A Work Project, presented as part of the requirements for the Award of a Master Degree in Management from the NOVA School of Business and Economics.

# Customer Relationship Management Field Lab at Sport Lisboa e Benfica
# - Examining Customer Lifetime Value -

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3rd of January 2018

## Abstract

As part of the Customer Relationship Management Field Lab, this study aims to instruct SL Benfica on the best way to examine the customer lifetime value. Literature regarding customer centric strategies, customer relationship management, lifetime value calculation and applications in the sports industry are needed. A set of conclusions was performed based on the analysis of the current lifetime value calculations and the highest value members for the club. Recommendations were made based on the limitations of the existing model and therefore SL Benfica should incorporate churn analysis and Red Power revenues in the lifetime value model.

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## Introduction

Sport Lisboa e Benfica competes in the Portuguese League as one of the main players, together with Sporting Clube de Portugal and Futebol Clube do Porto. It is commonly acknowledged as the Portuguese club with the largest community of supporters and it was recognized as the most widely supported club by Guinness World Records (Guinness World Records, 2006). While SL Benfica has a leading position in the Portuguese Country, with operating revenues of 128,2 million euros in the 2016/2017 season, excluding players transactions (Benfica, 2017), more than 200K members and 36 league titles, the same does not happen comparing to other European clubs. Despite the fact that the club ended up last season in the 9$^{th}$ position in the UEFA club ranking, the Portuguese reality is far away from the other 5 top European Leagues (English, Spanish, German, Italian and French).

With revenues of €344M in 2015, the Portuguese League is the 8$^{th}$ largest in Europe, visibly dissimilar to the leader Premier League, which holds a total value of 4865 million euros. (Deloitte, 2017).

SL Benfica's revenues come from different sources such as UEFA prizes, broadcasting rights, sponsorship and advertising, ticketing, corporate, among others. Although, the majority of them are uncontrollable in a manager's point of view. Almost 60% derive from UEFA prizes, which depends on the team's results and Broadcasting rights, which deal is already settled for a long period of time (Benfica, 2017). Hence, it is a challenge for the club's managers to increase other sources of revenues to be able to decrease the difference for the other top European clubs.

With such a big fan base, there is room for improvement and increase the incomes coming from them. In order to efficiently identify how to increase these revenues, a customer lifetime value analysis should be performed to segment the customers according to their value for the company. To do so, literatures regarding customer centric strategies, customer relationship management, lifetime value calculation and applications in the sports industry are needed.

Balancing the information collected from these literatures with the date provided by Sport Lisboa e Benfica regarding their members, this dissertation hopes to provide valuable recommendations on how the club could use the lifetime value model to better differentiate its customers and thus, optimizing its customer relationship management strategies.

**Literature Review**

Customer Relationship Management (CRM) is the way of realizing and influencing customer conduct by significant exploration and communications in order to better acquire and retain customers.

It is important for every company to establish a customer centric strategy in order to create longer relationships with the customers. With an efficient customer oriented approach, it is possible to have a closer connection among the two parts and facilitate the companies' effort to retain their customer database. The longer the relationship lasts, the higher the value of the consumer will have for the company.

The football industry has a high potential for application of CRM strategies. As a love brand, each club has the chance to easily keep their customer loyal. Thus, there is room for increasing the profitability of the existing consumers and acquire new ones due to large fan base community.

The following sections of this dissertation will be focusing on this topics in more detail.

**CRM and Customer Profitability**

Customer profitability represents the difference between the incomes and the expenditures that one particular customer generates over a certain period, illustrating the supplier's value of having one certain client (Chang, Chang, & Li, 2012). By knowing which consumers are the most profitable for the company, it's easier to adapt the CRM strategy according to their impact in the business. Different approaches should be used to retain customers according to their profitability. Therefore, it is necessary to have a model in which the customer value is measured and comparable among all the database – Customer Lifetime Value. Customer Lifetime Value (LTV) can be defined as “the stream of expected future profits, net costs on a customer’s transactions, discounted at some appropriate rate back to its current net present value” (Chang et al., 2012).

There are some advantages in which firms can improve and expand its customer communication approach by using the LTV model, a) Increase the return on marketing expenditures, by distributing resources for customers who are most probable to have higher value in the following period. b) recognize products to trade as packages. c) rearrange the remaining resources, after aiming the ones seen as priority, to other scenarios such as attaining new customers or recovering inactive customers (Kumar, Venkatesan, Bohling, & Beckmann, 2008).

