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Fans: an asset to be valued. Proposal of a Maturity Model for Sports Organizations

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SUMMARY

FIGURES SUMMARY	4
TABLES SUMMARY	5
EQUATIONS SUMMARY.....	5
ABSTRACT IN ITALIANO	7
ABSTRACT IN ENGLISH	9
EXECUTIVE SUMMARY	11
1. INTRODUCTION	19
1.1 Why Fan Experience?	19
1.2 Which relationship exists between Fan Experience and Digital Innovation?.....	22
1.2.1 What is Fan Experience?.....	22
1.2.2 The importance of Digital Innovation in Fan Experience.....	22
1.2.3 Some examples of Fan Experience Technologies.....	23
1.2.4 Integrated Strategy	24
1.3 Fan Economy	25
2. LITERATURE REVIEW	29
2.1 Fan Satisfaction Model	30
2.1.1 Disconfirmation of Expectations Model	31
2.1.2 Sport Spectator Satisfaction Model.....	33
2.1.3 Final Considerations on the Models.....	38
2.2 Fan Experience Model	39
2.2.1 Customer Experience	39
2.2.2 Customer Experience in Spectator sports model.....	44
2.2.3 Fan Community.....	51
2.3 Fan Experience Touchpoints	54
2.4 Role of Sport Marketers.....	58
2.5 Fan Funnel	62
3. RESEARCH DESIGN.....	67
3.1 Literature Review Methodology	68

3.2 Digital Strategy and Technologies Methodology.....	70
3.3 Fan Experience Maturity Model Methodology	71
3.4 Case Studies Methodology.....	72
4. DIGITAL STRATEGY AND TECHNOLOGIES	79
4.1 Data Collection and Integration	79
4.1.1 Data Warehouse.....	80
4.1.2 Data Lake.....	83
4.1.3 CRM (Customer Relationship Management)	85
4.2 Analysis.....	89
4.2.1 Data mining	89
4.2.2 Classification trees.....	92
4.2.3 Clustering.....	92
4.2.4 Advanced Technologies.....	94
4.2.5 Measurement and Tracking	95
4.3 Execution.....	96
4.3.1 Marketing Automation.....	97
4.3.2 Dynamic Content Management	101
4.3.3 Digital Asset management.....	105
4.3.4 Fan Technologies.....	109
4.4 Summary of the Technologies.....	113
5. FAN EXPERIENCE MATURITY MODEL	115
5.1 Maturity Model.....	115
5.2 Sport Digital Strategy	116
5.3 Fan Experience Maturity Model.....	117
5.3.1 Single Channel Approach	120
5.3.2 Few-Channel Approach	122
5.3.3 Multi-Channel Approach	124
5.3.4 Cross-Channel Approach.....	126
5.3.5 Omnichannel approach	128

5.3.6 The Final Model	129
6. CASE STUDIES	133
6.1 Case Studies' Reports	134
6.1.1 Lega Nazionale Professionisti Serie B	135
6.1.2 Atalanta Bergamasca Calcio	141
6.1.3 ACF Fiorentina.....	143
6.1.4 Brescia Calcio	146
6.1.5 Parma Calcio 1913	150
6.1.7 Pallacanestro Varese	157
6.1.8 IQUII	161
6.2 Case Studies' Analysis.....	164
6.2.1 Strategy & Organization.....	164
6.2.2 Technologies	165
6.2.3 Future and Geographic Trends	166
6.2.4 Benefits and Criticalities	167
6.3 Conclusion	168
7. CONCLUSIONS	171
7.1 Findings	171
7.1.1 Fan Experience Concept.....	172
7.1.2 Sports Digital Innovation	172
7.1.3 Fan Experience Maturity Model	173
7.2 Limits of the research	174
7.3 Further Improvements.....	174
7.4 Contribution to Literature	175
BIBLIOGRAPHY AND SITOGRAPHY	177
RINGRAZIAMENTI COMUNI	185
RINGRAZIAMENTI ANDREA.....	187
RINGRAZIAMENTI LUCA.....	189

FIGURES SUMMARY

Figure 1: Structure of the Thesis.....	12
Figure 2: Structure of Literature Review	13
Figure 3: Fan Experience Maturity Model.....	16
Figure 4: Relationship between Fan Experience and Revenues	21
Figure 5: Sports Ecosystem: The Flow of Money	25
Figure 6: Winning is a virtuous cycle	27
Figure 7: Structure of Literature Review	30
Figure 8: DEM Model.....	32
Figure 9: Extended DEM Model.....	33
Figure 10: SSSM Model	37
Figure 11: Customer Experience in Spectator Sports Model.....	45
Figure 12: Signal Iduna Park	48
Figure 13: Fan Community Model.....	52
Figure 14: Fan Touchpoints	57
Figure 15: Sports Marketing Plan	61
Figure 16: Purchase Funnel.....	63
Figure 17: Structure of the Thesis.....	67
Figure 18: Technologies Partition.....	70
Figure 19: Maturity Model Sample Matrix.....	72
Figure 20: CRM developing steps	87
Figure 21: Data Mining Process.....	90
Figure 22: Marketing Automation Process	98
Figure 23: Smart Arena.....	113
Figure 24: Global Maturity Model.....	117
Figure 25: Fan Experience Maturity Model.....	130
Figure 26: Fan Experience Evolution Framework.....	130
Figure 27: Structure of the Thesis: Case Studies step.....	133
Figure 28: Case Studies Positioning in Fan Experience Maturity Model.....	168

TABLES SUMMARY

Table 1: Numbers on Digital Diffusion23

Table 2: Case Studies 74

Table 3: Technologies Summary 113

Table 4: Single-Channel Approach 120

Table 5: Few-Channel Approach..... 122

Table 6: Multi-Channel Approach..... 124

Table 7: Cross-Channel Approach 126

Table 8: Omnichannel Approach..... 128

Table 9: Case Studies: Interviewed People 134

EQUATIONS SUMMARY

Equation 1: Seasonal Stadium Attendance 47

Equation 2: Match Day Attendance..... 50

ABSTRACT IN ITALIANO

In Italia, così come in tutto il mondo, sempre più persone praticano e seguono sport da casa, alla televisione, sui social network o nell'arena dove si svolge l'evento sportivo. Uno studio del 2014 di ESPN ha rivelato che ben il 93% delle persone è interessato a seguire sport. Di conseguenza, il bacino di tifosi attorno alle società sportive è diventato sempre più ampio. Inoltre, se negli anni '80 la biglietteria rappresentava il 90% del fatturato, oggi incide meno del 20% e il restante 80% è suddiviso tra sponsor, merchandising, diritti TV e valore del brand. Questa diversificazione dei ricavi si è resa necessaria in seguito all'incremento dei costi che è necessario affrontare per gestire una società sportiva. Il tifoso, quindi, diventa la chiave per il guadagno di un club. Una squadra senza fan è, infatti, sinonimo di una società senza visibilità e quindi senza introiti.

Creare un'esperienza di valore per il tifoso risulta quindi fondamentale per i club sportivi, che devono cercare di mantenere un livello di engagement elevato e costante, non solo durante l'evento sportivo, ma in ogni momento. Nel mondo odierno, in cui 2.6 miliardi di persone possiedono uno smartphone e 2.3 miliardi usano i social media, l'innovazione digitale gioca un ruolo fondamentale anche in questo ambito. Infatti, le nuove tecnologie a disposizione permettono ai club di raccogliere, integrare e analizzare i dati dei fan, provenienti da diversi punti di contatto, e di lanciare campagne di comunicazione sempre più personalizzate sulla base di essi.

Alla luce dell'emergente importanza ricoperta dal tifoso, la nostra ricerca si prefigge l'obiettivo di indagare il concetto di Fan Experience, ovvero la gestione della relazione con i tifosi da parte delle organizzazioni sportive, e il contributo che l'innovazione digitale può offrire in questo ambito. A questo proposito, dopo un'accurata ricerca dei modelli esistenti di Fan Experience e delle tecnologie disponibili, abbiamo creato un Fan Experience Maturity Model, che delinea gli step, le competenze e le tecnologie necessarie per passare da una gestione del fan tradizionale ad una "smart", che permette di valorizzare l'asset "tifoso".

ABSTRACT IN ENGLISH

In Italy, as well as around the world, more and more people practice and follow sports from home on television, on social networks or in the arena where the sporting event takes place. A ESPN study in 2014 revealed that as many as 93% of people are interested in watching sports. As a result, the basin of fans around sports clubs has become larger and larger. Moreover, if in the 80s ticketing represented 90% of turnover, today it accounts for less than 20% and the remaining 80% is divided between sponsors, merchandising, TV rights and brand value. This diversification of revenues became necessary due to the increase in costs that must be faced for managing a sports club. Fans, therefore, become the key for the gain of a club. A team without fans is, in fact, synonymous with a company without visibility and therefore without revenue.

Creating a valuable experience for the fan is therefore essential for sports clubs, which must try to maintain a high and constant level of engagement, not only during the sporting event, but in every moment. In today's world, where 2.6 billion people own a smartphone and 2.3 billion use social media, digital innovation plays a fundamental role also in this area. In fact, the new available technologies allow the clubs to collect, integrate and analyze fans' data, coming from different touchpoints, and to launch more and more personalized communication campaigns based on them.

In view of this emerging importance of the fan, the aim of our research is to investigate the concept of Fan Experience, the management of the relationship with fans by sports organizations, and the contribution that digital innovation can offer in this scope. In this regard, after a careful research of existing models of Fan Experience and available technologies, we have created a Fan Experience Maturity Model, which outlines the steps, the skills and the technologies needed to move from a traditional Fan management to a " smart " one, which allow to value the asset "fans".

EXECUTIVE SUMMARY

Thesis

Digital Innovation has permeated in recent years a huge number of economic industries, deeply revolutionizing some of them; among these, it is possible to highlight the sport industry, a huge and growing industry too often neglected in the field of research. Among the different aspects embedded in the Sports Organizations' management, "Fan Experience" concept is one of the most relevant in last years.

The work of Master Thesis is aimed to investigate the importance of Fan Experience in the sports organizations and understand the impact that the digital innovation has on it. We looked for existing Fan Experience Models, technologies that allow sports organization to generate a consistent Fan Experience and finally, on the basis of the research, we built a Maturity Model regarding the evolution steps, in terms of digital technologies, of the Fan Experience management for sports organization in order to obtain a wide and exhaustive vision on the phenomenon.

Why Fan Experience?

The motivations which characterized the choice to conduct an analysis on Fan Experience, have to be searched in the components of revenues of today sports organizations.

Nowadays the operative costs for sustaining a sports club are really high (there was a huge increase of costs of more than 100% for main European football clubs from first 2000 years to 2017) due to the exponential increase of the salaries of the players and the staff, which represent around the 70% of the overall operative costs.

In order to sustain this huge amount of costs, sports organizations have to diversify the entries, not only focusing on the basic revenues coming from the ticketing. In 80's ticketing represented the 90% of the turnover, while now it represented around 15-20% of it and the remaining 80% is distributed between broadcasting and Tv rights, sponsorship and commercial and other sources of entries. Technologies too has changed the way in which clubs are managed and in which they get their revenues. Hence, it seems that today broadcasting rights and lucrative sponsorship and commercial deals are becoming the principal sources of revenues in most professional sports leagues. Fan experience, in this scenario, arises as a new lever for sports clubs for diversifying the nature of revenues and consequently increase them, establishing a direct relationship between fan engagement and revenues.

Fan experience drive revenues for three reasons:

- Past Experience: fans are more likely to come back to games if they enjoy their experience;
- Positive word of mouth: happy fans are more likely to tell their friends about their experience;

- Sponsorships: sponsors want to be associated with amazing experiences and will pay for it.

And for activating and enhancing the management of Fan Experience Digital Innovation results fundamental. Sports industry is in the middle of a digital revolution. Every person owns a smartphone and uses social media, also within the stadium or the arena, consuming sport related content once a day. In this digital sports sphere, marketers are developing clever ways to engage with modern fans.

So, for a sports club, creating the fan experience means meeting fans where they are, not only in the venue during the match, but everywhere and every day. It is the end-to-end experience that starts before you purchase the ticket and it does not end when the season or the championship is over. The time the fan spends at the venue has to be the most awesome experience each time he is there, but the club has to remain in contact with the fan also far away from the venue.

In this scenario, a digital strategy results to be essential for a Sports club in order to survive and make the most of the actual technology offers.

Methodology

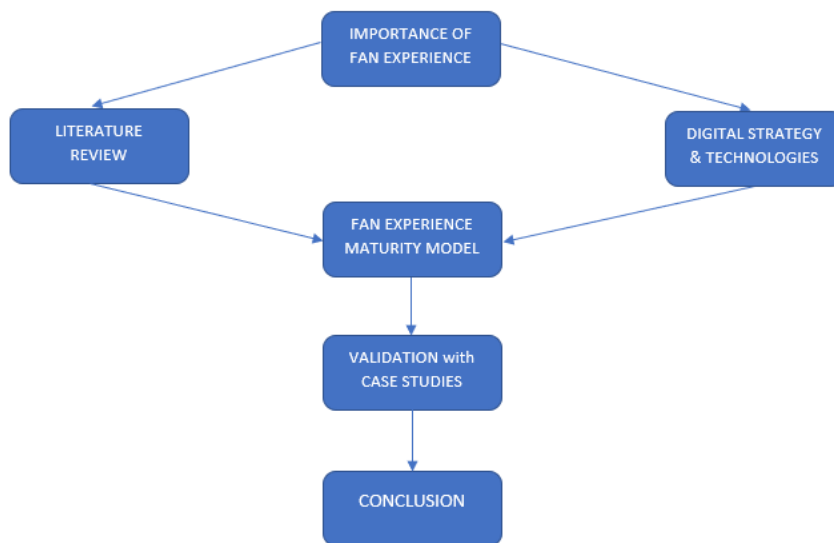


Figure 1: Structure of the Thesis

The logical process started (Figure 1) with the Introduction Chapter where we described the importance of Fan Experience for the sports organization and the contribution that Digital Innovation can offer in this field, we presented the economy around the fan and the linked phenomenon of sports tourism.

