

THE ANALYSIS OF CUSTOMERS' LOYALTY USING BIBLIOMETRIC AND MATHEMATICAL ANALYSIS

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ABSTRACT

We are in the fifth era of marketing evolution, that of relationship with customers, and be it made traditionally or virtually, this 1-to-1 relationship will offer value and benefits for both involved parts. Customer loyalty is very important for companies that want long-term performance. The purpose of this study is to perform a bibliometric analysis of the articles published in the field of customer loyalty. The research was carried out on 100 customers and on two supermarkets from Târgoviște, Dâmbovița county, Romania, to determine customer loyalty through the prism of several variables resulting from the applied bibliometric analysis itself. The developed questionnaire follows the steps of the GKG model specific to the customer relationship field and the variables resulting from the study. The bibliometric analysis focused on the evaluation of the scientific database Web of Science using the term "customer loyalty" as a search term. The study focused on the analysis of articles published in Open Access with non-zero impact factors (862 articles identified) and the most used variable will be used as impact factors on customer loyalty. The goal of the research was to analyze customer loyalty from the two supermarkets and will be measured the impact of several variables on customer loyalty using the SPSS program. The results were good, but they must be improved if the analyzed supermarkets want a long-term relationship and performance for both involved parts.

KEYWORDS: *customer loyalty, satisfaction, relationship, trust, purchase frequency.*

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1. INTRODUCTION

We are in the fifth era, that of relationship with customers, and be it made traditionally or virtually, this 1-to-1 relationship will offer value and benefits for both involved parties (Florea & Duica, 2019). Customer experience is the key to success (Molinillo et al., 2022) and next to word-of-mouth (Manyanga et al., 2022) and customer satisfaction which is considered tools used to improve long-lasting relationships (Mokha & Kumar, 2022), they are influencing customer loyalty which is becoming critical for any company who wants to be competitive (Cui et al., 2022) and crucial for its sustainability (Liu et al., 2022).

Being loyal means buying repetitively from the same company even if their prices increase, to convince other people to become customers (Kumar, 2012, p.141) and being genuinely loyal means that a customer buys from a company even if it makes mistakes or it cannot keep pace with competition when it comes to novelty (Hennig & Hansen, 2013, p.35). Once loyalty is obtained, the company must know how to direct it and how to enhance customers' wellbeing (Humby et al., 2007, p.16).

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Customers are emotionally linked to the company and consider it trustworthy, thus developing a strong commitment and a long relationship which leads to loyalty (Morgan et al., 2015, p.24). Loyal customers prefer a company over its competitors (Larson & McClellan, 2017, p.2). The longer the company will keep its customers, the bigger its profits will be (Hill & Alexander, 2017). Loyalty is influenced by past positive experiences, customer identification with the product or brand, and/or lower price, high quality, friendly personnel, good quality services, convenient location, attractive website and nice atmosphere (sensorial marketing or merchandising) (Burrow, 2012, p.163) and so on.

The customer loyalty analysis is carried out through the prism of five stages: attracting new customers, retaining valuable customers, challenging customers to repeat the purchase or increase the buying frequency, earning customer trust and satisfaction and thus obtaining customer loyalty as the ultimate objective of the two-way company-customer relationship.

The study is important and based on elements of novelty such as the scientific cartography of the research in the field of customer loyalty, making an in-depth analysis of the identified articles on 5 important areas that build the term loyalty. The study also identified areas not fully analyzed, offering future research perspectives in the field. This study identified the current state of the field and determined future research paths as far as increasing the importance of customer relationships is concerned.

The article is structured as follows: the first part analyses the Literature review which is based on the five variables further used in the bibliometric analysis made by the authors. Part two presents the Research methodology and consists of the development of a Bibliometric analysis which is then devised based on the model specific for CRM- the GKG model, the development of a questionnaire to analyze customer loyalty and its influencing factors, the description of a few steps where we may envisage an analysis based on regression function, an analysis based on R, the chi-square test and where the individual and global average scores are determined also. In the end, proposals were made and some important conclusions were formulated to improve customer loyalty and relationship with valuable customers.

2. LITERATURE REVIEW

The literature review will be analyzed from the perspective of the following characteristics extracted, actually, from the bibliometric analysis performed within the research methodology, so they will be analyzed among the customers subjected to the research.

