

AN INTEGRATION OF CUSTOMER VALUE AND CUSTOMER RELATIONSHIP IN URBAN CENTRES AND PERIPHERIES: RESEARCH IMPLICATIONS FOR BUSINESS PRACTICE AND BUSINESS STUDIES*

*Rasa Smaliukiene***

*Svajone Bekesiene****

*Gabriele Lipciute*****

Received: 29. 2. 2020

Accepted: 23. 4. 2020

DOI <https://doi.org/10.30924/mjcmi.25.s.5>

Preliminary communication

UDC 366.1(474.5)

658.89

Abstract

The purpose of this study is to investigate the role of customer values in building customer relationships with regard to the urban factor. This paper seeks to empirically explain how the urban factor affects customer preferences, as the differences between customers from urban centres and those from the peripheries are still notable, despite globalization and cultural levelling. The article presents a theoretical framework, explaining the role of customer value in building customer relationships. In this sense, customer value follows the general rules stipulating the business-customer relationships and includes steps, such as trust building, commitment, satisfaction and loyalty. After grounding the theoretical construct, it is tested using a data set of 364 customers across Lithuania. Exhaustive CHAID (Chi-squared

Automatic Interaction Detector) is used for model testing and re-classification. The results from this study report that there are statistically significant differences between customers' preferences in urban centres and in the periphery. The decision made by the customer to stay loyal to a business has a certain logical dependency. For customers in urban centres, functional value needs to be supplemented by emotional value. Only such a composition of values encourages them to remain loyal to the business. On the other hand, customer loyalty in the periphery is determined by high trust in business, customer commitment and perceived social value. The value of this paper lies in its original theoretical construct where customer value and customer relationship have an effect on customer loyalty, as well as in

* This research was carried out within the Erasmus+ Programme of the European Union in the framework of Strategic Partnership project "Cultural Studies in Business" (ERASMUS 2018-1-IT02-KA203-048091). The paper reflects only the views of the authors, and the European Commission cannot be held responsible for any use, which may be made of the information contained therein.

** Rasa Smaliukiene, Professor, Vilnius Gediminas Technical University, Faculty of Creative Industries; Saulėtekio al. 11, LT-10223 Vilnius, Lithuania; +370 5 274 5030, General Jonas Žemaitis Military Academy of Lithuania, Department of Strategic Management; Šilo Str. 5A, LT-10322 Vilnius, Lithuania, Phone +370 5 212 6313; E-mail: rasa.smaliukiene@vgtu.lt, ORCID: <https://orcid.org/0000-0002-5240-2429>

*** Svajone Bekesiene, Professor, General Jonas Žemaitis Military Academy of Lithuania, Department of Defence Technologies; Šilo Str. 5A, LT-10322 Vilnius, Lithuania, Phone: +370 5 212 6313, E-mail: svajone.bekesiene@lka.lt, ORCID: <https://orcid.org/0000-0002-3757-6770>

**** Gabriele Lipciute, Graduate student, Vilnius Gediminas Gabriele Lipciute, Faculty of Business management, Saulėtekio al. 11, LT-10223 Vilnius, Lithuania, Phone +370 5 274 5030, E-mail: glipciute@gmail.com

testing this construct in relation to the urban factor. Additionally, research implications suggest that the findings may be important for business practice and business studies.

Keywords: *customer value, customer relationship management, geographic segmentation, urban factor, business practice, business studies.*

1. INTRODUCTION

Customer value is analysed, by using a variety of theoretical paradigms, such as marketing, innovation and knowledge management, business economics, and others. All of these paradigms emphasize the contextual value and the urban dimension as important factors that need to be considered, when building customer relationships. In the context of globalization, cultural differences are becoming less important, but the customers' nearest living environment still influences their decisions.

The differences between customers from urban centres and those from the peripheries are still notable, despite globalization and cultural levelling. In a global, technology-driven business, the urban factor still impacts customer value, as customers from a range of geographical settings prefer different value combinations, based on their immediate living environment and/or the communities they belong to (Al Hakim et al., 2020; Wiechoczek, 2016). These differences need to be understood and integrated into customer relationship management to offer greater customer value and make the business competitive.

According to the recent literature on customer value, there are four types: functional, social, emotional, and symbolic one (Rintamäki & Kirves, 2017; Chen, 2017; Jiao et al., 2018; Ukpabi et al., 2020). While functional value becomes less dependent on cultural or geographic context,

other categories of customer value remain highly contextual (Vas Taras et al., 2016). When creating customer value, geographic factors remain important criteria in customer segmentation, as they explain the fundamental differences in the decision-making process between customers from urban centres and those from the periphery.

The geographic factor is a phenomenon, related to customers' cultural differences and identity, with the local community that needs to be analysed, by using social research methodology, as well as addressed by business practice and business studies. Thus, in this article, we present a study conducted in Lithuania, where customer decisions to stay loyal to a business is based on diverse values, whose importance is explained by the geographic factor. Four components of customer value, identified in recent literature, are analysed in the study: functional, social, emotional, and symbolic value. The functional value explains the consumers' choice to stay loyal, affected by functional benefits, while the other values shape the need for emotional and other benefits, which are of different importance to urban and peripheral customers.

The *purpose* of this study is to investigate the role of values in building customer relationship, with the regard to the urban factor. The contribution of this paper lies in the original theoretical construct, connecting customer value and elements of customer relationship in an interrelated manner, as well as in testing the construct with regard to the urban factor. Accordingly, the paper examines the hypotheses that customer value and customer relationships are interrelated and are influenced by the urban factor.

The rest of the paper is structured as follows. First, a review of the theory is presented and a theoretical framework, explaining the role of customer value on

customer relationship, is presented. In this regard, customer value follows general rules, stipulating the business-customer relationship and includes classical steps as trust building, commitment, satisfaction and customer loyalty (Iglesias, 2019). Then, the research methodology, which builds upon the decision-tree approach and utilizes Exhaustive CHAID (Chi-squared Automatic Interaction Detector) for building classification models and connecting customer values and elements of customer relationship is outlined. Next, data analysis is performed, by using a series of statistical tests. By using a data set of 364 customers across Lithuania, it was found that urban factor shapes the customer relationship with a business, particularly with regard to customer value and customer preference to stay loyal to a business. Finally, the paper draws conclusions and practical implications for businesses, as well as for business studies.