The aim of Literature Review Chapter has been to deep investigate the Fan Experience and the relationships it has with the Digital Innovation. We have analyzed deeply the traits that characterize the figure of the sports fan, why it could be considered a different type of customer. Once established who is the fan, we have searched for models of Fan Experience already existing in literature, stressing on fan satisfaction, fan loyalty, touchpoints and on the role of sports managers in promoting marketing campaigns addressed to fans.

Subsequently, having deep analyzed the existing models of Fan experience, it has been possible to move to the description of the digital strategies and the technologies that are now used in the sports industry for managing the Fan Experience. The objective of this sections was to find and explain in detail the main digital technologies useful for sports organization for collecting, managing and analyzing fans' data and launching the communication campaigns, and also the technologies through which fans are in contact with the club. We presented the technologies subdivided on the basis of their function: Data Collection and Integration, Analysis, Execution.

On the basis of the analysis and other studies, we developed the core of our thesis: the Fan Experience maturity model. This framework represents a series of sequential steps that the different sports organizations should face in order to transform their management from traditional to smart. It is also valid to understand which position a society occupies and how it should act to improve.

Case Studies have been built in order to validate the Fan Experience maturity model that we have developed. We interviewed different figures that works on Digital Innovation and/or the Fan experience in Italian sports clubs or in Italian sports societies. We asked them how they manage the digital evolution in the sports world and in particular what they are doing for the fans and for the future, looking also at the existing differences between Italian Fan Experience and Rest of the World one. Finally, on the basis of the whole research, we moved to the conclusion.

Chapters

➤ Literature Review

In order to build awareness about the theme and to build an overview on the existing models of Fan Experience and the linked concepts, we conducted a literature research throughout the utilization of search engines such as Biblio.polimi, Google Scholar, ResearchGate, Scopus etc.

You can see the structure of Literature Review analysis in the following image.

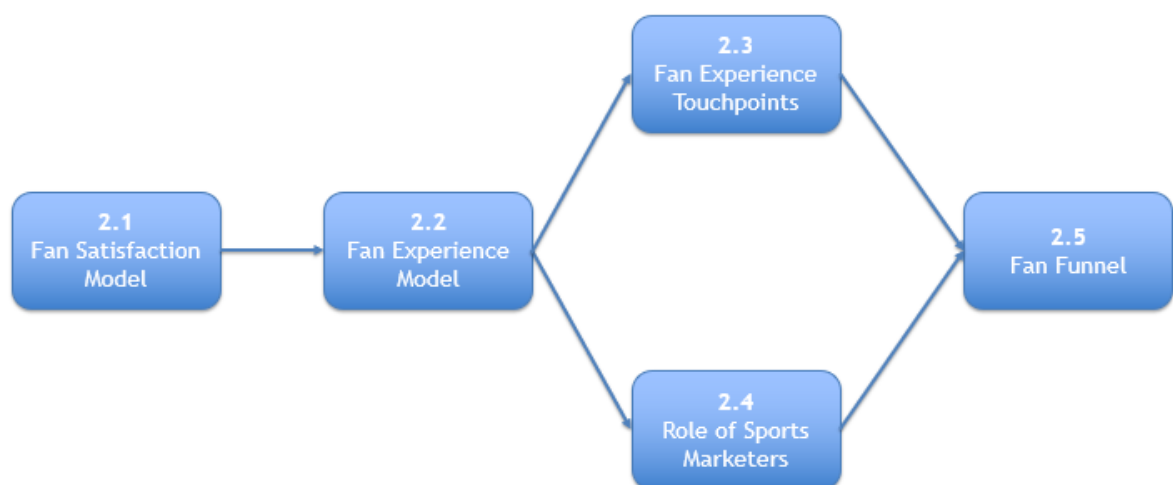


Figure 2: Structure of Literature Review

We started the review showing the Sports Spectator Satisfaction Model developed by Linda Van Leeuwen, Shayne Quick and Kerry Daniel. The key contributions of the SSSM are its inclusion of club identification and the win/lose phenomenon, together with its consideration of both the core and peripheral dimensions of the spectator sport service. The study demonstrates the major importance of peripheral dimension of the sport service on fan customer satisfaction, and so Fan experience, pushed by well-designed marketing efforts, represents the key for enhancing sport spectator customer satisfaction.

So, after that, we presented the only one existing model of Fan Experience: Customer Experience in Spectator Sports developed by Nicholas D. Theodorakis. The model is made by several context-specific determinants and moderators which influence and generate the total customer experience in sports sector: Functional Elements, Outcome Elements, Social Elements, Price, Customer Experience in alternative channels and Customer experience (t-1), Consumer Moderators and Situational moderators. One of the effects of creating a complete and personalized customer experience is the generation of strong loyal customers. This loyalty is verified in the creation of real Fan communities that have a great impact on the attendance of fans at the stadium during the matches, but also to their participation at club life off-field. So, in a paragraph of the chapter we included the theoretical framework developed by Yoshida, Heere and Gordon on this topic.

After explaining the Fan Experience Model, in parallel we showed the Fan touchpoints with the sports organizations, that can be categorized in atmospheric elements, communicative elements, process elements, people and technologies & digital, and the role and the responsibilities of today sport marketers, based on the sports marketing plan proposed by Da Silva and Luzzi Las Casas in 2017.

Finally, we presented the Purchase Funnel model originally developed by McKinsey and Co., which show how consumers process information about brands, regardless of the source. With this understanding of consumer information processing or in particular fans' one, sports marketers can direct specific messages in specific media. Technologies emerged as essential elements across the whole purchase channel, and so decided to explain in detail them in the next chapter.

➤ **Digital Strategy and Technologies**

The aim of this chapter was to present, with also some examples of application in Fan Experience field, all the available technologies for the sports organizations in order to create an advanced Fan Experience. We decide to show and explain them subdividing technologies on the basis of their functionalities in three categories:

- **Data Collection and Integration:** technologies dedicated to the acquisition of fans' data from different sources, to the integration of them and generally to their management. The technologies presented in this phase are the Data Warehouse, the Customer Relationship Management system, the Data Lake and the Data Hub from the most basic to most advanced system.

- **Analysis:** technologies that allow sports organization to cross available information in order to cluster the customers and create insights on data, as a basis for the execution. In this phase Business Intelligence techniques are embedded: from the most basic ones such as Data Mining, Classification trees and Clustering to the most advanced ones such as Real-Time Analytics and Machine Learning.
- **Execution:** technologies useful for launching marketing and communication campaigns, managing the content sent to fan, for directly involve the supporters. For the achievement of this phase three technologies have been presented and explained in detail: Marketing Automation, which is particularly focused on the aspect of Personalization, Dynamic Content Marketing, mainly devoted to newsletter and mail management and Digital Asset Management, which harmonize and handle the content in a clever way. We included in this section also the digital technologies made available to fans by sports organization such as team mobile app, platform, stadium wi-fi etc., the tools through which the clubs try to engage the fan.

➤ **Fan Experience Maturity Model**

The aim of this chapter was to build a maturity model regarding the “Fan Experience” branch of the digital strategy of a sports organization, including all the existent possible steps, composed by digital competences and technologies, between a traditional Sport Club management and a Smart Sport Club management on the basis of the framework introduced by the Osservatorio di Innovazione Digitale nell’Industria dello Sport of Politecnico di Milano.

The Maturity Model works thanks to the interaction between the structural elements and the maturity levels chosen for the model.

The structural elements represent the necessary three activities in order to collect, manage, analyze data and put in practice a campaign on the basis of them. They are the phases across which we subdivided technologies in the previous chapter: Data Collection and Integration, Analysis and Execution.

The Maturity Levels, instead, represent the steps a sports organization should cross for passing from a traditional way of management to a smart digital one. The five maturity levels in the case of Fan Experience are referred to the management approach of the different touchpoints between a fan and a club, in particular the number of contact-points and their integration within the organization. The levels start from the Single-Channel approach and arrive until the Omnichannel approach.

Each level present different competences and technologies in each structural element of the model. The model can be viewed as a matrix having on the two axis the structural elements and the maturity levels. The matrix below summarizes the entire model.

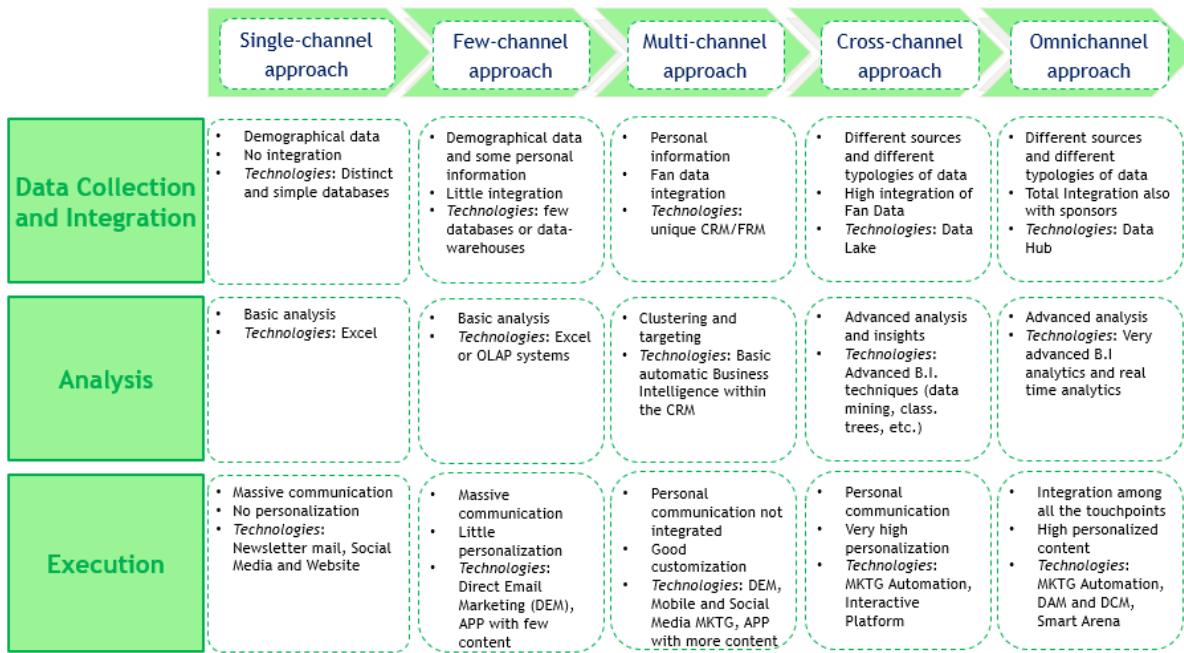


Figure 3: Fan Experience Maturity Model

After developing the model, we decided to validate it through some case studies of Italian sports realities, created by interviews about the way they manage Fan Experience within their organizations.

➤ Case Studies

The aim of this chapter was firstly to find out all the aspects not observable on the web, since many operative topics can emerge only by the opinions of whom works day by day in sports industry, and, above all, to validate all the components (Structural Elements, Maturity Levels and the features of each level) of the “Fan Experience Maturity Model” designed in the previous one. Thus, we built an interview scheme, addressed to 8 sports managers, belonging to sports clubs or leagues or to technologies vendor companies, composed by four areas of interest: Strategy and Organization, Technologies, Future and Geographic Trends, Benefits and Criticalities. After the collection of the opinions, we developed and elaborate 8 case studies. At the end, therefore, it was possible to identify common traits which characterize sports organizations’ way of implementing Fan experience:

- The centrality of fan in sports organizations’ strategy;
- The necessity of a Digital Strategy and a Responsible for the Fan experience;
- The importance of having a system able to integrate and analyze all fans’ data;
- The development of mobile apps for enhancing the Fan experience;
- The backwardness of Italy respect to the Rest of the World regarding Digital innovation;
- The main benefit of Fan Experience is the creation of a Loyal community of fans;

- The limited budget and the Italian culture are the main constraints in this field.

Finally, once validated the model through these case study, we tried to put each single organization within a level of the maturity model and then we were ready to move to the conclusions of the whole study.

1. INTRODUCTION

The aim of this chapter is to explain why it's significant to make a deep study about the concept "fan experience", bringing proofs relative to the importance that Fan Experience plays in the actual Sports Industry. Moreover, in this section, it will be presented the existent connection between fan experience and digital innovation. At conclusion of that, the importance of the presence of a Digital strategy in Business strategies of sports organization will be demonstrated. The final subparagraph will present numerically the importance of fans and fan experience in the world economy.

1.1 Why Fan Experience?

Attending sport events is one of the most popular leisure activities worldwide. A FiveThirtyEight and ESPN Research in 2014 found that only 7 percent of all men between the third quarter of 2013 through the third quarter of 2014 didn't care to watch sports. That breaks down to 1 in every 14 men. They don't watch casually, don't enter any fantasy leagues, don't provide a bracket to NCAA Tournament office pools, don't visit sports sites, they just don't pay attention to sports at all. That number is the same for women, 7 percent of all females during that same time period didn't watch sports either. Moreover, millions of spectators attend soccer games each weekend throughout Europe, creating a dynamic industry with huge economic impact (Ascari & Gagnepain, 2006; Frick & Prinz, 2006). But, why do sports organizations have to take into account fan experience and invest in generating an advanced form of it?

Nowadays, **the operative costs for sustaining a sports club are really high**. Considering the financial statements of some football clubs among the most important ones in Europe, such as Arsenal Football Club, Futbol Club Barcelona, Real Madrid Club de Futbol, Manchester United Football Club and Juventus Football Club, and Forbes team evaluation of eight sports organizations of the four major sports leagues in North America, New York Yankees and Boston Red Socks of Major League Baseball (MLB), Dallas Cowboys and New England Patriots of National Football League (NFL), New York Knicks and Los Angeles Lakers of National Basket Association (NBA), Toronto Maple Leafs and Montreal Canadiens of National Hockey League (NHL), the previous statement has been verified. In fact, taking into account 2015 or 2016 data of these clubs, the overall operative expenses range from 135 million euro of Toronto Maple Leafs to 630 ones of FC Barcelona, which represent a great increase of costs comparing with 10 and 15 years ago, higher for football clubs than US teams, which however met a huge increment. There was an average increase of the football clubs' expenses of around 100% respect to the first years of the new millennium, without considering the FC Barcelona, which has an increment of even more than 400%, while US organizations' costs averagely increased of 50% respect to the ones of 2008, without considering New York Knicks team which have almost the same expenses of 10 years ago. Breaking down the costs, it's easy to denote that the main component of them is represented by the staff costs, which includes the salaries to the players, the trainers, the administration and the ground staff. The weight of this cost component has increased in the last fifteen years moving from around 55% to around 70% of the overall operative costs of European football clubs, while US teams' staff costs, which represent averagely 50% of the overall expenses of the organizations, have not increased in last

10 years since the US Major Leagues introduced (the first time in 1946) the salary cap for sports teams, but they are the main components of costs also in these cases. The salary cap is a system which decrees the total amount of money that each team can pay for the salaries of the players present in its own roster.