2.1 Attracting and retaining customers through perceived value

The article published by Wallenberg & Lukassen (2011) offered the idea of improving the quality of services in terms of relationships and the three specific stages of obtaining loyalty: retention, growth and recommendations. Thus, a model was developed, and it was found that through the prism of cost and performance, a dynamic relationship and proactive performance can be developed. Zhang et al. (2016) showed in their study that the value obtained by customers and the quality of relationships is direct and positive depending on the relationship life cycle and loyalty. Another study made by Park et al. (2013) indicated that applying new technologies may lead to increased loyalty and new added business value.

2.2. Obtaining performance

El-Manstrly (2016) analyzes the relationship with customers from the perspective of costs-based value, trust and loyalty. The questionnaire and models used found that by maintaining average costs, the relationship will thrive. Ferreira et al. (2017) also contributed to understanding customer loyalty indicating that it is a growing concern and that loyalty is perceived as very important in obtaining performance and improving long-term relationships.

2.3. Improving perceptions and trust

Albaity & Rahman (2021) analyzed customer loyalty to UAE banking services according to several variables such as satisfaction, an attitude of choice, trust and the influence of religious factors. The results indicated that there is a strong relationship between the clients and the institution under analysis and demonstrated a strong and positive relationship between the analyzed variables. Trust plays an important role in understanding the relationship between satisfied customers, religious obligations and loyalty. Another study conducted by Iglesias et al. (2020) showed that in this transparent, digitalized, and connected environment, customers want that companies apply genuine corporate social responsibility practices and co-creation activities based on commitment, trust and loyalty. The study is made in Spain on 1101 customers within services. Lee (2022) also centered the idea of trust analyzing customer loyalty facilitators such as trust, commitment, and inertia. Attar et al. (2022) mentioned in their study the mediating role of trust between social presence and customer loyalty.

2.4. Obtaining customer satisfaction

Customer satisfaction is very important in this fast and globalized world, so its analysis is a condition not only to survive but to obtain performance and overcome competition.

Many authors conducted a lot of studies on customer satisfaction based on analyzing different communication channels used by customers under the influence of cultural factors (Lee & Salciuviene, 2018), analyzing trust and value demonstrated by customers in air services from Thailand, which were very affected by the COVID-19 crisis and tried to find new solutions based on loyalty and strategies starting from loyalty (Chanpariyavatevong et al., 2021), examining the association between relationship quality, service quality, customer satisfaction and loyalty in banking services from Tanzania (Tegambwage & Kasoga, 2022), analyzing valuable information on customers preferences using digitalization and, thus, creating loyalty (Rai et al., 2022), analyzing loyalty within the mobile service market in Macedonia, using impact factors and their inter-relationship insofar as service quality, customer satisfaction, switching costs and switching barriers. The results indicated their positive impact on loyalty, setting forth specific strategies necessary to develop loyalty (Palamidovska & Ciunova, 2017).

2.5. Customer loyalty

Various studies have indicated that by increasing loyalty among valuable customers, long-term relationships will improve and both sides will benefit.

Loyalty is approached in the studies of various authors on various axes, such as:

- loyalty as a choice. Narvanen et al. (2020) have devised a framework necessary to determine customer loyalty. The study was conducted in Sweden on retail, and the research resulted in ideas such as loyalty as a choice, as a relationship and as belonging.
- loyalty and quality. To improve the quality of services, Skackauskiene et al. (2015) have created a model based on the measurement of loyalty at different levels, which can help to obtain quality in the analyzed field and to determine the degree of loyalty of the clients it has in its portfolio. Another study made by Sivapalan & Jebarajakirthy (2017) indicated that the quality of offered services is an indicator of obtained loyalty of customers, collecting data from 2375 customers from Sri Lanka.
- loyalty and performance. Nenadal et al. (2021) developed a new term for complex customer loyalty, which confirmed that only 15% of this sector use loyalty measurement indicators. The term is only emerging, but one can foresee its application on a certain scale and areas, not only regionally but internationally too. Prentice & Correia (2017) analyzed the relationship between service attributes, relationship quality and customer loyalty in the field of air services. Using demographic and psychographic variables as well as behavioral and

attitudinal dimensions with an aim to determine the purchase intentions also by using a symmetrical test.

