the ICT (Information Communication Technology) use. Futhermore, findings reveal that market orientation correlates with higher business performance in Croatian organizations (Grbac and First, 2011). Kumar et al. (2011) investigate the impact of market orientation on company performance in 1997, 2001 and 2005 in Pakistan. The authors find that companies that develop market orientation early have a lasting advantage in business performance.

Suliyanto and Rahab (2012) confirm that market orientation can strengthen innovativeness, which impacts business performance in small and meduim-sized enterprises. The study of Gellynck et al. (2012) assesses market orientation in companies producing traditional food products which are located in Hungary, Belgium and Italy. Most of these companies do not have the possibility to

manage marketing, although some of them claim they do possess good marketing competencies which would enable them to develop market orientation.

The study Rašković et al. (2012) builds on a cross-sectional longitudinal reasearch of Slovenian firms in the period between 2008 and 2010. They analyse the impact of external and internal marketing orientation, business innovation and HRM performance indicators on firm performance in an economic crisis context. The results *show* that business innovation is positively linked to overall firm performance, and increases in importance with the worsening of the crisis. Aziz and Omar (2013) state that the relationship of market orientation, innovativeness and business performance is explored in Malaysia and in other developing countries. A larger use of ICT in marketing will enable companies to increase their innovation capabilities and expand activities in continuous customer research. In addition, a sharper focus on the customer will positively impact innovation capabilities and performance of the company. Candemir and Zalluhoğlu (2013) believe that the role of market orientation and innovation has become a major competitive tool for surviving on the global market. Tajeddini (2013) investigates how Swiss companies apply market orientation when entering emerging markets, and argues that innovation is a key competence that has to be understood through culture and market intelligence management.

Kylmänen et al. (2014) find that increasing the total average value of the incentive share scheme per employee involved, increases all the constituent market orientation factors in Finnish companies, both public and private. Mohamed (2014) states that nonfinancial measures have a positive and significant relationship with market orientation in the Malaysian market. Guo and Wang (2015) explore how three dimensions of market orientation in the US production companies affect the outcomes in managing relationships with customers. The results show that customer orientation and competitor orientation impact the outcome of companies' relationships with customers, while there is no significant impact of interfunctional coordination within a company. According to Frösén et al. (2016), market orientation (MO) provides an important safeguard for firms against fluctuating market forces. Their findings indicate that both the role of MO and its most effective forms vary across industry sectors, MO having a particularly strong impact on performance among B-to-B service firms. Frösén and Tikkanen (2016) research the development of key strategic marketing constructs market orientation, marketing-related business process capabilities and marketing performance measurement as well as their performance implications. The study was conducted among Finnish firms of various sizes representing different industries and market positions in 2008, 2010, 2012 and 2014. Its results show that marketing performance measurement maintains its beneficial impact on firm performance across years and across the business cycle.

Dabrowski (2018) confirms that monitoring competitors and gaining market information from the competiton has a positive impact on product innovation in Polish companies. Łobos and Szewczyk (2018) analyse the model of dependence of market orientation, product innovation, process innovativeness, marketing innovativeness and organisational innovativeness and performance in medium-size industrial enterprises which operate in Poland. He concludes that through developing market orientation, marketing and organisational innovativeness lead to increased business performance of the company. The results of the study by Bamgbade et al. (2017) show that market orientation and organisational factors of process innovativeness prompted large

Malaysisan construction companies to ensure environmental sustainability. Furthermore, market orientation has a positive influence on marketing performance as well as on business performance (Hussein, 2019). The analysis of customer needs focuses market orientation on competitiveness. Therefore, every company is required to respond to customer needs and wishes, either by creating new products or by developing the existing ones. Indriyani et al. (2019) state that market orientation has a significant and positive impact on innovations in the food industry of traditional small and medium-size enterprises in Indonesia.

