

Dependence of Brand Loyalty on Customer Relationship Management

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Abstract

Customer relationship management (CRM) is growing in importance due to the challenging business environment facing organisations around the world. CRM includes employees, business processes and technologies to maximise customer loyalty and, as a result, business profitability. This paper focuses on CRM as a tool with which to strengthen brand loyalty. The aim of the research was to verify the positive impact of CRM on customer loyalty, respectively brand loyalty for a Slovak company, i.e. to determine whether there is a statistically significant relationship between customer relationship management and brand loyalty. This was achieved through the application of the Chi-square test of independence and subsequent correspondence analysis. The analysis of the research results confirmed that the more loyal a customer is to a brand, the more important the CRM activities of the company are with regards to addressing, acquiring and retaining them, as are their activities for achieving customer satisfaction and the determination of customer priorities.

Keywords: Customer Relationship Management, brand loyalty.

Introduction

Customer Relationship Management (CRM) is an interactive process designed to achieve an optimal balance between corporate investment and customer satisfaction. The optimal balance is determined as that point where both parties achieve maximum profit (Storbacka and Lehtinen 2002). CRM is a set of tools that promotes marketing, sales, and customer service within a company. A prerequisite for supporting these tools is perfect customer knowledge that guarantees the delivery of the product or service at the right

time and in the right place (Wessling 2003). CRM includes employees, business processes and technologies (information systems and information and communication technologies) to maximise customer loyalty and, as a result, business profitability. It is an integral part of corporate strategy and is becoming an integral part of corporate culture, too (Černý 2003). The goal of CRM is to build business relationship strategies that cultivate these relationships and therefore increase their value and profitability (Lošťáková, 2009). The fundamental objective of CRM is to create a long-term strategic partnership that provides added value to all stakeholders (Storbacka and Lehtinen 2002). Currently, there are a number of technical tools that enable and support CRM to provide information, analyses and communication, regardless of the overall business strategy.

In other words, the goal of CRM is to describe customer relationships in a sufficiently detailed manner so that direct sellers can offer products that induce customers to buy them. Fundamental success in trading is a reflection of the quality of the relationships. A company must create a desire and give the impression that the product they are offering is something special. The goals of CRM are to: maintain current customers and increase their loyalty; acquire new customers; increase customer satisfaction; determine the priorities of customers; increase profitability of the product portfolio; increase market share; increase sales; increase profit margins; successfully manage the marketing process (Kozák 2008). Strong and lasting relationships between a customer and a seller form the cornerstone of long-term profitability. According to Mitchell (2003), only a customer-oriented business can acquire loyal customers over time, and with it achieve higher profitability.

Loyalty can be viewed as a synonym for allegiance or devotion. If the concept is seen from a sociological point of view, it can be expressed as the allegiance or devotion of someone towards a particular person or an impersonal organisation. Another insight is that loyalty is voluntary in nature, that is, the person who proves their loyalty does so of their own free will and choice. At the same time, however, this generally interacts with the emotional dimension that narrows this choice (Maříková et al. 1996). For the needs of customer loyalty research, the definition needs to be more detailed. At a very general level, customer loyalty is a sense of commitment or affection for a company - its employees, products or services (Jones and Sasser 1995). According to Kim et al. (2009), loyalty can broadly be defined as the customer's positive attitude and devotion to a retailer, resulting in repeated buying behaviour. Nenadal (2001) defines loyalty as the behaviour of a customer in relation to its market implications in terms of repeated orders and positive references in the neighbourhood. Lošťáková (2007) states that loyalty is dependent on the level of customer satisfaction, the degree to which this is maintained and the willingness to recommend products or services to other people.