- loyalty and novelty. Hu et al. (2020) made a study which indicated that efficiency and novelty-centered companies can directly affect customer loyalty.
- loyalty and relationship. Is hard to attract new customers due to fierce competitiveness, so changing marketing strategies and focusing on a relationship with customers by offering qualitative services is very important to obtain performance. The study performed on 162 customers by Tai (2015) indicated that the positive relationship and the brand influence customers' loyalty.
- loyalty and employees. Loyalty have become a priority for services, especially for banks; making a survey, Ferreira et al. (2015) indicated that using a top-down process, loyalty is increased at the bottom of the system, meaning the relationship between front officers and customers. So, a multi-criteria framework was developed to measure and manage loyalty.
- loyalty and brand. Other authors (Jader et al., 2021) made a study based on identifying the relationship between loyalty and brand reputation. The study made in Brazil indicated that popularity influences loyalty directly and positively to the most frequented brands.
- loyalty and sustainability. Moisescu (2018) indicated that customer-based perceptual corporate sustainability influences customer loyalty, by researching and using a sample of 1464 customers from four important industries and Frempong et al. (2022) analyzed the same relationship between sustainability, green image and loyalty in Ghana on 790 customers from three important fields of economy and found a direct relationship.

3. RESEARCH METHODOLOGY

3.1. Bibliometric analysis for customer loyalty field

A bibliometric analysis with a VOS viewer analyzed the interest in the customer loyalty field, using this term for searching the Web of Science database. They identified 4,417 publications (articles, proceedings papers, book chapters, reviews, books, etc.), published between 1976 - January 2022. From the 862 articles published on Open Access, only those with an impact factor other than zero were chosen in the end.

3.1.1 Materials and methods

The study focused on analyzing the scientific database Web of Science using the term "customer loyalty" as a search term. 4,417 publications have been identified (Article, Proceedings Paper, Book chapter, Review, Book, etc.), publications published between 1976 and January 2022, the study focused on the analysis of articles published in Open Access with a non-zero impact factor. These articles have times cited 100,663, Citing Articles 53,875, Average per item 22.79, H-Index 138. The first five categories of framing publications on the Web of Science, depending on their number are Business 1725, Management 1289, Hospitality Leisure Sport Tourism 421, Economics 378, and Computer Science Information Systems 354. The main first editors are Emerald Group Publishing 669, Elsevier 651, Taylor & Francis 45, Springer Nature 304, IEEE 263.

3.1.2 Research results

After analyzing the paper carried out with VOSviewer, they found that the first three countries that published in the field of customer loyalty summed up a percentage of 41.39% of the total publications in the analyzed field (Figure 1).

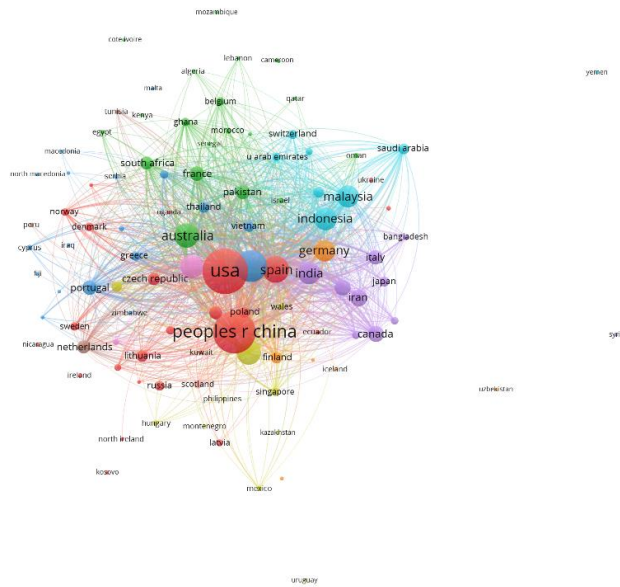


Figure 1. Bibliographic coupling – country

Source: Graphic representation using Vosviewer made by the authors

From the analysis, we can see in the top 10 according to the number of publications that the USA holds the first place with 778 publications (17.61% of the total publications in the field), followed by China with 667 publications (15.32%), and Taiwan with 374 publications (8.46%). Below is the analysis of the number of publications in terms of the institutional affiliation of authors in this field (Figure 2).

