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EFFECTS OF CUSTOMER RELATIONSHIP MANAGEMENT ON ORGANIZATIONAL PERFORMANCE

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Abstract: Customer Relationship Management (CRM) is a process that focuses on initiating, maintaining, and retention of long-term customer relationships with the help of information technology, to achieve better economic performance. Therefore, the paper examines the effects of CRM dimensions on financial and marketing performance, and moderates the role of an image on these relationships. The analysis included 106 organizations on the territory of the Republic of Serbia. The paper uses descriptive statistical analysis, correlation analysis, multiple regression analysis, and moderation regression analysis. The obtained results show that there is a negative statistically significant impact of CRM technology on financial and marketing performance. On the other hand, the existence of a positive statistically significant impact of consumer knowledge management on financial and marketing performance was found, as well as the fact that the image has negative moderating effects on these two relationships. The contribution of this paper is reflected in the unique structure of the research model, in the multidimensional observation of CRM, and measuring the impact of CRM dimensions on financial and marketing performance. Given that previous research has focused more on testing the main effects, rather than the interaction effects, the originality of the work is also contributed by testing the moderator role of the image on the relationship between CRM dimensions and organizational performance.

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1. Introduction

Due to the growing complexity and dynamism of the global business environment and increasingly intense competition, organizations are constantly striving to attract new and retain as many existing customers as possible. The adequate management of consumer relations results in greater consumer loyalty, as well as long-term profitability of organizations (Chen & Popovich, 2003). Thus, deepening the consumer relations contributes to partnerships and longer-term cooperation. The importance of this is reflected in the fact that the cost of attracting new consumers is five times higher than the cost of retaining the existing ones (Mittal & Lassar, 1998). In this regard, it is very important to identify and meet their needs and expectations, which indicates the importance of customer relationship management (CRM) (Rafiki et al., 2018).

Akroush et al. (2011) cite two drivers of growing interest in consumer relations management - advances in information technology and the growing importance of a business philosophy that implies consumer orientation. Nguyen & Varing (2013) believe that CRM is a philosophy embedded in an organization and supported by an information system based on a large consumer database. They state that this technology enables organizations to understand the needs of consumers better, identify profitable consumers, and develop strategies for acquiring and retaining them. According to Hendricks et al. (2007), CRM systems provide an infrastructure that facilitates building long-term customer relationships while reducing the duplication of consumer data by providing a centralized database at the organization level.

Numerous studies have indicated that CRM has a positive impact on organizational performance (Reinartz et al., 2004; Sin et al., 2005; Akroush et al., 2011; Mohammad et al., 2013). On the other hand, Reinartz et al. (2004) point out that a large number of companies spend huge sums of money on consumer relations management, and do not achieve the expected improvement in organizational performance. The reason for this is reflected in the failure of the company to adequately apply its CRM resources to build superior capabilities in customer relationship management and achieve a competitive advantage (Vang & Fang, 2012). In this regard, CRM can be considered one of the most important resources of the organization, which can be used to improve the overall performance (Rafiki et al., 2018).

According to Sin et al. (2005), Customer Relationship Management (CRM) is a multidimensional tool consisting of four key dimensions: focus on key customers, CRM organization, CRM technology, and knowledge management. Accordingly, the subject of the research in this paper are the key dimensions of CRM and their relationship with the organizational (financial and marketing) performance. Also, the paper explores the image as a moderator of the relationship between CRM and organizational performance. The main goal of this paper is to examine the effects of CRM dimensions on the financial and marketing performance of organizations in the Republic of Serbia. In addition, the aim is to examine whether the image has a moderating role in the relationship between CRM dimensions and financial and marketing performance.

The paper is structured in four parts. The first part of the paper includes a review of the literature which provides theoretical and empirical findings on the effects of CRM dimensions on organizational performance. The second part of the paper refers to the research methodology, the third to the results of the conducted empirical research, and the fourth part presents the discussion of the obtained results.

2. Literature review

CRM is a process that focuses on initiating, maintaining, and retention of long-term customer relationships with the help of information technology to achieve a better economic performance (Greve & Albers, 2006). Sin et al. (2005) defined CRM as a comprehensive strategy and process that enables an organization to identify, acquire, retain and nurture profitable consumers, by building and maintaining long-term relationships with them. Observing CRM as a multidimensional construction focusing on key consumers, CRM organization, CRM technology, and knowledge management, Sin et al. (2005) developed an appropriate research model to examine the impact of these four dimensions on organizational (financial and marketing) performance. This model is the scientific basis for this research.

