

# Testing of Methods for Customer Loyalty Measurement in Pharmacy „Camelia“

In marketing theory, every author proves the significance and value of the promoted method; however, in practice the customer loyalty measurement method has to be simple in its application, its results should be presentable, highlighting the real situation, promoting particular insights for future decisions. Therefore, it is important for every organization to know which method of customer loyalty measurement provides the most precise results and is the most suitable for customer loyalty measurement.

**Keywords:** customer loyalty, customer loyalty measurement.

Kiekvienas marketingo teorijos autorius pagrindžia savo pateikiamo metodo reikšmingumą ir mokslinę vertę, tačiau praktikoje naudojamas vartotojų lojalumo matavimo metodas turi būti lengvai pritaikomas, o jo rezultatai reprezentatyvūs, atskleidžiantys realią situaciją, nubrėžiantys gaires ateities sprendimams. Akivaizdu, jog kiekvienai organizacijai svarbu žinoti, kuris vartotojų lojalumo matavimo metodas pateikia tikslesnius rezultatus ir yra tinkamiausias vartotojų lojalumui matuoti.

**Raktiniai žodžiai:** vartotojų lojalumas, vartotojų lojalumo matavimas.

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## Introduction

**Relevance of the research.** Attraction of the hugest possible amount of customers has been the main aim of organizations for a long time. Recently, many organizations have shifted their orientations from short-term relationships with their customers to customer loyalty formation. In marketing literature, customer loyalty is defined as repeat purchases of a product or a service initiated by a strong positive intrinsic belief (Egan, 2005).

Every organization realizes that customer loyalty is a very important success factor in the present rapidly changing competitive environment and in the presence of economical crisis, because loyal customers foster organizations to grow, improve its image, and maintain profits. Organizations know how to stimulate customer loyalty, implement customer loyalty programs, however, customer loyalty measurement is the object of discussions at theoretical, as well as at practical levels. The evaluation of customer loyalty becomes important to

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every organization, because only knowing the actual amount of loyal customers an organization can properly react to growing competition, market saturation, and customer migration.

Many contemporary organizations, including pharmacy “Camelia”, face huge competition in the market, limited growth possibilities, and customer migration encouraged by the search of the best value proposition. Achieving to keep its customers, pharmacy is actively using the discount-based loyalty cards’ program; therefore, it is very important for the company to know the real amount of loyal customers. Various loyalty measurement methods are suggested in theory and practice; however, there is a lack of substantiation for the most reliable one. The comparison and testing of different models for customer loyalty measurement is needed. The complexity of models’ application in practice promotes the necessity.

In marketing theory, every author proves the significance and value of his/her promoted method; however, in practice the customer loyalty measurement method has to be simple in its application, its results should be presentable, highlighting the real situation, promoting particular insights for future decisions. Therefore, it is important for every organization to know which method of customer loyalty measurement provides the most precise results and is the most suitable for customer loyalty measurement.

**The subject of the article** – customer loyalty measurement methods.

**The aim of the article** is to test three different customer loyalty measurement methods.

**Research methods.** The questionnaire research was provided to measure customer loyalty of the pharmacy “Camelia”.

Three different loyalty measurement methods were applied: Trust-based Commitment model, the Multidimensional model, and Net Promoter Score model. While analyzing the results, descriptive statistics and reliability analysis were provided.

## Theoretical aspects of customer loyalty

According to the conception of relationship marketing, there are two basic customer loyalty conceptions: behaviouristic and neo-behaviouristic. Behaviouristic customer loyalty conception dominated at the sixth decade of the twentieth century; the basic idea of the concept was that customer loyalty is reflected by permanent purchases of the same brand or at the same point-of-purchase. C. K. Yim and P. K. Kannan (1999), emphasizing behaviouristic approach mentions an exclusive or a hard-core loyal customer; hard-core loyal consumers are loyal to a single alternative despite many choice possibilities. The topic of identity between repeat purchases and customer loyalty was considered early. R. M. Cunningham in 1956 based on empiric research identified factors affecting purchase behaviour; latter factors were not considered by the behaviouristic loyalty conception.

Neo-behaviouristic customer loyalty conception is based on G. S. Day’s (1969) conceptual attitude that customer loyalty is a two-dimensional construct, accordingly, both aspects have to be considered. Day’s customer loyalty conception encompassing behavioural and attitudinal measures is applicable till nowadays. Many authors (Jacoby, Kyner, 1973; Jacoby, Chesnut, 1978; Backman,

Crompton, 1991; Pritchard et al., 1999; Mahony et al., 2000, et al.) provide their own modifications of the concept; however, the modifications do not vary much from Day's (1969) conception. The most widely analyzed neo-behaviouristic conception of customer loyalty can be found at A. Dick and B. Basu's (1994) scientific researches.

According to the neo-behaviouristic customer loyalty conception, customer loyalty is expressed by:

1. Behavioural loyalty, which is reflected by actual amount of product/services purchases in a concrete period of time;

2. Attitudinal loyalty, which is reflected by preferences for a certain brand's product or service; satisfaction with a product or a service; commitment; repeat purchase intentions; advocacy (positive word-of-mouth, recommendations).

Attitudinal and behavioural measures of customer loyalty can be called inter-related and inter-dependent. The growth of behavioural loyalty can be forecasted as a consequence of growth of attitudinal loyalty; i.e. a time after interest and priority to some brand occurs increase in actual purchases can be observed. Conversely, as an outcome of intense usage of a particular brand (growth of behavioural loyalty) growth of commitment, brand-preferences, i.e. the growth of attitudinal loyalty can be observed.