The results of the Šlogar and Bezić (2020) study shows a statistically significant positive relationship between market orientation, learning orientation and innovativeness, and business performance in Croatian companies. Phorncharoen (2020) confirms that market orientation has a positive effect on innovativeness, while learning orientation mediated between market orientation and innovativeness in the sample of small and medium-sized enterprises in Thailand. The Alhakimi and Mahmoud study (2020) finds that market orientation as a whole has a significant impact on the innovativeness of small and medium-sized enterprises in Yemen. Furthermore, Riswanto et al. (2020) state that the impact of market orientation on the marketing results in small and medium-sized enterprises in Indonesia could be mediated by innovativeness. In the same way market orientation has a positive effect on performance. Tajeddini and Ratten (2020) examine the roles of brand orientation among small and medium-sized enterprises in various industries in Switzerland which operate on the international market. The results show that market and brand orientation are the two precursors of marketing and financial success. It can be established that all the above research was performed in order to develop the theory of market orientation and operationalization of the concept which emphasises innovativeness and business performance.

Based on the discussion, a hypothesis was defined:

**H**: Market orientation has a positive and direct influenceon the innovativeness and business performance of the company and this influence does not change significantly in the 2019 model compared to 2016.'

Market orientation Innovativeness Rusiness Customer - Product innovation performance - Process orientation - Quantitative effects - Competitor innovativeness - Qualitative effects orientation - Business system - Interfunctional innovativeness coordination

Figure 1. Conceptual model of research

Source: Author

The conceptual model outlined in Figure 1 points to the importance of an integrated approach to studying the influence of innovativeness on business performance, viewed from the perspective of market orientation.

#### 3. METHODOLOGY

To test the model empirically, we used the data from 2016 and 2019, which were collected with the identical questionnaire and with the same sample of enterprises for both years, to allow for comparison. The results of the first collected set of data from the 2016 research were published in the paper (Šlogar and Bezić, 2020). The population of the data collection sample consists of Croatian companies from the fields of manufacturing and information and communication technology. To measure market orientation, the scale adapted from Narver and Slater (1990) was used which consists of 15 items and assesses the subfactors of customer orientation, competitor orientation and interfunctional coordination. The 5 point Likert scale was used for this. To measure the innovativeness, a 15-item scale adapted from Nybbak (2012) was used, which assesses the subfactors of product innovation, process innovativeness and business system innovativeness. The business performance and its dimensions of quantitative and qualitative effects were used as dependent variables. The values of these variables are the answer to the questions from the survey, scored on the Likert scale from 1 to 5. Business performance is measured by the quantitative effects including: product and/or sales/service growth, market share, productivity, overall liquidity, degree of total indebtedness, employee growth and flexibility company's. Similarly, the qualitative effects within the company were measured: employees self-assessment of fluctuation, absenteeism, commitment, adaptability, number of new customers, the number of lost customers, product quality, the number of new products and company image (Šlogar, 2018).

The sample from the year 2016 and 2019 included 900 companies from the Register of the Croatian Chamber of Commerce, and the method of random sampling was applied. The final sub-sample consisted of 101 companies that responded to the survey in both periods. The data were collected online with a questionnaire that was sent to directors of the companies in the two periods: October - December 2016, and October 2019 - January 2020. Based on the 2016 survey, the power analysis showed that for the test power of 90%, and the confidence level of 95%, the correlation coefficient is bigger than 0.30, and thus reliable statistical results will be obtained on the sample of 101 companies. The gathered information was first analysed with descriptive statistics, while parametic methods were applied for further analysing, together with the regression and covariance analysis. Statistically significant regression directions are a prerequisite for applying covariance analysis. The analysis of covariance (ANCOVA) sought to determine whether there was a change in the influence of market orientation and its three dimensions, on innovativeness and business performance, in the 2016-2019 period.

#### 4. RESEARCH RESULTS

In this chapter, the analysis of the research results will be presented. Complex data will be outlined in a table or figure.