2.1. Organizational performance

Previous research has shown that CRM has a statistically significant positive impact on organizational performance (Reinartz et al., 2004; Sin et al., 2005; Akroush et al., 2011; Mohammad et al., 2013). Organizational performance can be assessed using the subjective and objective measures (Rafiki et al., 2019). Unlike the objective performance, which is measured based on the official reports of organizations, the performance can also be subjectively assessed bythe representatives of an organization. The subjective performance measures have been used in many studies (Sin et al., 2005; Akroush et al., 2011; Garrido-Moreno & Padilla-Melendez, 2011; Mohammad et al., 2013; Rafiki et al., 2019; Ullah et al.,2020). In these studies, the subjective measurement was performed by assessing the performance of the organization compared to the main competitors in the market. The research has shown that the subjective assessments are strongly correlated with objective measures of the performance (Venkatraman, 1990; Jaakkola et al., 2009). In addition, Doyle & Wong (1998) pointed out that the subjective approach is a reliable and valid method of measuring performance. In some studies, the performance is subjectively measured from a financial and marketing perspective (Sin et al., 2005; Akroush et al., 2011; Garrido-Moreno & Padilla-Melendez, 2011). From the above studies, financial performance was measured by the subjective assessment of profitability, sales growth, market share, and sales revenue compared to major competitors. Satisfaction, loyalty, and consumer trust in the organization were compared with the competition to assess marketing performance.

2.2. Focus on consumers

Focusing on consumers means putting them at the center of all the organization's activities to build long-term relationships with them (Benturm & Stone, 2005). It can also be defined as a set of activities, behaviors, and beliefs that give a high priority to consumer interests and continuously create a superior value for them (Cai, 2009). Organizations focus on consumers to achieve their long-term satisfaction and loyalty (Mohammad et al., 2013). Liu et al. (2003) believe that focusing on consumers helps the organization understand them, and thus meet the needs of consumers appropriately. The focus of organizations on consumers is the core of successful marketing, increased customer satisfaction, as well as the overall organizational performance (Dowling, 1975). The ocus on consumers is an important factor for the successful implementation of CRM (King & Burgess, 2008). Organizations' need to cultivate a culture of consumer focuses to gain a competitive advantage (Mohammad et al., 2013). Kim (2008) concluded that a focus on consumers has positive effects on CRM performance. Numerous studies have concluded that there is a positive relationship between the consumer focus and the organizational performance (Sin et al., 2005; Lui et al., 2003; Garrido-Moreno & Padilla-Melendez, 2011; Soltani et al., 2018; Alqershi, 2020). In addition, Mohammad et al (2013) showed that a focus on consumers has a positive impact on financial as well as marketing performance. Based on these studies, the following hypotheses were formed:

H1a: Focus on consumers has a statistically significant impact on financial performance.

H1b: Focus on consumers has a statistically significant impact on marketing performance.

2.3. CRM organization

The application of CRM leads to significant changes in the way business processes are implemented in organizations (Hoffman & Kashmeri, 2000). The success of CRM implementation depends on the way of redesigning the organizational structure and process (Mohammad et al., 2013). In addition to technological equipment, appropriate operational procedures are necessary (Ku, 2010). Directing time and resources to discover and meet the consumer needs contributes to a more successful acquisition and retention of consumers (Nykamp, 2001). The role of employees is very important in managing the consumer relations. The most difficult part of applying CRM is not technology, but employees (Krauss, 2002). Sin et al. (2005) point out that CRM requires that everyone in the organization understand and share the common goal of building and maintaining customer relationships. Several authors have concluded that the organization of CRM has a positive impact on the success of CRM (Soltani, 2018), as well as on marketing and financial performance (Akrouch et al., 2011; Sin et al., 2005). Based on the above, it is assumed that:

H2a: CRM organization has a statistically significant impact on financial performance.

H2b: CRM organization has a statistically significant impact on marketing performance.

2.4. CRM technology

CRM technology is an information technology used to better manage customer relationships and support organizations in sales, marketing, and service delivery activities (Wang & Feng, 2012). The development of information and communication technologies has greatly facilitated the processes of collecting, storing, integrating, analyzing, and sharing consumer information (Sin et al., 2005). Thanks to integrated data, organizations can tailor their offer to individual consumers and maintain profitable relationships with them (Mohammad et al., 2013). CRM technology enables an organization to offer a customized service of higher quality, but at a lower cost, so many customer-focused activities would be impossible without the right technology (Garrido-Moreno & Padilla-Melendez, 2011). CRM software systems greatly assist employees in providing services to consumers (Sin et al., 2005). CRM technology can help organizations increase customer satisfaction, and loyalty, and build long-term relationships with them (Butler, 2000). It is important to point out that CRM technology significantly determines the success of CRM (Kim et al., 2003; Soltani, 2018). The research has shown that CRM technology has positive effects on the organizational performance (Christy, 1996; Abdullateef, 2010; Akroush et al., 2011; Kasim & Minai, 2009). Based on the above, the following hypotheses will be tested:

H3a: CRM technology has a statistically significant impact on financial performance.

