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**BLACK SEA
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Odessa National Academy of Food Technologies

International Competition of Student Scientific Works

BLACK SEA SCIENCE 2020

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2. ECONOMICS AND **ADMINISTRATION**

**TRADE NETWORK LOYALTY PROGRAMS: THEORETICAL BASIS AND
METHODICAL ASPECTS OF EFFICIENCY ASSESSMENT****Author:** Olha Pakulenko**Supervisor:** Julia Brovkina*Odessa National Academy of Food Technologies (Ukraine)*

Abstract. *The paper studies the approaches to the definition of the term "loyalty program", suggests its own understanding of the term. The dependence of the loyalty program goal on the stage of the company life cycle is examined. Material and non-material client privileges are investigated. The advantages and disadvantages of loyalty programs are determined. The work highlights the main features of loyalty programs of the most popular supermarkets in Odessa. Recommendations on creation of additional privileges of loyalty programs in the B2C segment are given. Methodical approach to assessing the effectiveness of the promotional offer*

Key words: *loyalty program, customer lists, customer loyalty program.*

1. INTRODUCTION

The constant growth of competition in the market requires that modern entrepreneurs not only monitor the quality of goods (services), take care of the service etc., but also work directly with the needs of each client. Companies are faced with the task of developing mutually beneficial relationships with consumers that would allow them to receive stable profits, both in the present and in the future. The problem of customer loyalty is exacerbated every day, as the volume of supply of the same type of goods from different companies (brands) is growing, and at the same time the economic crisis is escalating, which entails a decrease in the effective demand of the bulk of the population. In such a situation, entrepreneurs are forced to constantly fight for the number and quality of customers. Finding the optimal ratio of preferences for consumers and maximum income for companies is a priority. In order to solve this problem it is necessary to develop your own competitive loyalty program.

II. ANALYTICAL REVIEW OF LITERATURE

The term "loyalty program" relatively recently appeared in everyday life of ordinary Ukrainians, the reason for this was the increased competition between sellers of goods of similar consumer properties.

In the phrase "loyalty program" the key word is loyalty - the quality of remaining faithful [1, c.13]. In the dictionary of Vladymyr Dal, the word "loyal" is devote, merciful, generous, affectionate, humane, friendly. According to the definition in the economic encyclopaedia "loyalty" is giving preference to certain goods and services by the target group of consumers.

In modern scientific literature there are different interpretations of the term "loyalty program". Thus, Mr. Khomich argues that loyalty programs include a number of activities aimed at increasing the emotional (good attitude) and behavioural (repeated purchases) loyalty of the buyer to the market offer of the supplier of goods or services [2]. Customer loyalty "strategically plays the role of competitive advantage of the enterprise, becomes an indicator of the ability to carry out innovative transformations not only in the production sector, but also in the service sector" [3, p.62].

"A loyal customer comes to the store in spite of the other, financially more profitable offers in the market, his positive attitude to the seller is mostly in the emotional sphere...", says O. Sahanda [4, p. 109]. Y. V. Vasin notes that loyalty is an indicator of how positive the attitude of a client is to everything that is connected with the company's activities, products and services, its brand and image [5, p. 60]. Thus, we can say that the main common feature of all loyalty programs is the development of measures that will foster long and effective relationship between the client and the company.

III. OBJECT, SUBJECT AND METHODS OF THE STUDY

The purpose of this work is the analysis and generalization of the main approaches to the development of loyalty programs, determination of the place of loyalty programs in the formation of consumer attitudes to the company.

The object of the study are the loyalty programs of companies that operate in the B2C segment.

The subject of the research is the approaches to the creation of loyalty programs.

In the topic research, the following methods were used: logical – to clarify the term "loyalty program"; comparative – to define customer privileges, advantages and disadvantages of loyalty programs and identify the main features of loyalty programs of supermarkets in Odessa; analytical – to make recommendations for the creation of successful loyalty programs of supermarkets.