Despite the scientific opinion about appropriateness of the behaviouristic loyalty conception (Bloemer, de Ruyter, 1999; Gronholdt et al., 2000; Sivadas, Baker-Prewitt, 2000; Chaudhuri, Holbrook, 2001; De Wulf et al., 2001; Lee et al., 2001; Olsen, 2002 et al.), the authors of this article accept a neo-behaviouristic approach;

both, attitudinal and behavioural measures have to be considered while measuring customer loyalty.

The neo-behaviouristic customer loyalty conception is based on identification of customer loyalty categories. A. Dick and B. Basu (1994) define customer loyalty as a combination of repeat patronage and object-related attitude. Accordingly, four categories of customer loyalty can be identified:

1. *True loyalty*, expressed by positive reviews and attitude (attitudinal loyalty), and repeat purchases (behavioural loyalty);

2. *Latent loyalty*, related to positive attitude (attitudinal loyalty), but not to repeat purchases (behavioural loyalty);

3. *Spurious loyalty*, expressed by a low level of positive reviews (attitudinal loyalty), but huge repeat purchases (behavioural loyalty);

4. *No loyalty*, expressed by a low level of positive reviews (attitudinal loyalty) and a low level of repeat purchases (behavioural loyalty).

### **Loyalty measurement methods: theoretical substantiation**

Perceiving the benefits and advantages of customer loyalty, organizations are trying not only to attract and retain their customers, but make them loyal as well. Accordingly, every contemporary organization is concerned about the amount of loyal customers. In scientific literature, as well as in practical researches, customer loyalty formation is widely analyzed; however, there is a lack of substantiation for its measurement methods. Whereas customer loyalty is more than only repeat purchases, its measurement is a complex

subject. Such things as inert purchases, indifference to competitors, and defection barriers should be considered. Three methods dominate in customer loyalty measurement:

- Trust-based Commitment model – the relation between satisfaction and loyalty is not analysed; the main emphasis is on trust.
- The multidimensional model – encompasses attitudinal and behavioural principles, which encourage the customer to change behaviour and are based on actual behaviour.
- Net Promoter Score model – combines satisfaction and other loyalty-reflecting behaviour, e.g. intentions to recommend, positive reviews about organization, brand, product or service.

#### **Trust-based Commitment model.**

J. Hess and J. Story (2005) propose that a significant differentiator between the groups of satisfied customers who behave differently is trust in the brand. In the Trust-based Commitment model, satisfaction primarily leads to functional connections between the customer and brands and contributes to trust. If brands behave appropriately, trust builds into personal connections. The combination of functional and personal connections results in committed relationships. “Hence, customers in committed relationships with a brand are a subset of satisfied customers. While merely satisfied customers may be relatively likely to change purchase patterns or even brand affiliation, those satisfied customers who are also in a committed relationship with the brand are much more likely to continue to exhibit loyal behaviours” (Story, Hess, 2006).

Trust-based commitment supports at least two dimensions of loyal behaviour:

first, behavioural loyalty – commonly measured in the marketplace and, second, attitudinal loyalty – comprising beliefs, feelings, and intentions toward a brand (Oliver, 1999). While satisfaction may be sufficient for behavioural loyalty, those customers who are “merely satisfied” are a fair game for the competition. However, when loyalty goes beyond observable behaviour to include trust-endowed personal connections, substitutability declines and committed relationships develop. Defining loyalty as measurable behaviour leads to measures limited to purchase intentions, actions or history. Relationship commitment as a measure of multidimensional loyalty avoids the natural confound between loyalty and satisfaction, since trust is the primary differentiator.

The Trust-based Commitment model measures two dimensions: functional and personal. The functional dimension focuses on satisfaction and the basic utility of consumption. Functional connections form when the needs are satisfied and products or services perform as expected. Personal connections, on the other hand, result from beliefs and feelings that go beyond a basic product and a service function. When customers believe that the brand has their best interests at heart and that this brand will go above and beyond the call of duty, personal connections may begin to develop. In addition to brand activities, customers may enhance personal connections by incorporating brands into their self-concept and deriving pleasure from relational experiences (Story, Hess, 2006).

In order to measure customer loyalty by using the Trust-based Commitment model, customers should be segmented. As both discussed dimensions (functional

and personal connection) can be scaled into two levels (high or low), four customer segments occur:

- First, those consumers who rate low on both functional and relational connections are in transactional relationship. They do not perceive a brand as providing significant value relative to other brands and do not experience personal connections with the brand.

- Second, those customers who are in a functional relationship with a brand (high in functional and low in personal connections) have a true relationship, but it is primarily based on satisfaction. Members of this group are behaviourally loyal, but may make up a majority of those loyal customers who defect.

- Third, those customers who are in a personal relationship (low in functional and high in personal connections) and are motivated by attitudinal factors related to personal connections. Such customers may also exhibit loyal behaviour, but it results from attitudinal loyalty rather than functional outcomes. Customers with only personal connections may appear loyal, yet switch if offered higher functionality by a competitor in the market.

- Fourth, committed customers (high in functional and high in personal connections that are both behaviourally and attitudinally loyal to a brand. Their behaviour is influenced, and perhaps constrained by both, functional satisfaction and relational components of consumption.

