

**Vojko Vučković**<sup>1</sup>**CUSTOMER RETENTION ANALYSIS - AN  
EXAMPLE OF A FITNESS CENTER****ANALIZA RETENCIJE KUPCEV – PRIMER  
FITNES CENTRA****ABSTRACT**

In present research we attempted to find out what influences fitness centre users' decisions to prolong fitness membership. We called users whose tickets had expired (n=57). We were interested in what factors influence a user to purchase a membership again and whether we could influence this decision with a phone call. Using logistic regression, we found that user age and experience with the receptor did not influence the decision to retain and repurchase. We found that we can influence a user's intention to repurchase if we call them less than 30 days after the membership expires. After 30 days, there is a good chance that the user has already purchased a ticket at another sports centre and will not return it. Users who were called and confirmed over the phone that they would come back and purchase the ticket again did so. We recommend that sports centre managers create a customer loyalty program and call them when the membership expires.

*Keywords:* customer retention, fitness centre

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**IZVLEČEK**

V raziskavi smo ugotavljali, kaj vpliva na odločitev uporabnikov fitnes centrov pri podaljšanju vavnine v fitnes centru. Preko telefonskih klicev smo povprašali uporabnike, katerim je potekala vavnina v največjem fitnes centru v Sloveniji (n=57). Zanimalo nas je, kateri dejavniki vplivajo na ponoven nakup karte in če lahko na to odločitev vplivamo s telefonskim klicem. S pomočjo logistične regresije smo ugotovili, da starost uporabnikov in dobra izkušnja z receptorjem ne vpliva na odločitev o retenciji in vnovičnem nakupu mesečne karte. Ugotovili smo, da lahko na vnovičen nakup vplivamo le, če jih pokličemo v manj kot 30ih dnevih od preteka karte. Po 30ih dneh je velika verjetnost, da je uporabnik že kupil karto v kakšnem drugem športnem centru. Uporabniki, ki so bili poklicani in telefonsko potrdili, da bodo prišli nazaj ter znova kupili karto, so to tudi storili. Managerjem športnih centrov predlagamo, da ustvarijo program retencije strank ter jih po izteku karte pokličejo.

*Ključne besede:* retencija uporabnikov, fitnes center

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## INTRODUCTION

People exercise regardless of their age, in different places, and for different reasons (Garcia-Fernandez et al., 2016). The entire fitness centre industry generated a turnover of 27.2 billion euros in 2018 in Europe alone and continues to grow. The number of fitness centres is growing by up to 4.6 percent annually (Schreerder, Vehmas and Helsen, 2020). Due to the growth in the number of fitness centres, competition is also increasing, which leads to an increase in the quality of these centres (Stadnyk & Sereda, 2016). Competition is the best thing for the development of the industry, because it forces all players in the market to optimise their services as much as possible or offer more for the existing price. By reinforcing the differences between each fitness centre's offerings, advertising is one of the most effective tools for maintaining a competitive advantage. Therefore, communication with members is becoming more complex, especially in fitness centres where the professionalism of the staff is very important.

There are several reasons for a customer's decision to suspend or renew a membership after some period of time. Some of these reasons can be influenced and thus we can increase both the quality of the fitness centre and its profitability. As early as 1994, Reichheld (1994) calculated that customer value would increase from 25% to 100% if the use of retention strategies were increased by 5%. Therefore, it is important to know the reasons for the customer to stay in the centre and to try to renew the membership fee, as this is much easier than reactivating a customer who has already stopped working with the centre (Alcaide, 2010). Annesi (1999) claims that more than 90% of clients prefer to exercise in a group rather than alone. He notes that the first 60 days after joining the gym are crucial for building clients' "social relationships." A study of 2385 South Korean gym members found that the presence of a personal trainer (PT) had a significant impact on dropout rates and customer retention. The retention rate of PT participants was 56.0 percent and the dropout rate was 44.0 percent, while the retention rate of non PT participants was 45.4 percent and the dropout rate was 54.6 percent (Yi, Lee, Connerton & Park, 2020). In the information age, more and more interaction with customers is taking place online, so more and more sports centres have profiles on social networks through which they communicate with customers. Takahiro, Hirotaka and Hirokazu (2016) proved that this type of proper communication is extremely important for customer satisfaction, good word of mouth and consequently for repurchase. And Gonçalves, Meireles & Carvalho (2016) have found a positive and significant relationship between customer satisfaction and customer loyalty. They also argue that it is very important for retention that the

service quality of the fitness club meets the expectations of the members and that the members are satisfied with the club.