IV. RESULTS OF WORK.

From my own experience I know that, in some cases, customers are even able to sacrifice something to get the effect of the loyalty program. For example, the client chooses a fitness club to which it is necessary to go half an hour, instead of a fitness club located near his own home. In this case, he sacrifices his own time (non-material loss) and funds for the road (material loss). Achievement of this effect is possible due to minor subtleties, namely a longer activation period of the club card, a longer period of "freezing" services, additional opportunities associated with discounts for long-term use of services, etc. But if such a situation occurs, it means that the effect of the loyalty program from the client's point of view exceeds its material and intangible costs. Summarizing the above interpretations and our own experience, we can say that the loyalty program is certain actions of the company which lead to the fact that customers will again come to the company to make purchases of its goods or services with a high degree of probability, even if they will need to sacrifice something for this.

Modern economic literature identifies several target groups of customers loyalty programs: designed for end users (B2C); designed for entrepreneurs (B2B); designed for distributors (B2D); integrated programme.

The most popular programs in Ukraine are focused on end users. The study is devoted to these programs.

In the above example we have shown that the consumer receives from the trip to the fitness club its benefits, for which he agrees to bear material and intangible losses. These losses are compensated by certain benefits, in other words, privileges, that loyalty programs give. In general, we can differentiate material and non-material privileges. Each of them is not used in its pure form, so it is necessary to choose a balance between these types of incentives. Material privileges are usually associated

with cost savings, of which there are few varieties, while non-material privileges can be various. Table 1 systematizes material and non-material privileges, identifies their subspecies and characterizes each of them.

Table 1 shows that the material benefits of loyalty programs are the most diverse in their content characteristics, and these programs are the most common in modern supermarkets. This information is confirmed by the international research Agency IFAK. It states that the level of penetration of discount, bonus and other cards among the population of Ukrainian cities is 74%. On average, the Ukrainian consumer has four cards, of which he actively uses only two. Most often these are cards in the sphere of food retail [7].

Table 1 Types and characteristics of customer privileges of loyalty programs

<i>Types of customer privileges</i>	<i>Subspecies of customer privileges</i>	<i>Characteristics</i>
<i>Material privileges</i>	Discount programs (discount cards and their simplified version-coupons for a one-time discount)	Their main idea is to provide the buyer with 2 to 7 percent discount on the purchase amount
	Cumulative discount programs.	The benefit of the buyer depends on its purchasing activity. Under such programs the client can accumulate up to 30% discount on the purchase amount;
	Bonus incentive programs.	The main idea of such programs is that, while making purchases, the client receives prize points, bonuses, having accumulated a certain number of which, he can use them as money or get a prize.
	Prize draws among buyers.	The point is in the material benefit of the buyer in the form of a prize, which is supported by the emotional component of the "happy occasion".
	Cash - back customer loyalty programs	Allow the customer to return a certain percentage from each purchase to the specified Bank card
<i>Non-material privileges</i>	Possibility to purchase an exclusive product	Gives a customer the opportunity to buy a rare and valuable product
	Extended information about the company's products or services	Allows customers to navigate the products or services of the company in a timely manner to make a well-informed choice
	VIP – service	Provides the client with the status of significance, and emphasizes their success
	The provision of information about the periods of discounts on goods or services of the company	Allows the customer to save money

Based on [2; 6]

In table 2, let us consider the advantages and disadvantages of loyalty programs that provide material benefits.

As you can see from the table, each program has its advantages and disadvantages. The least effective, in our opinion, are the programs related to the prize draws, because it totally depends on the "lucky chance", and there is a certain degree of distrust (non-transparent establishment of the winners).

Discount programs, cumulative discount programs and cash-back loyalty programs are very similar, but they are deprived of the main competitive advantage. Competitors can easily duplicate them or even offer customers higher discounts.