Table 1. Descriptive Statistics

Table 1. Descriptive Statistics								
2016	Ν	Mean	Median	Minimum	Maximum	Std.Dev.		
Market orientation	101	74.6	76.0	36	94	11.06		
Customer orientation	101	28.1	28.0	10	35	4.79		
Competitor orientation	101	19.0	19.0	11	25	3.64		
Interfunctional coordination	101	23.1	23.0	11	30	4.08		
Innovativeness	101	56.9	57.0	25	79	11.93		
Product innovation	101	20.9	22.0	6	30	5.36		
Process innovativeness	101	14.4	15.0	4	20	3.95		
Business system innovativeness	101	17.4	17.0	11	24	3.61		
Business performance	101	59.3	58.0	39	77	9.03		
Business performance- Quantitative effects	101	23.6	23.0	12	33	4.27		
Business performance - Qualitative effects	101	31.8	32.0	20	45	5.41		
2019	N	Mean	Median	Minimum	Maximum	Std.Dev.		
Market orientation	101	76.1	76.0	42	93	10.74		
Customer orientation	101	27.4	28.0	16	34	3.95		
C						3.73		
Competitor orientation	101	20.2	21.0	6	25	3.90		
Interfunctional coordination	101 101	20.2 24.1	21.0 24.0	6 12	25 30			
· ·				-		3.90		
Interfunctional coordination	101	24.1	24.0	12	30	3.90 3.98		
Interfunctional coordination Innovativeness	101 101	24.1 59.7	24.0 60.0	12 27	30 80	3.90 3.98 13.36		
Interfunctional coordination Innovativeness Product innovation	101 101 101	24.1 59.7 22.6	24.0 60.0 23.0	12 27 6	30 80 30	3.90 3.98 13.36 5.92		
Interfunctional coordination Innovativeness Product innovation Process innovativeness	101 101 101 101	24.1 59.7 22.6 14.8	24.0 60.0 23.0 16.0	12 27 6 6	30 80 30 20	3.90 3.98 13.36 5.92 4.11		
Interfunctional coordination Innovativeness Product innovation Process innovativeness Business system innovativeness	101 101 101 101 101	24.1 59.7 22.6 14.8 18.5	24.0 60.0 23.0 16.0 19.0	12 27 6 6 9	30 80 30 20 25	3.90 3.98 13.36 5.92 4.11 4.23		

Source: Author

Table 1 depicts basic statistical indicators for variables included in the research, the values obtained from both 2016 and 2019. It can be seen that the values of statistical indicators from these two time periods do not differ significantly, which indicates that no significant changes of the model are expected from 2016 to 2019. Descriptive statistics show that there is no significant difference between the arithmetic middle (Mean) and the median value (Median), which means that the values of the variables do not deviate significantly from the normal distribution. Thus, it is justified to apply regression analysis and covariance analysis in further statistical processing.

Table 2. Regression Analysis Influence of independent variables on innovativeness in 2016 and 2019