The main goal of present study is multi-faceted, as the theoretical background of the impact on customer loyalty relates to both customer service and communication through the digital channels of the observed company. For this reason, we aimed to observe the problem as multi-layered. The main objective is to determine which activities in the fitness centre influence the renewal of membership fees in fitness centres with following hypotheses: (i) customers who have visited the fitness centre in the past year and intend to purchase or renew the membership fee again after the revisit; (ii) customers contacted less than 30 days after membership fee expiration will be more likely to repurchase or renew than customers contacted later than within 30 days of membership fee expiration; (iii) customer's age has a positive impact on re-purchase or renewal of membership fee, and (iv) the customer's satisfaction with the receptionist has a positive impact on the repurchase or renewal of the membership fee.

## **METHODS**

### **Participants**

In present study we called 64 customers and we had got returned 57 completed surveys (90 %). We exported demographic data for each customer from the system and obtained participants written consent via e-mail.

### **Variables**

The dependent variable is dichotomous, which limits the possibilities of analysis with advanced statistical methods. Because the dependent variable (repurchase) is dichotomous, the analysis is performed on the basis of logistic regression.

### **Data processing and equipment**

We used the IBM SPSS Statistics software package for data processing. We built the logistics model in blocks and assembled a model without explanatory variables in block 0, and with explanatory variables in block 1.

## Statistical analysis

We performed logistic regression which enabled checking the validity of a categorical or dichotomous dependent variable with dichotomous explanatory variables. Altogether, 57 participants were interviewed, whose annual membership fee expired in January and February 2022. The measured variables were:

(i) Receptor rating - for this variable, the customer has rated the receptor on a liqueur scale from 1 to 5 with the elapsed annual card.

(ii) Experience with the receptor - in this variable, the customer expressed an opinion on the receptors with the elapsed annual card, namely the codification of the variable was at three levels:

a. 0 - no comments

b. 1 - good experience

c. 2 - bad experience

(iii) Number of shifts - for this variable, the customer estimated the number of shifts of different fitness centres with the elapsed annual card. The codification was in line with their replies, with the highest possible number of exchanges 5.

(v) Intention - in this variable, the customer categorically expressed his intention to return to the observed fitness centre with the elapsed annual card. The codification of the variable was as follows:

a. 0 - no

b. 1 - yes

c. 2 - possible

(vi) Number of days - for this variable, the days from the date of expiration of the annual membership to the date of the customer's call were measured. This variable was coded to a dichotomous variable where the decision criterion for the value 0 was the time difference from the expiration date to the call date more than 30 days, and in the case where less than 30 days elapsed from the expiration date of the annual ticket to the call date the variable took the value 1.

The number of observations limited the explanatory power of the model, as only 2 explanatory variables could be included at the same time, therefore we chose the explanatory variables intention after return (Return\_name\_floor) and number of days (Days\_dummy).

## RESULTS

Table 1 is showing the coding of the categorical variables. For the variable that measures the number of different fitness centres that clients switched, the values range from 1 to 5, where 5 means that clients switched between fitness centres more than 5 times. The variable measuring the propensity of customers to return to a particular fitness centre has two values, 0 and 1, where the value of 1 represents the likelihood that the customer will return to a particular fitness where they were previously a member. The categorical variable with receptionist experience was only measured in two categories, with a value of 1 representing an overall good experience and a value of 0 representing an overall poor or unsatisfactory experience.

Table 1. Categorical variables coding.

		Frequency	Parameter coding			
			(1)	(2)	(3)	(4)
<b>Membership renewal</b>	1.0	17	1.000	.000	.000	.000
	2.0	23	.000	1.000	.000	.000
	3.0	10	.000	.000	1.000	.000
	4.0	5	.000	.000	.000	1.000
	5.0	2	.000	.000	.000	.000
<b>Return intention</b>	.0	17	1.000			
	1.0	40	.000			
<b>Bad experience with receptionist</b>	.0	46	1.000			
	1.0	11	.000			

The difference between block 0 and block 1 has been statistically significant ( $p < 0.05$ ), therefore we observe model 1, which is statistically more significant in explaining the relations between variables. The model in block 1 has improved or that the explanatory variables better explain the model without variables. The explanatory power of the model is satisfactory ( $r^2 = 0.331$ ,  $p < 0.05$ ). In block 1, the program itself correctly ranked 75.4% ( $p < 0.05$ ) of the observations of likelihood of customer returning to previous fitness centre. Variables used in Model 1 are shown in Table 2.

Table 2. Variables in the equation in model 1.