For categorization of customers into the four segments while measuring their loyalty, a questionnaire and an interview method should be used. Behaviour or intention has to be measured at two different time periods. First, seven factors of loyal behaviour and intension are measured during the same session as relationship indicators:

- Willingness to pay more for a brand;
- Money spent during the past month;
- Sales promotion at brand's category;
- Visits during a period of time;
- Recommendation probability;
- Willingness to defect;
- Willingness to buy on Internet.

In addition, a separate set of questions involving both personal and functional measures is to be given (examples are presented in Table 1). All rating questions use a seven-point semi-anchored Likert scale. Their responses range from "Completely Agree" to "Completely Disagree" with the accompanying statements. Approximately six month later, customers should be contacted (using an interview method) for a follow-up study which would record their actual behaviour.

A separate set of questions has to be used in order to verify the efficacy of defining commitment resulting from a combination of personal and functional connections with a brand. Two general analyses should be performed to validate

Table 1

Samples of personal and functional connection measures

Personal	Functional
I have an emotional connection	They carry a wide variety of products
I have a personal connection	They carry products I'm looking for
I feel a sense of loyalty	They meet my basic needs

Source: J. Hess and J. Story (2005).

the overall framework. First, commitment should be analyzed paying attention to personal and functional connection and their interaction estimated by different parameters. The influence of each type of connection is enhanced by the presence of the other type of connection. Second, each of the behaviours should be analyzed following the relationship classification. The levels for all seven types of behaviour appear to be different across the relationship groups. The overall result suggests that personal and functional dimensions of relationship correlate with the incidence of loyal behaviour.

Following the mathematical and statistical processing, desirable results should be obtained – customers' loyalty should be measured and customers attributed into different segments according to their loyalty development.

#### **The Multidimensional model.**

A. Dick and K. Basu's (1994) customer loyalty model is a conceptualization of the combined effects of attitude and behaviour. The researchers suggest that loyalty is the result of the interaction between a customer's relative attitude to a brand or store, and his/her repeat purchase behaviour for that brand or store (Garland, Gendall, 2004). They utilize two dimensions or measures of loyalty (O'Malley, 1998):

- *Relative attitude.* Relative attitude focuses on the attitude to the entity and incorporates the attitudes to the alternatives. This encapsulates both, satisfaction and preference measures. The suggestion is that the higher the relative attitude between alternatives is, the more likely that attitude will influence the behaviour.

- *Patronage behaviour.* This includes traditional measures such as recency, frequency, and monetary value of purchases, share of wallet, purchase sequence, etc.

The typology divides customers into four loyalty groups. Customers with high attitudinal and behavioural loyalty are described as "true loyals", those with high behavioural loyalty but low attitudinal loyalty as "spurious loyals", those with high attitudinal loyalty but low behavioural loyalty as "latent loyals", and those with low attitudinal and behavioural loyalty as "non loyals". Implicit in A. Dick and K. Basu's model is the assumption that the classification of customers into four loyalty groups on the basis of relative attitude and repeat patronage should allow the prediction of other loyalty measures such as retention and defection.

Aiming to measure customer loyalty through the segmentation process, behavioural loyalty measures and attitudinal loyalty measures should be defined and an accurate questionnaire set. An example of both behavioural and attitudinal loyalty measures and questions, which could be used in the questionnaire, is presented in Table 2.

It has to be noted that the Multidimensional model of customer loyalty is modifiable and different authors, sustaining the main conception of Dick and Basu's model, represent different tools how to carry out the survey. Some of them accent questionnaires, while others emphasize telephone interviews. The choice often depends on the type of a market the company is working in, the type of a product or service the company produces and the information they generate. For example, R. Garland and Ph. Gendall (2004) suggest using the Juster scale for measuring attitudinal customer loyalty. Other authors (Rundle-Thiele, Mackay, 2001) emphasize data processing and suggest using factor and correlation analysis in order to get presentable findings. They also accent

Table 2

Examples of behavioural and attitudinal loyalty measures

Measure	Scale / question
<i>Behavioural loyalty measures</i>	
Price until switching	The preferred brand should be established and the average specified price reduction for the markets should be calculated.
Brand allegiance	Respondents should be asked to indicate the length of time they had been with the main brand purchased.
Price elasticity	Elasticity records how demand changes (in percentage terms) in response to a percentage change in price should be set (Sharp et al., 1997).
Share of category	Respondents should be asked to estimate their total spending with each supplier used at the time in all markets. This is distinct from share of category calculation in repeat-purchase markets where share of category is a function of how many times a given brand is purchased in a given time period.
<i>Attitudinal loyalty measures</i>	
Attitude toward the loyal act	Two 1-11 scales, where one is “totally disagree” and 11 is “totally agree” in response to the following statements: “I would feel uncomfortable moving to another supplier” and “I would not like to change suppliers” should be prepared.
Brand preference	Respondents should be asked to indicate the brand they most prefer.
Verbal probability	1-11 scale, where one is “no chance or almost no chance” and 11 is “certain, practically certain”.
Attitude toward the brand	Respondents should indicate which of the three statements best describes their feelings toward the brand. Statements could include: “There are many good reasons to continue to use and no good reasons to change” and “There are few good reasons to use but many good reasons to change” and “There are many good reasons to continue to use but also many good reasons to change”.

the Spearman rank-correlation procedure which could be used to study the association between loyalty measures. Thus it can be stated that different procedures and tools used to carry out the survey and generate the required information show wide adaptability of this loyalty measurement method and, at the same time, variant and problematic interpretation of the results.