			2016 and	2019					
Dependent Variable: Innovativeness									
Independent variable	2016				2019				
пиерепиент чапавіе	R	SE	F(1.99)	р	R	SE	F(1.99)	р	
Market orientation	0.681	0.074	85.512	<0.001	0.787	0.062	160.864	<0.001	
Customer orientation	0.641	0.077	69.065	<0.001	0.728	0.069	111.418	<0.001	
Competitor orientation	0.510	0.086	34.789	<0.001	0.726	0.069	110.447	<0.001	
Interfunctional coordination	0.531	0.085	6.233	<0.001	0.659	0.076	76.096	<0.001	
	De	pendent	Variable: P	roduct inn	ovation				
Independent variable		2016					2019		
independent variable	R	SE	F(1.99)	р	R	SE	F(1.99)	р	
Market orientation	0.579	0.082	49.886	<0.001	0.759	0.065	134.384	<0.001	
Customer orientation	0.605	0.080	57.098	<0.001	0.756	0.066	132.160	<0.001	
Competitor orientation	0.387	0.093	17.416	<0.001	0.669	0.075	80.155	<0.001	
Interfunctional coordination	0.427	0.091	22.033	<0.001	0.621	0.079	62.068	<0.001	
	Dep	endent V	ariable: Pro	cess innov	ativeness				
	2016				2019				
Independent variable	R	SE	F(1.99)	р	R	SE	F(1.99)	р	
Market orientation	0.607	0.080	57.785	<0.001	0.684	0.073	87.125	<0.001	
Customer orientation	0.508	0.087	34.508	<0.001	0.611	0.080	58.974	<0.001	
Competitor orientation	0.456	0.089	25.999	<0.001	0.624	0.079	63.078	<0.001	
Interfunctional coordination	0.545	0.084	41.776	<0.001	0.609	0.080	58.443	<0.001	
	Depende	ent Varia	ble: Busine:	ss system in	novativer	ness			
	2016			2019					
Independent variable	R	SE	F(1.99)	р	R	SE	F(1.99)	р	
Market orientation	0.532	0.085	38.987	<0.001	0.735	0.068	116.043	<0.001	
Customer orientation	0.503	0.087	33.615	<0.001	0.661	0.075	76.933	<0.001	
Competitor orientation	0.454	0.090	25.683	<0.001	0.720	0.070	106.333	<0.001	
Interfunctional coordination	0.363	0.094	15.040	<0.001	0.597	0.081	54.935	<0.001	

Source: Author

In Table 2 the results of the regression analysis show that in the years 2016 and 2019 market orientation, customer orientation, competitor orientation and interfunctional coordination had a statistically significant positive influence on company innovativeness (p < 0.001). Secondly, in 2016 and 2019, product innovation was statistically significantly positively influenced by market orientation, consumer orientation, competitor orientation and interfunctional coordination (p < 0.001). Thirdly, it is shown that in 2016 and 2019 process innovativeness is statistically significantly positively influenced by market orientation and all three of its dimensions (p < 0.001). Finally, market orientation, customer orientation, competitor orientation and interfunctional coordination had a statistically significant influence (p < 0.001) on business system innovativeness in both 2016 and in 2019.

Table 3. Influence of independent variables on business performance in 2016 and 2019

Dependent Variable: Business performance									
la dan an dankan dala		2016	2019						
Independent variable R		SE	F(1.99)	p-level	R	SE	F(1.99)	p-level	
Market orientation	0.594	0.081	53.838	<0.001	0.672	0.074	81.431	<0.001	
Customer orientation	0.497	0.087	32.521	<0.001	0.598	0.081	55.253	<0.001	
Competitor orientation	0.456	0.089	25.967	<0.001	0.623	0.079	62.787	<0.001	
Interfunctional coordination	0.516	0.086	35.938	<0.001	0.581	0.082	50.445	<0.001	
	Dependent '	/ariable: E	Business perf	ormance- Q	uantitative	effects	,		
Indopondent variable	2016					2019			
Independent variable	R	SE	F(1.99)	p-level	R	SE	F(1.99)	p-level	
Market orientation	0.365	0.094	15.171	<0.001	0.473	0.089	28.480	<0.001	
Customer orientation	0.269	0.097	7.694	0.007	0.484	0.088	30.328	<0.001	
Competitor orientation	0.287	0.096	8.907	0.004	0.402	0.092	19.095	<0.001	
Interfunctional coordination	0.349	0.094	13.740	<0.001	0.385	0.093	17.190	<0.001	
	Dependent	Variable:	Business per	formance- C	Qualitative (	effects			
	2016				2019				
Independent variable	R	SE	F(1.99)	p-level	R	SE	F(1.99)	p-level	
Market orientation	0.637	0.077	67.514	<0.001	0.704	0.071	97.134	<0.001	
Customer orientation	0.552	0.084	43.355	<0.001	0.592	0.081	53.515	<0.001	
Competitor orientation	0.489	0.489 0.088		<0.001	0.667	0.075	79.412	<0.001	
Interfunctional coordination	0.537	0.085	40.186	<0.001	0.630	0.078	65.039	<0.001	