H3b: CRM technology has a statistically significant impact on marketing performance.

2.5. Knowledge management

Knowledge management refers to the collection, organization, manipulation, and sharing of implicit and explicit data with internal and external users (Abdullateef et al., 2010). Chetioui et al. (2017) believe that CRM can only be successful if consumer data and information are effectively transformed into consumer knowledge. The knowledge of key consumers is essential for customer relationship management (Stefanou et al., 2003). The goal of generating this knowledge is to provide a complete overview of consumer information, i.e.a “360-degree consumer view” (Sin et al., 2005). Collecting and analyzing consumer information allows organizations to better understand their requirements (Garrido-Moreno & Padilla-Melendez, 2011), develop highly personalized offerings (Sigala, 2005), and build better consumer relationships (Sin et al., 2005). In addition, as one of the key drivers of innovation (Zlatanović & Mulej, 2015), knowledge management enables organizations to gain a competitive advantage (Hallin & Marnburg, 2008). Numerous studies have concluded that knowledge management has a positive impact on organizational performance (Akroush et al., 2011; Mohammad et al., 2013; Yim et al., 2005; Slavković & Babić, 2013). Based on the above, the following hypotheses were formed:

H4a: Knowledge management has a statistically significant impact on financial performance.

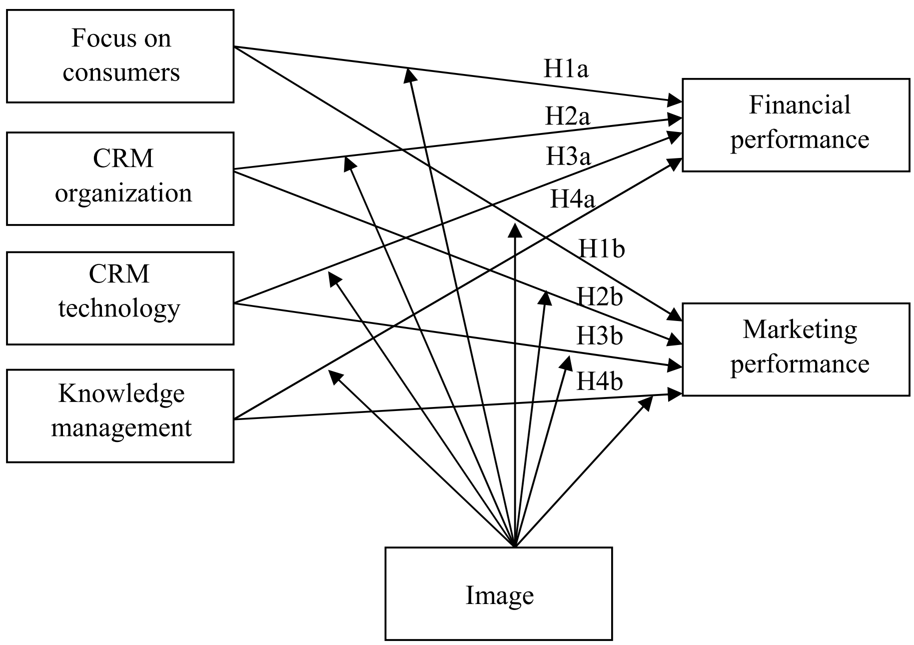
H4b: Knowledge management has a statistically significant impact on market performance.

2.6. Image

Mishra et al. (2014) found that the implementation of a consumer relationship management strategy has a positive effect on an organization’s image. The image of an organization allows its offer to be implanted in the minds of consumers (Propheto et al., 2020). Vesal et al. (2020) point out that a favorable image enables the organization to gain a strong market position and stand out from the competition. They concluded that a good image has positive effects on market performance. In addition, a favorable image has an indirect impact on the marketing performance of the organization (Propheto et al., 2020). In their study, Chen & Ching (2007) pointed out that image acts as a moderating factor between the consumer loyalty and the consumer relationship management. Mishra et al. (2014) concluded that image has a positive moderating impact on the relationship between the phases of customer relationship management (initiating and maintaining relationships) and corporate performance.

There are a few studies in the literature examining the moderating impact of a factor on the relationship between CRM dimensions and organizational performance (Ullah et al., 2020; AlQershi et al., 2020). This represents a corresponding research gap that has been observed in literature and which this research seeks to eliminate. According to the authors, no study has been conducted so far to test the moderator role of the image in relation to CRM dimensions and the organizational performance, which is an important research motivation and contributes to reducing this research gap. Figure 1 shows the research model.