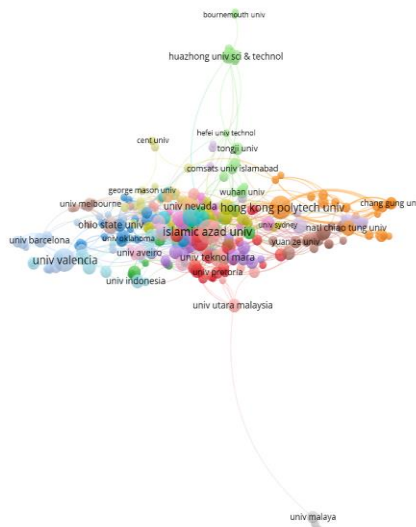


Figure 2. Co-authorship by organizations map

Source: Graphic representation using Vosviewer made by the authors

The 10 global institutions identified in the field are the State University of Florida (77), The Islamic Azad University (53), Hong Kong Polytechnic University (45), The University of Valencia (44), California State University System (38), Griffith University (31), The Indian Institute of Management IIM System (30), The Nevada System of Higher Education NSHE (29), The

Pennsylvania Commonwealth System of Higher Education PCSHE (29), Sejong University (28). In terms of the number of publications in the field of customer loyalty, the first three authors are Han H with 25 articles (0.566%), Gil-Saura I. with 16 articles (0.362%), and Prentice C. with 16 articles (0.362%).

The graphic representation of the authors is given below (Figure 3).

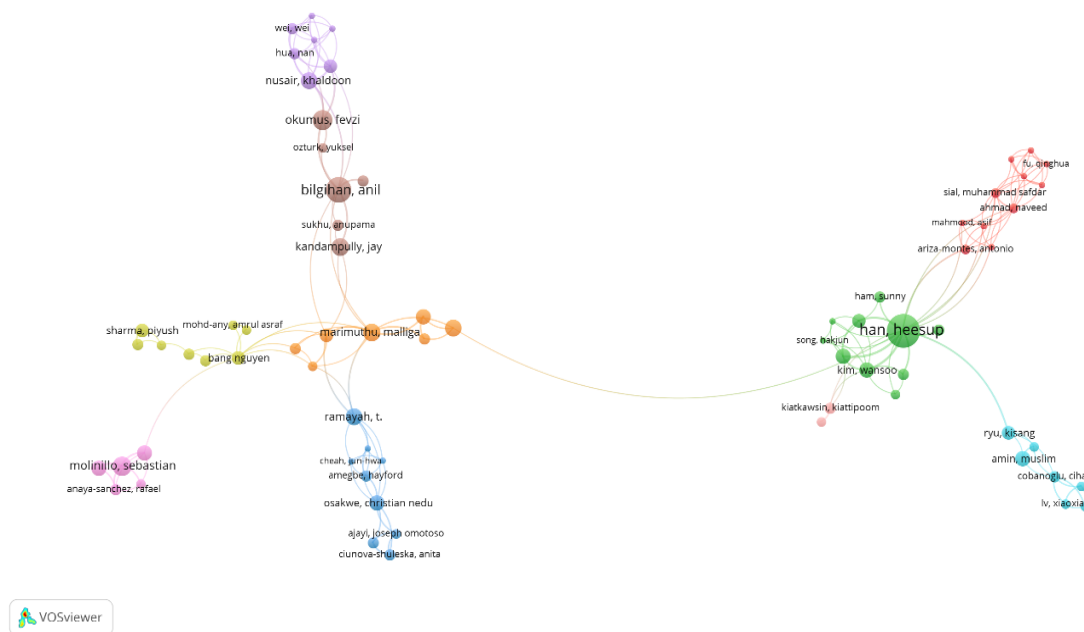


Figure 3. Graphical representation of articles by authors
 Source: Graphic representation using Vosviewer made by the authors

The most cited authors who have published articles in the field of customer loyalty are shown in the figure above and the 10 authors published a total of 149 articles out of the total of 4,417 (0.033%). Using VOSviewer software for database analysis, a map was generated showing the co-appearance of the keywords used by the authors of the publications (Figure 4).

This map is useful for understanding trends and shows the links between the most common keywords. Depending on the keywords found and the keywords that determine the research literature are customer loyalty, customer satisfaction, perceived value, intentions, perceptions, and performance.