Source: Author

Table 3 The results of the regression analysis show that in 2016 and 2019 market orientation, customer orientation, competitor orientation and interfunctional coordination had a statistically significant positive influence on business performance (p < 0.001). Secondly, in both 2016 and 2019 quantitative effects of business performance were statistically significantly positively influenced by market orientation, customer orientation, competitor orientation and interfunctional coordination (p < 0.01). Thirdly, both in 2016 and in 2019 the qualitative effects of business performance were statistically significantly positively influenced by market orientation, customer orientation, competitor orientation and by interfunctional coordination (p < 0.001).

Table 4. Analysis of Covariance (ANCOVA) Comparison of the influence of independent variables on innovativeness in 2016 and 2019

Effect 2016 vs 2019	Innovativeness			duct vation	Proc innovat		Business system innovativeness	
	F	р	F	р	F	р	F	р
Market orientation	2.742	0.099	3.969	0.048	0.004	0.950	3.504	0.063
Customer orientation	13.150	< 0.001	15.906	<0,001	2.671	0.104	11.429	0.001
Competitor orientation	0.335	0.564	1.225	0,270	0.383	0.537	0.835	0.362
Interfunctional coordination	0.895	0.345	1.910	0.168	0.196	0.658	1.824	0.178

Source: Author

Table 4 presents the results of covariance analysis, which tested the statistical difference between the regression directions of each independent variable (market orientation, customer orientation, competitor orientation and interfunctional coordination) and the company innovativeness in 2016 and 2019. Firstly, it is shown that there is no statistically significant difference between the influence of market orientation, competitor orientation and interfunctional coordination on company innovativeness in 2016 and in 2019 (p > 0.05). However, a statistically significant difference exists between the influence of customer orientation on company innovativeness in 2016 and in 2019 (p < 0.001).

Secondly, the results show that there is no statistically significant difference between the influence of market orientation, competitor orientation and interfunctional coordination on product innovation in 2016 and in 2019 (p > 0.05). At the same time, there is a statistically significant difference between the influence of customer orientation on product innovation in 2016 and 2019 (p < 0.001). Thirdly, there is no statistically significant difference between the influence of market orientation and all three of its dimensions on process innovativeness in 2016 and 2019 (p > 0.05). Furthermore, the covariance analysis reveals that no statistically significant difference exists between the influence of market orientation, competitor orientation and interfunctional

coordination on the business system innovativeness in 2016 and in 2019 (p > 0.05). Finally, the influence of consumer orientation on business system innovativeness in 2016 and in 2019 shows a significant statistical difference (p = 0.001).

Table 5. Comparison of the influence of independent variables on business performance in 2016 and 2019

Effect 2016 vs 2019	Business performance		Busi perfori Quantitat	nance-	Business performance- Qualitative effects		
	F	р	F	р	F	р	
Market orientation	1.664	0.199	0.032	0.857	4.798	0.030	
Customer orientation	7.373	0.007	1.185	0.278	13.001	<0.001	
Competitor orientation	0.238	0.626	0.039	0.844	1.450	0.230	
Interfunctional coordination	0.554	0.458	0.009	0.923	2.253	0.135	

Source: Author

Table 5 reveals there is no statistically significant difference between the influence that market orientation, competitor orientation or interfunctional coordination had on business performance in 2016 and 2019 (p > 0.05). At the same time, it shows there was a considerable statistical difference in the influence of customer orientation on business performance in 2016 and in 2019 (p < 0.05). Furthermore, it shows that there is no statistically significant difference between the influence that market orientation and all of its three dimensions had on the quantitative effects of business performance in 2016 and in 2019 (p > 0.05). Covariance analysis shows that there is no statistically significant difference between the influence that market orientation, competitor orientation or interfunctional coordination had on the qualitative effects of business performance in 2016 and in 2019 (p > 0.05). However, there is a significant statistical difference of the influence that customer orientation had on the qualitative effects of business performance in 2016 and in 2019 (p < 0.001).