**Net Promoter Score model.** F. Reithheld (2006) presents his new approach of loyalty measurement technique, which helps an organization to measure and manage the quality of relationship just as thoughtfully and thoroughly as it now measures profits. With his new viewpoint towards customer satisfaction and loyalty measurement, the author criticizes such loyalty predictors as traditional customer satisfaction surveys,

because they do not measure what the companies really need to know. F. Reithheld (2006) maintains the idea that the concept of loyalty implies strong values and is mostly applied to family, friends or country. People could be faithful (and loyal) to the company, but often they can call it in different words. If people are satisfied with the company, which produces their favourite product or service, what is their actual behaviour? Of course, they recommend it to their friends, relatives and so on (Reithheld, 2006). To behave as an advocate of a company, a person should believe that the company offers the best value: best price, best characteristics of concrete product, best quality, functionality, simplicity to use and other practical things. A very important idea is that a person should feel in good relationship with

the company. A person should believe that the company knows and understands his/her needs, appreciates him/her and has the same principles. Although it is more than satisfaction it could not exist without it. A person recommends the company with the enthusiasm to his/her friends only when the mentioned conditions are implemented as the question about recommendation rightly measures the quality of relationship, or in other words, customer loyalty.

After a long investigation, the author of this model found out that only one ultimate question: “How likely would you be to recommend our company to your friends or colleagues?” can truly measure customer loyalty. The measure index which is constructed from the answers to this question is called Net Promoter Score. Net Promoter Score is based on the assumption that each company’s customers could be divided into three categories:

- Promoters or loyal enthusiasts – people who talk about a company with their friends and family.
- Detractors or unsatisfied customers who spread ill-will.

- Passive or customers who are satisfied, but not enthusiastic, and competitors can easily lure them away.

The technique of dividing customers into these categories according to their answers to the ultimate question is presented in Figure 1.

According to F. Reichheld (2006), the method of gathering information about the customers can vary from telephone interviews to mailings. Data processing is rather simple as complicated mathematical methods are not used. The best way to calculate the Net Promoter Score is to deduct the detractors’ (D) percentage value from promoters’ (P) percentage value. The mathematical equation is presented below (1).

$$P - D = \text{NPS (Net Promoter Score)} \quad (1)$$

Although theoretically the calculation seems simple, F. Reichheld (2006) mentions that problems can occur in the process of giving the ultimate question (customers can refuse to participate in the research) and in trying to increase the Net Promoter Score (*see also* Zikienė, Bakanauskas, 2007).

**“How likely would you be to recommend our company to your friends  
or colleagues?”**

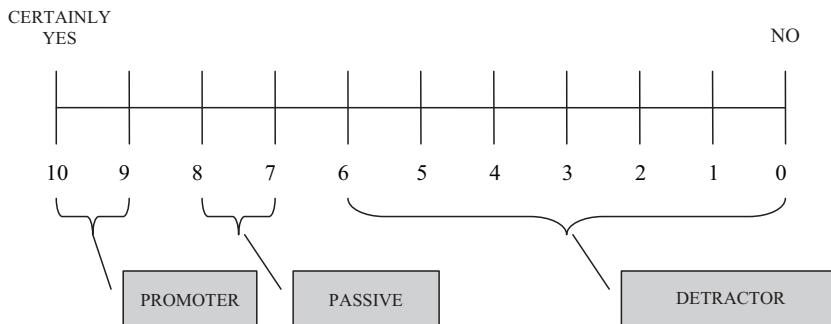


Fig. 1. The scale of answers to the ultimate question.



## **Methodological aspects of pharmacy's "Camelia" customer loyalty measurement**

The questionnaire research was provided to measure the pharmacy's "Camelia" customer loyalty. The organization was chosen considering its leading positions in the pharmacy sector. Promotional, discount, and loyalty cards programs are practiced for customer retention. The company's market share for medical products is the second largest in Lithuania (E-medicina, 2011). However, the market leader is the pharmacy „Eurovaistinė“. After the regulation for mark-ups of recoverable pharmaceuticals (the main sales share) started, pharmacies lost the possibility for price competition. The main factor for the survival in a competitive market became the loyalty-based relationship building with customers. Before starting building and maintaining customer loyalty, the organization has to determine the amount of existing loyal customers.

The research was provided to determine customer loyalty using three different customer loyalty measurement methods: Trust-based commitment model, Multi-dimensional model, and Net Promoter Score model. The aim of the research was to test the suitability for customer loyalty measurement.

Quantitative research methods were used for customer loyalty measurement. A questionnaire survey was provided for information gathering; accordingly, descriptive research was provided to determine the relations between variables. A standardized questionnaire was composed for information gathering about the customers' attitudes and intentions. Likert scale was used to determine the level of respondents' agreement or disagreement

with the statements provided. Three different measurement scales were used for the research. In the first case, respondents had to provide their evaluation at 1 to 7 points Likert type scale, where 1 meant "Absolutely disagree / Definitely won't recommend", 7 – "Absolutely agree / Will definitely recommend", and 4 – "Neither agree nor disagree"; and in the second case, 1 to 11 points scale was used, where the choice of 1 was "Absolutely disagree / Definitely won't recommend", and 11 – "Absolutely agree / Will definitely recommend". The third scale used was 0 to 10, where 0 meant "Certainly no", and 10 – "Certainly yes". The depth of the questionnaire was composed of 26 questions / statements. The research width was 150 customers of the pharmacy "Camelia". Probabilistic random sample was used where the choice of respondent was based on personal decision or convenience, and the probability for separate element of population to get to the sample was unknown. The research results were evaluated using statistical methods: descriptive statistics was used, means of evaluations and standard deviations calculated. Applying reliability analysis, Cronbach's alpha was calculated for the verification of the research reliability.