2. THEORETICAL BACKGROUND

2.1. The elements of customer value

In theory, customer value is usually defined as a multifaceted construct, representing a customer's overall assessment of the product. This assessment is based on an understanding of what the customers receive and what they pay for. For example, Larivière (2016) describes customer value as the monetary value of technical, economic, service, and social benefits that a customer receives, in exchange for the price

paid for a market offering. Customer value, in addition to the offering, also includes the elements that are indirectly related to a particular service provider. In other words, customer value can be understood as including both consumer-defined and relative aspects that generate added value.

As previously mentioned, value is an integral part of the business-customer interaction, thus customer value co-creation theory needs to be taken into consideration. According to this theory (Chandler & Vargo, 2011), value co-creation is related to the process that encompasses the interaction between the customer and the business; more specifically, individual customers and groups of customers and businesses are in a direct interaction, i.e. are involved in joint activities aiming at contributing to the value that emerges from one or both parties (Grönroos, 2012). Following the theory on co-creation, in this study, we focus on the business-customer relationship and the value, which is created in the interaction. Accordingly, we rely on the classical customer value theory (Sheth et al., 1991; Slater, 1997), which distinguishes not only functional, but also, social and emotional value (see Table 1). Taking into consideration contextual and cultural elements of customer value, symbolic value was also added. The importance of symbolic value has been widely analysed in recent studies, with an emphasis on the symbolic meaning of consumption (Rintamäki & Kirves, 2017; Kim et al., 2019; Yrjölä et al., 2019). Each dimension of value will be briefly reviewed below.

Table 1. Four elements of customer value

Value elements	Definition
Functional value (reliability)	Usefulness is derived from the perceived product quality and expected performance
Social value	Usefulness is derived from the product's ability to create positive customer experience by being connected to others
Emotional value	Usefulness is derived from feelings or emotional states created by a product (positive emotional customer experience).
Symbolic value	Usefulness is derived from meaning-related benefits perceived as getting an approval from others

Source: Compiled by the authors (from Echeverri & Skålén, 2011; Rintamäki & Kirves, 2017; Jiao et al., 2018)

Functional value is determined by the characteristics of the product, such as functional performance, reliability, durability, and price. Product reliability and durability are related to the quality and are assessed in relation to the price (Echeverri & Skålén, 2011). Moreover, functional value is the result of a solution that demands less effort, time and cost (Yrjölä et al., 2019). It is a value that is consciously understood and its parameters are easy to measure.

Social value is derived from the product's ability to improve social interactions (Ukpabi et al., 2020). It is related to a deep knowledge of customer needs, a willingness to help the customer and the social interaction between the business and the customer (Ukpabi et al., 2020), or customer communities (Gallarza et al., 2018).

Emotional value, as well as social value, are created through experience. This value is caused by the feelings and emotions created by the product. Emotional value shapes the choices that are defined by the emotional state. In a business-to-customer relationship, it builds emotional loyalty, which refers to a positive attitude from the customer, shaped by the previous experience with the product or service.

Symbolic value is related to the context, where the consumption of a product

creates a symbolic value in a contextual environment. This can be any value that is important to the society or community. Rintamäki & Kirves (2017) state that the *“symbolic value results mainly from an increase in meaning-related benefits and can be perceived as giving a positive impression to others [...] or getting approval from others that is rooted in the store and product choice”*. This value stems largely from the status, self-esteem and a sense of belonging (Yrjölä et al., 2019). Together with emotional value the symbolic value creates a stronger competitive advantage than the functional value (Kangas et al., 2019). Symbolic value is measured as *“positive consumption meanings that are attached to self and/or communicated to others”* (Rintamäki et al. 2007; 629). Therefore, the cultural-contextual environment plays the main role in creating a symbolic value. To sum up, symbolic value is culturally bound, as symbols have co-constructed meanings that need to be created together by both the business and the consumer.

2.2. Customer value and the components of customer relationship

Reflecting on the theory of customer value, the ultimate goal of customer value is to build a lasting business-customer

relationship and gain customer loyalty (Eggert et al., 2018). Indeed, customer relationship management states that loyalty is reached by a flow of trust, commitment and satisfaction (Bricci et al., 2016; Chen, 2017). All of this interacts with the effect of value: the customer first seeks the functional benefit, and after receiving it, develops trust to the business. Customer value, and customer relationships are related and accumulate synergy. In the following paragraphs, we explain the customer relationship elements in relation to the customer value.

Reflecting on the description of functional value, it could be stated that the functional value is a precondition for trust. More specifically, trust demonstrates customer confidence in the reliability and integrity of a business. It is also related to consistency, honesty, fairness, helpfulness, goodwill, and responsibility, i.e. all the qualities a successful business should highlight. However, the most important one is the functional quality of the product that the business delivers. Jalilvand et al. (2017) claim that trust is a wish to rely on an exchange partner. In essence, trust consists of beliefs about the other party's integrity and competence and is a key component of all communication exchanges. More specifically, Rufin & Molina (2014) argue that trust exists, when one party trusts the reliability and integrity of the other, which is important, as providing the basis for future collaboration. This is the first and lowest level of the relationship. In addition, Dowell et al. (2015) emphasize that trust includes cognitive and emotional elements that are linked to positive customer experience, by being connected to others. With regard to this, it could be presumed that trust creates social value for the customer.

The second element of customer relationship is commitment. Commitment is a

social construct that connects a customer to a business. It rises from trust, shared values, and the belief that changing a partner can be costly (Lacey, 2007). In essence, commitment is strongly linked to customer loyalty (Izogo, 2017; Korsakienė et al., 2008), which is positively affected, when customer commitment is based on shared values. Moreover, commitment is considered a desire to maintain the relationship (Celuch, Walz, & Jones, 2018) and, therefore, moves from transactional to emotional relations.

The third element of customer relationship is satisfaction. Satisfaction can be defined as an overall positive emotion (Otero et al., 2019), or as the key to improving and maintaining customer relationship. Moreover, it is a key variable that influences customer response to the relationship maintenance. Thus, the higher the satisfaction, the higher the customer's loyalty to the business. In addition, satisfaction not only creates loyalty, but also creates meaning in the relationship; therefore, it is linked to the symbolic value.

Finally, customer loyalty is one of the key factors, facilitating strong competitive advantage (Prentice & Correia Loureiro, 2017). Researchers agree that customer loyalty is the ultimate goal of customer relationship management and value creation (Hidayanti et al., 2018; Nyadzayo & Khajehzadeh, 2016). Thus, customer loyalty is defined as the positive attitude towards a particular product or service provider, leading to repeat purchase.