Many authors deal with loyalty in connection with brands. Brand loyalty has been a central structure of marketing for almost a century, yet this research topic is still actual and relevant. Brand loyalty is a complex construct, which leads to many definitions that are often very different. Pelsmacker et al. (2003) suggest that loyalty is a mentally positive correlation or relationship between a customer and a brand. Reischeld (1996) defines

loyalty as the long-term preference for a brand or firm based on the maximum satisfaction with the provided value and the positive expectations of the customer for the future. Jacoby and Kyner (1973) defined brand loyalty with six conditions, *videlicet* (1) biased (i.e., non-random), (2) behavioural response (i.e. purchase), (3) expressed over time, (4) by some decision-making unit, (5) with respect to one or more alternative brands out of a set of such brands, and (6) is a function of psychological (decision-making evaluative) processes. The American Marketing Association defines brand loyalty as a situation in which a consumer generally buys the same manufacturer originated product or service repeatedly over time rather than buying from multiple suppliers within the category, or the degree to which a consumer consistently purchases the same brand within a product class (Moisescu 2006). Aaker (1991) suggests that brand loyalty reflects the likelihood that a customer will switch to another brand, especially if a brand makes changes to its price, product function, communication, or distribution channels. Brand loyalty is also defined as a measure of consumer loyalty to a particular brand as expressed by repeat purchases, regardless of the market pressure generated by competing brands. When consumers commit to a brand, they make repeated purchases over time. Brand loyalty is the result of consumer behaviour and is influenced by personal preferences. Faithful customers consistently buy the products of their preferred brands, regardless of convenience or price. Brand loyalty is a key goal and the result of successful marketing programmes, business initiatives and product development efforts. The core of every successful brand is the core of loyal customers. They understand the brand better, buy more often and recommend the brand to others. Roy (2011), referring to Aaker, states that brand loyalty reflects the extent to which a customer is willing and able to switch from one brand to another. Tuominen (1999) defines brand loyalty as a positive attitude towards a brand, which leads to the consistent purchasing of the brand over time. It is the result of knowing the consumer that only one brand can satisfy its needs. One of the newest definitions of brand loyalty comes from Chegini (2010) who describes it in terms of theory, guidance leadership and positive behaviour, including repurchase, support and offer to purchase, which may influence a new potential customer.

Various typologies of customer loyalty are given for consideration in scientific literature (Aaker 2003; Gibbons 2012; Dick and Basu 1994; Jones and Sasser 1995; Kotler and Keller 2013; Lizbetinová 2017; Moisescu 2006; Reichheld, 2003; Schuller, 2014; Worthington, 2010). Reichheld and Teal (2001) argue that classical methods of measuring loyalty and subsequent segmentation are unnecessarily complicated. They present a new idea, namely that just one question is enough to measure customer loyalty. That question relates to the willingness of a customer to recommend a brand to other people. From the results of this one question, it is possible to simply and efficiently generate a single number (as the authors say "The one number you need to grow."), from which you derive the current state of brand loyalty. Reichheld (2003) argues that this is also an effective measurement for testing both the rational and emotional dimensions of a customer.

Material and Methods

Based on the analysis of secondary data on the research topic, it can be assumed that customer relationship management and brand loyalty are dependent. In order to confirm this hypothesis on the basis of primary data, we conducted empirical research into the influence of customer relationship management on customer loyalty, respectively brand loyalty for a Slovak company. At the time of the research, this anonymous company did not have a CRM strategy or programme in place. For the purposes of this research, data collection took place in the form of a questionnaire survey. The questionnaire was developed and distributed online. The expectation was that the research results would confirm the positive influence of CRM on customer loyalty to the brand of the company. Based on the research problem identified in the first phase of the research, a method for selecting a suitable sample, sample size and appropriate survey tools was established. We defined the customers of the analysed enterprise as the suitable sample. So we had to use the stratified sampling method. The size of the research sample was determined on the basis of a formula determined by Chráska in accordance with Nowak (2007):

$$n = \frac{t_{\alpha}^2 \times p(1 - p)}{d^2}$$

where n is the minimum number of respondents, t_{α} is the critical value of the normal distribution, p is the likely sample proportion, expressed as a decimal, and d is the confidence interval, expressed as a decimal. The confidence level was set at 95%. The critical value of the normal distribution at confidence level $\alpha = 0.05$ was 1.96. This is based on the fact that 95% of the area of the normal distribution is within 1.96 standard deviations of the mean. For those cases where the likely sample proportion was not known, p was set at 50%. The confidence interval was set at 7%. The confidence level and confidence interval were set by the management of the company. They considered them to be sufficient. Knowing that the surveyed company has 1,000 regular customers, and in order to avoid potential problems with the return rate of questionnaires, the confidence and interval levels were set at the higher level accordingly. On this basis, it was determined that 164 completed surveys would suffice. In total, 196 were obtained.