## **Research results**

The research for customer loyalty evaluation was provided using three methods of customer loyalty measurement: Trust-based Commitment model, Multidimensional model, and Net Promoter Score model. The comparative analysis of customer loyalty results provided by latter methods will be given. The questionnaire was composed of 26 questions / statements,

where 17 were reflecting results of Trust-based Commitment model, 8 – multidimensional model's results, and 1 question from Net Promoter Score model. After reliability analysis, Cronbach's alpha was calculated 0.90; accordingly, it can be stated that research results were statistically reliable.

### **Trust-based Commitment model's results for pharmacy's "Camelia" customer loyalty**

The principal elements of Trust-based Commitment model are satisfaction, trust, personal and functional connections and commitment to a brand.

Brand trust becomes the basis for personal connections, and satisfaction – for functional connections. Both connections significantly contribute to the creation of brand commitment. Achieving to properly measure customer loyalty using the latter method all the mentioned elements have to be considered. According to the reliability of the coefficient Cronbach's alpha (higher than 0.90) there can be stated that the results provided by Trust-based Commitment model are reliable. Using the latter method for customer loyalty evaluation, the results for every aspect of customer loyalty are analyzed:

- *Willingness to pay more for a brand.* The research results highlight the doubts of the pharmacy's "Camelia" customers for paying more. Contemporary customers are price-sensitive; accordingly, even small price fluctuation is important. Standard deviation varies from 2.086 to 2.176; the range is high and reflects the possibility for competitors to attract customers using smaller prices.

- *Money spent during past month.* The research results show that almost half of the pharmacy's "Camelia" customers

(73 from 150) spent about 40 Litas at the pharmacy during the past month. Even 123 respondents bought something at the pharmacy "Camelia" during the last month and have spent a certain amount of money: less than 40 Lt or more than 40 Lt.

- *Sales promotion at brand's category.* The research results highlight that customers of the pharmacy "Camelia" sometimes observe promotions and discounts, and often embrace in them.

- *Visits during past month.* During the past month even 79 respondents visited and purchased products at the pharmacy "Camelia" 2 and more than 2 times. It can be stated that the average monthly visit amount per customer equals 2.

- *Recommendation probability.* The research results highlight that customers are more tended to recommend than not to recommend (the mean of evaluations equals 2.9, where 1 meant "Will definitely recommend" and 7 – "Definitely won't recommend").

- *Willingness to defect.* The research results revealed that customers are not willing to defect to competitors; however, they would consider that in case of any misunderstandings or lack of appropriate products.

- *Willingness to buy on Internet.* The pharmacy's "Camelia" customers refuse to buy products on Internet.

According to the analysis provided, the strength of personal and functional connections is determined. Latter connections build trust between brand and customer. Functional connections reflect benefits received by customers, risk level, purchase efforts, and satisfied needs; personal connection reflect fulfilled expectations, faith, good brand-related emotions (see table 3).

Table 3

Customer valuations of functional and personal connections

Functional connections	Mean	Std.dev.	Personal connections	Mean	Std.dev.
<i>Money spent during past month</i>	2,15	0,702	<i>Recommendation probability</i>	2,90	1,957
<i>Visits during past month</i>	2,69	1,093			
<i>Sales promotion at brand's category</i>	3,09	2,277	<i>Willingness to defect</i>	2,89	1,985
<i>Willingness to buy on Internet</i>	5,93	1,960			
<i>Willingness to pay more for a brand</i>	4,33	2,131			
<b>Average valuations</b>	<b>3,64</b>	<b>1,633</b>		<b>2,90</b>	<b>1,958</b>

The pharmacy's "Camelia" functional connections with its customers can be defined more as weak than strong; the mean of evaluations is 3.64, which is slightly higher than scales average (3.5, where 1 is absolutely agree, and 7 – absolutely disagree). While evaluating functional connections, it is important to note that majority of customers visit pharmacy twice a month. S. W. Lewis (2010) states that if customer visits point-of-sale with the same brand at least twice a month, he/she can be held as sufficiently behaviourally loyal. Customers spend some amount of money during their visits. Research results highlighted that average customer spends at the pharmacy "Camelia" up to 40 Lt per month. The fact that customers often come and purchase namely at the pharmacy "Camelia" indicates quite strong functional connection. It can be proved by evaluations of sales and discounts-related benefits – the mean of evaluations is 3.09. However, functional connections cannot be called very strong, because customers are not willing to buy on Internet. Moreover, majority of respondents are not aware of such possibility (maybe because it's quite new). In Lithuania, the majority of seniors do not even use Internet; therefore, they have no possibilities to adopt such kind of purchase. Beside unwillingness of buying on Internet, the pharmacy's "Camelia"

customers doubt about willingness to pay higher prices for a brand. Summarising, it can be stated that functional connections between the pharmacy "Camelia" and its customers are weak and have a trend to develop into neutral connection zone.

The mean of responses (2.90) shows quite strong customers' personal connection with the pharmacy "Camelia". A high mean of likelihood of recommendations (2.90) reflects the customers' faith and brand trust. Suchlike mean reflects the customers' unwillingness to defect. The latter evaluation of the aspect highlights the pharmacy's "Camelia" customers' satisfaction with the production and service; moreover, it reflects the satisfaction of customers' needs and fulfilment of their expectations. Obviously, personal customers' connections with pharmacy "Camelia" is strong enough.