The LTV model can be used in different decision areas according to the purpose of the study. The most used areas include a) segmentation and targeting, b) choosing priority clients, c) defining when to withdraw attention concerning clients, d) marketing budget distribution, e) developing approaches to determine the right distribution channels.

As important as the areas are the variables included to calculate the lifetime value. The variables that should be included in the model are a) types of product/service which the client consumed so far, b) Cross sell, up sell tendencies of the consumer, c) churn likelihood, d) frequency value, e) demographics information f) client retention and acquisition likelihood, g) profit earned from each deal and h) money involved in each operation of the client. (Ekinci, Ülengin, Uray, & Ülengin, 2014)

These two parts combined according to each company’s business area allows the creation of their own LTV model.

Most of the companies divide their customers according to the profitability of each one of them, using the 80/20 rule, in which 80% of the revenues come from 20% of the customers. However, this division is not seen as sufficient. Hence, it was proposed a new framework called Customer Pyramid, a tool that allows the company to exploit distinctions in client profitability. Companies can use it to reinforce the connection among service quality and profitability together with establish ideal distribution of limited resources. Firms can foster customized products/services, which are strictly associated with the specific customer's preferences, allowing the company to get a larger value from the clients, resulting in better global customer profitability (Zeithaml, Rust, & Lemon, 2001).

Other way of segmenting the customers according to the customer profitability of the total client base is to create a more complex 80/20 rule, for example in four different groups. Group A contains the 20% most profitable customers, group B contains the next 30%, group C the following 30% and group D the 20% that are the less profitable (Storbacka, 1997).

After segmenting the clients according to its value, a company must perform four actions to understand how its marketing strategy can influence the value of their customer resources: a) Generate a database to monitor the gathering of marketing intelligence to calculate the LTV; b) Segment customers consistent with their needs and buying conduct, having into account elements as buying power, the buying regularity and the kind of products they buy; c) Predict LTV considering other circumstances; d) Distribute resources to reach the maximum value of the client base (Berger et al., 2002).

Nevertheless, there are different interpretations regarding the possible conclusions taken from the model, which may lead to inefficient decisions. Following the 80/20, the most natural decision is to focus most of the marketing communications on these most valuable consumers. However, this segment are not necessarily the most loyal buyers (Dowling & Uncles, 1997). Even if they are indeed the most loyal customers, their potential higher expectations may lead to lower future revenues. Long-life buyers expect value-added relationships to acquire additional products, then their expenses can be inferior. Otherwise, temporary consumers might not create any prospects of value-added relationships and thus will have no problems with buying from the seller (Reinartz & Kumar, 2000).

On the other hand, the lifelong customers are seen as source of the firm's profitability growth due to their willingness to pay a higher price for products/services and provide the company referrals. Furthermore, it is less expensive to retain current clients rather than acquiring new ones. Therefore, the higher the LTV, the higher number of resources allocated to each customer. It's also possible to classify the existing customers into low, medium and high-value customers, which allows the differentiation of products and services, as well as service level. (Chang et al., 2012).

While LTV is the value of a customer's total period with the firm, the models for long periods include the reduced importance of more chronological data or the increasing inaccuracy of projected future consumptions. Typically the analysis' duration choice should be done according the time-related topics of client life-time, interpurchase times, and an administration's forecasting cycle (Mulhern, 1999).

It is now important to realize how these concepts are adapted to the sports industry.

## Customer Lifetime Value in Sports

As it was seen so far, it is important for the companies to have a customer centric strategy. But how are sports' companies adapting their approach in order to know the lifetime value of their customers?

Sport fans are seen as consumers who repeatedly make one-time buying decisions. If companies want to guarantee longer relationships and make the fans feel connected with the club, a different approach should be used – relationship marketing.

Relationship marketing can be defined as a) relationship oriented; b) one-to-one communication; c) long-term significance, facilitating the calculation the customer LTV; d) the use of a larger information base such as transactions, preferences and satisfaction e) interactive communication and f) an emphasis on making the customer an equal partner. (Shani, 1997)

In this industry, a season ticket owner should not be considered as someone who will only spend money in tickets, but potentially in other additional products or services such as merchandising, concessions and parking. As the peer influence is a strong driver for the buying decision, other indirect sources of benefits should be taken into account, due to the fact that a satisfied customer will spread the word and inspire friends to buy, which will increase the club's revenues (Lachowetz, McDonald, Sutton, & Clark, 2001).