Table 2 Advantages and disadvantages of loyalty programs

	Characteristics	Discount programs	Cumulative discount programs	Bonus Incentive programs	Prize draws	Cash – back programs
Advantages	Ability to create a client base	+	+	+	+	+
	Contribution to the increase in the frequency of purchases	-	+	+	-	-
	Impossibility of repetition by competitors	-	-	+	-	-
	No direct reduction of revenue	-	-	+	-	+
Disadvantages	Decrease in exclusivity, possibility of duplication by competitors	+	+	-	+	+
	Direct reduction of revenue	+	+	-	+	-
	High cost of implementation	-	-	+	-	-

Based on [8; 9]

Loyalty bonus programs are becoming widespread. In each company they differ and have their own individuality, but have one common drawback – the high cost of implementation. Most often, the so-called "artificial intelligence" programs are used which independently search for the corresponding consumer in the client databases and give them targeted offers.

Long-term studies of loyalty programs have shown that loyalty programs lead to a reduction in the transfer of buyers to another brand by 30% and to an increase in the turnover of goods by 10%; retention of only 5% of the total number of buyers leads to an increase in profits by 50-85%; the cost of attracting new buyers is 5-10 times higher than the cost of holding existing ones; 20% of buyers provide 80% of profits. It is for the retention of these buyers that loyalty programs should be directed [10, p.41]. From these facts we conclude that the purpose of the loyalty program may vary depending on the development of the company and the market situation.

All companies in the market share one common goal – to increase profits. Achievement of this goal is possible by increasing the number of sales, which in turn is achieved by increasing the number of customers. Thus, the main goal of the loyalty program is to increase the number of customers. But it should be noted that the purpose of the company depends on what stage of the life cycle it is. Figure 1 shows the transformation of the loyalty program's goal depending on the stage of the company life cycle. For the startup stage it is typical that most customers are interested in the company's products, because it is something new in the market. It is at this stage that is advisable to get acquainted with the target audience of buyers and offer them to issue cards. At the stage of growth, it is necessary to pursue a policy of multidimensional impact on the organization of client benefits and to take into account all possible cases of loss of profits of the company. It is this stage of the life cycle that is the key to how high the company will rise on the life cycle graph. Mature companies are mainly engaged in the retention of acquired customers. The longer the company manages to

do this, the longer the brand lasts in the market. All stages of the company's life cycle are associated with competition with other similar market participants. The positive result of this struggle is achieved through constant monitoring of competitors' prices, their promotional offers, service conditions, etc.

Successfully devised loyalty program is not one hundred percent success in the market, especially when it comes to grocery supermarkets. IFAK experts note the transformation of factors that form customer loyalty, and emphasize the reduction of the role of such factor as "price-quality" and the growth of "customer focus" [7].

The most popular among the population are the so-called "shops at home" which allow you to shop after work, and some of them around the clock. In addition to additional customer privileges, consumers are guided by the level of prices, the breadth and depth of the range of products presented, the cleanliness and general atmosphere of the store, the level of service and much more.