Based on the research problem, it was necessary to determine the level of brand loyalty. On the basis of secondary data, it was decided to determine this variable by asking the straightforward question posed by Reichheld and Teal (2003), namely "How likely are you to recommend us (our brand) to a friend or colleague? Respondents were required to answer using an 11-point scale (0 – 10), where 0 indicated "not likely at all" and 10 "extremely likely". According to the obtained values, respondents were divided into 3 basic groups: promoters (indicated 9 or 10 on the scale); passives (indicated 7 or 8 on the scale); and detractors (indicated 0-6 on the scale).

The impact of the CRM activities of the company were subsequently investigated. The data was obtained by posing the following questions: Are you influenced by the activities of the company with regards to addressing and acquiring customers? Are you influenced by the activities of the company with regards to retaining customers? Are you influenced by

the activities of the company with regards to achieving customer satisfaction? Are you influenced by the activities of the company with regards to determining the priorities of customers? Respondents were asked to choose from the following options: strongly agree (SA); agree (A); neither disagree nor agree (NDNA); disagree (D); strongly disagree (SD). It should be noted that the questions were developed on the basis of the defined objectives for a CRM system according to Kozak (2008).

The respondent's responses were used to statistically test and confirm or refute the hypotheses that were set, that is, with regards to the positive influence of customer relationship management on customer loyalty, respectively brand loyalty. Statistical hypothesis testing is one of the most important statistical inference procedures. The role of statistical inference is to decide on the basis of information on the available choices whether to accept or reject certain hypotheses with respect to the basic sample set. In order to do so, we proceeded in accordance with the methodology of statistical hypothesis testing, which consists of the following steps: Formulation of the null hypothesis (H_0); Formulation of the alternative hypothesis (H_1); Determination of the level of significance (α); Calculation of test statistics and probability; and Conclusion (Rimarčík 2007).

The goal of most statistical tests is to evaluate the relationship between variables. The null hypothesis expresses the independence of those variables. However, in the majority of cases we want to prove the validity of the alternative hypothesis, which expresses the actual relationship between the variables. The validity of the alternative hypothesis is proven indirectly by showing that the null hypothesis is incorrect and the alternative (the only remaining one) is correct. The null and alternative hypotheses must be mutually exclusive. The level of significance (α) is the probability of the first type error, which occurs when the null hypothesis is rejected even though it actually holds true, that is, we come to the conclusion that there is and there is not a relationship between the variables. The significance level is traditionally set at between 1% and 10%. For this research, the significance level was set at 0.05, which corresponds to a confidence interval of 95%. A confidence level of 95% is sufficient for conjoined analysis because it belongs to the set of multivariate methods and also combines data on preferences to a greater extent than standard methods. The test statistic is calculated from the sample set. It has an appropriate probability distribution based on the validity of the null hypothesis. Because the primary data in this research is of a nominal nature, the test statistic is a Chi-square test of independence. The p-value is the probability that the test statistic, assuming the veracity of the null hypothesis, achieves a value that is at least equal to the value calculated from the sample set. The p-value is the probability that the relationship found in the sample is only a consequence of chance. The p-value is the lowest value of the significance level that leads to the rejection of the null hypothesis. The smaller the p-value is, the more likely the null hypothesis is not true and should be rejected. If the p-value is so low that the statement is valid (the null hypothesis is rejected) at the significance level of 0.01 as well, it can be assumed that there is a statistically significant relationship between the observed variables. To calculate the test statistic for the hypothesis, IBM SPSS Statistics software was used. This software also calculates the correlation coefficient. In this case,

because the nominal variables are being examined in the number of 3+ x 2+, it was appropriate to investigate the strength of the dependence between the variables using Cramer's V measure of association. Cramer's V is the most common strength test with which to test data when a significant Chi-square result has been obtained. If the calculated p-value is less than the determined significance level, the null hypothesis is rejected (thus the alternative hypothesis is accepted). The conclusion is that the difference found in the sample set is too large to be reasonably considered as random, so it is statistically significant. If the p-value is equal to or greater than the established significance level, the difference found in the sample is not statistically significant and the null hypothesis is not rejected (Rimarčík 2007; Durica and Svabova 2015; McHugh 2013).