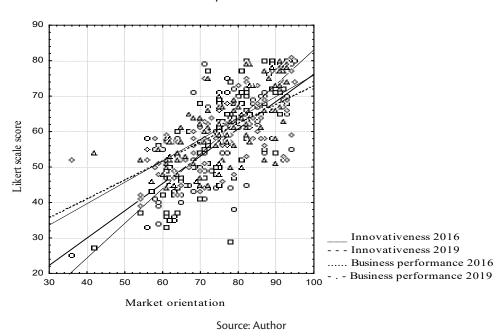


Figure 2. The influence of market orientation on innovativeness and business performance

Figure 2 presents the score of responses related to the influence of market orientation on business performance, and is the same in both 2016 and in 2019. Actually the regression directions are almost overlapping, which means that the dependence of responses remained unchanged. The responses related to the influence of market orientation on the company innovativeness show that in 2016 there were more answers with a lower score than in 2019. Furthermore, the directions intersect at around the score of 65, which means that the values of the score at around 65 are equal in both 2016 and in 2019. As for the the scores higher than 65, there were more of them in 2019 than in 2016.

The results confirm the hypothesis: Market orientation has a positive and direct influence on the innovativeness and business performance of the company and this influence does not change significantly in the 2019 model compared to 2016. Positive and statistically significant influence was identified on all segments of market orientation (customer orientation, competitor orientation and interfunctional coordination) and on all segments of innovativeness (product innovativeness, process innovativeness and business system innovativeness) in both 2016 and 2019. Furthermore, in both years the positive and statistically significant influence was identified on all segments of market orientation and on quantitative and qualitative effects of business performance. The results correspond to the conclusions of the recent studies carried by Hussein (2019), Indriyani et al. (2019), Šlogar and Bezić (2020), Phorncharoen (2020) and Alhakimi and Mahmoud (2020).

#### 5. CONCLUSION

Following the set goals this study has confirmed the results of the previous research on the influence of market orientation on innovativeness and business performance. The results are particularly important for companies that want to increase their competiteveness on the international market (Narver and Slater, 1990; Calantone et al., 2002; Hult et al., 2004; Keskin, 2006). The results obtained by the longitudinal research have justified the framework used, the one that identifies the influence of market orientation on innovativeness and business performance of Croatian companies in the two observed periods (2016-2019). Market orientation directly affects innovativeness and the result corresponds with a previous study (Hult et al., 2004; Kumar et al., 2011). The relationship of market orientation and innovativeness is actually vital for defining strategy, but also for business operations of a company. Kirca et al., (2005) state that market orientation positiveley affects business performance, which is confirmed in this research.

A significant change in the relationshiop between orientation on innovativeness and business performance in the two time periods can be seen in earlier research studies by various authors. Narver et al. (2004) argue that a proactive market orientation plays a very important role in making a new product successful. Moreover, in the present turbulent business environment, companies with a high level of market orientation will actively strive for innovative activities and communication with customers, as opposed to companies with a low level of market direction. Companies today do business in a very demanding global market where consumer standards are set very high, and fufilling consumer requirements and wishes is becoming a precondition for staying competitive on the market. In addition to meeting customer standards, companies should intensively focus on the goals and their realisation within the organisation. In intra-organizational activities, they should strive to apply new technology in all segments, which would further the development of company infrastructure.