In order to sustain and renter of this huge amount of expenses, sports clubs, in recent years, have to consider and promote new sources of cash entries, which are different to the basic revenues coming from the ticketing. About this, Adriano Galliani, AC Milan CEO from 1986 to 2017, in an interview taken by Nicola Porro in 2006, declared: *“nel 1986, la biglietteria rappresentava il 90% del fatturato. Oggi il mix è 60% diritti tv, 25% sponsorizzazioni e attività commerciali, 15% biglietteria.”* (Nicola Porro, “Sociologia del calcio”, 2008), which means that during 80s the main component of the turnover was represented by ticketing, but already in the first years 2000, the mix has changed (60% TV rights, 25% sponsorships and commercial activities and only 15% ticketing). Theodorakis reported the situation of 2013: *“only Arsenal FC had match-day tickets and corporate hospitality sales as its major source of income. This source of income contributed a mere 8% of the Italian giant Juventus FC’s annual revenue”* (Theodorakis, 2014). Hence, it seems that today **broadcasting rights and lucrative sponsorship and commercial deals are becoming the principal sources of revenues** in most professional sports leagues, despite the increased costs of tickets, confirming what Galliani said. Fan experience, in this scenario, arises as a new lever for sports clubs for diversifying the nature of revenues and consequently increase them. In particular, nowadays technology and television have made the stay-at-home-watching experience more enjoyable than ever before. So now clubs have convert casual fans who might attend one game into people who are repeat ticket buyers and who invest even more in other ways, such as through merchandise sales or attending additional events at a venue.

Now, let’s understand the actual situation. Looking at last financial statements of clubs cited above, nowadays the situation is similar to the one described by Adriano Galliani, for Arsenal FC and Juventus FC: the biggest percentage of revenues, almost the 45%, is represented by Broadcasting and TV rights, around the 20% by the sponsorship and commercial, a range between 15% and 20% by the ticketing, and the remaining 15-20% by other sources of entries. Real Madrid FC, FC Barcelona and in particular Manchester United FC, which considerable invest in Fan engagement and experience and have the highest number of fans in the world, present a different revenues breakdown, with higher weight of marketing and commercial and lower impact of broadcasting and ticketing. Manchester United FC, the football club with the highest number of fans in the world (around 354 million), which promote fan experience not only in the venue, but also activities around the stadium and in the city with experiences of brand awareness, have reached even the 52% of revenues with commercial (in 2012 the 24%) while broadcasting represent the 27% of revenues and ticketing the 21%. In absolute terms, the 3 most followed clubs have the highest turnover: FC Barcelona has a turnover of 679 M€, Real Madrid FC of 620 M€ and Manchester United FC of 555 M€. Unfortunately for US organizations, revenues breakdown isn’t available, but however we found the percentage of gate receipts (ticketing). Considering the two teams cited above of each league, ticketing percentage of the overall revenues is around 45% for MLB ones, 15% for NFL ones, 32% for

NBA ones and 39% for NHL ones. So, as you can see, ticketing component represents less than 50% of the revenues, whose main entries probably come from commercial and broadcasting TV. The interesting fact is that the two NFL considered teams, the ones with the lowest percentage of ticketing component, have the highest turnover: Dallas Cowboys have a turnover of 840 M\$, while New England Patriots of 575 M\$. This is the proof that “Fans area” has wide room for growth, and that there is a **direct relationship between the fan engagement and the revenues** of a sports organization.

But why, in detail, improving the Fan Experience will drive revenue? For three reasons:

- 1) **Past Experience:** fans are more likely to come back to your games if they enjoy their experience. If fans associate negative experiences and poor impressions with your stadium, you’ve potentially lost them forever. So, here, it’s emphasized the importance of past experience in the mind of supporters: it’s a significant determinant, which will be explained in the Fan experience model, presented in the second chapter of the thesis.
- 2) **Positive word of mouth:** happy fans are more likely to tell their friends about their experience: the impact of positive associations, instead, can be just as strong. “72% of customers will share a positive experience with 6 or more people.” (Esteban Kolsky, 2017). This is what is commonly called word of mouth. Based off a research study conducted by the White House Office of Consumer Affairs, “67% of people spend money after getting recommendations from their friends on online communities, such as Facebook and Twitter.” Therefore, **shareability** is the key for sports clubs, and **profitability** is the directly linked with it. Fans want something they can tell their friends and family about: a reason to persuade their friends to attend the next game. They want to feel a part of something different, personal and **special**.
- 3) **Sponsorships:** sponsors want to be associated with amazing experiences and will pay for it. Sponsors place a high importance on being associated with unforgettable moments; and as a result, will pay huge bucks for it. As of 2016, sponsorship spending on festivals and venues reached a total of \$1.47 billion dollars (www.brizicam.com).

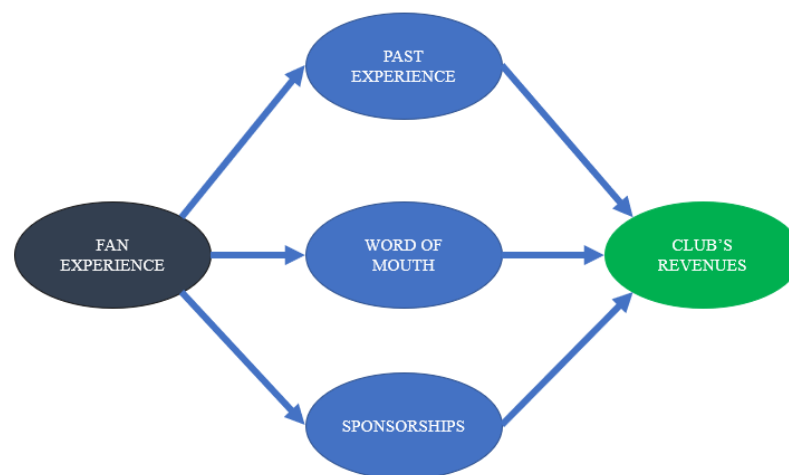


Figure 4: Relationship between Fan Experience and Revenues

1.2 Which relationship exists between Fan Experience and Digital Innovation?

After showing the importance of Fan experience and its linkage with the profitability of a sports organization, now it's the time to define what Fan Experience means nowadays.

1.2.1 What is Fan Experience?

In the past, fan journey was very simple and based essentially on only one touchpoint, the stadium, while nowadays it is encompassed by a huge number of touchpoints through which fans and sports organizations come in contact (for example media, social media, website, store, e-commerce platform etc.). In this context, Fan Experience has a particular meaning, not only linked to the arena and the sports result.

The **real meaning of Fan experience** is well explained by Mark Cuban, owner of Dallas Mavericks, NBA club: *"We don't sell the game; we sell unique, emotional experiences. We are not in the business of selling basketball. We are in the business of giving you a chance to create shared experiences."*

Nowadays, a fan interacts with his favorite club on multiple occasions, through different devices, applications and channels. He buys tickets, watches live matches, streams video clips, and consumes all the news and views surrounding his club and its players. So, the modern sport experience isn't confined to the stadium. Nearly half of all sports fans prefer to follow their teams digitally, and frequently use their laptops or smartphones to search for sports-related content during a game. So, actual fans are no longer simply watching sport; they are engaging with it by creating content (sharing videos, photos, social media posts and blogs, and even live video streaming).

1.2.2 The importance of Digital Innovation in Fan Experience

Sports industry is in the middle of a digital revolution. Nowadays, 2.6 billion people own smartphones, a figure that is predicted to become 6.1 billion by 2020. Additionally, 2.3 billion people use social media (2 billion claiming to be active mobile social users) (Pew Research Center, 2015). It is reported on Medium.com that 70% of modern-day fans as well as bring a digital device to a stadium, ground or arena, intend to use that device throughout the course of the minutes the sporting action in question lasts. Moreover, 60% of mobile and tablet owners consumed sports related content on their devices at least once a day (Nielsen Report, 2012). Additionally, 87% of sports supporter reportedly 'second-screen' when watching a live sports broadcast, watching video replays of incidents, checking live scores from other games, downloading stats and data analytics, or talking about the match on social media platforms (Jonny Madill, 2016). This is due to the proliferation of digital media: Facebook, Twitter, Instagram, Snapchat and others provide platforms offering in-depth and innovative content which is both incredibly accessible and also user-generated. So, thanks to the digital transformation around the world in this period, also the Sports Industry is affected by the digital disruption, which means that change the way sports content is produced, distributed, consumed, monetized, engaged with, and so Fan Experience too. Consequently, **Digital innovation is fundamental for activating the management of Fan Experience** or for helping to make it effective or more effective.

Table 1: Numbers on Digital Diffusion

People with a smartphone	2.6 billion
People using social media	2.3 billion
People bringing a digital device at the Arena	70%
People consuming sports content on digital devices once a day	60%
People using smartphone as second-screen at the stadium	87%

In this digital sports sphere, marketers are developing clever ways to engage with modern fans. Infographics, videos, and even webinars allow curators to break down relevant statistics using clever designs or animations. These creative visuals encourage sports fans to share great visual content across social channels. Marketers can best engage with this new generation of sports fans by providing mobile-friendly content and using great storytelling.

So, for a sports club, creating the fan experience means meeting fans where they are, not only in the venue during the match, but everywhere and every day. It is the end-to-end experience that starts before you purchase the ticket and it does not end when the season or the championship is over. The time the fan spends at the venue has to be the most awesome experience each time he is there, but the club has to remain in contact with the fan also far away from the venue. This is the goal of fan engagement on and off the field.

Increased connectivity presents a range of opportunities for sports organization and for media rights owners to provide added-value to fans and consumers, and also to commercial partners through advertising and sponsorship.

For example, a mobile based fan engagement platform can help fan stay connected anytime and anywhere with their favorite team or sport. It is a single convenience platform that caters to the need of most ardent and enthusiastic digital fans wherever they are. Following a specific sports person or team with the use of decent application can help bridge the increasing gap between fans and their sporting idols or clubs.

In this scenario, **a digital strategy results to be essential for a Sports club in order to survive and make the most of the actual technology offers**. A digital strategy is not just a sum of operations, but a real plan of distinct but communicating activities, developed and articulated within them. Not only, it is essential from the data collection about fans, their integration, the generation of an insight on them to the execution and communication of the customer experience through different touchpoints. In order to do all these activities, different digital tools could constitute the digital strategy of a sports organization.

1.2.3 Some examples of Fan Experience Technologies

Marketing Automation tools, for example, could be an essential part of the digital strategy. It's a key tool for targeting and customizing content. Developing a Marketing Automation strategy means taking advantage of fan master data and behavior, to send to him multichannel

campaigns tailored to his specific needs, interests, and attitudes. It is essential to cultivate every moment of the fan journey. The use of this tool has already generated palpable benefits and results. In the case of the Detroit Pistons parent brand, Palace Sports and Entertainment, **the organization saw a 90-percent renewal in membership rates and a 30-percent increase in season ticket sales**. Trail Blazers franchise, instead, was able to increase season ticket renewals by eight percent (a 96-percent renewal rate), up single-game ticket sales by 30 percent and improve email open rates by 45 percent.

Fans want information about their favorite teams and players instantly. The Internet has become one of the first places where they can find out new facts about their favorite teams. Generally, this means that they want to be able to find what they are looking for among the first pages of the search engine listings. So, SEO (Search Engine Optimization) could be used by sports organizations to enhance exposure and generate additional traffic to websites.

Also, Video Content Marketing could be an important tool within the digital strategy of a sports club. An Aberdeen study tells that brand-using videos **increase their revenue 49% faster than those who do not use them**. In addition, it was estimated that video advertising in 2017 will account for 69% of the traffic dedicated to consumers. Content Video Marketing keep fans, followers and potential customers interested and engaged.

In Deloitte research on digital trends in Sports Industry dominating in 2017, it emerges that the world of sports is accelerating more and more investments in virtual reality technologies. Teams and leagues believe that these technologies can increase the experience for "casual" spectators and let fans across the world feel as if they were seated in field abilities.

Marketing Automation tools, Search Engine Optimization, Video content Marketing and Virtual Augmented reality are only examples of possible useful digital tools inside the sports organization's digital strategy. Its composition and detailed explanation will be treated in the fourth chapter.

1.2.4 Integrated Strategy

Digital strategy needs to become the essence of business strategy of a Sports Organization. In order to make more effective the Fan Experience for the fans, it should be integrated with an engagement strategy too. An engagement strategy let the club to advance practices in awareness based marketing to where fans grow with the brand and are very much a part of the activity rather than merely the recipients. It could be based on four fundamental concepts:

1. **Contribution** – where the audience creates their own content, also known as ‘user generated content’ (UGC)
2. **Collaboration** – where the audience participates in content creation with other consumers or with the brand
3. **Influence** – where the audience are influential over other consumers
4. **Advocacy** – where the audience adopts a sense of ownership and affinity

The business objectives that a sports organization can enforce with this Digital Engagement Strategy can drive actionable outcomes such as signups, transactions, downloads and purchases etc., with the long-term goals having a loyal and retained user base.

As explained in this paragraph, Fan Experience plays a key role for a sports Organization. So, we can say that nowadays Fan Experience is a lever that cannot be missed in sports management and Digital Strategy is essential for improving it.