Correspondence analysis is a multivariate graphical technique designed to explore relationships among categorical variables. When the study variables of interest are categorical, correspondence analysis is an appropriate technique to explore the relationships amongst variable response categories and can play a complementary role in analysing data (Sourial et al. 2010). This method therefore lends itself well to marketing surveys that explore customer preferences and attitudes, and which seek to assess brand attractiveness. Examining the internal structure of the variables only makes sense if there is a dependency between the observed characters (factors). The use of correspondence analysis must therefore be preceded by the testing of hypotheses on the independence of the observed characters (Král' et al. 2009).

As previously stated, our research was aimed at determining the relationships between the level of brand loyalty and the activities of the anonymous company with regards to addressing and acquiring customers, their retention, the achievement of customer satisfaction and the determination of customer priorities.

Results

Hypothesis A – Level of Brand Loyalty/Addressing and Acquiring Customers

H0: There is not a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to addressing and acquiring customers.

H1: There is a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to addressing and acquiring customers.

The calculated test statistics are presented in Table 1.

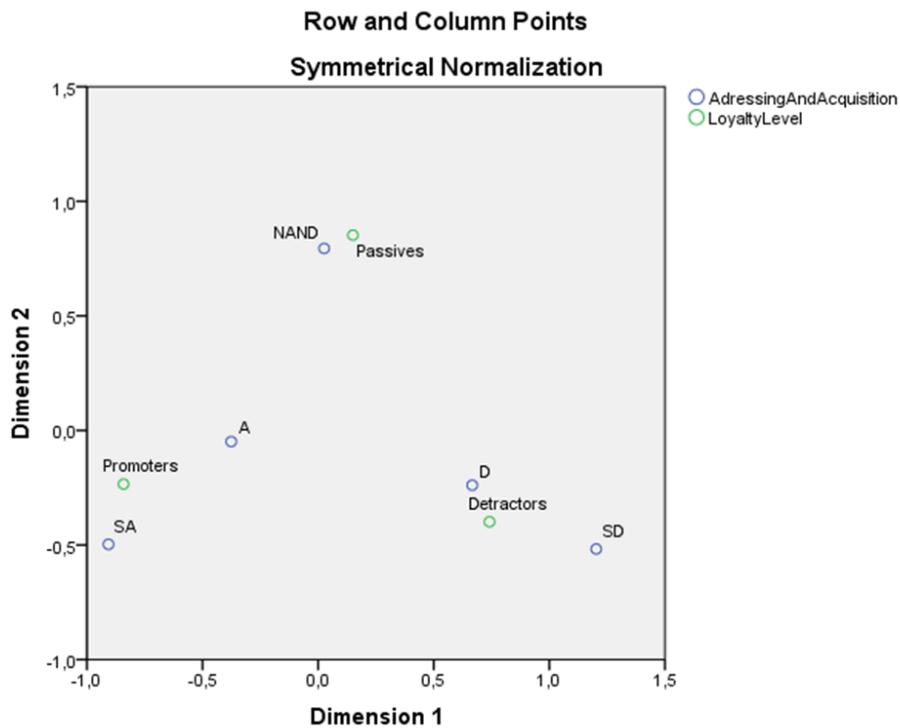
Table 1: Chi-Square test results for Hypothesis A

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------|--------------|-----------|--|
| Pearson Chi-square | 57.185a | 8 | 0.000 |
| No. of valid responses | 196 | | |

Source: Authors according to SPSS

Based on the comparison of the significance level with the p-value (Asymptotic Significance), the null hypothesis was rejected and the alternative hypothesis confirmed, i.e. there is a statistically significant relationship between the variables examined. The intensity of the dependence of the variables according to Cramer's V (0.382) indicates a moderate dependency. Based on the existence of dependence between the variables, it made sense to examine the internal structure of the contingency table by conducting a correspondence analysis. The data were processed using IBM SPSS Statistics software, the results of which are presented in Figure 1.

Figure 1: Correspondence map - level of brand loyalty/approach and acquisition



Source: Authors according to SPSS

Hypothesis B - Level of Brand Loyalty/Customer Retention

H0: There is not a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to customer retention.

H1: There is a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to customer retention.