Whereas functional connections are weak (mean = 3.64), and personal connections are strong enough (mean = 2.90), it can be stated that the pharmacy's "Camelia" customers maintain personal relationships based on attitudinal factors. The customers demonstrate loyal behaviour, which is induced by attitudinal loyalty. Such customers can become loyal only for personal skills; however, such loyalty remains even if competitors offer better products.

The main result provided by Trust-based Commitment method is that the pharmacy's "Camelia" customers are loyal in their attitude, not at behaviours.

#### **Multidimensional model's results for pharmacy's "Camelia" customer loyalty**

Customer loyalty measurement applying Multidimensional Model starts with the evaluation of behavioural loyalty (high, low) and attitudinal loyalty (positive, negative). Purchase frequency and the possibility for customers to remain the pharmacy's customers reflect behavioural loyalty; and product choice possibilities and likelihood of recommendation and positive word-of-mouth reflect attitudinal loyalty. The method is statistically reliable – Cronbach's alpha is higher than 0.80.

Four statements were provided for the respondents' evaluation achieving to measure attitudinal loyalty. The first statement (I feel embarrassed when I go to other pharmacy than "Camelia") was evaluated negatively by the respondents. Such results mean that the majority of the pharmacy's customers do not feel intimacy to it. The mean of the statement's evaluations was 3.43, where 1 meant "I don't feel embarrassed" and 11 – "I feel embarrassed". The evaluation results for the second statement (I would not like to change the pharmacy "Camelia" to other pharmacy) were quite the contradicting. The majority of respondents choose neutral position; such results mean that pharmacy's "Camelia" customers are actively considering competing promotions, and anytime can defect to other pharmacy. The mean of evaluations is 6.04 and is neutral, slightly higher than scale average 6  $((1+11)/2)$ ; accordingly, it can be stated that the pharmacy's "Camelia" customers are undecided to defect to other pharmacy. The third statement (I often refer

positively about pharmacy "Camelia") reflecting brand attitude was favoured by majority of respondents. It means that customers are tended to spread rather positive than negative word-of-mouth. The mean of evaluations was 7.14. The results for statement "I recommend the pharmacy "Camelia" to others" are similar. Majority of the respondents absolutely agreed (11 point evaluation); therefore, it can be stated that the pharmacy's "Camelia" customers are recommending the pharmacy. The mean of evaluations (6.99) reflects rather intentions to recommend than to not recommend.

The analysis of statements' evaluations reflects quite low respondents' personal relationship with the pharmacy "Camelia", however, the level of recommendations and intentions to spread positive word-of-mouth appeared to be high. Based on the research results it can be stated that the pharmacy's "Camelia" customers' attitudinal loyalty can be called as negative. The mean of all evaluations (5.9) reflects rather negative than positive customers' attitudes; however, the trend goes to neutral.

Four statements were provided achieving to evaluate customers' behavioural loyalty: 1) "There are as many good reasons for further buying at pharmacy "Camelia", as at other pharmacies"; 2) "There are only few good reasons for buying at the pharmacy "Camelia", and much more good reasons for buying at other pharmacies"; 3) "There are many good reasons to stay with pharmacy "Camelia", however, there are many good reasons to go to other pharmacies"; 4) "I buy products at the pharmacy "Camelia" regularly". The respondents' evaluations were negative (tended to neutral), while considering first three statements. The mean evaluation was 5.66 (see Table 4 below). Accordingly,

Table 4

Means and standard deviations of behavioural loyalty-related statements' evaluations

Behavioural loyalty-related statements	Mean	Std. Dev.
There are as many good reasons for further buying at the pharmacy "Camelia", as at other pharmacies;	5,96	3,121
There are only few good reasons for buying at the pharmacy "Camelia", and much more good reasons for buying at other pharmacies;	5,14	3,167
There are many good reasons to stay with the pharmacy "Camelia", however, there are many good reasons to go to other pharmacies;	5,88	2,905
I buy products at the pharmacy "Camelia" regularly.	6,75	3,616
<b>Total:</b>	<b>5,93</b>	<b>3,202</b>

pharmacy's "Camelia" customers cannot compare "Camelia" with other alternatives, because of their frequent purchases at latter pharmacy. Research results reflect unawareness of other pharmacies' offers, weak consideration of their positive and negative aspects, low level of comparison between pharmacies. It can be stated that frequently customers do not know or consider reasons of pursuing at the pharmacy "Camelia" or the other pharmacies.

According to the research results, customers are regularly purchasing at the pharmacy "Camelia"; the mean of evaluations of fourth statement is 6.75.

After the analysis of evaluations of the behavioural loyalty-related statements it can be stated that the possibility for the pharmacy's customers for remaining with "Camelia" is unclear, because the respondents' opinion is more negative than neutral (mean = 5.66). The current opinion can be easily affected by the competitors' or pharmacy's "Camelia" actions. Thereby, the customers' behaviour can be affected on behalf or on prejudice of "Camelia". Despite the unclear likelihood of the customers' retention, same customers are frequently purchasing at the pharmacy. Finally, it can be stated that the pharmacy's "Camelia" customers' behavioural loyalty is low (total mean = 5.93 is lower than scale average).

Based on the results for attitudinal and behavioural loyalty, the category of the pharmacy's "Camelia" customers can be determined. Whereas attitudinal loyalty appeared to be negative and behavioural loyalty – low, it can be stated that customers of the pharmacy "Camelia" are not loyal.