Figure 1. The research model



Source: Authors

3. Research methodology

To examine the effects of CRM application on organizational performance, an empirical study used a survey method to collect primary data. Based on the literature review, a questionnaire was created that consisted of appropriate findings that measured CRM dimensions, image, and organizational performance. CRM dimensions were measured over 25 statements (Sin et al., 2005; Garrido-Moreno & Padilla-Melendez, 2011; AlQershi et al., 2020; Abdullateef, 2010; Mohammad et al., 2013; Croteau & Li, 2003; Wang & Feng (2012); Ullah et al., 2020), and the image of over 5 statements (Vesal et al., 2020) with which the respondents expressed the degree of agreement on the seven-point Likert scale (1 - I absolutely disagree with the statement, 7 - I absolutely agree with the statement). Organizational performance was measured by comparing it with the performance of the main competitors (grade 1 - much worse performance compared to the competition, grade 7 - much better performance compared to the competition). Based on the previous research (Sin et al., 2005; Akroush et al., 2011; Garrido-Moreno & Padilla-Melendez, 2011), organizational performance was assessed from the financial (4 items) and marketing perspective (3 items).

The questionnaire was distributed to 274 organizations in the Republic of Serbia, and 106 organizations responded to it (response rate of 38.69%). To obtain the relevant answers, the questionnaire was filled in by those employees in the organizations whose activities are directly related to consumers or who work in sectors on activities related to consumers and who thus come into direct contact with them. The organizations of different sizes, which perform production or service activities, participated in the research (Table 1).

Table 1. Structure of organizations involved in the research

		Number of organizations	Percentage
Number of employees	Up to 49	27	25,47%
	50-200	24	22,64%
	Over 200	55	51,89%
Activity	Manufacturing	38	35,85%
	Service	68	64,15%

Source: Authors

Data analysis was conducted in the statistical package for social sciences IBM SPSS. The descriptive statistical analysis was used to determine the degree of agreement with the findings, as well as the reliability analysis to determine the internal consistency of the formed variables. The correlation analysis was performed to determine the degree of linear correlation of the formed variables. The regression analysis determined the influence of CRM dimensions (focus on consumers, CRM organizations, CRM technology, and knowledge management) on financial and marketing performance, and moderation regression analysis examined the moderator role of an image on relationships: CRM dimensions - financial performance and CRM dimensions - marketing performance.

4. Research results

To determine in which statements the highest degree of agreement was expressed, as well as in which the most homogeneous / most heterogeneous attitudes were expressed, the descriptive analysis was conducted (Table 2).

Table 2. Results of descriptive statistical analysis analysis

Statement	Mean	St.dev.
The organization's business goals are focused on customer satisfaction.	5,89	1,22
The organization often measures consumer satisfaction.	5,65	1,39
The organization offers personalized products and services to key consumers.	5,33	1,45
Your employees are focused on customer relationships.	6,03	1,07
The organization is committed to meeting the needs and expectations of consumers.	5,92	1,02
The consumer database is frequently updated.	5,79	1,42
Your employee training programs are designed to develop the skills needed to acquire and deepen customer relationships.	5,48	1,42
Your organization has established clear business goals related to the acquisition, development, retention, and reactivation of consumers.	5,49	1,32
Your organization invests time and resources in customer relationship management.	5,67	1,31
In your organization, business processes are designed to improve the quality of interaction with consumers.	5,49	1,34
All employees in your organization understand and share the common goal of building and maintaining a relationship with spending.	5,16	1,53
Top management gives high priority to customer relationship management.	5,85	1,41
Your organization has the right hardware to serve your customers.	5,24	1,77
Your organization has the right software to serve your customers.	5,58	1,68
Your organization has a good information system and telecommunications infrastructure.	5,77	1,41
Your organization has the necessary infrastructure to collect consumer data from all points of interaction with consumers.	5,43	1,53
Your computer technology can help create customized offers for your consumers.	5,54	1,40
Individual consumer information is available at the right time.	5,56	1,48
The organization can integrate all acquired consumer information into a comprehensive, centralized, up-to-date database.	5,52	1,55
The organization can make quick decisions due to the availability of knowledge about consumers.	5,29	1,41
The organization can ensure fast decision-making due to the precision of knowledge.	5,38	1,42
Your organization fully understands the needs of your key customers	5,47	1,42

by relying on knowledge.		
An organization can respond quickly to consumers due to its knowledge of consumers.	5,53	1,38
The organization can provide up-to-date information about consumers due to fast and accurate interaction with them.	5,60	1,29
The organization has established processes for applying knowledge to solving new problems.	5,45	1,34
Consumers trust your organization.	5,98	1,01
Consumers admire your organization.	5,47	1,21
Your organization is credible.	6,01	1,15
Your organization has a good image.	5,95	1,11
Your organization has a good reputation.	6,02	1,14
Evaluation of performance in relation to the main competitors (1 - much worse performance in relation to the competition, 7 - much better performance in relation to the competition)		
Profitability	5,69	1,21
Sales growth	5,75	1,16
Increased market share	5,64	1,32
Increase in sales revenue	5,64	1,33
Consumer satisfaction level	5,65	1,06
Consumer loyalty	5,75	1,16
Consumer confidence in the organization	5,89	1,11