The calculated test statistics are presented in Table 2.

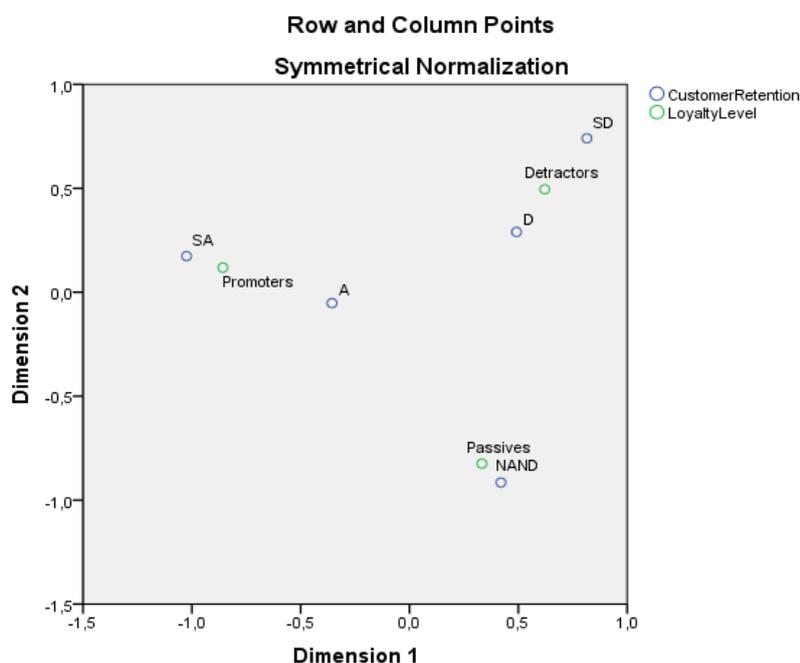
Table 2: Chi-square test results for Hypothesis B

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------|---------|----|-----------------------------------|
| Pearson Chi-square | 53.071a | 8 | 0.000 |
| No. of valid responses | 196 | | |

Source: Authors according to SPSS

Based on the comparison of the significance level with the p-value (Asymptotic Significance), the null hypothesis was rejected and the alternative hypothesis confirmed, i.e. there is a statistically significant relationship between the variables examined. The intensity of the dependence of the variables according to Cramer's V (0.368) indicates a moderate dependency. Based on the existence of dependence between the variables, it made sense to examine the internal structure of the contingency table by conducting a correspondence analysis. The data were processed using IBM SPSS Statistics software, the results of which are presented in Figure 2.

Figure 2: Correspondence map - level of brand loyalty/customer retention



Source: Authors according to SPSS

Hypothesis C – Level of Brand Loyalty/Customer Satisfaction

H0: There is not a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to customer satisfaction.

H1: There is a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to customer satisfaction.

The calculated test statistics are presented in Table 3.

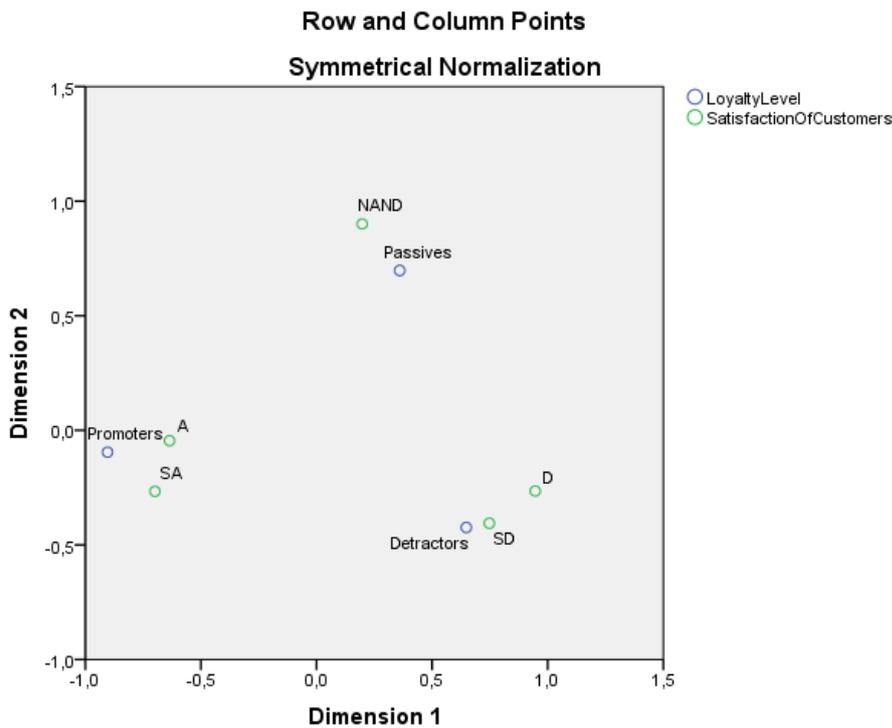
Table 3: Chi-square test results for Hypothesis C

