Using data to increase ticket sales.

Effective Customer Lead and Risk Scoring – for soccer clubs and other industries.

The soccer industry might be far away from IT but it is also interested in using digital processes to increase financial success. A practical example demonstrates how already available data volumes contribute to this success. And other industries can also benefit from the Customer Lead and Risk Scoring approach.

Fans chanting, flags waving, excitement and beautiful goals: That is how most people imagine a nice afternoon watching soccer. But the reality is often very different: poor athletic performance, bitter losses and being relegated to a lower league. No wonder that ticket sales start to decline and some fans do not renew their season tickets for the new season. After all, there are other nice things to do in a big city.

This means that many soccer clubs must think hard about how they can increase ticket sales. Price adjustments often do not work in the medium term, particularly if the team is not playing well. Available data sources can help to make marketing activities more professional. For example, sales data can be used to identify trends and patterns in order to optimize the way in which fans are approached.

Understanding fans to increase sales

It is not just forwards who always have to keep their eye on the goal - namely the opposing team's goal. The club too should know its objectives. Predictable sales revenues based on season tickets is a central source of income in addition to TV and sponsoring, and therefore represents a key pillar for all professional soccer clubs. Data can help to stabilize or even expand this strategically important pillar in difficult times.

Initially, this means gaining a better understanding of the fans and in particular season ticket holders. With respect to the above example, this means: Which fans buy season tickets?

Who is not renewing their season ticket? What are the main reasons why fans buy / fail to renew a season ticket?

The answers to these questions can be used to identify new potential and at-risk season ticket holders in a timely manner, and also for managing the communication for these target groups. Such an analysis should result in a concrete result, e.g. an assessment (scoring) of current season ticket holders with regard to the risk that they may not renew their season tickets. Even a list of potential new customers (leads) and their probability of buying a season ticket could be useful. Such results form the basis for a subsequent marketing campaign.

Implementation: The truth is on the field

Even the best tactics are for naught if the players cannot implement them on the field. Implementation starts once the contents and scope of the application case have been clearly defined and its added value has been demonstrated. This also requires an assessment of which resources will be required and whether the club has access to these resources or whether it will need to involve external partners for this purpose.

Our example comprises the following areas:

- Ticketing data (ERP / ticket provider)
- Membership data
- (Socio-)demographic data (CRM)
- Access control data (tickets that are scanned when entering the stadium)

The corresponding tools, technologies and persons (skills) are also required to connect, prepare, store and model the data and for the subsequent analysis. It should begin with a descriptive process, followed by an investigative (diagnostic) review. Predictive statements can then be made on this basis.

Using our example, this would mean the following when put into practice:

a.) What has happened / How have ticket sales changed?
b.) Why did something happen / Why did season ticket holders renew (or not renew)?
c.) What will happen / Who will not renew a season ticket?

Design and implementation must be carried out in compliance with the EU General Data Protection Regulation, hence in accordance with the specific purpose and with the agreement of the data subjects. For modeling purposes, the data of season ticket holders can be linked with various data sources so that the information that is contained in the same can be combined. This requires the data to be cleaned and prepared in advance. The subsequent analysis and pattern detection process aims to identify the most important factors for purchasing a season ticket versus a normal individual ticket, or for not renewing a season ticket.

The analysis identified the following key factors for purchasing a season ticket, among others::

- Age of person
- Distance to stadium
- Number of single tickets purchased

Key factors for not renewing a season ticket:

- Number of games attended
- Distance to stadium
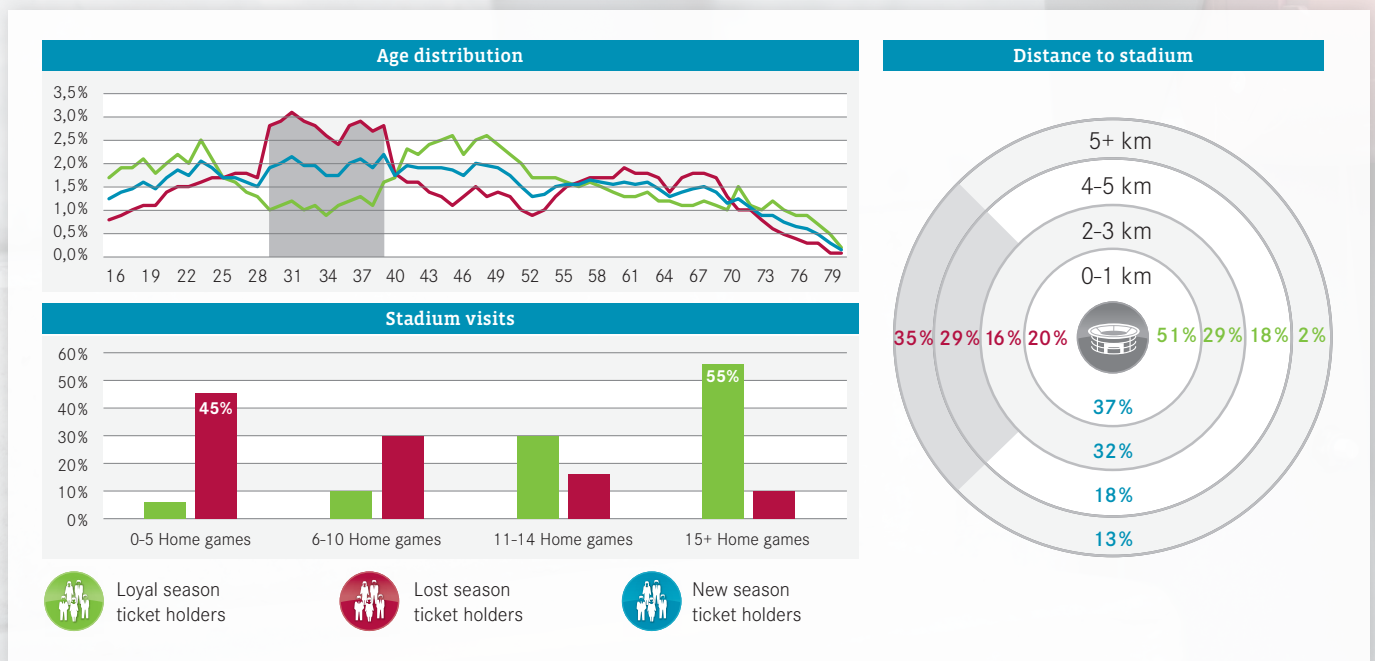- Number of years someone has had a season ticket