Figure 4 generated using VOSviewer shows a map referring to the co-appearance of the keywords used by the authors in their publications from the analyzed field. The minimum occurrence of a keyword was set at 5 for the 4,027 identified keywords and only 497 were chosen by the program. By understanding the links between the keywords used and by observing the keywords most used by the authors in their works, 16 clusters were identified and the most important keywords from each cluster are presented below:

- Cluster 1 (71 items): attitudes, behavioral intention, consumer, brand, business performance, engagement, value, perception, relationship, retention.
- Cluster 2 (68 items): brand, consumer, big data, clustering, CRM, value, NPS, prediction, repurchase.
- Cluster 3 (58 items): attitude, cloud computing, customization, e-loyalty, e-satisfaction, CRM, supply chain, website design.
- Cluster 4 (50 items): loyalty, brand, customer, e-wom, trust, social media, value co-creation, information sharing.

K (to keep)- consists of retaining or regaining the valuable customers, dropping the non-valuable customers, satisfy them, protect them against the competition and make them loyal; the last phase- G (to grow)- is consisting in making unique offers, use recommendations and benefits to attract new customers and retain the old and loyal ones (Baran & Galka, 2013, p. 298; Peppers & Rogers, 2004, p.6; Brigman, 2013; Baran & Galka, 2016, pp.337-340; Kumar & Meenakshi, 2011). Starting from the GKG model we developed a few important actions necessary to improve the relations with customers and analyze their degree of loyalty.

Table 1. Implementing the GKG model and developing loyalty analysis using a questionnaire

Phase	Actions necessary to develop an analysis based on a questionnaire
1. Getting customers	1.1. offering perceived value for customers 1.2. reducing costs and growing performance
2. Keeping customers	2.1. improving perception 2.2. growing trust
3. Growing customer portfolio	3.1. increasing customers satisfaction 3.2. increasing customers loyalty

Source: Adaptation after Baran & Galka (2013), p.298; Peppers & Rogers (2004), p.6; Brigman, (2013); Baran & Galka (2016) pp.337-340; Kumar & Meenakshi (2011) and actions/steps developed by the authors

The research was made on 100 customers who made purchases from two analyzed supermarkets from Târgoviște, Dâmbovită county, Romania. For strategic reasons, the supermarkets were denoted as S1 and S2; both supermarkets are situated in the center of the town at a short distance one from another. S1 has a small and intimate commercial area, making communication effective between customers and sales-force, more open and closer and applying bigger prices, but the quality and novelty of products are bigger; S2 has the largest commercial area and its prices are average. Necessary steps to analyze loyalty and its influencing factors:

Step 1- develop a questionnaire to analyze loyalty

The research was made between October 2021 and May 2022, and the persons questioned had ages between 20 and 50 years old (participants from license and master programs in analyzing the relationship and communication process). This variable along with gender or socio-economic status are not analyzed, this being the reason for not presenting them; only the relationship and communication with both supermarkets are important for comparison and analysis. It used Likert scale (1-minimum to 5-maximum). It analyzed each phase of the GKG model, developing a questionnaire to observe each phase and the behavior of analyzed customers in relationship with the analyzed supermarkets. Then, the obtained scores were analyzed and compared and some measures were proposed to improve the loyalty of analyzed customers.

Table 2. Questionnaire-based on GKG phases and sub-phases

Model GKG and specific actions/affirmations
1. Get new customers
1.1. Offering perceived value for customers
Q1. When I buy from this supermarket I find product novelty
Q2. The products I buy from these supermarkets bring me real benefits
1.2. Reducing costs and growing performance
Q3. The level of prices is convenient
Q4. I am glad whenever different offers are made

Model GKG and specific actions/affirmations
2. Keeping customers
2.1. Improving perception
Q5. Communication with the sales force is good
Q6. Sensorial marketing is well-used in the supermarket
2.2. Growing trust
Q7. I trust the quality of their products
Q8. I trust their messages
3. Growing the number of customers
3.1. Growing customers' satisfaction
Q9. I am pleased when I go shopping at this supermarket
Q10. The price is linked to the quality of the product
3.2. Growing customers' loyalty
Q11. I am loyal to the brand
Q12. I recommend their products to my friends

Source: model developed by the authors

Step 2 – implement regression function, R square and interpret the research hypothesis

Research hypothesis developed based on the variables resulting from the bibliometric analysis:

I – attracting and retaining – H1-value perceived by the customers challenge them to become loyal (Q1, Q2, Q3 and Q4)

II – increasing performance – H2-good communication is absolutely necessary to obtain increased loyalty (Q5 and Q6)

III – increasing trust – H3-trust by using efficient messages influences loyalty (Q7 and Q8)

IV – satisfaction – H4-satisfaction makes customer more loyal (Q9, Q10 and Q12)

To achieve our objectives, the collected data was interpreted using the IBM SPSS statistic 20 program and conclusions and proposals are formulated.