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------|--------------|-----------|--|
| Pearson Chi-square | 54.349a | 8 | 0.000 |
| No. of valid responses | 196 | | |

Source: Authors according to SPSS

Based on the comparison of the significance level with the p-value (Asymptotic Significance), the null hypothesis was rejected and the alternative hypothesis confirmed, i.e. there is a statistically significant relationship between the variables examined. The intensity of the dependence of the variables according to Cramer's V (0.372) indicates a moderate dependency. Based on the existence of dependence between the variables, it made sense to examine the internal structure of the contingency table by conducting a correspondence analysis. The data were processed using IBM SPSS Statistics software, the results of which are presented in Figure 3.

Figure 3: Correspondence map – level of brand loyalty/customer satisfaction



Source: Authors according to SPSS

Hypothesis D – Level of Brand Loyalty/Customer Priorities

H0: There is not a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to the determination of customer priorities.

H1: There is a significant relationship between the level of brand loyalty and the impact of the activities of the company with regards to the determination of customer priorities.

The calculated test statistics are presented in Table 4.

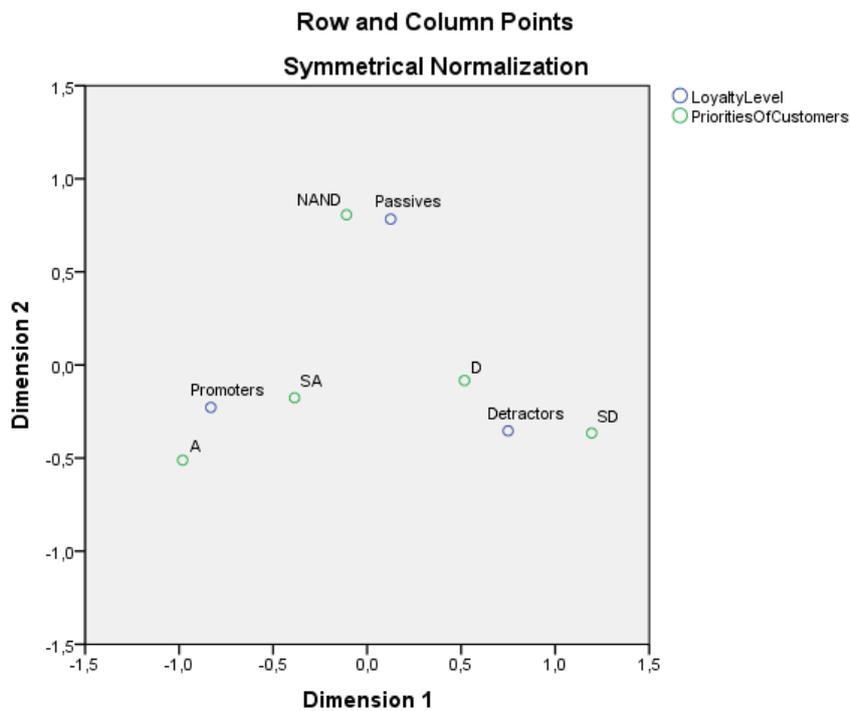
Table 4: Chi-square test results for Hypothesis D

| | Value | df | Asymptotic Significance (2-sided) |
|------------------------|---------------------|----|-----------------------------------|
| Pearson Chi-Square | 52.195 ^a | 8 | 0.000 |
| No. of valid responses | 196 | | |

Source: Authors according to SPSS

Based on the comparison of the significance level with the p-value (Asymptotic Significance), the null hypothesis was rejected and the alternative hypothesis confirmed, i.e. there is a statistically significant relationship between the variables examined. The intensity of the dependence of the variables according to Cramer's V (0.365) indicates a moderate dependency. Based on the existence of dependence between the variables, it made sense to examine the internal structure of the contingency table by conducting a correspondence analysis. The data were processed using IBM SPSS Statistics software, the results of which are presented in Figure 4.