2.3. Theoretical model

Based on four values (functional, social, emotional and symbolic) and four relationship principles (trust, commitment, satisfaction and loyalty), the theoretical model was constructed (see Figure 1). The model explains the role of customer value in the

customer loyalty formation process. The decision process begins when the customer receives an appropriate functional value. Functional value leads to customer developing trust in the business. Trust then creates social value, as the demand for the relationship arises. Then, social value leads to commitment, where the customer agrees to maintain the relationship, as it is mutually valuable. In other words, commitment is not only directly linked to satisfaction, but also creates an emotional value, if the business is able to provide a positive emotional experience to the customer. Consequently, satisfaction comes from commitment and emotional value. Depending on the context of consumption, symbolic value may arise from satisfaction, as an outcome of the added value, associated with meaning. Together, these elements form customer loyalty. The theoretical model states that

the customer loyalty, as the highest level of customer relationship, is formed in a relationship with customer value. We hypothesize that:

H1: Customer value and customer relationship are related through element-to-element interfaces.

In addition, we argue that this interface takes place in a context and depends on the customer environment. We recognize the importance of the contextual value and emphasize the urban dimension as an important factor to be considered when building a customer relationship. Accordingly, we hypothesize that:

H2: Urban factor has an impact on the relationship between customer value and customer relationship.

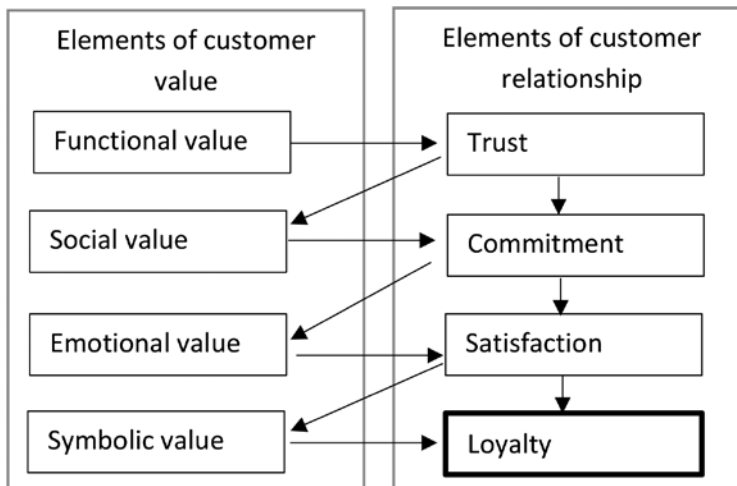


Figure 1. Theoretical construct: element-to-element interfaces in the relationship between customer value and customer relationships

3. RESEARCH METHODOLOGY

The configuration of the constructed theoretical model should be investigated in an exploratory manner. It is important to test it in a context of urban centrality because the customer values are context-dependent. Hence, the two-component urban

factor complemented the theoretical model and the customers were categorised, according to their geographical classification of themselves, as belonging to an urban centre, or to the periphery. The visualization of the research model is presented in Figure 2.

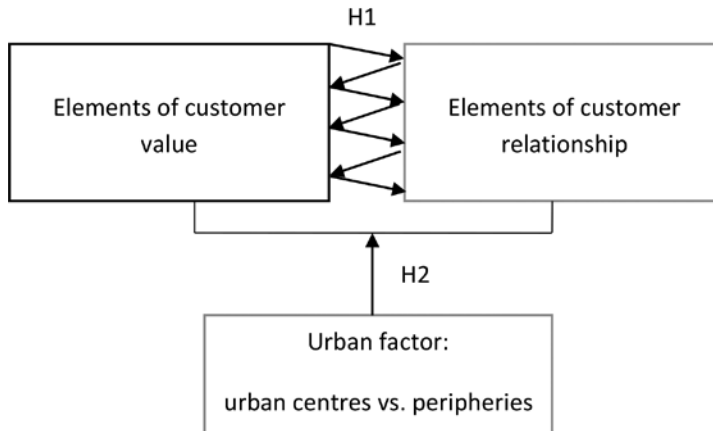


Figure 2. Research model

To test the research model, the Exhaustive CHAID (Chi-squared Automatic Interaction Detector) was applied, as a method for building classification models, which can be used to identify the role customer value plays in a customer relationship. Exhaustive CHAID is a method for forming decision trees, where each node (value or element of the customer relationship management) identifies a split option, as to predict customer response variables (Nisbet et al., 2018). The method allows the use of survey data and builds a decision tree, based on a series of “if-then” rules. As the method allows only one dependent variable and multiple independent variables, it is considered appropriate for the customer decision analysis, where the result is measured in a metric or nominal way. The tree begins with all of the observations in the sample and identifies the best fitting root to explain the phenomenon

being analysed. Exhaustive CHAID is a convenient data mining method, as it merges categories until only two are left “*that have the strongest association with the target variable*” (Zhang, 2017). This makes it easier to understand the root of consequences and leaves no room for subjective interpretation.

3.1. Data collection

The research was conducted by administering questionnaires to visitors at selected specialized retail shops across Lithuania, which ensured that the population of both major cities and peripheries were included into research. Data was collected in September-October 2019. A random sample of 364 participants completed the structured, self-administered questionnaire. Detailed information on the respondents is presented in Table 2.

Table 2. Respondents' characteristics

Characteristic	Category	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Consumer's geographic location	Urban centre	152	31	47.3	-
	Periphery	20	161	52.7	-
Longevity of the relationship	less than 1 year	40	11	11.0	11.0
	1 year	65	17.9	17.9	28.8
	2-5 years	224	61.5	61.5	90.4
	6 and more years	35	9.6	9.6	100.0
	Total	364	100	100.0	

The questions (see Table 3) are based on a theoretical analysis of relationship marketing principles and customer value elements. The questionnaire consisted of survey questions, measured by a five-point reversed Likert scale, where 1 corresponded to "strongly agree" and 5 to "strongly disagree" for all customer value and customer relationship indicators, except for "*Longevity of the relationship*", which was

measured using four categories (see Table 2) and "Urban factor", which was measured using two categories: "Urban centre" and "Periphery" (Table 2). The two latter categories were constructed on the basis of the OECD-EC definition of cities (Dijkstra & Poelman, 2012). According to this definition, only two cities in Lithuania are identified as urban centres.