Source: Authors

The highest degree of agreement was expressed in the statement that employees are focused on customer relations, which shows the highest value of the arithmetic mean (6.03). In addition, favorable attitudes were expressed in the statements that the organization has a good reputation (arithmetic mean is 6.02) and that the organization is credible (arithmetic mean is 6.01). On the other hand, the lowest degree of agreement occurs when all employees in the organization understand and share the common goal of building and maintaining relationships with consumers, which is expressed by the lowest value of the arithmetic mean (5.16).

The most homogeneous attitudes occur with the statement that refers to consumer confidence in the organization, due to the lowest value of the standard deviation, which is 1.01. Homogeneity in attitudes is also present in terms of the organization's commitment to meeting the needs and expectations of the consumers (standard deviation is 1.02). The most heterogeneous attitudes were expressed regarding the possession of appropriate hardware that serves the consumers, due to the highest value of the standard deviation (1.77).

Table 3. Reliability analysis - values of the Cronbach's alpha coefficient

Variables	Cronbach's alpha
Focus on consumers	0,782
CRM organization	0,908
CRM technology	0,915
Knowledge management	0,949
Image	0,913
Financial performance	0,874
Marketing performance	0,921

Source: Authors

All findings from the questionnaire can be grouped into seven variables (focus on consumers, CRM organization, CRM technology, knowledge management, image, financial performance, and marketing performance). It is important to determine whether the findings that make up these variables are internally consistent. The results of the reliability analysis are shown in Table 3.

Since the value of the Cronbach's alpha coefficient for each formed variable is higher than the lowest required value of 0.7 proposed by DeVellis (2003), it can be concluded that the findings are internally consistent, i.e. that all variables are reliable.

Table 4. Correlation analysis

Variables	1	2	3	4	5	6	7
1. Focus on consumers	1	0,785**	0,642**	0,616**	0,340**	0,252**	0,290**
2. CRM organization	0,785**	1	0,647**	0,677**	0,340**	0,301**	0,326**
3. CRM technology	0,642**	0,647**	1	0,684**	0,235*	0,218*	0,224*
4. Knowledge management	0,616**	0,677**	0,684**	1	0,570**	0,518**	0,546**
5. Image	0,340**	0,340**	0,235*	0,570**	1	0,639**	0,800**
6. Financial performance	0,252**	0,301**	0,218*	0,518**	0,639**	1	0,699**
7.Marketing performance	0,290**	0,326**	0,224*	0,546**	0,800**	0,699**	1

** The correlation is significant at the level $p < 0,01$

* The correlation is significant at the level $p < 0,05$

Source: Authors

Correlation analysis determined that there is a statistically significant positive linear correlation between all pairs of variables. The highest degree of linear correlation is present between the image and marketing performance ($r = 0.800$, $p < 0.01$), and the lowest between CRM technology and financial performance ($r = 0.218$, $p < 0.05$). Table 4 shows the results of the correlation analysis.

In addition, the correlation analysis showed that there is a strong positive linear relationship between all four dimensions of CRM (consumer focus, CRM organization, CRM technology, and knowledge management), as evidenced by Pearson coefficient values greater than 0.6, recommended by Cohen (1988). All these values are statistically significant at the level of 0.01. Observing only these four variables, it is noticed that the highest degree of linear correlation is present between the focus on consumers and the CRM organization, which shows the highest value of Pearson's coefficient, which is 0.785. The lowest degree of linear correlation occurs between focus on consumers and knowledge management (Pearson's coefficient is 0.616).

To test the effects of four independent variables (four dimensions of CRM - consumer focus, CRM organization, CRM technology, and knowledge management) on financial and marketing performance, two multiple regression analyses were applied. Based on Table 5, it is concluded that 30.4% of financial performance variability is described by CRM dimensions, and 34% of marketing performance variability is described by CRM dimensions, showing the values of determination coefficients of 0.304 and 0.340, respectively. Both values are significant at the 0.01 level. For all the variables in the model, the value of the VIF coefficient is less than 10, as suggested by Hair et al. (1995), which means that multicollinearity is not a problem, i.e. that the data are suitable for multiple regression analysis.