To attract, retain and grow the number of loyal customers, the research hypothesis was verified and the results showed that all the independent variables influence loyalty positively, between a low influence (between 1.2% and 8.7%) and a bigger influence and the average (between 21.8% and 48.5%) (table 3). The research hypothesis was partially fulfilled, so, it is imperiously necessary for managers to work in collaboration with the sales force and plan to improve performance and to relate with valuable customers. More details are presented within the conclusions.

Making the estimation equation it was obtained the following regression function:

- For S1: Y (loyalty-Q11) = 0.42 x nov (Q1) + 0.492 x ben (Q2) + 0.492 x lev pric (Q3) + 0.080 x offers (Q4) + 0.714 x good comm (Q5) + 0.017 x sens mk (Q6) + 0.615 x qual (Q7) + 1.155 x mess (Q8) + 4.292 x pleas shop (Q9) + 0.042 x pr&qual (Q10) + 27.964 x recomm (Q12)
- For S2: Y (loyalty-Q11) = 3.830 x nov (Q1) + 2.711 x ben (Q2) + 0.082 x lev pric (Q3) + 0.030 x offers (Q4) + 0.592 x good comm (Q5) + 0.608 x sens mk (Q6) + 0.977 x qual (Q7) + 1.153 x mess (Q8) + 0.888 x pleas shop (Q9) + 0.277 x pr&qual (Q10) + 4.373 x recomm (Q12)

To increase by a monetary unit, y (loyalty) will obtain an increase for each analyzed variable with the value obtained above. It can be observed that the value of the free term is not so high (between 73.613 and 118.623), so the chosen analyzed characteristics have an important impact on the evolution of loyalty (being positive). The positive values for the determined free terms indicate that the chosen variables positively influence the evolution of loyalty.

Table 3. Regression function and R

Dependent variable (loyalty-Q11)	Independent variable	Analyzed supermarket	regression	residuals	R	R square
	Novelty	S1	2.365	116.275	0.141	0.020
	Q1	S2	3.830	76.760	0.218	0.048
	Benefits	S1	0.123	118.517	0.032	0.001
	Q2	S2	2.711	77.879	0,183	0.034
	level of prices	S1	0.492	118.148	0.064	0.004
	Q3	S2	0.082	80.508	0.032	0.001
	Offers	S1	0.080	118.560	0.026	0.001
	Q4	S2	0.030	80.560	0.019	0.000
	good comm	S1	0.714	117.926	0.078	0.006
	Q5	S2	0.592	79.998	0.086	0.007
	sens. mk.	S1	0.017	118.623	0.012	0.000
	Q6	S2	0.608	79.982	0.087	0.008
	Quality	S1	0.615	118.025	0.072	0.005
	Q7	S2	6.977	73.613	0,294	0.087
	Messages	S1	1.155	117.485	0.099	0.010
	Q8	S2	1.153	79.437	0.120	0.014
pleas shop	S1	4.292	114.348	0.190	0.036	
Q9	S2	0.888	79.702	0.105	0.011	
price & qual	S1	0.042	118.598	0.019	0.000	
Q10	S2	0.277	80.313	0.059	0.003	
Recomm	S1	27.964	90.676	0.485	0.236	
Q12	S2	4.373	76.217	0,233	0.054	

Source: calculations made by the authors using SPSS

Step 3 – determining the individual and the global scores

Using the Likert scale and calculating the average scores, we observed that all the analyzed scores are above average (the smallest individual scores are 3.19 for S1 and 3.14 for S2), indicating that most of the respondents added that they are influenced by many characteristics (described within the article) in order to be loyal to the analyzed supermarkets to a large and a very large extent (Table 4).

Table 4. The individual and the global average score for each affirmation and supermarket

Affirmation	S1	S2
Q1 (novelty)	4.19	3.86
Q2 (benefits)	3.81	4.01
Q3 (prices)	4.44	3.58
Q4 (offers)	3.19	3.93
Q5 (comm)	4.11	3.08
Q6 (sens mk)	3.49	3.14
Q7 (quality)	3.79	3.81
Q8 (messages)	3.70	3.65

Affirmation	S1	S2
Q9 (pleas shop)	3.83	4.29
Q10 (price&qual)	3.45	3.50
Q11 (loyalty)	3.44	3.21
Q12 (recomm)	3.43	3.27
Global average score	3.74	3.61

Source: calculations made by the authors using SPSS

The first analyzed entity has a larger score than the second one (as we add, it has a smaller surface, so the communication and the relationship with customers are 1-to-1, closer and deeper).