However, in a product category with scarce substitutive products, it would be a mistake to only have into account the customer satisfaction. It is important to focus on increasing the share of the individual instead of the share of the market. In the sports industry, this means that the marketer should collect all the customers' sports expenditures instead of having that customer spending money somewhere else throughout the season. As all the main competitions are happening at the same time, it is vital an efficient relationship marketing strategy.

It is important for the firms to have a strong relationship with their customers, thus some initiatives should be incorporated in the marketing strategy, such as identifying the fan by the own name during an interaction, giving fans the opportunity to meet their favorite players to have an autograph and pictures session. The lifelong customer should feel part of the team and celebrate when victories happen and still be present during the losses (Shani, 1997).

NBA is considered a case study regarding the relationship marketing and LTV. The franchising marketing directors realized that if their customer retention rate was 80% as other businesses, in 5 years the customer base would have changed. As acquiring new customers is an expensive cost, the best way to grow this base is by increasing the retention rate and therefore the customer’s value for the firm. The more time the relationship lasts, the higher the chances to make the fans consuming more tickets and other products. The NBA created a formula which demonstrates the importance of a season ticket owner for the revenues. If the average season ticket price is multiplied by the average number of seats purchased by customer, multiplied by the total numbers of games in a season and multiplied by the average number of years that a customer holds the season ticket, by adjusting the value to the inflation during that period, the lifetime season ticket revenue is obtained. However, it must be taken into account that a season ticket owner also spends in other products such as concessions, merchandising, game programs and parking, therefore those expenses should be incorporated in the lifetime calculation. A part of the marketing and sponsorship revenues are endorsed to the season ticket owners due to the revenue coming from them as an audience and their quality. Season ticket holders have a strong influence in the share of new buyers. 25 to 40% of the new owners have been referred by a current user. All these calculations combined allowed NBA to reach the value of a lifetime relationship with a season ticket holder. Thus, it is possible to conclude the importance of retaining the existing customers. A defecting customer represents not only the loss of that year, but also all the following years that the fan could have kept that member(Lachowetz et al., 2001).

There is a large number of literature regarding CRM and customer value. Though, the fact that the sports industry and particularly the football industry only adopted a customer centric strategy recently, explains the lack of information regarding this specific topic.

Combining the existing literature with insights obtained throughout this project, this study hopes to contribute to a deeper knowledge about the customer value in the football industry.

## Conclusions and Recommendations

In order to facilitate and improve the quality of the analysis done throughout this project, a set of data was provided by Sport Lisboa e Benfica with information regarding its members. The dataset includes evidence of every member regarding a) type of membership, b) membership fees, c) membership with season ticket (Red Pass), d) type of charges, e) frequency of payment, f) red pass type, g) tickets purchased and its channel and h) merchandising bought and its channel.

By analyzing the data available, it was not possible to compute a complete customer lifetime value due to some limitations of the dataset such as a) impossibility to distinguish the gender, b) impossibility to distinguish each Red Pass' seat and floor, c) Lack of historical information which doesn't allow to calculate the growth rate of each segment and d) no information about costs, and thus, everything is considered profit.

Therefore, it was calculated a customer value having into account 3 main variables, a) Red Pass ownership, b) Membership fees and c) ticket sales. To facilitate the calculation and based on the limitations previously mentioned, 3 main assumptions were defined, a) the average price of Red Pass and Red Pass Total were calculated as a weighted average, according to the number of seats available in each floor, b) the average price of Red Pass premium was calculated as an arithmetic average, considering only the base prices and c) the analyzed period was from June 2017 to November 2017, which represents the minimum common denominator between all databases.

Having into account these limitations and assumptions, a calculation of member value was performed, being possible to take several conclusions regarding the buyer behavior of the current SL Benfica members.

The average value spent per member is 94,78€. More in depth, the type of members who spend more are the *Maior* (older than 18). The Lisbon residents are the ones who spend the most, however, the ones who live in Oeiras have a higher average value. Regarding the member marital status, the single members have the highest value for the company, but the divorced have higher average values. The customers aged between 35 and 44 years old are the best age group consumers (Group thesis, slide 80).