Table 5. Results of multiple regression analysis

	Financial performance				Marketing performance			
Variables	β	t	sig.	VIF	β	t	sig.	VIF
Focus on consumers	-0,027	-0,190	0,849	2,853	0,029	0,209	0,835	2,853
CRM organization	0,010	0,067	0,947	3,158	0,000	-0,001	0,999	3,158
CRM technology	-0,249	-2,004	0,048**	2,248	-0,292	-2,409	0,018**	2,248
Knowledge management	0,699	5,552	0,000***	2,298	0,728	5,938	0,000***	2,298
	$R^2 = 0,304$; $F = 11,029^{***}$ ($p < 0,01$)				$R^2 = 0,340$; $F = 12,996^{***}$ ($p < 0,01$)			

*** The value is significant at the level $p < 0,01$

** The value is significant at the level $p < 0,05$

Source: Authors

The regression analysis showed that CRM technology has a statistically significant negative impact on financial (β = -0.249, r <0.05), as well as on marketing performance (β = -0.292, r <0.05), which confirms the hypotheses H3a and H3b. In addition, multiple regression analysis showed that knowledge management has a statistically significant positive impact on financial (β = 0.699, r <0.01) and marketing performance (β = 0.728, r <0.01), which confirmed the H4a hypotheses. and H4b. On the other hand, it was found that the remaining two CRM dimensions (focus on consumers and CRM organization) have no statistically significant impact on either financial or marketing performance. This rejects hypotheses H1a, H1b, H2a, and H2b.

Table 6. Results of moderation regression analysis

	Financial performance				Marketing performance			
Variables	β	t	sig.	VIF	β	t	sig.	VIF
Focus on consumers	0,001	0,010	0,992	3,011	0,051	0,381	0,704	3,011
CRM organization	0,113	0,767	0,445	3,410	0,094	0,669	0,505	3,410
CRM technology	-0,210	-1,648	0,103	2,557	-0,239	-1,954	0,054*	2,557
Knowledge management	0,479	3,353	0,001***	3,217	0,496	3,615	0,000***	3,217
Focus on consumers x Image	0,114	0,740	0,461	5,990	0,133	0,708	0,481	5,990
CRM organization x Image	-0,183	-0,922	0,359	6,188	-0,170	-0,892	0,374	6,188
CRM technology x Image	0,131	0,929	0,355	3,157	-0,046	0,339	0,735	3,157
Knowledge management x Image	-0,308	-2,670	0,009***	2,106	-0,312	-2,811	0,006***	2,106
	$R^2 = 0{,}386$; $F = 7{,}614^{***}$ ($p < 0{,}01$)				$R^2 = 0{,}432$; $F = 9{,}231^{***}$ ($p < 0{,}01$)			

*** The value is significant at the level p < 0,01

* The value is significant at the level p < 0,1

Source: Authors

After examining the main effects of independent variables on financial and marketing performance, interaction effects were determined. For this purpose, a moderation regression analysis was performed. The variable image was used as a moderator. Generally speaking, the moderator is a qualitative or quantitative variable that affects the direction and/or strength of the relationship between the independent and dependent variables (Baron & Kenny, 1986). To achieve the interaction effects, the independent variables and moderators were centered, and then each centered independent variable was multiplied by the centered moderator. Centering is carried out to avoid the problem of multicollinearity that can occur when calculating the interaction effects (Marinković & Kalinić, 2017).

It was found that the dimensions of CRM and image described 38.6% of the variability of financial performance and 43.2% of the variability of marketing performance, which shows the values of the coefficient of determination of 0.386 and 0.432, respectively. Both values are significant at the 0.01 level. Since the value of the VIF coefficient is less than 10 for all variables, multicollinearity is not a problem and the data are suitable for conducting moderation regression analysis (Table 6).

Moderation regression analysis showed that two of eight interaction effects were statistically significant. Image has a statistically significant negative moderation effect on the ratio of knowledge management and financial performance ($r = 0.009 < 0.01$), as well as on the ratio of knowledge management and marketing performance ($r = 0.006 < 0.01$), which shows negative values of the β coefficient $\beta = -0.308$ and $\beta = -0.312$). This means that by strengthening the image, the relationship between knowledge management and financial performance is weak, i.e. the relationship between knowledge management and marketing performance.

5. Discussion

The analysis of the results found that the focus on consumers does not have a statistically significant impact on marketing and financial performance, which is in line with the results of several previous studies (Akroush et al., 2011; Rafiki et al., 2019). On the other hand, Sin et al. (2005) and Mohammad et al. (2013) came to opposite conclusions. Focusing on consumers is something that consumers themselves now take for granted, so focusing organizations on consumers does not guarantee superior performance. Therefore, the focus on consumers, in itself, is not enough to achieve good performance, without adequate technology, knowledge management, and generally without providing quality service.