1.3 Fan Economy

The sports market is a particular context and so is important to understand how the different parties are organized and act in this ecosystem

According to A.T. Kearney research (2014), the global sports industry is worth for \$600-\$700 billion, this market includes all the aspects related to sport, events, goods, licensed products and other non-event activities. This economy is growing faster than the overall GDP, and the long-term growth prospects remain strong. The sports industry is a wide-reaching business and in this complex environment there are lots of participants that want to enlarge their earnings.

The sports ecosystem is composed by media, fans, leagues, brands, clubs and players and by the different flows of money that the different actors exchange among each other (figure 1).

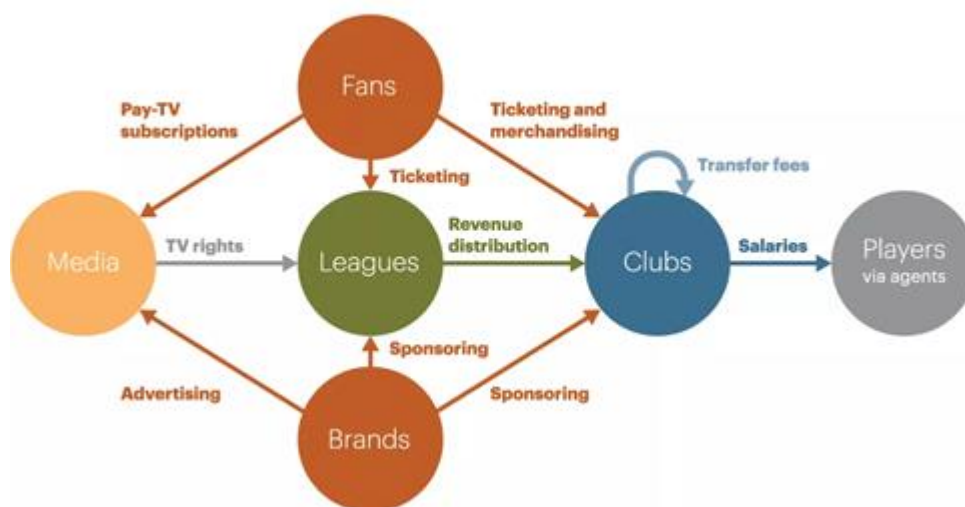


Figure 5: Sports Ecosystem: The Flow of Money

In the ecosystem Clubs have the central role, they are the main actors, where all the money of the chain ends up.

Clubs obtain their revenues from four main streams: ticketing, merchandising, sponsorship and media rights. Usually television broadcast and sponsorship are governed by long term deals, while merchandising and ticketing depends on fan loyalty and disposable income.

An important aspect that is needed to be considered is the combination between sports and technology that is born in the last years. In the sports industry, as in every other industry, there was a disruption due to technology development, and now it is something that is necessary to get success in this field.

The technology changing the sports, has also changed the way in which the clubs are managed and in which they get their revenues, different from the past, in which ticketing was the main income of a society. In a research made by A.T. Kearney in 2014 they said that the forecast for the 2017 of the sports market events revenues will be around 91\$ billion, and they were right. Nowadays media rights and sponsorship are the most part of the revenues, they represent the 35% each, instead ticketing only the 27%.

Football is the king in this market and its big increase in revenues is mostly due to the increase of TV rights. The clubs were forced to find new source of earnings since the costs to sustain a team constantly increase during the last decades.

A.T. Kearney also observed that in 15 years, starting from 2001, all the most important European football leagues have increased their TV broadcasting rights, in particular the Premier League of 118% and the Ligue 1 with an increase of 172%. It is evident that this numbers are due to the technology development that allows to transmit to always a more larger number of people the sport events.

As already said above reporting Adriano Galliani's words, the distribution of the revenues of a football society is completely changed comparing to 30 years ago. Nowadays ticketing represents only a small part, and the revenues come from media and sponsor.

This does not mean that fans are no more a source of incomes, instead they are the main source. If no one is interest in sport, no one watch it, this implies no sponsorship, no ticket sold, no media available to buy the rights and so no money. It is evident that all the economic flows in the ecosystem are correlated.

To get success, the club management must create a virtuous cycle

Teams have to protect and increase their revenues and they can do it watching three key indicators, that are synergistic and overlapping: the performance, because a winning team generate interests and media revenue; the presence of star players, that increase ticketing, merchandising and sponsorship; loyalty, that drives ticketing revenues (in particular) and merchandising.

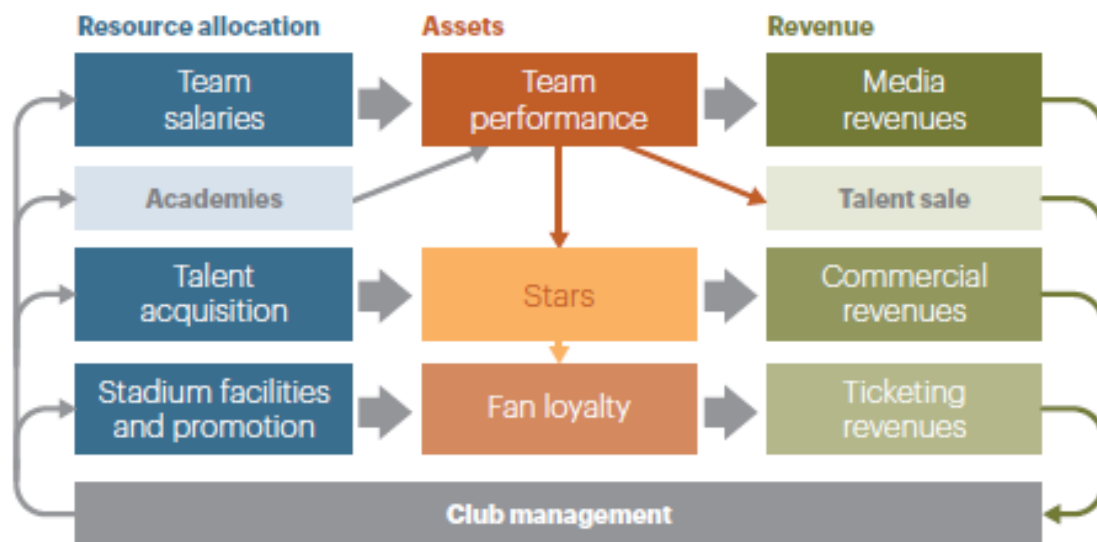


Figure 6: Winning is a virtuous cycle

Having winning performance is the best way for a team to protect revenues. In general, the teams which perform the best are those ones that invest more to acquire the best players. Because having good team performance means having more money to invest, since you have more media attention, more merchandising and ticketing revenues. This money can be used to have more star players that increase the fan loyalty.

In this ecosystem, in which the fan is the main actor, clubs could decide to work within the paradigm proposed by the economist Paul Madden “fan welfare maximization”. This includes having lower ticket prices, lower wages expenditure that leads to higher attendance levels.

Madden states that fan welfare maximization means maximizing match attendance, and so this new paradigm on leading a sport club requires a constant fan engagement stimulus. Fan welfare maximization also lead to increases identification and passion, and so fan loyalty. This in turn leads to maximize media consumption and social media behavior. Therefore, fan engagement activities will result in a positive loop, increasing passion and loyalty leads to increasing stadium revenues (ticketing), increased sponsorship interest, thanks to greater visibility, and media attractiveness, creating a win-win business situation.

In the sport industry, another important market related to the fan economy has to be considered, the sport tourism.

Sports tourism refers to the experience of travel to engage in or view sport-related activities. According to European Travel Commission, this phenomenon is really increased in the last years and now has important dimension: it represents the 10% of the global tourism industry, generating between 12 and 15 billion of international arrivals yearly, with a turnover of \$956 billion. Instead at the beginning of the 2000s it was only the 2.5% of the world trade.

Looking at these numbers, a question arises spontaneously: why this increase? There is no a unique answer, but there are different factors that contribute to this great exploit, like the fact that people have more leisure time and more money to spend. But surely a very important actor in this development is, as usual, the technology. We live in a digitized world, technology is always the key. The availability of buying tickets online for sports events, the possibility to know in advance where and when the competitions will take place, unified with the possibility of using sites for booking flight or train tickets at low price, rooms in hotels and hostels and check what it is possible to see in a city, created the background to allow this phenomenon.

The importance of sports tourism is linked to its double effect: it has the direct effect of the attendance of the competitors and spectators and accompanying people, and the indirect effect of the marketing of the destination which lead to the subsequent tourism flow.

Also in this case results evident that the main actor is the fan, and so the fan engagement. But here it is not only a problem for the clubs or for the sports societies, but it is a common matter that involve also the local community. Sports event mean sports tourist, that means more work for hotels, museums, and any kind of attraction. These are important sources of earnings for communities.

Since the consumer desire is growing and the sports tourist are so varied, this is an opportunity for many different destinations that can renovate themselves creating a new way to make money.

The host sites must be prepared, it is necessary an investment in infrastructure, people and everything is needed. For this reason, there are always more partnership and sponsorship related to the sporting events.

In conclusion, the fan has a very central role in the sports industry, it focuses on itself all the money flows. It is a source of income that could be directly related to the sports events, with ticketing, merchandising media, but also indirectly with the tourism sector, that leads benefit not only to the sports companies, but to all the community. So, engage fans is very important and it is the only way to get success in the sports ecosystem.

In the next chapter we explore better the Fan Experience world. In particular our focus is:

- In the next chapter, to understand better the dynamics that lie behind the Fan experience are presented the main concepts related to this topic, not only studying the world of sports and so of the fan, but also enlarging the study to the more general concept of customer.
- In the Chapter two there is a study of the technology that are related to the Fan Experience, specifying how they can be used in the sports industry, their benefits and their criticalities.

2. LITERATURE REVIEW

The aim of this chapter is to show the definition and the existing models of Fan experience found in literature. Unfortunately, there are not many studies about sport management and in particular fan experience.

First of all, a definition of “fans” is necessary, before defining any kind of models regarding them. The word “fan” is an abbreviation from “fanatic”. Fanatic derives from the Latin “fanaticus” which literally means “a temple servant, a devotee”. In sociology, a fan is viewed as an obsessed individual someone who has an interest in a certain team, celebrity, show, brand and the like (Hills 2002). In particular, sport fans are defined as “individuals who are interested in and follow a sport, team and/or athlete” (Wann, Melnick, Russell, & Pease, 2001). Fans’ engagement in following their favorite teams includes attending sporting events, watching games on television, purchasing a number of team products, reading sport magazines and newspapers, and talking with others about sport (Bristow & Sebastian, 2001; Funk & James, 2001; Hunt et al., 1999).

Is Fan different from general customer? Sacramento Kings owner Vivek Ranadivé asked rhetorically, "What's the difference between a customer and a fan?" "Fans will paint their face purple, fans will evangelize. Every other CEO in every business is dying to be in our position - they're dying to have fans," he replied. In literature, Balwant Samra and Anna Wos (2014), found three unique characteristics that distinguish a fan from the general consumer:

- *Fans possess a strong and intense emotional attachment with the consumption objects.*

A fan is more closely associated with a particular form of intensity or affect compared to general customers (Grossberg, 1995). According to Kolbe and James (2000), sports consumers form psychological connections to specific teams that are persistent and resistant to change. They found that fans feel themselves as part of the team, demonstrating a strong psychological commitment.

- *Fans behave as loyal consumers who exhibit several loyalty behaviors, such as repeating their purchase or patronage, or insisting on staying in the relationship between brands or products.*

Brooker and Jermyn (2002) and Harrington and Bielby (1995) identify the relationship between repeated consumption and the emotional commitment of these fans. Sandvoss (2005) observes that most of those who labelled themselves as fans, pointed to their repeated consumption patterns. He described the fan behavior equal to consumer loyalty one, which is made of a blend of brand, an attitude and behavior with indexes that measure the degree to which the consumer favors and purchases a brand repeatedly.

- *Fans present informal membership behaviors, such as co-production and investment.*

The relationship between fans and the object tends to always be active and proactive. Active participation on production processes distinct fans from general consumers. Cavicchi (1998) notes, that fans are specialist consumers since they are consumers

whose consumption habits are highly predictable and are likely to remain stable. Fans want to get involved with production of the object rather than simply repurchasing or possessing it. Bhattacharya (1998) characterizes the consumer who has greater affiliation with the organization as informal membership, which implies that highly loyal consumers are more actively involved in club's activities as co-producer. According to him, membership motivates the consumer to help the organization by volunteering time and gifting money to support the mission of the team.

Obviously, the central theme of this chapter is Fan Experience, but it's important to link it also to other concepts such as Fan satisfaction, Fan Engagement and Fan Community. Fan experience and satisfaction of the spectators are linked by a cause-effect relationship. The more the fan experience is advanced and effective, the more the fan is satisfied. So, delivering a significant Fan experience to all the supporters of a club is really important and necessary for increasing customer satisfaction, one of the business objectives of a sports organization. So, here, in this chapter, we will firstly present a **Customer Satisfaction Model** in sports environment, defining at the end the importance of Fan experience for customer satisfaction. Once demonstrating it, the **Fan Experience Model** found will be showed and deeply explained. Then, the means through which Fan Experience could be executed will be explained: the physical ones, the **Touchpoints**, and the people in charge of managing the relation with fans, the **Sports Marketers**. Finally, we will report here an example of marketing strategy through which sports organization could acquire and satisfy the fan, the **Fan Funnel**.