The main findings of this study indicate that market orientation has a positive and direct influence on the innovativeness and on business performance of the company and this influence did not change significantly in 2019 compared to 2016. Positive and statistically significant influence was identified on all segments of market orientation (customer orientation, competitor orientation and interfunctional coordination); on innovativeness (product innovativeness, process innovativeness and on business system innovativeness); as well as on business performance (on both quantitative and qualitative effects).

This paper has made several contributions to the existing literature. Firstly, it studies the market orientation on the sample of Croatian companies in the two observed periods. Secondly, this study theoretically explores the role of innovativeness at the company operational level. The analysis of the customer orientation relationship that changed significantly in the two observed periods shows that human resources directly influence product innovation and process innovativeness. This paper complements the field of knowledge by providing empirical insight into the relationship between market orientation and innovativeness of companies operating in Croatia. We assume that the more marketing research is made in different national environment, and the more reliable and valid concepts are developed, the more practical managerial implications will be born. Hence

the marketing concept can contribute to the macro well-being of less developed societies as well. The purpose of the paper and the survey of Croatian firms make efforts in this direction.

Creating innovative marketing systems based on good practice in customer relations is essential today, since they can be the key to the development and survival of small and medium-size enterprises. Despite significant and positive changes in managing the systems of consumer relationship, it is still common for marketing departments not to be sufficiently intergrated into a single system. Many companies do not have the resources to employ marketing specialists or to develop marketing departments. In those circumstances, the lack of marketing specialisation may imply an unclear responsibility in companies of who is in charge of gathering information about customers and competitors. The contribution of this study, with its theoretical knowledge about market orientation, is in demonstrating that companies, especially production ones, must innovate and be oriented towards consumers and markets.

This study has certain limitations. Its scope is limited to Croatian companies and future research should seek to collect data from other countries in order to generalize the results. Market orientation offers different starting points for discussing innovativeness and long term business performance of companies, particularly in the observed periods. Although the findings of this study can be implemented in developing a market orientation strategy in companies, other relevant factors exist that could significantly afftect company competitiveness and they should be taken into account.

Future research could also focus on developing market orientation in different phases of innovation process, in different industries, in different countries. A challenge for many companies is not so much whether to innovate or not, but how to create possibilities to access new markets, and how to increase their competitive advantage.

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# LONGITUDINALNO ISTRAŽIVANJE: UTJECAJ IZMEĐU TRŽIŠNE ORIJENTACIJE, INOVATIVNOSTI I POSLOVNE USPJEŠNOSTI

### Helena Šlogar

Dr. sc., docentica, Libertas međunarodno sveučilište, Trg J. F. Kennedy 6b, 10 000 Zagreb, Hrvatska; *e-mail*: hslogar@libertas.hr

#### **SAŽETAK**

Cilj ovog istraživanja je provesti longitudinalno istraživanje utjecaja između tržišne orijentacije, inovativnosti i poslovne uspješnosti. Studija nastoji ispitati moguće promjene u modelu utjecaja tržišne orijentacije na inovativnost i poslovanje u razdoblju 2016. - 2019. u hrvatskim tvrtkama. Za analizu podataka koristili smo se regresijskom i kovarijantnom analizom. Rezultati pokazuju da utjecaj tržišne orijentacije, usmjerenosti na konkurenciju i međufunkcionalne koordinacije na inovativnost i poslovnu uspješnost nije pokazao statistički značajne razlike u razdoblju 2016. - 2019. u hrvatskim tvrtkama. Istodobno, utjecaj orijentacije na kupca na inovativnost, inovativnost proizvoda, inovativnost poslovnog sustava i na poslovni učinak pokazao je značajnu statističku promjenu. Empirijski rezultati daju posljedične teorijske implikacije i implikacije na menadžment u provođenju tržišne orijentacije, što bi omogućilo povećanje konkurentnosti poduzeća na tržištu.

**Ključne riječi:** inovativnost, tržišna orijentacija, orijentacija na potrošača, orijentacija na konkurenciju, interfunkcionalna koordinacija