Step 4- determining the association chi-square and those based on this coefficient

To make this analysis the SPSS program was used and it was established as a null hypothesis-H0- that there does not exist any association between the independent variable and loyalty- as a dependent variable. As we may observe in Table 5, for both supermarkets are determined the association coefficient for chi-square and those based on this coefficient.

Table 5. Association coefficients for chi-square and based on this coefficient

	Analyzed independent variables		Pearson chi square determ	Phi	Cramer's V	Spearman correlation	df (degrees of freedom)	Chi square theor	Compare chi determ with chi theor
novelty	S2	14.379	0.379	0.219	0.223	12	21.026	<, H0 is acc	
Q2	S1	5.733	0.239	0.138	0.045	12	21.026	<, H0 is acc	
benefits	S2	5.921	0.243	0.140	-0,181	12	21.026	<, H0 is acc	
Q3	S1	8.613	0.293	0.208	-0,049	8	15.507	<, H0 is acc	
prices	S2	30.841	0.555	0.321	-0,039	12	21.026	>, H0 is rej	
Q4	S1	18.535	0.431	0.215	0.008	16	26.296	<, H0 is acc	
offers	S2	7.102	0.267	0.154	0.005	12	21.026	<, H0 is acc	
Q5	S1	13.252	0.364	0.210	-0,072	12	21.026	<, H0 is acc	
communic	S2	11.296	0.336	0.168	-0,089	16	26.296	<, H0 is acc	
Q6	S1	15.334	0.392	0.196	-0,023	16	26.296	<, H0 is acc	
sens mk	S2	23.241	0.482	0.241	0.058	16	26.296	<, H0 is acc	
Q7	S1	30.313	0.551	0.275	-0,022	16	26.296	>, H0 is rej	
quality	S2	22.273	0,472	0.272	-0,269	12	21.026	>, H0 is rej	
Q8	S1	11.690	0.342	0.171	-0,062	16	26.296	<, H0 is acc	
messages	S2	6.304	0.251	0.145	-0,121	12	21.026	<, H0 is acc	
Q9	S1	11.014	0.332	0.166	-0,162	16	26.296	<, H0 is acc	
pleasure shop	S2	11.181	0.334	0.193	-0,112	12	21.026	<, H0 is acc	
Q10	S1	20.364	0.451	0.226	-0,046	16	26.296	<, H0 is acc	
price&qual	S2	6.455	0.254	0.126	0.063	16	26.296	<, H0 is acc	
Q12	S1	48.831	0.699	0.349	0.473	16	26.296	>, H0 is rej	
recomm	S2	22.039	0.469	0.235	-0,217	16	26.296	<, H0 is acc	

Source: calculations made by the authors using SPSS

The interpretation of these values is presented in the Findings section.

4. FINDINGS

R, for S1, shows that between the analyzed variables, there is a positive relationship and that the evolution of chosen influencing factors explains between 1.2% (for sensorial marketing) or 1.9% (for price and quality) and 19% (for pleasure to shop) or 48.5% (for the recommendation) of the evolution of dependent variable- loyalty.

R for S2 indicates that between the analyzed variables, there is a positive relationship and that the evolution of chosen influencing factors explains between 1.9% (for offers), 5.9% (for price and quality), or 29.4% (for quality) and 23.3% (for the recommendation).

R is positive for both analyzed supermarkets but weak and some of them are average, indicating that S1 and S2 must implement efficient policies necessary to improve efficient relationships with customers and their loyalty and implicitly both sides obtained long-term value.

The global score is 3.74 for S1 and 3.61 for S2. They are both above average and between good and very good (4 and 5 points). The highest scores for S1 are obtained for novelty (4.19), for good communication (4.11) and pleasure to shop (3.83). The smallest scores are obtained for prices (4.44), being the most increased they can negatively influence loyalty; the offer (3.19) and recommendation (3.43). S2 obtained increased scores for pleasure to shop (having a larger surface for shopping than S1, being above S1 – 4.29), for obtained benefits (4.01), being the only score above 4 points. The next is for offers (3.93). The smallest are obtained for loyalty (3.21), sensorial marketing (3.14) and for communication with the sales force (as it is a large surface, the communication suffers and is seen as a low score- 3.08).