Figure 1: Criteria for canceling a season ticket

The table never lies

Every forward wants to be the one shooting the most goals - but no goalie wants to be the one who lets in the most goals. Such ranking lists are used to evaluate not just players but also fans, because the results of the preceding data analysis can be used to develop a scoring model.

There are two points of view in this regard: The **Lead Scoring List** lists the fans and visitors in the databases according to similarities with season ticket holders, which provides a list of promising new customers and people interested in season tickets. On the other hand, the **Risk Scoring** evaluates current season ticket holders with regard to the risk that they will not renew.

First name	Last name	Block	Row	Seat	Age	Distance to stadium	Number of years person has had a season ticket	Visits of Bundesliga matches in 18/19	Cancellation risk	
Gisela	Schulz	S	4	19	38	31 km	3	5	**67 %**	🔴
Petra	Hoffmann	H	27	16	53	37 km	5	7	**1 %**	🟢
Peter	Schäfer	I	36	69	65	4 km	7	8	**89 %**	🔴
Michael	Koch	W	45	7	83	21 km	9	2	**40 %**	🟠
Thomas	Bauer	K	19	37	3	25 km	5	2	**56 %**	🔴
Wolfgang	Klein	V	27	21	18	43 km	15	1	**31 %**	🟠

Figure 2: A Risk Scoring table

This scoring can be used in combination with other information about the person in order to start the fan and customer targeting phase, with the aim of creating personalized contents and offers that are in line with the fan's requirements.

Sample Lead Scoring results:

- Upselling offer for a second-round season ticket for fans who bought several single tickets in the first season

- Upselling offer for season tickets combined with significantly reduced children's season tickets for single ticket buyers with children

Sample Risk Scoring results:

- Meal vouchers for season ticket holders who live near the stadium but did not use their season ticket a lot in the current season

- Parking vouchers (free parking for some games) for season ticket holders who live far from the stadium and have rarely used their season ticket in the current season

- Cross-selling offer for changing seats because the season ticket holder is sitting in a high-risk area of the stadium

In the end, only the results count

The above approach has already been successfully implemented at several soccer clubs. The benefits were as follows:

- Reduction in the decline of season ticket sales (cancellation rate was reduced by up to 20%)

- Increase in new customers (up to 30% increase in new season ticket holders)

- Increase in fan retention through positive feedback regarding tailored communication activities

- Higher ROI through rapid implementation of the use case with clear added value

What other industries can learn from this example

This approach also offers many points of contact for other industries when it comes to starting or upgrading data-driven marketing and sales campaigns, which can be expanded with e.g. success measurement or automation. The Customer Lead and Risk Scoring approach can also be transferred to other B2C and B2B areas to support marketing and sales processes.

Here are some ideas:

- What data is available about the customer?

- Is this knowledge used for marketing and sales purposes?

- Which are the most important customers?

- Which group/industry accounts for 80 percent of sales?

- Which customer groups were lost, maintained or acquired in the last few years and months?

- How does the company communicate with these groups?

- How can success be measured?

Conclusion

The application example shows how even for small industries and companies such as soccer clubs, data can be an essential factor for professionalizing marketing activities, and hence for optimizing customer communication. Even if the analysis results described above are specific to soccer, the data-driven approach for marketing and sales campaigns can be used in other industry sectors as well. In this context, companies do not always have to turn to "Big Data Science" to obtain concrete benefits. Instead, they can use a simple Customer Lead and Risk Scoring model to find concrete approaches for new sources of income and higher sales revenues.

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