Table 3. Structural justification for quantitative research

Indicator	Individual indicator	Characteristics measured in the questionnaire	Code
Elements of customer value	Functional value	Characteristics of the service measured by comparing the perceived price and expected performance	FN
	Social value	Characteristics of the service measured as an ability to create positive customer experience by being connected to others	SC
	Emotional value	Characteristics of the service measured by feelings or emotional states created by a retailer	EM
	Symbolic value	Characteristics of the service measured as an ability to derive meaning-related benefits for the customer as a member of a community or society	SM
Elements of customer relationship	Trust	Trust in the functional quality, consistency, fairness, and responsibility	TR
	Commitment	Willingness to stay retailer's customer and believe in added value	CM
	Satisfaction	Overall positive emotion and willingness to continue the relationships with a retailer	SF
<i>Consumer's characteristics</i>	Longevity of relationship	Number of years as a loyal customer	LY
Urban factor	Geographic location as indicated by the respondent	Urban centre or periphery	CT

3.2. Data analysis

IBM SPSS Decision Trees 25, as an alternate path to modelling customer relations, was used to build a classification tree model, by using the Exhaustive CHAID method. A decision tree (DT) model was designed, by classifying factors of customer values and customer relationship. Independent variables in the study were the following: Functional (FN), Social (SC), Emotional (EM), and Symbolic (SM) values, Customer Trust (TR), Commitment (CM) and Satisfaction (SF) and Longevity of the relationship (LY). Urban factor (CT) was used as the target variable that indicates consumers' geographic location and classifies consumers into two segments: consumers from major cities and consumers from the periphery. Geographic location (urban centre or the periphery) was chosen, because customer behaviour changes,

depending on the respondent's location and indicates the differences in the importance of customer values.

4. MODEL SPECIFICATION AND RESEARCH RESULTS

Table 4 presents a summary of specifications of the created decision tree model. The information is divided into two parts: specifications and results. In the specification part, information on the used method, names of dependent and independent variables, validation, maximum tree depth, minimum cases in parent node and in child node are presented. In the results section, only independent variables that were included in the created model, the total number of nodes, the total number of terminal nodes, and the depth of the decision tree are listed.

Table 4. Decision Tree Model summary for specifications and results

Specifications	Growing Method	EXHAUSTIVE CHAID
	Target Variable	CT
	Independent Variables	EM, FN, TR, SC, CM, SF, SM, LY
	Validation	Cross Validation
	Maximum Tree Depth	3
	Minimum Cases in Parent Node	25
	Minimum Cases in Child Node	5
Results	Independent Variables Included	TR, FN, CM, EM, SC
	Number of Nodes	14
	Number of Terminal Nodes	9
	Depth	3

Only five independent variables were included in the constructed tree model for the decision tree: Trust (TR), Functional value (FN), Commitment (CM), Emotional value (EM) and Social value (SC), which created

statistically significant 14 model nodes and 9 terminal nodes. Totally, three levels below the root node were created. Detailed information on the designed decision tree is presented in Table 5.

Table 5. Decision tree summary table

Node	Main cities		Periphery		Total		Predicted Category*	Parent Node	Primary Independent Variable				
	N	Percent	N	Percent	N	Percent			Variable	Sig.a	Chi-Square	df	Split Values
0	183	50.3	181	49.7	364	100.0	1						
1	21	100.0	0	0.0	21	5.8	1	0	TR	.000	144.663	3	<= Disagree
2	0	0.0	8	100.0	8	2.2	2	0	TR	.000	144.663	3	(Disagree. Neutral]
3	66	70.2	28	29.8	94	25.8	1	0	TR	.000	144.663	3	(Neutral. Agree]
4	96	39.8	145	60.2	241	66.2	2	0	TR	.000	144.663	3	> Agree
5	1	9.1	10	90.9	11	3.0	2	3	FN	.000	75.444	1	<= Agree
6	65	78.3	18	21.7	83	22.8	1	3	FN	.000	75.444	1	> Agree
7	0	0.0	11	100.0	11	3.0	2	4	EM	.000	18.773	1	<= Agree
8	96	41.7	134	58.3	230	63.2	2	4	EM	.000	18.773	1	> Agree
9	29	82.9	6	17.1	35	9.6	1	6	CM	.000	106.082	2	<= Disagree
10	0	0.0	11	100.0	11	3.0	2	6	CM	.000	106.082	2	(Disagree. Neutral]
11	36	97.3	1	2.7	37	10.2	1	6	CM	.000	106.082	2	> Neutral
12	25	59.5	17	40.5	42	11.5	1	8	SC	.000	15.352	1	<= Agree
13	71	37.8	117	62.2	188	51.6	2	8	SC	.000	15.352	1	> Agree
0	183	50.3	181	49.7	364	100.0	1	0	TR	.000	144.663	3	<= Disagree
1	21	100.0	0	0.0	21	5.8	1	0	TR	.000	144.663	3	(Disagree. Neutral]
2	0	0.0	8	100.0	8	2.2	2	0	TR	.000	144.663	3	(Neutral. Agree]

Growing Method: EXHAUSTIVE CHAID

Dependent Variable: CT

a. Bonferroni adjusted

*Predicted Category :1- Main cities; 2- Periphery

The Exhaustive CHAID growing tree method shows that the trust in functional quality, consistency, fairness, and responsibility (the TR variable) is the best predictor for customer value prediction, so it was the first recommended split, which was applied (p-value of 0.000). Using Trust (TR) as a split variable, the values of all dataset were divided into four nodes (see Appendix). Neutral to high attitude towards Trust (TR) was predicted for the first terminal node that accounts for 25.8% of choices by customers, predominantly located in main cities. For the second terminal node that describes 66.2% of choices, Trust (TR) is important or very important for the customers, predominantly located in the periphery (Table 5). Additionally, it could be noted that the level of trust is different among customers from the main cities and those from the periphery. A moderate level of trust is an indicator for customers from

the main cities and a high level of trust is an indicator for customers from the periphery (see Appendix).