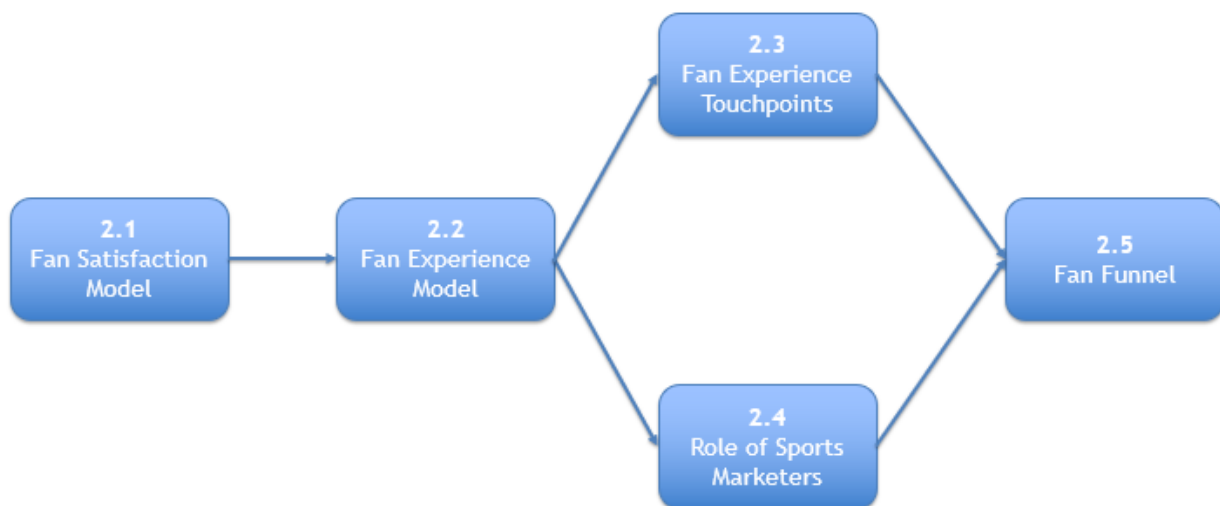


Figure 7: Structure of Literature Review

2.1 Fan Satisfaction Model

As just said, fan experience has a direct impact on what it's generally called customer satisfaction. In sports literature, very few researches have addressed the satisfaction of sport spectators, with even fewer studies examining the determinants of this satisfaction.

Let's start with the definition of Customer Satisfaction found in Literature. Generally, customer satisfaction is defined as “a judgment that a product or service feature, or the product or service

itself, provided (or is providing) a *pleasurable* level of consumption-related fulfilment.” (Oliver, 1997).

As it was explained in the introduction chapter, satisfying customers is just as important and relevant to the sport organization as it is to any other.

Customer satisfaction, pushed by a customer experience well designed, can generate repeat purchase behavior, decreased complaints and increased positive word-of-mouth (Kotler, 1994), increased market share (Anderson et al., 1994) and profitability (Anderson et al., 1994; Anderson & Mittal, 2000; Kotler, 1994).

There are several aspects of customer satisfaction that sport organizations should be concerned with. It is critical both to determine **how** satisfied customers are, and to understand **why** customers are satisfied.

The customers central to this study are the spectators. Sport spectators are not homogenous (Arnett & Laverie, 2000; Quick, 2000; Stewart & Smith, 1997; Sutton, McDonald, & Milne, 1997) and also the spectator services they consume are different to each other.

Thus, the model, that we are going to present, is focused on a particular type of spectator of a particular type of sport service, that is, the game-attending fan of professional team sport events.

These fans are important for the organization since they are the sources for generating revenue from ticket sales, concessions and merchandise as well as indirectly via sponsorship.

There is only one customer satisfaction model in literature, about spectator sports: The Sport Spectator Satisfaction Model (SSSM), a conceptual framework for understanding the satisfaction of spectators, developed by Linda Van Leeuwen of Deakin University and Shayne Quick and Kerry Daniel of University of Technology in Sydney. The model dates back to 2002, demonstrating the lack of recent researches about this topic.

Before showing the SSSM, we will present another model, from which the SSSM development takes the basis. This model is the Disconfirmation of Expectations Model (DEM) in which customer satisfaction derives from a comparison between expectations and perceived performances. The SSSM starts from this model, including also some typical elements of the sports industry: Club Identification and Win/Lose Phenomenon. We are going to explain in detail both the model in the next paragraphs.

2.1.1 Disconfirmation of Expectations Model

As already said, the DEM represents the basis of the development of the Sport Spectator Satisfaction Model. In this paragraph, the DEM will be presented in detail.

The DEM, as shown in the Figure below, is based on the premise that customers form certain expectations of product performance, observe or experience the performance and form perceptions of the performance. These perceptions of performance are then compared to the customers' originally expectations, and the comparison could generate three types of results: negative disconfirmation, zero disconfirmation (or confirmation), or positive disconfirmation.

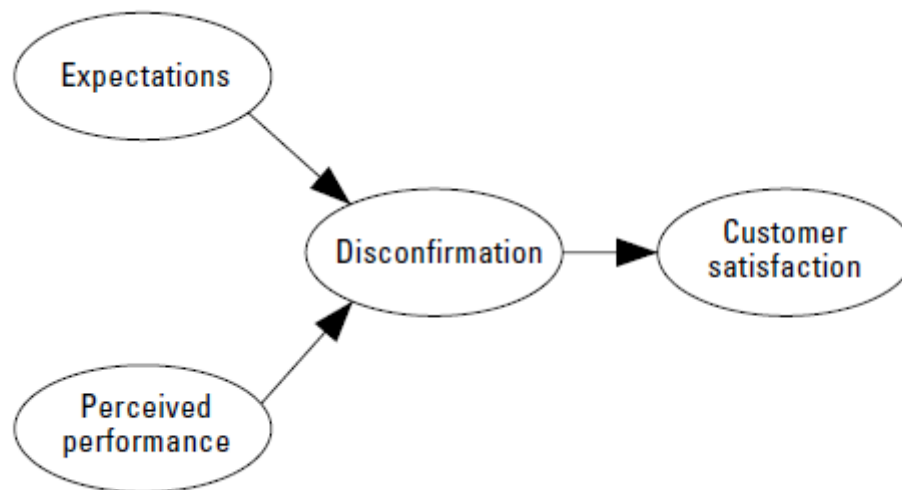


Figure 8: DEM Model

Negative disconfirmation occurs when performance is not good enough as expectations. **Zero disconfirmation**, or confirmation, occurs when performance equals expectations. **Positive disconfirmation** results when performance exceeds expectations. In this model, satisfaction results from expectations being met or exceeded (confirmation and positive disconfirmation) and dissatisfaction results from expectations not being met (negative disconfirmation) (Churchill & Surprenant, 1982; Oliver, 1997; Patterson, 1993b).

Some studies use higher level expectations (deserved expectations, desired and ideal ones) and, in this way, the possibility of dissatisfaction arising from positive disconfirmation of very low expectations diminishes. It is possible that dissatisfaction as opposed to satisfaction may result when very low predictive expectations exist (Oliver, 1997; Swan et al., 1982). It does not make sense that customers would be satisfied if poor expectations are achieved with a poor service quality. Therefore, in the SSSM, expectations are defined as the pre-usage specification of the level of feature or product performance the customer **wants** as opposed to predicts.

The direct relationship between expectation and customer satisfaction is ambiguous as to the direction of effect. If expectations are difficult, therefore it is more likely to result in customer dissatisfaction (a negative relationship), but at the same time, high expectations can also contribute to customer satisfaction (a positive relationship). Positive expectation effects arising from high expectations can be explained as assimilation effects (Oliver, 1997). Assimilation effect is an action made by the customer which consists in adjusting satisfaction ratings to more closely approximate the initial expectations.

The direct relationship between expectations and perceived performance can be explained with the use of assimilation theory (Oliver, 1997; Oliver & Burke, 1999). According to that theory, people will change their perceptions of performance to reflect their initial expectations. In summary, not only do expectations have an indirect influence on customer satisfaction through disconfirmation, they also indirectly influence it through perceived performance.

However, perceived performance has been found to directly influence customer satisfaction. Moreover, customer perceptions of performance have often been found to have the strongest influence on whether customers are satisfied or dissatisfied with a particular product.

2.1.2 Sport Spectator Satisfaction Model

It's the time to find characteristics typical of sports industry in order to adapt the DEM model to the main topic of the study. Mullin in 1985 tried to define the uniqueness of the sport marketing, identifying a number of aspects he believed were unique to the marketing of the sport product and thus the spectator sport service. He found two particular concepts that influence the satisfaction of sport spectators: club identification, and the win/lose phenomenon. In the image below, it is shown the relationship between the two concepts and customer satisfaction, comprehending all of the linkages with expectations and perceived performances, which will be explained in detail in the two paragraphs related to Club Identification and Win/Lose phenomenon.

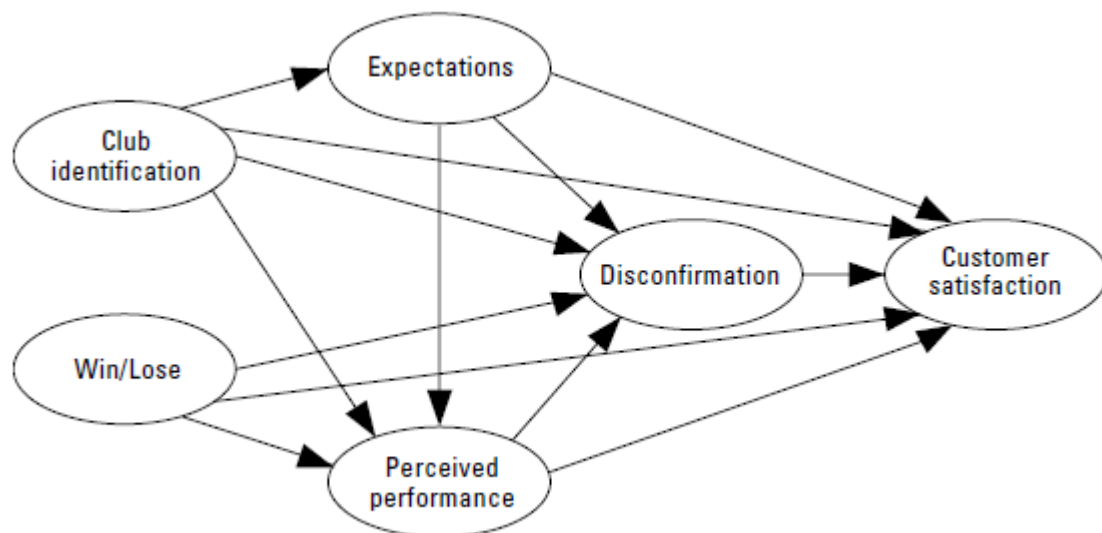


Figure 9: Extended DEM Model

Club Identification

A fan could identify himself with even an individual athlete; a team (Branscombe & Wann, 1991; Fisher, 1998; Wann & Branscombe, 1993); other fans of a team (Wann & Branscombe, 1995; Wann & Dolan, 1994c); and the institution represented by the team such as a university (Schurr, Wittig, Ruble, & Ellen, 1988) or club. Club identification is “*the psychological orientation of the self, such that the individual defines him- or herself as part of the club*”. From sports fans, we know that uniform clothing and shared rituals lead to an increased sense of belonging to a specific in-group (Derbaix, Decrop, & Cabossart, 2002). Club identification, a type of organizational identification, is based on **social identity theory**. Social identity theory states that individuals have two separate identities that together constitute the self-concept (Turner, 1982). One of these identities is the **individual's personal identity**, that is, what one thinks or feels about oneself (feelings of competence, attractiveness, intelligence). The other is the individual's **social identity**, that is represented by the group classifications with

which one identifies (favorite sport club, university, gender). **The more strongly an individual identifies with a social group, the more likely he or she will be motivated to ensure the wellbeing of the group** (Brickson, 2000). Alternatively, if a person is low in group identification, he or she is more focused on his or her own needs than the needs of the group. For this reason, **low group identification is associated with self-interest as opposed to group interest** (Scott & Lane, 2000). From the literature, it is well known that customers can identify not only with the products but also with the organizations that produce and sell these products. Social identity theory, together with the results of Bhattacharya (1995) and Ferreira (1996), suggests that organizations with highly identified customers, thanks to this identification, should experience positive outcomes. In the SSSM, customer satisfaction is one of these outcomes. It is a multidimensional construct, whose included factors are fan identification and team identification. It has been demonstrated that these two factors could affect spectators in different ways:

- a) affective states, including enjoyment (Wann, Dolan, McGeorge, & Allison, 1994; Wann & Schrader, 1997);
- b) evaluations of the team's playing performance (Dietz-Uhler & Murrell, 1999; Wann & Dolan, 1994b);
- c) expectations of the team's future playing performance (Hirt, Zillmann, Erickson, & Kennedy, 1992; Murrell & Dietz, 1992; Wann & Dolan, 1994b);
- d) attributions about the team's accomplishments (Wann & Branscombe, 1993; Wann & Dolan, 1994a);
- e) support for the team (Fisher, 1998; Fisher & Wakefield, 1998; Laverie & Arnett, 2000; Murrell & Dietz, 1992; Wakefield, 1995; Wann & Branscombe, 1993);
- f) support for team sponsors (Pritchard & Negro, 2001).

For understanding the relationship between the group identification of sport spectators and their expectations several studies have been made. The results indicated that highly identified people gave more positive predictions of future team performance and accomplishments than did people low in identification.

Now, let's see the **relationship between club identification and perceived performance**. From the studies, it results that spectators high in identification with the organization rated the team's performance much more favorably across all games than did spectators with low levels of identification. As for expectations, the group identification of sport spectators has a positive influence on their performance evaluations. The more highly identified a spectator is with an identity target, the more favorable will be his or her perceptions of performance.

Club identification affects also disconfirmation. Therefore, since highly identified individuals are motivated to favorably evaluate product performance, it is likely that they are also motivated to favorably evaluate the association between their expectations and the performance. The results from literary studies is that the more highly identified the members are, the more positive disconfirmation they experience.

Club identification has been linked to customer expectations, perceived performance and disconfirmation and so can also affect the customer satisfaction indirectly. Fisher and Wakefield (1998), through their studies, tried to certify the existence of a relationship between club identification and customer satisfaction by demonstrating that spectators' behaviors were associated with their level of team identification. For example, they found that highly identified spectators attended more games and purchased more licensed products than spectators low in identification. Moreover, highly identified fans had stronger purchase intentions and were more willing to pay higher prices for tickets than fans low in identification.

Basically, club is central to fans' social identity. The importance of the club to an individual's social identity dictates that highly identified spectators have strong motivations to evaluate their club and its products positively. Highly identified fans would be not inclined to criticize club performance because the club is part of their own identity and therefore their self-esteem is contingent upon this evaluation. So, finally, Social identity theory demonstrated the existence of a relationship between club identification and customer satisfaction. Highly identified spectators will experience more satisfaction with the spectator service than customers low in identification. This is because highly identified customers are motivated to feel satisfied with their club and its symbolic representations in order to maintain a positive social identity.