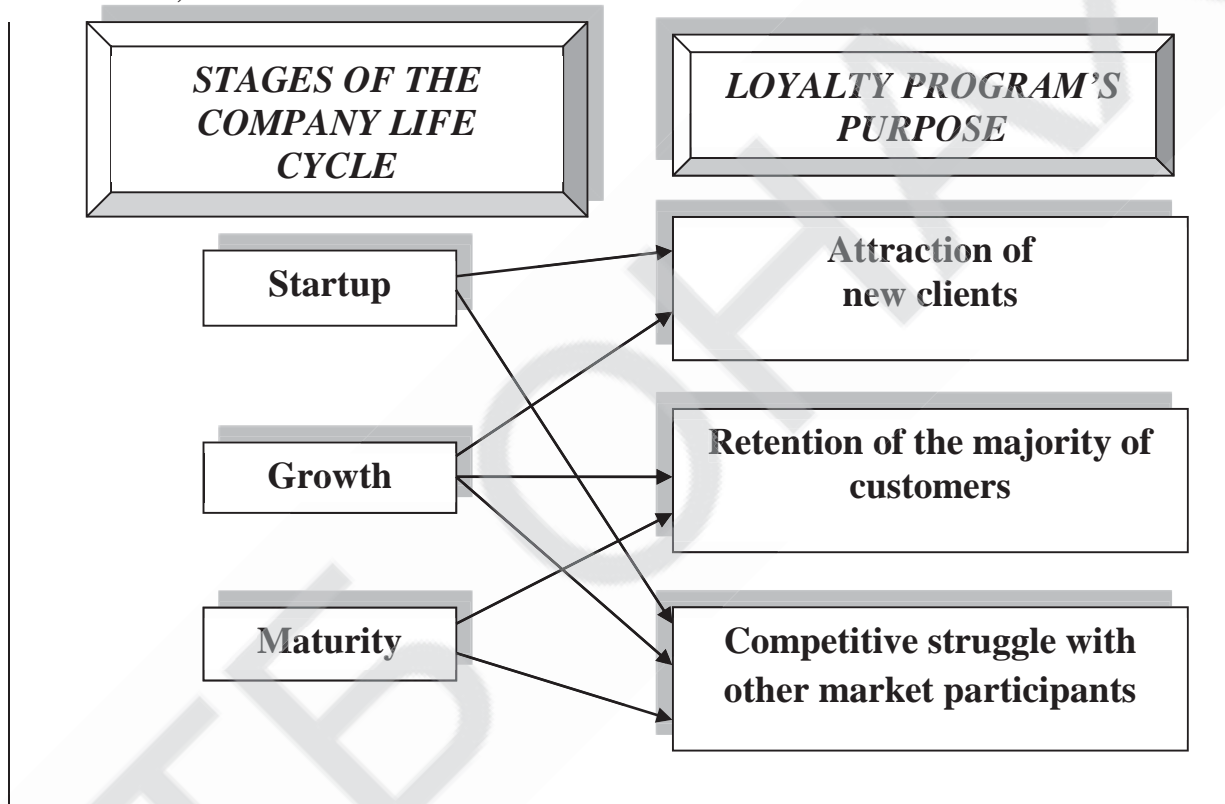


Fig. 1 Dependence of the loyalty program's goal on the stage of the company life cycle

Currently, supermarkets of such brands as "Silpo", "Tavriya V", "Kopiyka", "ATB", "Furshet", "Obzhora" and others are widely spread in the Odessa region. Approaches to the organization of interaction with the client in these trade organizations are different. For example, the ATB network does not use loyalty programs, the main concept of supermarkets is the sale of goods at the lowest prices. The network of supermarkets "Silpo", which belongs to one of the largest trade industrial groups FozzyGroup, occupies the first place by the number of customers who use client privileges according to the company IFAK (31% of the total number of consumers involved in loyalty programs in Ukraine); network of supermarkets "Furshet" features 9%; the supermarkets "Tavria V" and "Obzhora" -3%.

Taking into account the fact that by the number of retail facilities in Odessa leading positions are occupied by retail chains "Tavria" (36 shopping facilities), "Silpo" (20 shopping facilities) and "Kopiyka" (38 shopping facilities), let us consider the components of loyalty programs of these supermarkets in table 3.

Table 3 Comparative characteristics of loyalty programs of supermarkets in Odessa.

Criterion	«Tavria V»	«Silpo»	«Kopiyka»
Program name	«Clover bonus»	«Personal account»	Discount «Kopiyka»
Program type	Bonus program	Bonus program	Discount program
Conditions of joining the program	The card of the regular buyer is issued on condition of one-time purchase of goods in the amount of not less than 50 UAH.	The card of the regular buyer is issued on condition of one-time purchase of goods in the amount of not less than 39,99 UAH.	The card of the regular buyer is issued on condition of one-time purchase of goods in the amount of not less than 1000 UAH.
Basic benefits	Point accumulation, the ability to pay points for goods directly through the card	Point accumulation, , the ability to pay points for goods if their size is more than 1000 points (1 hryvnia=1bal). Points are received by the client once every three months in the form of a coupon with the amount of accumulated points, which is sent in letters or in electronic form	The opportunity to receive a discount on goods from 3-5%
Conditions for additional benefits	Participation in the "Clover bonus" campaigns provides an opportunity to increase points	Bonus coupons provide the opportunity to receive additional points for the products that the customer buys the most often, as well as limit discounts on the amount of one purchase	Discount for the next month: 4% in case of purchase of goods in the amount of not less than 1200 UAH.; 5% in case of purchase of goods in the amount of not less than 2000 UAH.
Additional benefits to simplify the use of the loyalty program	Mobile application availability	Mobile application availability	None
Limitation of use of the program	Bonuses are not awarded for products participating in other promotions		
The presence of partners of a loyalty program	T-sprint cafe, "Tauris", a network of shops "Kosmos", "GLITTER and BUCKET»	Bank "Vostok"	None