The two different variables - Functional value (FN) and Commitment (CM) were used as the second-best exponent, according to p-value of 0.000. The FN variable, which includes the customers' overall attitude towards the usefulness of a product and expected performance was chosen to split Node 3. Node 3 is predominated by customers from the main cities and indicated that functional values are important, or very important for customers who trust the business (neutral to positive trust). The CM variable, which indicates the consumers' willingness to stay loyal to the business split the decision tree further into Node 4. A total of 22.8% of customers declare importance of functional trust. Consumers, who express a high degree of trust in the

business have been statistically divided into two groups, based on their commitment (CM). Trust was the main precondition for commitment for 63.2% customers.

For the third split, two statistically significant variables were identified: Emotional value (EM) and Social value (CS). Neutral to high emotional value explains 10.2% of customers' choices to stay loyal, if they experience functional value and express neutral to positive trust towards the business. It is important to note that this is true for customers from the main cities, as well as that 9.6% of customers are not interested in the emotional value, if they are satisfied with the functional value.

Positive social value (SC) explains 51.6% of customer choices, if they are committed to and trust the retailer. Additional possible connections between customer value and customer relationship are presented in Table 5 and the Appendix.

4.1. Assessment of the constructed model

The gain chart and index chart were used to assess the performance measures of the designed decision tree model (McArdle & Ritschard, 2013). The summary of terminal nodes in decision tree is presented in Table 6. Main cities and periphery were chosen as target variables. Based on these target categories gain, response and index percentage were calculated. In Table 6, node N identifies the number of cases in each terminal node. Node percentage is the percentage of the total number of cases in each node. Accordingly, the gain N is the number of cases in each terminal node in the target category. The corresponding percentage shows the percentage of cases in the target category. Response is the percentage of cases displayed for the identification of the Main cities or Periphery category. Additionally, index value larger than 100% shows that there are more cases in the target category than the overall percentage.

Table 6. Terminal node description for target categories Main cities and Periphery

Main cities (Urban centres)							Periphery						
Node	Node		Gain		Response (%)	Index (%)	Node	Node		Gain		Response (%)	Index (%)
	N	Percent	N	Percent				N	Percent	N	Percent		
1	21	5.8	21	11.5	100.0	198.9	10	11	3.0	11	6.1	100.0	201.1
11	37	10.2	36	19.7	97.3	193.5	7	11	3.0	11	6.1	100.0	201.1
9	35	9.6	29	15.8	82.9	164.8	2	8	2.2	8	4.4	100.0	201.1
12	42	11.5	25	13.7	59.5	118.4	5	11	3.0	10	5.5	90.9	182.8
13	188	51.6	71	38.8	37.8	75.1	13	188	51.6	117	64.6	62.2	125.2
5	11	3.0	1	0.5	9.1	18.1	12	42	11.5	17	9.4	40.5	81.4
10	11	3.0	0	0.0	0.0	0.0	9	35	9.6	6	3.3	17.1	34.5
7	11	3.0	0	0.0	0.0	0.0	11	37	10.2	1	0.6	2.7	5.4
2	8	2.2	0	0.0	0.0	0.0	1	21	5.8	0	0.0	0.0	0.0

Growing Method: EXHAUSTIVE CHAID
 Dependent Variable: CT

Figure 3 presents gain charts and shows that the dependence curve is not close to the supporting diagonal. Moreover, the gain charts rise steeply towards 100% approximately and then level off. According to Kass (1980), the faster

the dependency curve approaches 100% and settles at that value, the better the model. Accordingly, it can be argued that gain charts indicate that the designed decision tree model is good enough and provides new information.

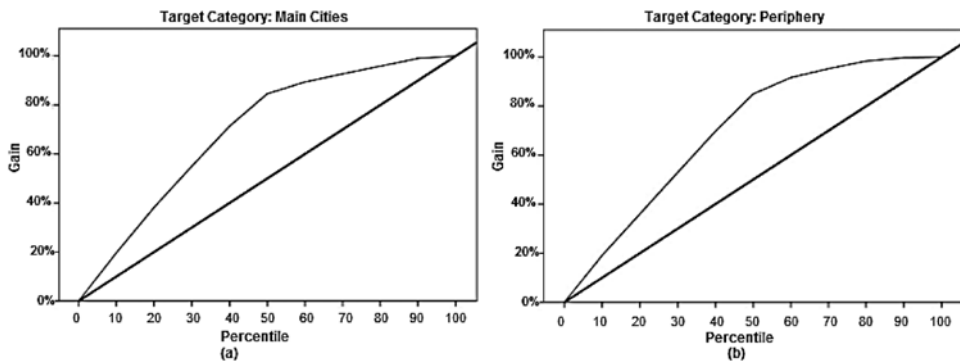


Figure 3. Gain graphs for two categories: a) Urban centres; b) Periphery (Growing Method: Exhaustive CHAID)

Risk estimate and classification. The collected data used in this model was classified quite well. The Exhaustive CHAID growing method risk estimates the risk of 0.14 with 0.018 std. error (estimation by the resubstitution method) indicates that the category predicted by the DT model (Main cities or Periphery) is wrong for only

14% of the cases. The classification results, which are consistent with the risk estimate, show that the designed model correctly classifies approximately 83% of customer value and customer relation interconnection in the Main cities and 89% in the Periphery. Accordingly, correct classification in all population is 86%.

Table 7. Data classification summary

Observed	Predicted		
	Main cities (urban centres)	Periphery	Correct Percentage
Main cities	152	31	83.1%
Periphery	20	161	89.0%
Overall Percentage	47.3%	52.7%	86.0%

Growing Method: EXHAUSTIVE CHAID
 Dependent Variable: CT

5. CONCLUSIONS

This research addresses the importance of customer value in the process of building customer relationship. It takes into consideration not only the relationship between customer value and customer relationship, but also introduces the importance of urban element to customer decision-making. The main conclusions from the research are as follows.

With the accuracy of 86% it can be stated that the importance of customer values is different for customers from urban centres and peripheries. This proves hypothesis H2. The first split shows that the distribution of customers from urban centres and those from the peripheries was balanced with 50.3% and 49.7% respectively (terminal Node 1).

The second split indicates that the only factor that unifies consumers from urban centres and those from the peripheries is trust to the business, whose products they buy or services they use. Trust to business is precondition for value creation for more than 80% of customers, who agree that trust is important or very important for their loyalty to a business (terminal Nodes 4 and 5). At the same time, this split demonstrates that the customers are clearly divided by the urban factor. Trust is significantly important to the customers from the periphery. Twice as many customers from the periphery indicate trust as an important, or very important factor for their loyalty, compared to only 39.8% customers from the urban centres (terminal Node 5).