Win/Lose Phenomenon

Basically, the win/lose phenomenon is a specific central factor of sport competitions. The winning and losing of a sport team can be considered in a seasonal context as well as the more commonly researched event-by-event context. Fans follow their teams not only on a weekly basis but throughout the whole season. On this phenomenon, which represent the core product of a club (the game itself), sport marketers have very little control, since it's not possible to predict the result of a sports event and so their marketing efforts are focalized on product extensions (Mullin, 1985). Winning is considered as an antecedent of brand equity, which in turn they linked to ticket and merchandise sales.

Obviously, the win/lose phenomenon influences the perceived performance, and such a relationship is supported by three studies (Dietz-Uhler & Murrell, 1999; Hirt et al., 1992; Lapidus & Schibrowsky, 1996).

Hirt et al. (1992) found that game outcome influenced spectator evaluations of team performance, individual player performance and game quality. Spectators who watched their home team win rated the team, individual players and game quality significantly more favorably than spectators who watched their team lose. Together with the club identification, the win/lose phenomenon has an effect on team evaluations. People who identified strongly with the club evaluated the team more favorably after a win than after a loss

The win/lose phenomenon seems to positively affect also disconfirmation, in a similar manner to perceived performance. This is because disconfirmation is the discrepancy between a customer's expectations and perceptions of performance. The higher the customer's perceived performance, the greater their positive disconfirmation.

It is not known exactly how the win/lose phenomenon influences customer satisfaction. Most of the literature provides support for the existence of an indirect relationship, since the win/lose phenomenon influences perceived performance (e.g., Dietz-Uhler & Murrell, 1999) and disconfirmation (e.g., Hirt et al., 1992), as just said. However, it is also possible there is a direct relationship between the win/lose phenomenon and customer satisfaction. In some studies, it was found that the best performance produced the highest satisfaction ratings, whereas the worst performance produced the lowest satisfaction ratings. Moreover, Wann et al. (1994) found that spectators who watched their team win experienced the greatest increases in positive emotions, while instead fans who watched their team lose experienced the greatest increases in negative emotions. Highly identified spectators who watched their home team win reported a higher rating of enjoyment than the highly identified spectators who watched their home team lose. So, it's possible to say that exists a complex relationship between the win/lose phenomenon and customer satisfaction.

Sport spectatorship is a service. As a service, it is different from sporting goods since it presents the typical the four separated, yet interrelated, characteristics of intangibility, inseparability, perishability and heterogeneity. These are the defining characteristics of all services as described in the services marketing literature (e.g., Zeithaml, Parasuraman, & Berry, 1985). A customer can be satisfied, or dissatisfied, with an entire service, a service dimension, or a specific service attribute. Service can be distinguished in two general dimensions: the core service offering and the peripheral service offering. In the context of spectator sport, the core service dimension is the game itself. The peripheral service dimension includes all the non-game extra services such as parking, concessions and half-time entertainment.

Already in the 90's, some researchers (Iacobucci et al., 1994a, 1994b; Jones & Sasser, 1995; Walker, 1995) thought that the peripheral dimensions of a service contribute more to customer satisfaction than the core service. And nowadays, this thinking is even more consensual.

It was demonstrated that both dimensions play a role in the satisfaction of the sport spectator. For example, Madrigal (1995) found that various aspects of the game contributed to spectator satisfaction and Wakefield and Blodgett (1994) identified that a number of venue-specific service peripherals influenced satisfaction. So, both dimensions are important to the sport spectator, but the peripheral dimension is the more important and the customer satisfaction is derived from both the two dimensions. Here below there is the graphic representation of the Sport Spectator Satisfaction Model, with all of its relationship between determinants described in the chapter.

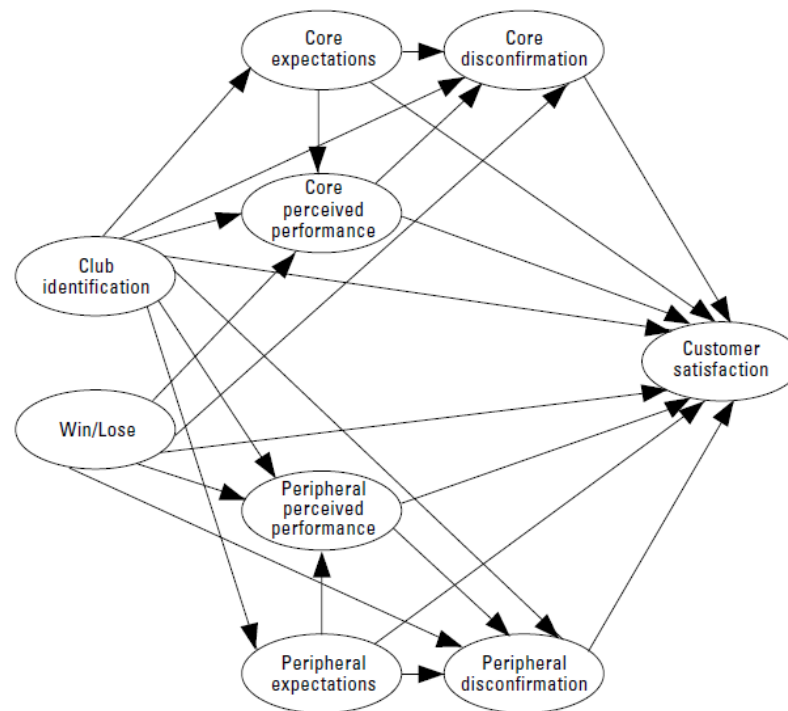


Figure 10: SSSM Model

The SSSM not only accounts for the influences of club identification and the win/lose phenomenon but also acknowledges that spectator satisfaction is derived from both the core and peripheral dimensions of the spectator product. Thus, the SSSM has represented an important improvement in the knowledge of a complex and little researched phenomenon: the satisfaction of sport spectators, in particular, the game-attending fans of professional team sports.

The key contributions of the SSSM are its inclusion of club identification and the win/lose phenomenon, together with its consideration of both the core and peripheral dimensions of the spectator sport service. The core performance of a sport club may generally be beyond the control of the sport manager (Mullin, 1985; Mullin et al., 2000) but it is still important to understand how both components of the sport service contribute to the satisfaction of the sport spectator. Knowing that both the two dimensions play a significant role in customer satisfaction and knowing which determinants affect customer satisfaction, the sport manager would be able to drive marketing efforts in the right direction. At this point, demonstrating the major importance of peripheral dimension of the sport service on fan customer satisfaction, Fan experience, pushed by well-designed marketing efforts, represents the key for enhancing sport spectator customer satisfaction. Moreover, nowadays, the lower importance of the core dimension (club performance) is highlighted by two examples of NBA franchises: the Dallas Mavericks and the Sacramento Kings, teams that haven't had the strongest on-court performance, but have done an amazing job getting fans to come to their games. The Mavericks are ranked 2nd in Home Game Attendance % but 24th in Away Game Attendance %, while the Kings are ranked 3rd in Home Game Attendance % but 26th in Away Game Attendance %. Despite their low rankings, these teams have gone beyond in giving their fans an advanced stadium experience.

2.1.3 Final Considerations on the Models

The SSSM is an extension of the Disconfirmation of Expectations Model (DEM) accommodating unique aspects of the sport product, as well as including the core and peripheral dimensions of the spectator service. Club identification and the win/lose phenomenon are represented in the SSSM model as considerable influences on the satisfaction spectators derive from the game and its peripheral services. The SSSM integrates marketing theory, sports marketing in particular and also social identity theory to create a clear and understandable definition of sports spectator satisfaction.

Before 2002, only other two studies proposed a model for fan satisfaction.

The first one, developed by Madrigal in 1995, comprised six variables including customer satisfaction. Three of the model's variables were cognitive determinants (disconfirmation of expectations, team identification and quality of opponent). These were related to two affective determinants (enjoyment and BIRGing), which in turn were directly related to customer satisfaction. BIRGing refers to a sport spectator's tendency to publicly display his or her association with a successful sport team (Cialdini et al., 1976). BIRGing may emerge when a person has a sense of accomplishment based on the glory of his or her favorite team and publicizes one's relationship with the successful team through the display of visible products such as team apparel (Cialdini et al., 1976).

The second one, implemented by Wakefield and Blodgett's in 1994, was aimed at the discovery of the effects of quality perceptions of the service, or sport facility, on customer satisfaction and the effects of perceived crowding, excitement and enduring involvement.

In both studies, they found that customer satisfaction was directly affected by the quality of the facility: the higher the perception of facility quality, the higher the satisfaction with the facility.

In general Marketing literature, three customer satisfaction determinants appear regularly: expectations, perceived performance and disconfirmation. Together with customer satisfaction, these three determinants as already seen, constitute the Disconfirmation of Expectations Model (DEM) (McCollough, 2000; Patterson, 1993b).

DEM has been extended to incorporate some of the unique characteristics of sport: the group identification of the spectator and the win/lose phenomenon. Moreover, in SSSM both the core (game) and peripheral (non-game) components of the spectator service are considered. The Sport Spectator Satisfaction Model (SSSM) not only identifies probable determinants of customer satisfaction, but it also depicts the process by which satisfaction is derived.

The SSSM represents the basis for professional team sport practitioners for conceptualizing the sport customer satisfaction process, and for researchers for further customer satisfaction researching.

So, now, it's the time to define, show and explain in detail the model of Fan experience found in literature.

2.2 Fan Experience Model

Only one model called “Customer Experience in Spectator Sports” has been found and in the following paragraphs it will be shown and explained in detail. The model has been developed by Nicholas D. Theodorakis, assistant professor of Sport Management at Qatar University, in 2014. He has published more than 40 peer-reviewed articles in such journals as the *European Sport Management Quarterly*, *Managing Service Quality*, *Sport Management Review*, *Leisure Sciences*, and *Managing Leisure*. His model was born by the theoretical background present in literature regarding the general concept of Customer Experience. So, here, it will be shown firstly the notion of customer experience and then how the fan experience model has been created on the basis of that.

2.2.1 Customer Experience

Marketing experts have realized, with the passing years, the importance of creating significant experiences for their customers as a fundamental factor for the success of their companies (Verhoef, 2009), since several business reports and empirical studies have suggested a link between customer experience and several marketing and business outcomes such as economic value, market share, loyalty, positive word of mouth, and satisfaction (Frow & Payne, 2007; Klaus & Maklan, 2012; Maklan & Klaus, 2011; Pine & Gilmore, 1999). So, they decided to develop models for managing the customer experience in order to establish longer-term relationships with their customers (Maklan & Klaus, 2011). Customers need something more than quality service, they are looking for interesting, significant, even memorable experiences.

The conceptualization of customer experience failed to reach consensus between practitioners. Gentile’s definition states that “the customer experience originates from a set of interactions between a customer and a product, a company, or part of its organization, which provoke a reaction. This experience is strictly personal and implies the customer’s involvement at different levels (rational, emotional, sensorial, physical and spiritual).” The above definition shows that customer’s experience is multidimensional and includes not only cognitive components like other customer evaluation models, but also sensory, emotional, social, and physical components.

On the basis of Gentile’s definition, Verhoef (2009) proposed that the customer experience is not only influenced by service elements which are under the control of a manager (price, personnel behavior), but also by other factors (, outcome, behavior of other customers) that cannot be controlled in an easy way.

The conceptual model of customer experience, presented by these scholars, was developed for the context of retailing, and so it included some specific determinants:

- *Social Environment*: this dimension refers to how a customer’s experience can be influenced directly or/and indirectly by another customer or a group of customers, such as family members. Social interactions with the staff are also considered an important factor in the social environment.
- *Service Interface*: Previous research has emphasized the role of interpersonal quality on service delivery in retailing (Baker, Parasuraman, Grewal, Voss, 2002; Mittal & Lassar,

1996). This determinant considers also the influence of new technology systems and the advent of online retailing on the shopping experience.

- *Retail atmosphere*: In the retailing literature it is well documented that store atmosphere has a significant effect on customers' responses. Baker (2002) found that several store environmental factors such as design, ambience, and music can influence the choice of a store and store patronage intentions.
- *Assortment*: in retailing context, assortment refers to the variety, uniqueness, and quality of products. It also relates to the availability of a favorite product, and its proper viewing in the store. A research conducted by Broniarczyk, Hoyer, & McAlister in 1998 showed a direct link between assortment perceptions and choice of store.
- *Price*: it refers not only to monetary price and its use in loyalty programs, and promotions, but also to nonmonetary costs such as time and effort.
- *Customer experience in alternative channels*: nowadays, a customer may use multiple channels to buy something (such as the store, the internet, catalogs, etc.). Thus, customers' experience in one channel could be influenced by their experience in another one.
- *Retail brand*: this determinant refers to the interaction between perceptions about the brand and the customer's experience. The concept of brand includes both the retail brand and the manufacturer or the service brand that can be found inside the store. It is important to establish a two-way relationship between the brand and customer experience.

This dynamic model implies that current and future customers' experiences are also affected by experiences in the past, as well as all phases of the experience: search, purchase, consumption, and after-sales. The model is dynamic also because it is stated that the customer's experience is formed over multiple channels of purchasing. Finally, this model highlights the need to formulate a well- designed management strategy in order to influence both the antecedents and moderators of customer experience.

In 2011 Lemke defined customer experience as "the customer's subjective response to the holistic direct and indirect encounter with the firm, including, but not necessarily limited to the communication encounter, the serve encounter, and the consumption encounter." This definition encloses both the multiformity of customer's subjective response suggested by Gentile (rational, emotional, sensorial, physical, and spiritual), and the concept of "total experience" coined by Verhoef that refers to the search, purchase, consumption, and after-sale phases of the experience.