From this analysis, we may observe that by calculating Pearson chi-square and then comparing the values with the theoretical ones, it results that for only three variables the null hypothesis- H0 is rejected, meaning that between them there is an association and that price (for S2), quality (for S1 and S2), and recommendation (for S1) influence loyalty. The other variables, for both supermarkets and two just for one supermarket, the null hypothesis- H0 is accepted, meaning that there is no association between analyzed variables.

5. PROPOSALS AND CONCLUSION

In order to attract and retain customers, H1-value perceived by the customers challenge them to become loyal- for novelty- Q1, only 14.1% of novelty influence loyalty and S1 and 21.8% for S2, thus H1 is partially accepted. Retaining customers with competitive prices is not perceived as very influential, due to lower obtained values for R, so for the level of prices- Q3 influences loyalty, only with 6.4% for S1 and 3.2% for S2, thus there is a positive but weak influence, so the H1 again is partially fulfilled. The influence of benefits is important too, having an influence of 18.3% for S2; for offers-Q4, the influences are low (between 1.9% and 2.6%), so, clear objectives must be set so that the offer of the two analyzed supermarkets become attractive and challenging to keep valuable customers or gain new customers.

To increase performance- H2-good communication is necessary to obtain increased loyalty, it may be added that for good communication- Q5, only 7.8 and 8.6 influence loyalty for both supermarkets. So, the management must take into consideration these values and improve the communication process between the sales force and customers, so that they are attracted and maintained, and to bring new customers and communicate positively about them while improving performance for both parties involved. Regarding the influence of sensorial marketing, both supermarkets obtained lower but positive scores (1.2% for S1 and 8.7% for S2), so H2 is partially fulfilled.

To increase trust specific for phase three- H3- by using efficient messages and quality influencing loyalty, we may add that the values for S1 are positive but very low, and for S2 are 29.4% for quality which can influence loyalty and 12.0% for messages to create trust. So, Q7 and Q8 are partially fulfilled for S1 and fulfilled for S2.

Phase IV analyzed the influence of satisfaction on loyalty, so H4- satisfaction renders the customer more loyal as a result of the calculation that pleasure to shop is positive and above 10 for both supermarkets, supporting the hypothesis H4; price and quality influence between 1.9% and 5.9% the loyalty and recommendations influence loyalty more powerfully, between 23.3% for S1 and 48.5% for S2, so again the H4 is fulfilled.

Calculating R resulted in that the influence of some independent variables is low and of others is between 18.3%- for benefits and 48.5% for the recommendation. So, all other variables such as the level of prices, the offers, good communication, sensorial marketing, messages, the pleasure to shop, price and quality, all must be made real, clear and specific objectives in order to improve relationships with customers and implicitly the loyalty of analyzed customers. It is the result of this analysis that customers are still seeking good communication with the sales force, a specific sensorial marketing in the supermarket, good offers and competitive prices because these will be real reasons to leave the analyzed companies and search for competitors who satisfy their needs.

Regarding the average individual and global scores, they are above average, between 3.19 and 4.19 for S1, and between 3.08 and 4.29; they are good scores but not enough to attract and retain valuable customers interested in a close relationship based on trust, transparency, sincerity, communication, offer, not only in the distance between the analyzed supermarkets and the location of customers, or the shopping surface. So, not only technical characteristics influence the relationship, but also the social ones which must be fulfilled so that the valuable customers may not change their supplier and affect the performance of the old ones. There are a few limitations of this study, reminding that variables such as gender or socio-economic status were not analyzed, but their influence on the analyzed processes could be a future direction for other important research.

Implications for organizations and customers- the study indicates that the mathematical models used are important and showed for the two analyzed supermarkets that the managers could improve their performance by focusing on a 1-to-1 relationship with their customers. Knowing how to make them loyal, will grow the performance of the organization and also the number of customers. Specific programs and objectives must be developed to create such a mutual relationship, based on efficient communication and feedback, providing efficient information, improved relationships by using a good, trained sales force, and good practices and policies known and applied by all employees. For example, some important strategies could be developed by the management of business organizations: strategy based on 1-to-1 relationships based on treating each customer as unique and important for business performance, developing a database with customers' desires and opinions in order to know better and obtain long-term performance, strategies based on win-win situations, strategies based on the GKG model in order to comprehend the customer mind and needs.

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