Figure 4: Correspondence map – level of brand loyalty/customer priorities



Source: Authors according to SPSS

Discussion

The analysis of the research results confirmed that the more loyal a customer is to a brand, the more important the CRM activities of the company are with regards to addressing, acquiring and retaining them, as are their activities for achieving customer satisfaction and the determination of customer priorities. This is proved by the fact that the p-values for all the tested hypotheses were so low that the null hypotheses were rejected at the significance level of 0.01 as well. On this basis, it can be assumed that there is a statistically significant relationship between the observed variables. The subsequent correspondence

analysis revealed that the most loyal customers (promoters) of the company predominantly strongly agree or agree with the statement that they are influenced by the activities of the company with regards to addressing, acquiring and retaining them, as are their activities for achieving customer satisfaction and the determination of customer priorities, i.e. activities defined as objectives of CRM. In direct contrast to this, the least loyal customers (detractors) of the company predominantly disagree and strongly disagree with the same statement. In summary, it can be concluded that more loyal customers are more influenced by company activities defined as objectives of CRM.

This therefore implies that customer relationship management indeed has a positive impact on customer brand loyalty for companies. Similar findings were also confirmed in other research. Lawson-Body and Limay (2004) analysed the impact of customer relationship management on customer loyalty and found that customer-oriented partnerships and the personalisation of services had a direct impact on customer loyalty. This means that an effective CRM strategy increases the customer's social and behavioural commitment. Amin (2011) found that engagement and dedication to customer requirements and needs increases customer loyalty. Seyyed Javadin, in accordance with Mohammadpour (2014), concluded that the main factors influencing customer loyalty include customer relationship management in the form of manpower, processes and technology and that all these factors had a significant effect on customer loyalty in his study. Further research confirms that a significant relationship has been observed between customer relationship management and customer loyalty. Accordingly, it can be said that emphasis has to be placed on customer relationship management (Kocoglu and Kirmaci 2012). The results of another statistical analysis show that customer relationship management not only has an influence on customer satisfaction, but also on customer loyalty (Khedkar 2015). Customer loyalty can be achieved through the successful implementation of a CRM strategy and programme. An effective customer relationship management strategy is positively linked to customer loyalty. CRM helps organisations to build long-term relationships with their customers (Kamrul and Rahman 2015). As a result, emphasis, once again must be placed on customer relationship management. It is suggested that companies should invest in relationship building and customer intimacy with loyal customers because it will in turn lead to even greater loyalty (Ndubisi 2004). Businesses that develop business relationships with customers through frequent product and service adjustments will have a high customer engagement rate and will win their loyalty (Weberova 2016). If an organisation truly wants to create a group of loyal customers, it must use a CRM marketing strategy that leads to a personal dialogue with each of its clients. In this way, they can slowly recognise them and start using their feedback to provide the best products and specific services for each one.

Conclusion

This article looked at the influence of customer relationship management on customer and brand loyalty with regards to the anonymous company at the heart of the research. Customer relationship management can be considered to be an important tool for the

competitiveness of businesses. This is because the strengthening of the relationships with customers by delivering higher customer value and the application of differentiated approaches to them can change the relationship to the benefit of both sides and therefore increase the potential for maintaining customer loyalty. This conclusion is mainly based on theoretical knowledge and secondary research data. However, this was also confirmed by the results of our research, which revealed that the most loyal customers of the company predominantly strongly agree or agree with the statement that they are influenced by the activities of the company with regards to addressing, acquiring and retaining them, as are their activities for achieving customer satisfaction and the determination of customer priorities, i.e. activities defined as objectives of CRM. On the basis of the research results, the importance and benefits of customer relationship management in relation to brand loyalty were highlighted, all of which form the theoretical and practical basis (reasons) for the potential implementation of a CRM strategy and programme within an enterprise.

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