Lemke grouped 17 categories of experiences into three types of encounters, cited in the above definition:

- *A communication encounter* which includes two categories: communication (all communications between the customer and the firm, such as advertising) and

relationship with the company (the extent to which firm values and maintains relationships)

- *A service encounter* which embodies typical quality attributes grouped in three categories: Product quality, which comprehends the quality-price ratio and the choice-variety one; Service quality described with seven service attributes (accessibility, value for time, caring-attitude and caring procedures, atmosphere, application of knowledge, and personalization); eventually, network quality (a company's competences from internal and external networks).
- *The usage encounter* which consists of a relationship with other customers (the role of other customers in value creation), and social impact (the social impact on non-customers). These professors presented proofs of evidence regarding their construct's context-specificity, arguing that customers evaluate their experiences differently in B-to-B and B-to-C contexts.

In 2012, Klaus and Maklan presented a multiple-item scale for measuring customers' service experience (EXQ). According to this multilevel concept of the construct, customers can evaluate their experience at an overall level, a dimensional level, and an attribute level. The EXQ model showed that the customer's experience is basically developed in a hierarchical way and that each level drives perception on the level above.

In this model, the overall customer experience is driven by four dimensions:

- **Product experience:** this dimension describes the concept of choice dynamics (compare offerings and products from the same or other competitors) and attributes related to account management from employees.
- **Outcome Focus:** this dimension relates to several outcomes of the transaction such as reducing transaction costs, and the impact of previous experiences.
- **Moments-of-Truth:** this dimension includes the traditional moment of truth from the service marketing literature and the notion of service recovery.
- **Peace of Mind:** it embodies the evaluation of all interactions before, during, and after the transaction. Emotions emerging from the experience are also reflected in this dimension.

Through their empirical findings, Klaus and Maklan concluded that EXQ could assist managers in showing the impact of specific customer experience dimensions on some customers' future behaviors by means of satisfaction, word of mouth communications, and repurchase intentions. In today's market place, customers have always more power, for this reason the customer experience is considered so important and it is considered essential to pursue a competitive advantage.

The peculiarity of the customer experience is that it is something subjective that stays in the customers' mind, and so change according to the person, the situation and the feelings of the moment. Customers have experiences every time they touch any part of the product, service,

brand or organization, across multiple channels and at various points in time. These touch points together composed the so-called customer journey (Stein, Ramaseshan, 2015).

In today's marketplace, the customer experience is an important component in sustaining a competitive advantage because customers have more power than ever. Customers have experiences every time they touch any part of the product, service, brand or organization, across multiple channels and at various point in time. (Pantano and Milena, 2015). Such moments are known as "touch points". Customer experience develops throughout all touch points and elements encountered during the service delivery process (Jüttner et al., 2013; Frow and Payne, 2007). These touch points can exist pre and post purchase (Meyer and Schwager (2007), Zomerdijk and Voss (2010) and Tynan and McKechnie (2009)) and occur in different retail channels (Martin et al., 2015; Verhoef et al., 2009). Meyer and Schwager (2007) point out that touch points may not be linked necessarily or directly to a company, suggesting that indirect interactions also emerge during unplanned encounters with representatives of a company's products, service or brands. Given the subjective nature of the customer experience, to have a deep understanding it is necessary to analyze it from the customer's point of view.

Investigating customer experience touch points requires rich insights into the specific elements that from the distinct moment of truth interactions. To do this, Stein and Ramaseshan have done a research with the objective to give a holistic understanding of the situation. They have interviewed 28 people, with different demographic characteristics, asking them to tell a recent customer experience they have had with a retailer. The analysis has revealed that we can distinguish seven distinct themes related to the elements customer experience touch points: atmospheric, technological, communicative, process, employee-customer interaction, customer-customer interaction and product interaction elements.

Atmospheric elements are the physical characteristics and surrounding customers observe when interacting with any part of the retailer. For example, amenities, ambience, store attractiveness, store layout and design and store display. The physical channels and the atmospheric aspects provide different stimuli to the customers influencing them in the customer experience. The presence or not of these elements could have important effects on the customer's evaluation of the experience.

Technological elements are every customer's direct interaction with any form of technology during an encounter with a retailer. Nowadays these elements appear to be playing an important role, since the digitized nature of today marketplace. The importance of being technological is evident for a business. Having a website on which customers can find what they are searching, the convenience of buying online without going directly in the stores, are fundamental elements that can enjoy the customer experience. Furthermore, people can use technology also directly in the stores with tablets, PCs, self-service checkouts, etc., enhancing their shopping experience. But the technology is critical, because could have also detrimental effects if the services that are offered don't work, agitating and frustrating customers.

Communicative elements are represented by the one-way communication from the retailer to the customer, including both promotional and informative messages. The results of the interview show that consumers regularly observe the content and messages provided by the

retailer. These messages are sent by the retailers using different channels throughout the entire customer journey. For example, some retailers have a newsletter service that informs all the members of this list about promotion, discounts and ad hoc promotions, via e-mail, via mail or also via SMS. This communication is viewed as an important aspect of the experience at different touch points. It is important to consider also the possible negative impacts, if these services are too frequent and stressful, with the opposite result as consequence.

Process elements are the actions or step customers need to take in order to achieve a particular outcome with a retailer. These play an important role in shaping the perceptions and evaluation of the experience. Different aspects are involved like checkout waiting time, the service process, the manner in which customers move around the store, or the way they navigate in a digital environment. The easiness and responsiveness of all these aspects allow to create a good customer experience.

The direct and indirect interactions customers have with employees when interacting with any part of the retailer represent the employee-customer interaction elements. These are very critical aspects for the evaluation of a customer experience. The way in which a customer interact with who represent the retailer influence how he or she perceive the shopping journey. The presence of kind employees, that are able to give people with the right information, helping them, make the experience better. This is not only related in the shop, but via multiple channels, like e-mails, phone and every kind of encounters.

Customer-customer interaction elements are very similar to the previous touch point element, but the interactions happen among customers, that especially in physical store environments come into contact. These interactions can have a significant affection on the customer experience. For example, the presence of annoying people that shout, or babies that cry, etc. contribute to make the experience very bad. The interactions have also impacts in the pre-purchase stage, when customers search for information of a particular retailer. A negative experience of a customer can have also impact on possible future customers that make their choices looking at the previous evaluations.

The last element is the product interaction, that are the different type of interactions that customers have with the core product or service offered by the retailer. Obviously, a bad product, for example in a Cafè, or a bad service offered to the customers can have a very bad influence, not only in the evaluation of the experience but also for potential customers, that are influenced by the world-of-mouth.

These touch points are a useful tool to have an end-to-end understanding of the customer journey, and management could use them to have a map of a customer experience, incorporating the customer journey process, the retail channels and relevant elements at each touch point. These general arguments could be applied to the specific case of the fan experience in the sports management. In fact, the fan experience is a particular aspect of the customer experience.

2.2.2 Customer Experience in Spectator sports model

After analyzing the theories about the general customer experience, now, it's the time to focus on the main topic of this thesis: Fan experience or Spectator Sports experience, as it was called by Theodorakis.

In sports industry, the co-creation of the experience with the customers is one of the most important aims of an organization's customer experience management program. Until recently, this assumption was not considered so important by many sports team managers, since sports fans were the main creators of the exciting atmospheres and experiences inside the sport arenas by waving flags, singing songs, presenting spectacular forms of choreography, etc. However, today, sports managers have acknowledged that simply supporting fans' efforts to generate significant experiences inside the sport venues cannot fully satisfy the spectators, whose experience is developed through multiple channels of interaction with the team on-and-off the pitch. So, following the example of their colleagues from other business sectors, sport managers have started to work on creating compelling experiences through multiple encounters for emotional bonding, satisfaction, and eventually creating loyalty among fans and spectators (Johnston & Kong, 2011). In order to do so, it's essential for sports marketers to create a strategy for planning, designing and putting into effect fans' experiences both inside and outside the sports arenas.

Liverpool FC, one of the most famous English football club, represents a significant example. The English soccer club has recently established a department dedicated to improving fans' experiences, direct not only to season ticket holders but to all fans around the globe who follow the team through the Web and all the available channels. Jean Crisp, the head of this department, states in the following sentence the aim of the introduction of this department: "the department was set up to look at ways we could improve the experience supporters have when interacting with Liverpool Football Club be that when buying tickets, shopping in one of our stores or enjoying our hospitality, museum, stadium tours and the all-important match day experience"

Basically, Liverpool FC's management understood the necessity for engineering fans experiences both inside and outside the sport arena and the importance of co-creating experiences for its huge supporter base worldwide (16.5 million supporters in Europe alone, and almost 42 million worldwide), and, consequently it created a Customer Experience Department aiming to improve all interactions between the team and its supporters. The target customers of the activities of the new department are not exclusively season ticket holders from Anfield, but every fan around the world whose only interaction with the club is through the website. Working together with them and continually listening to them, the department's staff is devoted to improving their fans' experiences when interacting with the club in any way: attending home and away games, buying tickets, traveling with the team, shopping online, touring the stadium and museum, following on social media, or actively participating in the supporters' forum.

Basing on the definition presented by Verhoef in retailing, Theodorakis stated that "customer experience in spectator sport events is holistic in nature and involves the spectator's cognitive, affective, emotional, social, and physical responses to the sports event and its organizer (i.e.,

the sporting team). This personal experience is created not only by those elements which are under the control of the sports marketer (e.g., the cleanliness of the facility, staff behavior), but also by other elements that are outside the marketer's control and are related to the core product (e.g., team performance). Additionally, the effect of multiple channels of interaction (buying tickets online, the official shop) and repeated experiences within a channel on fans' total experience is also recognized". So, this definition of customers' experience in spectator sports encompasses the recent theoretical advancements regarding the holistic and dynamic nature of the model, as suggested by Verhoef (2009), and by traditional sport marketing theory (Mullin, 1985; Mullin, Hardy, & Sutton, 2007).

So, after reviewing and analyzing the sport management literature and adapting Verhoef's original theoretical model of retailing sector to sports one, Thedorakis (2014) developed the first framework of customer experience in spectator sports, what we call Fan Experience, which can be seen in the figure below.

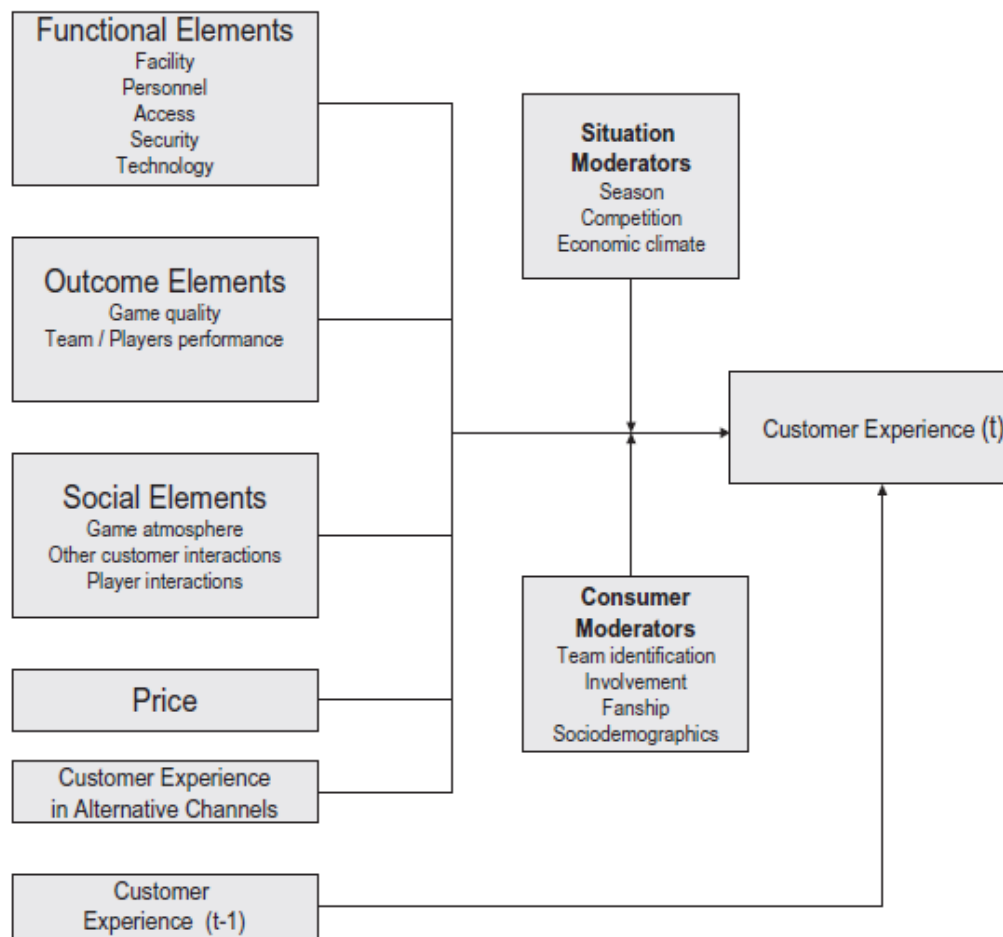


Figure 11: Customer Experience in Spectator Sports Model

Observing the model, there are several context-specific determinants and moderators which influence and generate the total customer experience in sports sector:

- *Functional Elements*

These elements of the experience are usually under the control of the sports marketer and constitute the service interface and delivery. This determinant relates to such attributes as sport facility design, ambience, cleanliness, concession stores, and seating and is considered to be the most significant factor in the sports marketing mix (Sutton, 2007). For example, the building of the new stadium, Emirates stadium, gifted by such impressive quality was the main factor that boosted Arsenal FC to becoming one of the top soccer teams worldwide, generating almost €120m from match day revenues each season (Deloitte, 2013). It has also been found by some scholars that personnel behavior and knowledge influence fans' future behavior. For example, O'Neil, Getz, and Carlens (1999) found that spectators' overall experience could be improved by providing more welcoming and visible staff at a Coca Cola Masters surfing event in Australia.

Access attribute refers to factors such as parking availability, public transport availability, ease of entry or exit from the sports arena (Theodorakis, Aleksandris; & Tsigilis, 2013). Security, over the years, has taken on an increasingly important role in the organization of every kind of event, sporting one included. So, nowadays security is considered a significant determinant of the physical environment dimension also by the researchers since a general sense of freedom from danger when attending games has to be guaranteed to the fans. They tested this fact in sport spectator events, such as professional rugby in Australia, as well as professional soccer in Greece. These last two factors, access and security, are context-specific and highly influenced by the culture and type of sport.