Compiled by the author on the basis of information from the official websites of supermarkets "Tavria", "Silpo", "Kopiyka"

Let's analyze the information from the table 3 for each position:

1) in terms of the conditions of joining the loyalty program, the most attractive programs are those of the supermarkets "Tavria V" and "Silpo". Their entrance barriers are quite low, in contrast to the "Kopiyka", where you need to make a purchase of 1000 UAH;

2) in terms of convenience for the client, the basic conditions of the loyalty programs of "Tavria V" and "Kopiyka" are optimal, since the card is a tool that allows you to get a discount, unlike "Silpo", where you need to have cards and coupons;

3) conditions for obtaining additional benefits are attractive in "Tavria", because you can buy products of any category in any amount;

4) additional benefits to simplify the use of the loyalty program are available only in "Tavria", namely mobile application-bonus card;

5) only the supermarkets "Tavria B" and "Silpo" have the partners of the loyalty program. "Tavria V" has a more extensive network of partners.

Examination of loyalty programs of popular supermarkets in Odessa has shown the focus of the main promotional activities on material privileges, while non-material are given little attention. We suggest to aim attention at such privileges as the organization of parking spaces for regular customers, special events for VIP-consumers, donations for charity, differentiation of customer service etc.

In our view, the expansion of partnerships in the loyalty programs would be also relevant. For example, if a customer visits a certain network of fitness clubs, he may have additional discounts on the products of the department of healthy nutrition, and vice versa, if you visit a certain supermarket and buy there the products of the department of healthy nutrition, you can get a discount to the fitness club. Similar partnership programs can be created, for example, with child nutrition departments and relevant child development clubs, stationery departments with educational institutions and so on.

A very convenient element of the loyalty program is a mobile application that allows a customer to learn about the promotions of supermarkets, as well as use the bonus (discount) card.

Methodical approach to assessing the effectiveness of the promotional offer

The main objective of the loyalty program is to maintain the existing customer base, since it is usually difficult to attract new customers (especially when the retail facility has been operating for more than two years). The main instrument of loyalty programs are promotions. In this paper we propose a methodical approach that allows to take into account the main aspects of the development of the address proposal and to evaluate the effect of the conducted targeted promotional activities, that is, personal proposals to each client. Consider the situation when a supplier makes a promotional offer. Such an offer can be carried out for many reasons, the main of which is the excess of this product in the supplier's warehouses.

In the case of a supplier's proposal, it is necessary to study the circle of customers who usually buy this particular product and develop targeted advertising for them. It is advisable to place such advertising in applications on smartphones, for example Viber.

When developing an address proposal, we propose to adhere to the following algorithm:

Segmentation of customers (study of customers who buy this particular product for a long time (for example, one year), study customers who buy this product in other packaging options; study customers who buy products of this brand, but promotional products buy other delirium). In selected segments, it is necessary to determine the indicator of the frequency of purchases and from here distinguish regular and random purchases. Depending on the type of product, you need to offer different threshold values to determine regular and casual customers)

To study the prices of similar goods from competitors (the price should be lower than the average market price, otherwise the supplier's promotional offer should be rejected);

Develop high-quality and understandable advertising (it can be targeted advertising in a mobile application, but there can also be other types of advertising, for example, banners).