After the third split, more differences and similarities between urban centres and peripheries emerged. With moderate confidence, functional value becomes important. It is important to 22.8% of customers (terminal Node 7 with their vast majority

located in the urban centres. In contrast, high trust is equally important to both customers from the urban centres and those from the peripheries. Trusting the business, they declare their commitment (41.7% in urban centres and 58.3 in peripheries; terminal Node 8). Totally, it is declared by 63.2% of consumers.

The largest differences between customers are observed after the fourth split. As functional value is more important to customers from the urban centres, functional value becomes a precondition for the emotional value for this group of consumers. Accordingly, emotional value is a statistically important factor of loyalty for 10.2% customers from the urban centres (terminal Node 11). Additionally, the decision tree analysis shows that social value is a key factor in loyalty for 62.2% of customers from the periphery, compared to 37.8% of customers from the urban centres (terminal Node 13).

Using visual representation, statistically important interlinkages between customer values and customer relationship are presented for the urban centres and peripheries (Figure 4). These two generalized models show the relationship between customer value and customer relationship. There are only three elements left in each statistically validated model that determine customer loyalty. Therefore, we state that this dependency is only partially related through the element-to-element interfaces. Accordingly, hypothesis H1 is only partially confirmed. Nevertheless, these two models are of high statistical accuracy, as precise data classification and the results for gains and index indicators were used in the analysis. Based on this, we argue that the results of this study can be used to construct further theories and make practical decisions.

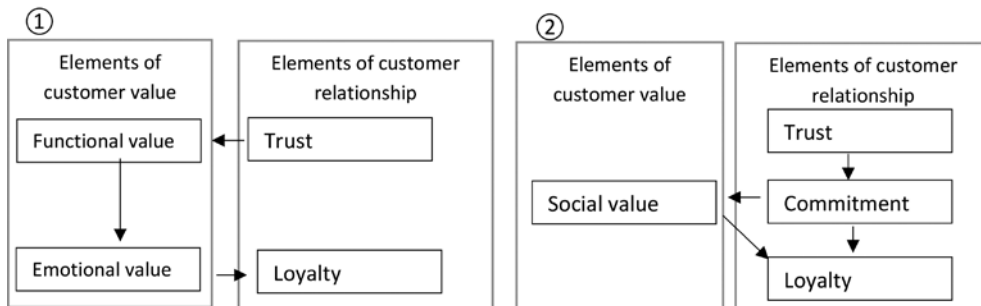


Figure 4. The role of customer value on a customer relationship in the (1) urban centres and (2) peripheries

6. IMPLICATIONS FOR BUSINESS PRACTICE AND BUSINESS STUDIES

Results of this research can assist business practice and business studies by identifying the elements of customer value and customer relationship that have a different impact on customers from the urban centres and those from the peripheries. Using this knowledge, business practitioners can optimise their decisions regarding customer relationship management, while instructors of business studies can explain customer value in the urban context.

It is important for business practitioners to take into consideration that a client's decision to stay loyal to a business has some logical interdependence. Moreover, this logic differs in urban centres and peripheries. In order to build strong customers relationships, business practices in urban centres need to focus on functional and emotional value. Only such a composition of values encourages customers to remain loyal to a business. It can be anticipated that customer relationship management in urban centres has to be driven by trust creation; after the trust is created, business needs to focus on functional and emotional value for the customer.

There is a completely different logic in customer value creation in the periphery. Here, more attention needs to be paid to customer relationship management. In addition to the need to build high level of trust, customers' commitment is important too. As commitment is a social construct that is formed from trust, it is important for businesses to develop measures that will enable the customers to maintain a strong relationship with both the business and the community. It is likely that customers in the periphery have formed strong communities and that their decisions are influenced by social value. In this context, social value is perceived as usefulness of the product in creating a positive customer experience, when a customer is connected to others. Accordingly, businesses should focus on connectedness in creating value for customers in the peripheries.

Research results are also valuable in the business studies classrooms. Results of this study can be included in theoretical discussions about rational and emotional customer decision-making and customer loyalty. Results show that value to the customer is not only created by functional value. On the contrary, functional value becomes important, only after trust is established between the business and the consumer. This shows the importance of emotional customer

decision-making over the rational one. The differences in customer loyalty that have been singled out in this study stimulate a debate about what customer values are important and which are merely secondary; how a business has to behave in this context and what business decisions could be made. The fact that customers in urban centres make their decisions based on functional and emotional value encourages classroom debate, not only on the causes and consequences of rational and emotional customer decision-making but, also on the contextuality of customer value.

Analysing classical customer value theory or developing students' competencies to gain a competitive advantage in business, the results of this study reveal a consistent sequence of how businesses should create value for customers in general (Figure 1) and for those in different areas (Figure 4). The priority given to social value by customers in the periphery fosters discussion about the influence of the neat living environment and communities on customer decisions.