Regression analysis also determined that the CRM organization does not have a statistically significant impact on organizational performance. This result is not expected, but it can be attributed to the fact that organizations in the Republic of Serbia have an organizational culture in which the great importance of managing consumer relations is still not understood. For the successful implementation of CRM, it is necessary to make an appropriate allocation of resources, as well as redesign business processes. The same results were achieved by AlQershi et al. (2020), and the opposite by Akroush et al. (2011), Sin et al. (2005), and Mohammad et al. (2013).

Research has shown that CRM technology has a negative statistically significant impact on financial and marketing performance, which is in contrast to research that has proven to have a positive impact (Akroush et al., 2011; Sin et al., 2005). On the other hand, Reinartz et al. (2004) concluded that CRM technology does not have a statistically significant impact on performance. The obtained results show that investments in CRM technology are not always profitable. If organizations view CRM only as a technology tool and not as part of a business strategy focused on meeting consumer needs, technology investment will not contribute to improving performance. Therefore, CRM technology must be adequately integrated with the other three CRM dimensions. However, these negative effects of CRM technology can only relate to the short term. It is possible that the organizations had high expenditures for the purchase of technology so the positive effects have not been reflected yet. So, if investments in CRM technology are recent, positive results and return on investment could be achieved in the long run. Finally, the negative effects of CRM technology on performance can be attributed to the fact that employees are not adequately trained to work in CRM software.

The results of the regression analysis showed that knowledge management is the only CRM dimension that has a statistically significant positive impact on financial and marketing performance. Thus, organizations adequately use and manage the acquired data and information about their consumers. These results are consistent with several previous studies (Sin et al., 2005; Mohammad, et al., 2013; Garrido-Moreno & Padilla-Melendez, 2011), inconsistent with research conducted by AlQershi et al.(2020), and are partly in line with the conclusions reached by Akroush et al. (2011) (knowledge management has a statistically significant positive impact on financial performance and no impact on marketing performance).

Finally, it was found that the image has a negative moderating effect on the relationship between knowledge management and financial and marketing performance. In other words, strengthening the image weakens the impact of knowledge management on financial and marketing performance. This means that in organizations that have a strong image, the possession and adequate the use of consumer information has less of an impact on performance than in organizations that do not have a strong image. In this sense, a strong image can compensate for the consequences of inadequate consumer knowledge management, so it will not affect organizational performance. On the other hand, organizations with a weaker image need to pay more attention to knowledge management to achieve good results. As a result, these organizations may improve their image in this way.

6. Conclusion

Starting from the main research motivation reflected in the elimination of the gap in the literature, which refers to a small number of studies examining the effects of CRM dimensions on organizational (financial and marketing) performance, as well as examining how image as a moderator affects this relationship, it can be concluded that the work provides an appropriate scientific and social contribution.

The scientific contribution of this paper is reflected in the unique structure of the research model that has a scientific foundation (Sin et al., 2005; Akroush et al., 2011; Mohammad et al., 2013; AlQershi et al., 2020). The contribution is also in the multidimensional observation of CRM since in many papers CRM is observed through a one-dimensional approach, without a component analysis. An additional contribution of this research is measuring the impact of CRM dimensions on financial and marketing performance. Although several foreign research deal with this issue, no study of this type has been recorded in the domestic literature, so the acquired knowledge will be a good basis for the future research of this kind in the Republic of Serbia. The originality of this research is reflected in the acquisition of new knowledge about the moderating role of an image on the relationship between CRM dimensions and organizational performance, given that in domestic and foreign literature, there are no studies that have dealt with the above. The previous research has focused on testing the main rather than the interaction effects.

The social contribution of this paper is reflected in the recommendations of organizations related to the successful implementation of customer relationship management (CRM). The research emphasizes the importance of knowledge management for achieving good business results. Organizations should adequately collect, analyze and use consumer data and information to build long-term relationships with them. Constantly getting to know consumers and their needs is a necessary segment of a successful business. In addition, consumer knowledge must be available to everyone in the organization, especially those who are in direct contact with consumers. Organizations that do not have a strong image can compensate for the positive effects of an image on organizational performance by managing consumer knowledge. Next, it is important to emphasize the need to approach the implementation of CRM from a holistic perspective. Successful customer relationship management is not just enough to get the right hardware and software. First, employees must have the appropriate skills to work in software. Then, it is necessary to adequately train employees to acquire skills for deepening relationships with consumers. In addition, top managers must give high priority to customer relationship management, so that other employees understand the importance and give importance to consumers. In addition, a system of rewarding employees based on successful customer service can contribute to a greater focus of employees towards meeting the goal of building long-term relationships with the consumers. Therefore, it is very important to create an organizational culture of consumer orientation, reorganize business processes, as well as to encourage employees to consider the consumers as their main priorities. In addition to the above, investments in adequate software are needed, since their application can be used for business simulations, consumer segmentation, as well as better adaptation of service offers to the needs of attractive segments. Also, the application of information technology to segment consumers, and identify their preferences and habits is the basis for creating adequate loyalty programs. In addition, sending personalized offers to the most valuable consumers will create a sense of trust, commitment, and satisfaction, thus developing long-term relationships between the organization and consumers.