#### Net Promoter Score model's results for pharmacy's "Camelia" customer loyalty

Good customers relationships with an organization, organization trust, and satisfaction are evaluated applying Net Promoter Score model. Respondents were given one simple question: "Would you recommend the pharmacy "Camelia" to a friend?". The question enables organizations to observe the dynamics of promoters and detractors, and to evaluate business performance from the customers' perspective. The question highlights the link between customer relationship quality and the organization's growth opportunities.

According to the research results, the pharmacy's "Camelia" customers can be divided into three categories:

- Promoters (9-10 points evaluation) – 41.33 per cent of the respondents;
- Passives (7-8 points evaluations) – 19.33 per cent of the respondents;
- Detractors (0-6 points evaluations) – 39.33 per cent of the respondents.

Accordingly, the Net Promoter Score (NPS) can be calculated:

$$\text{NPS} = \text{Promoters (per cent)} - \text{Detractors (per cent)} = 41.33 - 39.33 = \mathbf{2 \text{ per cent (2)}}$$

The pharmacy “Camelia” can be named as a medium-large enterprise; consequently, NPS equality to 2 per cent is critically low in comparison to the worldwide rates. According to F. Reichheld (2006), the medium enterprise’s average NPS varies from 5 to 10 per cent. The amount of promoters is slightly higher than detractors. The calculated rate indicates that the organization fails in creating sustainable and profitable growth, although, there are stable investments into long-term customer relationship building.

#### **Comparison of different results for pharmacy’s “Camelia” customer loyalty**

Today’s rapidly changing environment substantiates the necessity for comparison and evaluation of the customer loyalty measurement methods. As the outcome of the analysis, the method providing the most representative results will be named. The results of customer loyalty to the pharmacy “Camelia” were obtained distinct by three different measurement methods used (*see* Table 5 below). Two customer loyalty measurement methods (Multidimensional model and Net Promoter Score model) revealed similar results. The result similarity substantiates the reliability of

the methods used. However, Trust-based Commitment models results are quite different; moreover, the result reliability can be doubted.

After the comparison of the results obtained by three different models, it can be stated that Trust-based Commitment model does not estimate customer loyalty as precise as Multidimensional and Net Promoter Score models. Therefore, it is important to summarise and identify advantages and disadvantages of every method (*see* Table 6) in terms of methods theoretical and practical substantiation, practical applicability, required information, complexity of data processing and result interpretation.

Summarising, it can be stated that every loyalty measurement method analysed has its advantages and disadvantages. Trust-based Commitment model is unreliable in practice, has plenty of disadvantages. The Multidimensional model is more reliable; however, it has not many advantages. Both methods are complicated for practitioners, even if they lack mathematical or statistical knowledge. Net Promoter Score model should be mostly appreciated by practitioners for its simplicity in data collection, processing and interpretation process, its data reliability; however, the method lacks theoretical and practical substantiation.

For every contemporary enterprise it is essential to know the amount of its loyal customers for the long-term relationship

Table 5

#### **Comparison of the results provided by three different customer loyalty measurement methods**

Method	Trust-based Commitment model	Multidimensional model	Net Promoter Score model
Pharmacy’s „Camelia“ customers are:	Loyal (because of the attitudinal loyalty)	Non loyals	Non loyals

Table 6

**Advantages and disadvantages of customer loyalty measurement methods**

Method	Advantages	Disadvantages
<b>Trust-based Commitment model</b>	- Sufficient theoretical substantiation; - Sufficient practical substantiation; - Simple results interpretation for academicians.	- Complicated practical applicability; - Information-imperative; - Data processing is complicated for practitioners, and precise for academicians; - Result interpretation is problematic for practitioners.
<b>Multidimensional model</b>	- Wide practical applicability (because of model adaptation possibilities); - Simple results interpretation for academicians.	- Problematic theoretical substantiation, because of the lack of established empirical background; different authors change same parts of the method; - Problematic practical substantiation, because of different results obtained by distinct studies; - Information-imperative; - Data processing is complicated for practitioners, and precise for academicians; - Result interpretation is problematic for practitioners.
<b>Net Promoters Score model</b>	- Sufficient practical substantiation (according to author), - Simple practical application; - Only one question used; - Simple data processing; - Simple result interpretation.	- Theoretically unsubstantiated; because of its novelty there is a lack of scientific research.

building and further customer loyalty formation. Customer loyalty measurement is a complex process, because of the necessity of the results' timeliness and representativeness, especially, when it's unknown which method should be applied. The research indicated the Net Promoter Score model as the most precise and the least disadvantageous customer loyalty measurement method. Applying this method, organizations can properly measure customer loyalty; however, the question should be asked in a way highlighting a concrete action course.

## Conclusions

- There are various possible contexts for analysing customer loyalty as a distinct object of management. According

to the conception of relationship marketing, there are two basic customer loyalty conceptions: behaviouristic and neo-behaviouristic; both of them elaborate the development of the customer loyalty conception and definition. The behaviouristic customer loyalty conception (based on behavioural loyalty – repeat purchases) is problematic, because it underestimates the customer's emotional incentives for purchases of products and services. The neo-behaviouristic customer loyalty conception is based on the assumption that customer loyalty is two-dimensional concept – composed of behaviour and attitude. It can be stated that this conception closely relates to the relationship marketing conception, because loyalty is substantiated considering not only behaviour, but its incentives, as well. Interpretations of the concept (provided by various authors) are

based on combination of repeat patronage and positive object-related attitude.