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>
<b>Bad experience with receptionist</b>	-1.006	.924	1.185	1	.276
<b>Nr. of ticket change</b>			.857	4	.931
<b>Nr. of ticket change (1)</b>	.224	1.656	.018	1	.892
<b>Nr. of ticket change (2)</b>	-.209	1.625	.017	1	.898
<b>Nr. of ticket change (3)</b>	-.464	1.757	.070	1	.792
<b>Nr. of ticket change (4)</b>	-.772	1.937	.159	1	.690
<b>Return intention</b>	-2.631	1.134	5.384	1	.020
<b>Age</b>	.027	.029	.858	1	.354
<b>Days</b>	.050	.037	1.846	1	.174
<b>Constant</b>	-1.678	2.134	.618	1	.432

Legend: B – value for logistic regression, S.E. – standard error, Wald – Wald statistics, df – degrees of freedom, Sig. – significance.

Table 3. Explanatory results in model 1.

	<b>EXP(B)</b>	<b>95% C.I. FOR EXP(B)</b>	
		Lower	Upper
<b>STEP 1<sup>A</sup></b>			
Bad experience with receptionist (1)	.366	.060	2.237
Nr. of ticket change			
Nr. of ticket change (1)	1.251	.049	32.120
Nr. of ticket change (2)	.811	.034	19.588
Nr. of ticket change (3)	.629	.020	19.700
Nr. of ticket change (4)	.462	.010	20.576
Return intention (1)	.072	.008	.665
age	1.028	.970	1.089
days	1.051	.978	1.129
Constant	.187		

Legend: A - Variable(s) entered on step 1: Bad experience with receptionist, nr. of ticket change, return intention, age, days; B – explaining variable; C.I. – confidence interval.

Tables 2 and 3 show the probability of clients returning to the observed fitness centre for each value of the categorical variables in the model. Clients are most likely to return to the observed fitness centre if they are considering returning (return intention) and if no more than 30 days have elapsed between fitness centre changes (days). The statistically insignificant but very negative effect is observed in the experience with the receptionist. If the experience with the receptionist is very negative, customers will most likely never return to the observed fitness centre.

Based on the measurement of soft data, the most statistically acceptable result is that a client whose annual fitness centre membership fee has recently expired, shows an intention to return to the observed fitness centre 0.072 times more likely to do so than if they had no such desire. The small value of the coefficient suggests that people like to lie. The result is also statistically significant ( $p < 0.02$ ). The statistically acceptable result is also shown for the variable days ( $p < 0.05$ ). The results show that the more days after the expiration of the annual membership in the observed fitness centre, the probability of return is 1.051 times higher than if the customer is contacted immediately after expiration.

## DISCUSSION

In present research, we sought to find out what variables influence the customer's repurchase of the membership. Some authors (Bedford, 2009) have proven that customers leave the fitness centre less if they visit the centre more often which is in line with the findings of the International Fitness Association (FIA), which is that one-third of former fitness centre members would buy a membership again at the same gym if they were called when their membership ended (FIA, 1999). We have also found that if we contact a customer in less than 30 days, the customer is more than 2 times likely to return. We can use this in our customer loyalty program.

For the customer age variable, we found that it is not statistically significant, not like some other authors claim (Clavel San Emeterio et al., 2016; Bedford, 2009, IHRSA, 2019). This could be due to a small sample of clients, as the observed database was only used by one fitness centre. Many authors have demonstrated a relationship between elements of service quality and repurchase intention in fitness centres (Howat & Assaker, 2013; Macintosh & Law, 2015; Gonçalves & Diniz, 2015). Howat & Assaker (2013) argue that responsiveness and friendliness of the staff are key to the perception of the quality of the centre. Therefore, we also studied the relationship between the customer satisfactions, experience with receptionists and return intention. Although we did not find a statistically significant relationship, this variable offers the need for further research, since our results were not consistent with those of other authors.

In addition, the analysis found a significant and positive correlation between the intention to repurchase or renew after the revisit. That is, customers who told us they would repurchase the membership most often did so. The reasons for re-purchase could be social rather than financial, as described by Macintosh and Law (2015).

An interesting application of this measurement would also be from the point of view of the success of sweepstakes or additional services in the sales service. To this end, we will likely conduct a comparison of the performance of different repurchase campaigns in the future.

### **Limitations**

The present study has some potential limitations:

- (i) The measurement of opinions and feelings is considered to be the measurement of "soft" data; therefore, the present conclusions are not objective.
- (ii) We included all variables simultaneously in the logistic model because we did not have a concrete theoretical basis for building the model.
- (iii) To obtain more reliable results in the present model, we should conduct the analysis with a larger sample.
- (iv) The questionnaires were collected in a single fitness centre in Slovenia, therefore the results are not valid for all fitness centres in Slovenia and cannot be generalised to other countries.

### **CONCLUSION**

Fitness centre managers should create a customer loyalty program based on improving infrastructure and professional staff. Part of the customer loyalty program should also consist of calling customers who have cancelled their membership within a maximum of 30 days and offering them a new repurchase offer.

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### **Declaration of Conflicting Interests**

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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