There are several limitations to the research conducted. First, insufficient sample size can affect the reliability of results and conclusions. Second, the research was conducted on the territory of the Republic of Serbia, so the results cannot be generalized to other countries. Third, subjective performance measures were used in the research, which may result in obtaining biased responses from the respondents. Fourth, in several organizations, lower-level employees answered questions from the questionnaire regarding top management, and subjectivity is possible when giving answers.

The directions of future research stem from the stated limitations. This type of research could be conducted in the surrounding countries, and then the results obtained will be compared with the given research. In addition, future research could use objective performance measures instead of subjective ones, to eliminate the bias of the respondents. The proposal for future research is that in addition to the image, another variable should be considered as a potential moderator (size of organizations, activities of organizations), as well as to make an analysis by segments (service-manufacturing organizations; micro-small-medium-large organizations).

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EFEKTI UPRAVLJANJA ODNOSIMA SA POTROŠAČIMA NA ORGANIZACIONE PERFORMANSE

Apstrakt: Upravljanje odnosima sa potrošačima (eng. Customer Relationship Management - CRM) predstavlja proces koji se fokusira na iniciranje, održavanje i zadržavanje dugoročnih odnosa sa potrošačima uz pomoć informacione tehnologije, radi postizanja boljih ekonomskih performansi. Shodno tome, u radu su ispitivani efekti CRM dimenzija na finansijske i marketinške performanse, kao i moderatorska uloga imidža na navedene odnose. Analizom je obuhvaćeno 106 organizacija na teritoriji Republike Srbije. U radu je primenjena deskriptivna statistička analiza, korelaciona analiza, višestruka regresiona analiza i moderacijska regresiona analiza. Dobijeni rezultati pokazuju da postoji negativan statistički značajan uticaj CRM tehnologije na finansijske i marketinške performanse. S druge strane, utvrđeno je i postojanje pozitivnog statistički značajnog uticaja upravljanja znanjem o potrošačima na finansijske i marketinške performanse, kao i to da imidž ima negativne moderatorske efekte na ova dva odnosa. Doprinos rada se ogleda u jedinstvenoj strukturi istraživačkog modela, u višedimenzionalnom posmatranju CRM-a, kao i u merenju uticaja CRM dimenzija na finansijske i marketinške performanse. S obzirom da su prethodna istraživanja više fokusirana na testiranje glavnih, nego interakcijskih efekata, originalnosti rada doprinosi i testiranje moderatorske uloge imidža na odnos CRM dimenzija i organizacionih performansi.

Ključne reči: CRM, fokus na potrošače, organizacija CRM-a, CRM tehnologija, upravljanje znanjem, organizacione performanse, imidž

Annex

Questionnaire

Focus on consumers

The organization's business goals are focused on customer satisfaction.
An organization often measures consumer satisfaction.
The organization offers personalized products and services to key consumers.
Your employees are focused on customer relationships.
The organization is committed to meeting the needs and expectations of consumers.
The consumer database is frequently updated.

CRM organization

Your employee training programs are designed to develop the skills needed to acquire and deepen customer relationships.
Your organization has established clear business goals related to the acquisition, development, retention, and reactivation of consumers.
Your organization invests time and resources in customer relationship management.
In your organization, business processes are designed to improve the quality of interaction with consumers.
All employees in your organization understand and share the common goal of building and maintaining a relationship with spending.
Top management gives high priority to customer relationship management.

CRM technology

Your organization has the right hardware to serve your customers.
Your organization has the right software to serve your customers.
Your organization has a good information system and telecommunications infrastructure.
Your organization has the necessary infrastructure to collect consumer data from all points of interaction with consumers.
Your computer technology can help create customized offers for your consumers.
Individual consumer information is available at the right time.
The organization can integrate all acquired consumer information into a comprehensive, centralized, up-to-date database.

Knowledge management

The organization can make quick decisions due to the availability of knowledge about consumers.
The organization can ensure fast decision-making due to the precision of knowledge.
Your organization fully understands the needs of your key customers by relying on knowledge.
An organization can respond quickly to consumers due to its knowledge of consumers.
The organization can provide up-to-date information about consumers de to fast and accurate interaction with them.
The organization has established processes for applying knowledge to solving new problems.

Image

Consumers trust your organization.
Consumers admire your organization.
Your organization is credible.

Your organization has a good image.
Your organization has a good reputation.

Financial performance

Profitability
Sales growth
Increased market share
Increase in sales revenue

Marketing performance

Consumer satisfaction level
Consumer loyalty
Consumer confidence in the organization

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