- The pharmacy's "Camelia" customer loyalty was measured applying three methods. The first one (Trust-based Commitment model) provided the positive results; despite of weak functional connections, customers appeared to be loyal because of the quite strong customers' personal connection with the pharmacy. Accordingly, the pharmacy's "Camelia" customers are loyal in their attitude, not at behaviours. The Multidimensional and Net Promoter Score models gave similar results, i.e. the pharmacy's "Camelia" customers were not loyal. According to Multidimensional model, attitudinal loyalty is negative, and behavioural loyalty is low; consequently it can be stated that customers are not loyal. Based on Net Promoter Score model all pharmacy's customers were divided into promoters, passives, and detractors. After deduction of detractors' from promoters' score, obtained result indicated that customers were not loyal. After comparing obtained results for customer loyalty, it can be stated that Trust-based Commit-

ment model is not reliable and cannot be recommended for proper customer loyalty measurement. Meanwhile, the Multidimensional and Net Promoter Score models reflected real customer loyalty situation. After the indication of all the methods' advantages and disadvantages, it can be stated that Net Promoter Score model is mostly advantageous, and the Multidimensional model has largest amount of disadvantages. According to negotiable results provided by Trust-based Commitment model and the disadvantages of the Multidimensional model, it can be stated that Net Promoter Score model can be recommended to theoreticians, as well as practitioners, for customer loyalty measurement. It can be substantiated by proper results and small amount of disadvantages.

- Net Promoter Score model can be recommended for organizations. Applying this method, organizations can properly measure customer loyalty; however, the question ("Would You recommend our organization to Your friends or colleges?") should be asked in a way highlighting a concrete action course.

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## VARTOTOJŲ LOJALUMO MATAVIMO METODŲ TIKRINIMAS VAISTINIŲ TINKLE „CAMELIA“

### S a n t r a u k a

**Tyrimo aktualumas.** Dar visai neseniai vienas iš pagrindinių organizacijos tikslų buvo pritraukti kuo daugiau vartotojų. Šiandien daugeliui įmonių jau neužtenka tik trumpalaikių santykių su vartotojais, todėl stengiamasi klientus kuo ilgiau išlaikyti organizacijoje. Įmonės siekia, kad sukurti ilgalaikiai

santykiai su vartotojais peraugtų į lojalumą įmonei / produktui / paslaugai. Marketingo literatūroje vartotojų lojalumas apibrėžiamas kaip pakartotiniai produkto / paslaugos pirkimai, kuriuos inicijuoja vartotojo stiprus teigiamas vidinis įsitikinimas (Egan, 2001).

Kiekviena organizacija suvokia, kad vartotojų lojalumas dabartinėje, greitai kintančioje, konkurencinėje aplinkoje ir ekonominės krizės akivaizdoje, yra itin svarbus, nes tik lojalių vartotojų pagalba organizacija gali augti, didinti pelną ir gerinti savo įvaizdį. Organizacijos žino, kaip skatinti vartotojų lojalumą ir tai sėkmingai įgyvendina, tačiau kaip pasiektus rezultatus, t.y. vartotojų lojalumą, įvertinti, yra ne tik teorinių, bet ir praktinių diskusijų klausimas. Vartotojų lojalumo įvertinimas tampa svarbus kiekvienai organizacijai, nes tik žinodama savo lojalių vartotojų skaičių, organizacija gali tinkamai reaguoti į greitai augančią konkurenciją, rinkos prisotinimą ir vartotojų migraciją.

Dauguma šiuolaikinių įmonių, tame tarpe ir vaistais prekiaujanti įmonė „Camelia“, susiduria su didele konkurencija rinkoje, ribotu jos augimu bei didele klientų migracija ieškant geriausios produkto vertės. Siekdama išlaikyti savo vartotojus, įmonė aktyviai taiko nuolaidų - lojalumo kortelių programą, todėl jai labai svarbu žinoti, kiek lojalių klientų ji turi. Teorijoje ir praktikoje galima aptikti įvairių vartotojų lojalumo matavimo metodų, tačiau nėra aišku, kuris iš jų atskleidžia tiksliausias rezultatus. Jau seniai išryškėjo poreikis palyginti skirtingus

vartotojų lojalumo matavimo metodus. Tai sąlygoja sudėtingas jų pritaikymas praktikoje.

Nors teorijoje kiekvienas autorius įrodo savo siūlomo metodo reikšmę ir vertę, tačiau praktikoje labai svarbu, kad vartotojų lojalumo vertinimo metodas nebūtų pernelyg sudėtingas, o gauti rezultatai būtų reprezentatyvūs, atspindintys tikrąją situaciją ir leidžiantys daryti tam tikras išvalgas priimant zabūtinus sprendimus. Dėl to kiekvienai organizacijai svarbu žinoti, kuris vartotojų lojalumo matavimo metodas parodo tiksliausias rezultatus ir yra tinkamiausias vartotojų lojalumui įvertinti.

Straipsnio objektas - vartotojų lojalumo matavimo metodai.

Straipsnio tikslas - patikrinti tris skirtingus vartotojų lojalumo matavimo metodus.

Tyrimo metodai. Siekiant išmatuoti vaistinių tinklo „Camelia“ vartotojų lojalumą, atliekama anketinė apklausa. Naudojami trys skirtingi vartotojų lojalumo matavimo metodai: Pasitikėjimu pagrįstas įsipareigojimo modelis, Daugiamatis metodas ir Grynųjų rėmėjų metodas. Tyrimo rezultatai analizuojami taikant aprašomosios statistikos ir patikimumo analizės metodus.