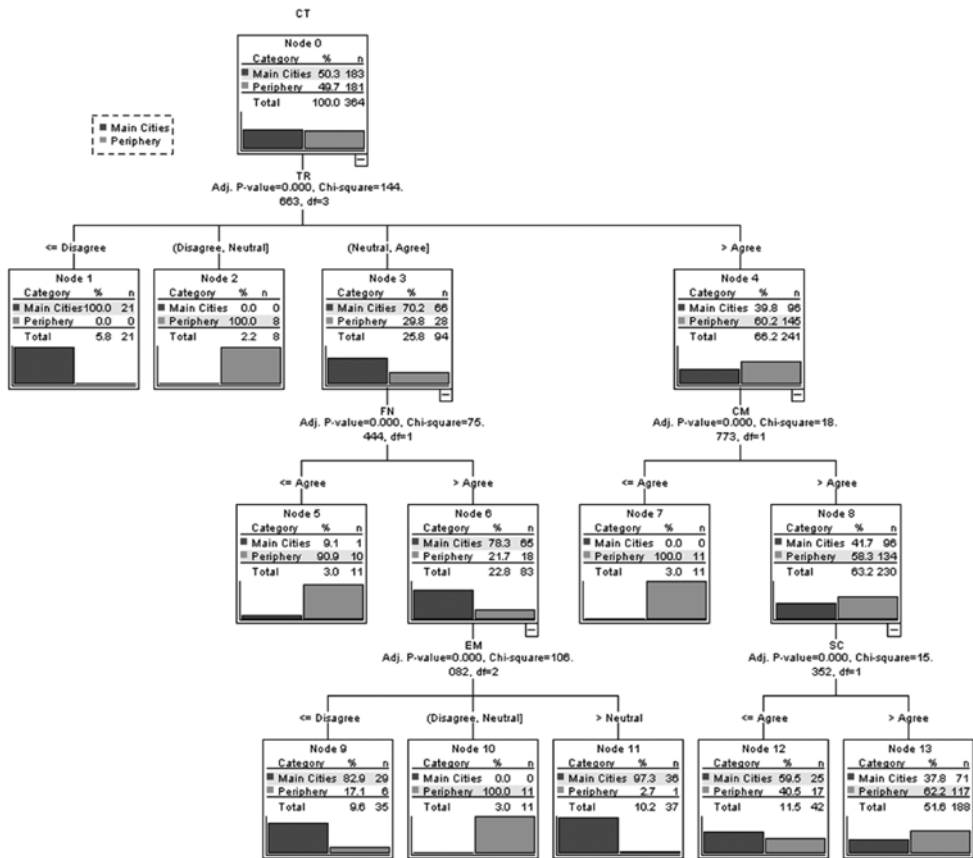
References

1. Al Hakim, Z. T., Sengupta, S., & Cuny, C. (2020). Impact of shared history on customers' service evaluations. *Journal of Retailing and Consumer Services*, 55, 102070. Advance online publication. doi:10.1016/j.jretconser.2020.102070
2. Bricci, L., Fragata, A., & Antunes, J. (2016). The effects of trust, commitment and satisfaction on customer loyalty in the distribution sector. *Journal of Economics, Business and Management*, 4(2), 173-177. doi:10.7763/JOEBM.2016.V4.386
3. Celuch, K., Walz, A., & Jones, A. (2018). The relational drivers of commitment for different customer groups. *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior*, 31, 142-167.
4. Chandler, J. D., & Vargo, S. L. (2011). Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11(1), 35-49. doi:10.1177/1470593110393713.
5. Chen, Y. (2017). The relationships between brand association, trust, commitment, and satisfaction of higher education institutions. *International Journal of Educational Management*, 31(7), 973-985. doi:10.1108/IJEM-10-2016-0212.
6. Dijkstra, L., & Poelman, H. (2012). *Cities in Europe, the new OECD-EC definition*. Regional focus, A series of short papers on regional research and indicators produced by the DG for regions and urban policy, RF 01/2012. Brussels: European Commission. Retrieved April 30, 2020, from: [Http://Ec.Europa.Eu/Regional_policy/Sources/Docgener/Focus/2012_01_city.Pdf](http://Ec.Europa.Eu/Regional_policy/Sources/Docgener/Focus/2012_01_city.Pdf).
7. Dowell, D., Morrison, M., & Heffernan, T. (2015). The changing importance of affective trust and cognitive trust across the relationship lifecycle: A study of business-to-business relationships. *Industrial Marketing Management*, 44, 119-130. doi:10.1016/j.indmarman.2014.10.016.
8. Echeverri, P., & Skålén, P. (2011). Co-creation and co-destruction: A practice-theory based study of interactive value formation. *Marketing Theory*, 11(3), 351-373. doi:10.1177/1470593111408181.
9. Eggert, A., Ulaga, W., Frow, P., & Payne, A. (2018). Conceptualizing and communicating value in business markets: From value in exchange

- to value in use. *Industrial Marketing Management*, 69, 80-90. <https://doi.org/10.1016/j.indmarman.2018.01.018>.
10. Gallarza, M. G., Del Chiappa, G., & Arteaga, F. (2018). Value-satisfaction-loyalty chain in tourism: A case study from the hotel sector. In D. Gursoy & Ch. G. Chi (Eds.). *The Routledge Handbook of Destination Marketing*, 163-176. Routledge.
 11. Grönroos, C. (2012). Conceptualising value co-creation: A journey to the 1970s and back to the future. *Journal of Marketing Management*, 28(13-14), 1520-1534. doi:10.1080/0267257X.2012.737357.
 12. Hidayanti, I., Herman, L. E., & Farida, N. (2018). Engaging customers through social media to improve industrial product development: The role of customer co-creation value. *Journal of Relationship Marketing*, 17(1), 17-28. doi:10.1080/15332667.2018.1440137.
 13. Iglesias, O. (2019). How does sensory brand experience influence brand equity? *Journal of Business Research*, 96, 343-354. Retrieved from <http://www.econis.eu/PPNSET?PPN=1067631542>.
 14. Izogo, E. E. (2017). Customer loyalty in telecom service sector. *The TQM Journal*, 29(1), 19-36. Retrieved from <http://www.econis.eu/PPNSET?PPN=888073321>.
 15. Jalilvand, M. R., Nasrolahi Vosta, L., Kazemi Mahyari, H., & Khazaei Pool, J. (2017). Social responsibility influence on customer trust in hotels: Mediating effects of reputation and word-of-mouth. *Tourism Review*, 72(1), 1-14. doi:10.1108/TR-09-2016-0037
 16. Jiao, Y., Ertz, M., Jo, M., & Sarigollu, E. (2018). Social value, content value, and brand equity in social media brand communities. *International Marketing Review*, 35(1), 18-41. doi 10.1108/IMR-07-2016-0132.
 17. Kangas, A., Kujala, J., Lönnqvist, A., Heikkinen, A., & Laihonen, H. (2019). *Introduction: Leadership for dealing with complex changes*. Tampere University Press. Retrieved from <http://tampub.uta.fi/handle/10024/105130>.
 18. Kass, G. V. (1980). An exploratory technique for investigating large quantities of categorical data. *Applied Statistics*, 29(2), 119. Retrieved from <https://search.proquest.com/docview/1299670958>
 19. Kim, S., Ham, S., Moon, H., Chua, B. L., & Han, H. (2019). Experience, brand prestige, perceived value (functional, hedonic, social, and financial), and loyalty among GROCERANT customers. *International Journal of Hospitality Management*, 77, 169-177. doi: 10.1016/j.ijhm.2018.06.026
 20. Korsakienė, R., Tvaronavičius, V., & Mačiulis, A. (2008). Customer relationship management in real estate companies the research of advantages and restrictive factors. *Verslas: Teorija Ir Praktika*, 2008(3), 190-198. doi: 10.3846/1648-0627.2008.9.190-198
 21. Lacey, R. (2007). Relationship drivers of customer commitment. *Journal of Marketing Theory and Practice*, 15(4), 315-333. doi:10.2753/MTP1069-6679150403
 22. Larivière, B. (2016). Modeling heterogeneity in the satisfaction, loyalty intention, and shareholder value linkage. *Journal of Marketing Research*, 53(1), 91-109. Retrieved April 30 2020 from <http://www.econis.eu/PPNSET?PPN=856744204>
 23. McArdle, J. J., & Ritschard, G. (Eds.). (2013). *Contemporary issues in exploratory data mining in the behavioral sciences*. Routledge.