After a more generic analysis to find out which are the group of consumers who have more value for the club, a further exploration was made with higher detail, in order to find the specific customers that have the highest value for the company. The top 10% members were found, following the same characteristics as the ones mentioned before. Therefore, it is possible to characterize a typical valuable client for the firm, a *Maior* member aged between 35 to 44, who lives in Lisbon and is single (Group thesis, slide 82)

Looking closely to the behavior of the 5 top members during the period analyzed (June 2017 to November 2017), there is a huge gap between the first to the second one and then from the second one to the remaining.  Although the age group which has higher value is between the 35 and 44 years old (consider the overall database), these 5 top members are all younger than 35. 4 out of 5 are single and 2 of them are season ticket holders. Only one of them is member for more than 2 years and all of them spent the most in merchandising. (Group thesis, slide 81)

Considering the limitations and assumptions defined a simpler version of lifetime value was performed with the main conclusions already presented. However, there is room for improvement not only regarding the data collected, but also how to analyze and apply the key findings taken from the information. Thus, this study aims to present some recommendations to facilitate throughout this process.

Due to confidentiality issues, more specific information about the members was not given by the firm, however, it is known that variables such as gender or red pass seats are part of the club's database. Therefore, a more accurate calculation is possible with the current information collected, having into account the season ticket discounts for women and the different prices of the seats depending on each stand.

The churn analysis is an important part of the LTV calculation. Right now, it is a challenge for SL Benfica to realize when someone is withdrawing his/her membership. As there are different frequency payments it is difficult to define a rule for the members with overdue fees. Therefore a rule was created in order to incorporate the churn in this analysis. It was defined that after 3 months of overdue fees, the customer is considered a former member. As after 2 months of overdue fees, the club cancels the advantages associated to the membership, this is seen as the first warning. If in the next month, the member still does not pay the missing value, it is then considered as o former member. By assuming a specific rule, it is easier to compare the retention rates needed to calculate a more detailed LTV.

Another source of revenue that is not included in the model is the Red Power consumptions. Red Power is the partners' network provided by SL Benfica in which the members have discount in different businesses from driving licenses to gas and electricity. Every time a member uses its card in one the partners to have access to the discount, SL Benfica gets a percentage of that value. The value that each member contributes to the pie coming from the partners is important not only to include in the LTV model, but also to measure the impact that the Red Power has in each member, allowing a more personalized communication with offers that really matters to each one of the associate.

With this study it is possible to better differentiate the value of each member and therefore adapt the CRM strategies according to the different segments provided by the LTV analysis. It is also expected that this exploration helps to overcome the challenge for this project regarding "how to increase the current and potential value of SL Benfica's members?"

## References


Benfica. (2017). *Financial Statement*

Berger, P. D., Bolton, R. N., Bowman, D., Briggs, E., Kumar, V., Parasuraman, A., & Terry, C. (2002). Marketing Actions and the Value of Customer Assets: A Framework for Customer Asset Management. *Journal of Service Research*, *5*(1), 39–54.

Chang, W., Chang, C., & Li, Q. (2012). Customer Lifetime Value: A Review. *Social Behavior and Personality: An International Journal*, *40*(7), 1057–1064.

Deloitte. (2017). *Annual Review of Football Finance*

Dowling, G. R., & Uncles, M. (1997). Do Customer Loyalty Programs Really Work? *Sloan Management Review*, *38*(4), 71–82.

Ekinci, Y., Ülengin, F., Uray, N., & Ülengin, B. (2014). Analysis of customer lifetime value and marketing expenditure decisions through a Markovian-based model. *European Journal of Operational Research*, *237*, 278–288.

Kumar, V., Venkatesan, R., Bohling, T., & Beckmann, D. (2008). The Power of CLV: Managing Customer Lifetime Value at IBM. *Marketing Science*, *27*(4), 585–599.

Lachowetz, T., McDonald, M., Sutton, W., & Clark, J. (2001). The National Basketball Association: Application of Customer Lifetime Value. *Sport Marketing Quarterly*.

Mulhern, F. (1999). Customer Profitability Analysis: Measurement, Concentration and Research Directions. *Journal of Interactive Marketing*, *13*(1), 25–40.

Reinartz, W. J., & Kumar, V. (2000). On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing. *Journal of Marketing*, *64*(4), 17–35.

Storbacka, K. (1997). Segmentation based on customer profitability — retrospective analysis of retail bank customer bases. *Journal of Marketing Management*, *13*(5), 479–492.

Zeithaml, V. A., Rust, R. T., & Lemon, K. N. (2001). The Customer Pyramid: Creating and Serving Profitable Customers. *California Management Review*, *43*(4), 118–142.