We suggest to evaluate the effect of the conducted address action for the selected product by the following formula 1:

$$E = \begin{cases} \sum_{i=1}^n K_i^b * T_i^b < \sum_{i=1}^n K_i^s * T_i^s \\ \left(K^s - \frac{\sum_{i=1}^n K_i^s - K^s}{\sum_{i=1}^n K_i^b - K^b} * K^b \right) * T^b - V \end{cases} \quad (1)$$

where,

i – the product serial number of the selected category;

n - quantity of product in the category;

K_i^b – number of sales of the i -th product in this category during the base period;

T_i^b – trade markup of the i -th product of this category for the base period, UAH;

K_i^s - the number of sales of the i -th product in this category during the promotion period;

T_i^s - trade mark-up of the i -th product of this category during the promotion, UAH;

K^s – the number of promotional goods sold in the base period;

K^b – the number of promotional goods sold in the base period;

T_b – trade mark-up of the network for promotional goods during the promotion, UAH;

V - expenses for sending advertising messages in Viber, UAH These costs include the number of messages sent (K_s) and the cost of sending each message (P_s). It should be noted that $K_s \geq K_r$. Thus, the cost of sending advertising messages in Viber can be represented as $V = K_s * P_s$.

The promotion takes a certain amount of time, so the base period should be chosen in the calculations, which is equal to the promotional period by the number of days.

Under the trade mark-up (allowance) is understood the amount of costs of trading networks associated with the turnover of goods made in the course of its sale in retail trade and profit.

The trade margin before the promotion, and during the promotion should be different. This allowance during the promotional period should be less, but should not be zero.

We will test this model for calculating the effectiveness of a stock using an example. Let one of the suppliers of the distribution network working under TM "Real Oil" offers to hold a promotional offer providing for a reduction in the price of a 1 liter bottle. During the promotion, it is proposed to reduce the trading margin from 55 to 25 UAH.

The next step is to segment customers to determine the number of targeted offers for customers. Over the past year, we make the following conclusions.

Table 4 Sales volumes of TM "Real Oil" sunflower oil in various segment

Indicator	Bought sunflower oil TM "Real oil" 1 lite	Bought sunflower oil TM "Real oil" 0,5	Bought other goods of TM "Real oil", but sunflower oil 1 and 0.5 l of another band
The number of customers with loyalty cards, people, incl	46355	31755	35770
random (number of purchases less than or equal to 12)	35470	21675	29654
constant (number of purchases over 12)	10885	10080	6116
TOTAL (constant (number of purchases over 12)	27081		

Thus, the cost of mailing is $27081 * 0,48 = 12999$ UAH, where 0,48 – the cost of one Viber message. Usually mailing is NOT carried out for a single product, as retailers develop promotions. Therefore, to obtain a more expedient result, it is necessary to divide the costs of send by the number of goods presented in it.

Table 5 Input data for evaluating the effectiveness of the model 1

Indicator	base period	promotional period
Weighted average sales by sunflower oil categor	114905	135623
Sales volume of promotional good	5145	12162
trade margin	28	18

E = 101 747 UAH

From the obtained calculations it is clear that all the conditions for the effectiveness of model 1 are fulfilled, so the promotional offer presented is effective

V. Conclusions

Loyalty programs are now part of daily life of Ukrainians. Well-chosen customer privileges even lead to certain sacrifices on the part of the buyer.

The study has given the characteristic of tangible and intangible client benefits and proved that the most common in Ukraine are tangible client benefits.

The advantages and disadvantages of loyalty programs where the overwhelming number of privileges is material are identified. The common advantage of such

programs is the ability to create a client base that allows a company to directly study the customer needs.

The dependence of the purpose of the loyalty program on the stage of the life cycle of the company is determined. The main features that should be inherent in loyalty program at each stage of the company development are highlighted.

The analysis of loyalty programs of the most common supermarkets in Odessa, namely "Tavria V", "Silpo" and "Kopiyka" is carried out. Their advantages and disadvantages from the client's point of view are established.

Among the recommendations for the improvement of modern loyalty programs the study puts special emphasis on the following: improvement of non-material privileges, the development of partner programs and simplification of use of the loyalty programs with a smartphone.

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