24. Nisbet, R., Miner, G., & Yale, K. (2018). *Handbook of statistical analysis and data mining applications (Second edition)*. London; San Diego, CA; Cambridge, MA; Oxford: Academic Press, an imprint of Elsevier.
25. Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262-270. doi:10.1016/j.jretconser.2016.02.002
26. Otero, M. C., Wells, J. L., Chen, K., Brown, C. L., Connelly, D. E., Levenson, R. W., & Fredrickson, B. L. (2019). *Behavioral indices of positivity resonance associated with long-term marital satisfaction*. *Emotion*. Advance online publication. doi:10.1037/emo0000634.
27. Prentice, C., & Correia Loureiro, S. M. (2017). An asymmetrical approach to understanding configurations of customer loyalty in the airline industry. *Journal of Retailing and Consumer Services*, 38, 96-107. doi:10.1016/j.jretconser.2017.05.005.
28. Rintamäki, T., & Kirves, K. (2017). From perceptions to propositions: Profiling customer value across retail contexts. *Journal of Retailing and Consumer Services*, 37, 159-167. doi:10.1016/j.jretconser.2016.07.016.
29. Rufin, R., & Molina, C. M. (2014). Moderating effects of familiarity and experience in the relationships of trust with its antecedents and consequences. *E-Service Journal: A Journal of Electronic Services in the Public and Private Sectors*, 9(3), 19-42. doi:10.2979/eservicej.9.3.19.
30. Ukpabi, D. C., Karjaluoto, H., Olaleye, S., & Mogaji, E. (2020). Customer value framework and recommendation intention: The moderating role of customer characteristics in an on-line travel community. *Information and communication technologies in tourism 2020*, 38-49. Springer. doi:10.1007/978-3-030-36737-4_4.
31. Slater, S. F. (1997). Developing a customer value-based theory of the firm. *Journal of the Academy of Marketing Science*, 25(2), 162-167. doi.org/10.1007/BF02894352.
32. Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of business research*, 22(2), 159-170. doi:10.1016/0148-2963(91)90050-8
33. Vas Taras, Piers Steel, & Bradley L. Kirkman. (2016). Does country equate with culture? Beyond geography in the search for cultural boundaries. *MIR: Management International Review*, 56(4), 455-487. doi:10.1007/s11575-016-0283-x
34. Wiechoczek, J. (2016). Creating value for customer in business networks of high-tech goods manufacturers. *Journal of Economics & Management*, 23, 76-90.
35. Yrjölä, M., Kuusela, H. Närvänen, E., Rintamäki, T. & Saarijärvi, H. (2019). Leading change: A customer value framework. In: *Leading Change in a Complex World: Transdisciplinary Perspectives*, ed. by Heikkinen, A., Kangas, A., Kujala, J., Laihonon, H. & Lönnqvist, A. Tampere: Tampere University Press.
36. Zhang, J. (2017). *Life-oriented Behavioral Research for Urban Policy* (1st ed.). Tokyo: Springer. doi:10.1007/978-4-431-56472-0

APPENDIX. DATA GRAPH FOR THE DECISION TREE (DT) MODEL USING THE GROWING METHOD EXHAUSTIVE CHAID



Note. For meaning of abbreviations and symbols, see Table 3.

INTEGRACIJA VRIJEDNOSTI ZA KUPCE I ODNOSA S KUPCIMA U URBANIM SREDIŠTIMA I NA PERIFERIJI: IMPLIKACIJE ISTRAŽIVANJA ZA POSLOVNU PRAKSU I POSLOVNE STUDIJE

*Rasa Smaliukiene
Svajone Bekesiene
Gabriele Lipciute*

Sažetak

Cilj ovog istraživanja je istražiti ulogu koju vrijednost za kupca ima pri izgradnji odnosa s kupcima s obzirom na urbani faktor. Ovaj rad pokušava empirijski objasniti kako urbani faktor utječe na preferencije kupaca jer su razlike između kupaca u urbanim središtima i onih s periferije još uvijek uočljive unatoč globalizaciji i kulturnom ujednačavanju. Članak donosi teorijski okvir koji objašnjava ulogu koju vrijednost za kupca ima pri izgradnji odnosa s kupcima. U tom smislu, vrijednost za kupce slijedi opća pravila koja propisuje odnos s kupcima i uključuje korake poput izgradnje povjerenja, predanosti, zadovoljstva i vjernosti. Teorijski model istraživanja postavljen je pomoću skupa podataka dobivenih od 364 kupca diljem Litve, koji se zatim testira i reklasificira koristeći CHAID (Chi-squared Automatic Interaction Detection) model stabla odlučivanja. Rezultati ovog istraživanja pokazuju da postoje statistički značajne razlike između preferencija kupaca u urbanim središtima i onih na periferiji. Odluka kupca da ostane vjeran tvrtki pokazuje određenu logičku ovisnost. Kupcima u urbanim središtima funkcionalnu vrijednost treba nadopuniti emocionalnom vrijednošću jer ih samo takav sklop vrijednosti potiče da ostanu vjerni tvrtki. S druge strane, vjernost kupaca na periferiji određuje veliko povjerenje u tvrtku, predanost kupaca i percepcija društvene vrijednosti. Vrijednost ovog rada leži s jedne strane u izvornom teorijskom konstrukturu gdje vrijednost za kupca i odnos s kupcem utječu na vjernost kupca, a s druge strane u ispitivanju ovog konstrukta u odnosu na urbani faktor. Osim toga, implikacije istraživanja sugeriraju da bi rezultati mogli biti važni za poslovnu praksu i poslovne studije.

Ključne riječi: *vrijednost za kupca, upravljanje odnosima s kupcima, zemljopisna segmentacija, urbani faktor, poslovna praksa, poslovne studije.*