Despite technology, in this world always more digital, plays a central role in the experience delivery and its advancements have also changed the way spectators consume sports, the technological aspect of the experience both inside and outside of the sports arena has been largely overlooked by sport management researchers. A fan survey in the U.K. revealed that technological advancements (HD, 3D, and surround sound) can help broadcasters to bring more of the atmosphere of a live event to viewers at home or in the pub and this could potentially begin to lessen the reliance on game tickets for revenue in the future (Mintel, 2011). As highlighted by Verhoef, technology aspects also regard the self-service encounters and the extensive use of the internet as an alternative channel for buying tickets, shopping official merchandise, communicating with personnel and other fans through social network such as Facebook, Instagram and Twitter, and watching team games in live streaming on the web.

- *Outcome Elements*

Spectator sports is an outcome-driven industry (Brady, Voorhees, Cronin, & Bourdeau, 2006). The outcome of spectator sport relates to the core product offered to fans (game related attributes), which in this context is not under the immediate control of sports marketers, as it was already explain in the SSSM paragraph. Game related attributes include game quality, outcome of the game, team characteristics, and player and team performance. The link between outcome-related attributes and spectators' experiences

at different levels (rational, emotional) is well documented in the sports management literature (Brady, 2006; Ko, Zhang, Cattani, 2011; Theodorakis, 2013). A team's successful performance is probably the most significant indicator of spectators' future behavior (Dale, van Iwarden, van der Wiele & Williams, 2005). For supporting this observation, Kenneth Cortsen states that the team performance and, in particular, winning are fundamental factors for enhancing the attendance at the venue. Cortsen recalled a function representing the seasonal stadium attendance proposed by Kesenne in 2014 for demonstrating its statement:

$$A_i = A_i[m_i, w_i, p_i] \quad \text{for all } i; 1, n$$

Equation 1: Seasonal Stadium Attendance

The function states that seasonal attendance levels (A_i) are dependent on the potential fanbase, or drawing potential of the team (m_i), the seasonal winning percentage (w_i) and the average ticket price (p_i). An example: a club like FC Barcelona facilitates an international market and has a high expected seasonal winning percentage, and concurrently has a higher seasonal stadium attendance than its city competitor Espanyol. Simply put, teams with low winning percentages have more difficulty attracting fans, and therefore have a more urgent need for maximizing fan engagement.

- *Social Elements*

Ko, in a study developed in 2011, has highlighted the importance of the spectator-spectator interaction in the evaluation of the event from a customer's point of view. He and his colleagues also stated that "in the context of sporting events, displaying appropriate attitudes and behaviors towards other customers has the potential to optimize their game experience." The relationship between a spectator and other spectators inside the sport arena and its effect on behavior has been also assessed by other researchers such as Clemes and Yoshida & James.

Sport fans often engage in prosocial, extrarole behaviors (positive word-of-mouth, collaborative event attendance, and helping other fans; de Ruyter & Wetzels, 2000). Prosocial behavior means that sport supporters engage in network development such as interpersonal and computer-mediated fan-to-fan helping behaviors on behalf of the team (Brodie et al., 2011; Dholakia et al., 2009; van Doorn et al., 2010). According to Yoshida, Nakazawa, Gordon and Biscaia (2014), more engaged consumers are more likely to invite friends to future sporting events. Moreover, engaging consumers in extrarole behaviors (e.g. Consumer-to-consumer interactions, voluntary participation in marketing programs, collaborative product customization, and reciprocal service learning and delivery), will enhance the likelihood of repeat purchasing. This is especially important with the proliferation of social media, where sport organizations can engage their fan base as well as foster fan-to-fan social interaction. Also, a feeling of connectedness can arise as the emotional glue between all fans attending the match in the venue (Stieler, Germelmann, 2016). From other fields of research different from sport, we know that a certain degree of perceived togetherness among people involved

may lead to positive behavioral and psychological outcomes. According to Stieler and Germelmann, “experiencing the feeling of connectedness may serve as a starting point for a long-term relationship towards the service itself or brands associated with the service.” Their study shows that the feeling of connectedness and positive emotions together affect overall service satisfaction positively.

Despite the proliferation of social networks, such as Facebook, Twitter, Instagram, Snapchat, etc., and their acquired importance in today life, sports researchers seem to neglect the direct or indirect interactions between fans and team or players through these alternative channels. Just to understand the imposingness and the potential of these channels, some numbers are reported: the NBA superstar LeBron James (@KingJames) has almost 38 million followers on Twitter, while Real Madrid’s soccer star, Cristiano Ronaldo (@Cristiano) attracts around amazing 59 million followers (2017). A study of rugby, developed by Dale in 2005, on fans showed that increasing the players’ profile with the public is the second most important factor in increasing attendance.



Figure 12: Signal Iduna Park

The atmosphere inside a sports venue is probably the most important element in the social environment, since it not only includes interactions with other spectators and the physical environment (stadium’s architecture and facilities), but also relates to the aesthetic element of the experience. According to Yoshida and James (2010) the game atmosphere includes themes, designs, memorabilia, special events, and a feeling of excitement. And the main contributors of this

memorable atmosphere are exactly the fan themselves, who sing, wave flags, carry out spectacular feats of choreography, as well as boo a player’s performance, complain about referees’ decisions, or interact with rival fans. The atmosphere can positively or negatively influence a spectator’s experience. For example, Borussia Dortmund fans are known for their coordinated displays of murals at matches (in the photo on the left side), while recently Manchester United have hired engineers to enhance the acoustics inside Old Trafford in order to improve the atmosphere, and eventually the experience of fans (Vennard, 2013).

- *Price*

Price relates to the value for many products and services offered and delivered by the sports organization to the fans that reflect the benefits given to them (Lemke, 2011). In the sports context, the price factor includes the pricing of tickets, official team products, concessions and parking, as well as other costs related to transportation and accommodation. With the economic crisis hitting several parts of the world and the rise of tickets prices in several professional sports leagues, the role of this element has become more influential in the customer experience. A recent survey launched by BBC

Sport Price of Football Survey in 2012 showed that a family of four people has to spend a minimum of €234 (the cheapest day out) to attend a Chelsea FC soccer game at Stamford Bridge Stadium. This price includes the cheapest ticket, a program, and a tea and a pie for each person. At the same time, the average price for attending an NFL game is even more expensive: €153 including tickets, parking, and beer for one person (Hicken, 2013). Considering Kesenne's Model of Seasonal attendance at the venue, ticket price plays an important role: a large club with big drawing potential and a high winning percentage can raise its prizes simply because there is more demand. This explains why ticket prizes at large clubs are as much as expensive and also more expensive than at smaller clubs. If small clubs would raise their prizes, it would negatively impact attendance levels.

- *Customer Experience in Alternative Channels and Customer experience (t-1)*

These two determinants, which include fans' interaction with multiple channels of consumption and all previous experiences were extensively presented in the previous paragraph named "Customer Experience", in Verhoef's original theoretical model. Her in this paragraph, only some tips from sport spectator context will be added. Nowadays, improved technology in broadcasting sport events via television and the internet, and the emergence of new media and technologies (social media, smartphones) extensively used by fans, have changed spectators' habits and consequently the way sports are consumed today (Theodorakis, 2014). In particular, a typical activity relative to spectator sports has changed radically: according to information provided by Ticketmaster, 60 percent of its traffic is via mobile while in 2016, 75 percent of Gametime's tickets were bought within a week of an event.

- *Consumer moderators*

Consumer moderators include the level of identification with the sporting team, involvement with the sport, fandom, and spectators' sociodemographic characteristics. For example, in a study conducted by Theodorakis in 2009 on Basketball fans in Greece, team identification was discovered to be an important factor for spectators in the evaluation of the overall service offered and in the creation of a loyal fan. According to Lee, gender, age, educational and income level (sociodemographic features) play significant roles in influencing spectators' perceptions of the quality of a sporting event and experience (Kelley & Turley, 2001).

- *Situational moderators*

Situational moderators include culture, point of consumption (inside the sports arena), channels, the economic climate, and level of competition between others (Verhoef et al, 2009). At this regard, Kesenne proposed another function modelling the match day attendance (2014), which is different than the seasonal stadium attendance function. Whether an occasional fan visits a sports game depends on the following factors:

$$A_{ij} = A_{ij} [m_i, m_j, dist_{ij}, w_i, w_j, p_i] \quad \text{for all } i, j \quad i \neq j$$

Equation 2: Match Day Attendance

In an average match in an average league, i stands for any club and j stands for the opponent team. The number of fans at the stadium now also depends on the fan base of the opponent (m_j), the distance between the clubs ($dist_{ij}$), the winning percentage of the opponent (w_j) and the price of the tickets the home club charges (p). Research shows that variables $dist_{ij}$ and w interact: fans are not as likely to travel to a club with a low winning percentage than to attend matches with high level opponents (Wang, Goossens, & Vandebroek, 2016). This explains why it's harder to sell out low-profile matches than high-profile matches, and why these matches require considerably more marketing activities. Kenneth Cortsen, basing on Kesenne's Model, demonstrated the importance acquired of level of competition between clubs. Moreover, other variables which affect stadium attendance are the day of play (weekday or weekend), weather conditions and free-to-air broadcasting or broadcasting via subscription channels (Garcia & Rodriguez, 2002).

In conclusion, despite the importance of customer experience management in spectator sports, that was explained in the introduction chapter, literature and research into this matter is still limited. Practically, the model of Theodorakis has adapted the holistic conceptual model of customer experience creation proposed by Verhoef (2009) and modified it to reflect the unique characteristics of the sports industry. In fact, the framework suggests that a fan's overall experience is influenced by context-specific functional, outcome, and social determinants. Not only, also price and customer experience dynamics (alternative channels experience and past one) play a significant role in fan experience. Finally, several specific consumer and situational factors that moderate the relationship between the overall customer experience and its determinants are influential factor for a spectator and consequently are embodied in the framework. Theodorakis' theoretical model is the first framework about this enhancing topic and it represents only an initial attempt to comprehend how fans construe their total experience.

The model of customer experience in spectator sports shows which are the specific determinants of customer experience that count the most for the supporters of a sport team. It represents a really important landmark for sport managers in assisting them. Basing on the presented framework, they can direct their resources more effectively, by investing in those factors that influence more the experience of the real and the virtual spectator. The experience developed within the arena during the sports event is still important, but, the emergence of new technology and the desire and the necessity of most professional teams to expand their fan base, in order to be competitive with other organizations, make clear the need to design the experiences for the virtual fan as well. For these reasons, it is highly suggested to sports clubs to establish a customer experience department, as Liverpool FC has done recently. This department should be responsible for engineering all customer experiences in order to create value for both the team and its supporters (Verhoef, 2009).

According to Theodorakis, the next step is to develop a measure for assessing customer experience in spectator sports. Such a scale will help practitioners to evaluate the experience of their fans, benchmark, and relate specific determinants to marketing outcomes (Maklan & Klaus, 2011). Data detected from the fans can be integrated into management programs to facilitate the creation of an advanced and more customized experience for all fans inside and outside the sports arenas.

One of the effects of creating a complete and personalized customer experience is the generation of strong loyal customers. This loyalty is verified in the creation of real Fan communities that have a great impact on the attendance of fans at the stadium during the matches, but also to their participation at club life off-field. So, in next paragraph, we are going to show a framework that describes in detail the effects of the creation of loyal fan communities

2.2.3 Fan Community

Each professional sport team has a real fundamental objective: acquire and maintain the support of a devoted fan base that will consume the team's service on a consistent basis. Fan consumption is the heart of a sport team, it drives attendance, media consumption, merchandise sales and sponsorship. As such, for a professional sport team is fundamental having a considerable fan base that consistently repurchase the service offered. Since the nature of sports, it is particularly challenging. In fact, the teams cannot guarantee the quality of the performances, the outcome is unsecure, fans might be disappointed about the results of a game. So, understanding the real process behind the reason of repurchase and the drivers, are a central theme in academic research of sports marketing. Most of this work has been rooted in attitude theory, which suggests consumers' cognitive, affective, and conative responses to a specific object influence their consumption behavior (Eagly & Chaiken, 1992; Oliver, 1999). Scholars have focused on concepts such as satisfaction (Matsuoka, Chelladurai, & Harada, 2003; Trail, Anderson, & Fink, 2005; Yoshida & James, 2010), psychological commitment (Iwasaki & Havitz, 2004; Mahony, Madrigal, & Howard, 2000), attachment (Funk & James, 2001, 2006; Laverie & Arnett, 2000; Trail, Robinson, Dick, & Gillentine, 2003), and team identification (Fisher & Wakefield, 1998; Heere & James, 2007; Trail & James, 2001; Wann & Branscombe, 1993). Following these researches, it became clear that the commitment of the consumer is not related only to one object but it is formed by many different points of attachment such as sport (Kwon, Trail, & Anderson, 2005; Mahony, Nakazawa, Funk, James, & Gladden, 2002; Trail et al., 2003), Predicting Consumer Loyalty 319 JSM Vol. 29, No. 3, 2015 player (Kwon et al., 2005; Mahony et al., 2002; Trail et al., 2003), coach (Kwon et al., 2005; Trail et al., 2003), local city (Kwon et al., 2005; Mahony et al., 2002; Trail et al., 2003), athletic level (Kwon et al., 2005), university (Heere, Walker, et al., 2011; Kwon et al., 2005; Trail et al., 2003), and fan community (Katz & Heere, 2013).

Unfortunately, an important aspect is missing: what are the elements of brand loyalty which indicates that is a behavioral process that is repeated over time, it is not possible to measure the willingness to repurchase. For this reason, Yoshida, Heere and Gordon has developed a model that study the effects of consumers' attitudinal constructs (team identification, associated attachment points, consumer satisfaction, and behavioral intentions) on behavioral loyalty.

Early marketing research, defined the repeat purchase behavior as the results of consumers' loyalty toward a specific brand. Jacoby and Kyner (1973) defined brand loyalty as a behavioral response expressed over time and as a function of psychological processes within the consumer and Oliver (1999) defined loyalty as "a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior". From these definitions results evident that loyalty stays in the mind of consumers and it is something subjective.

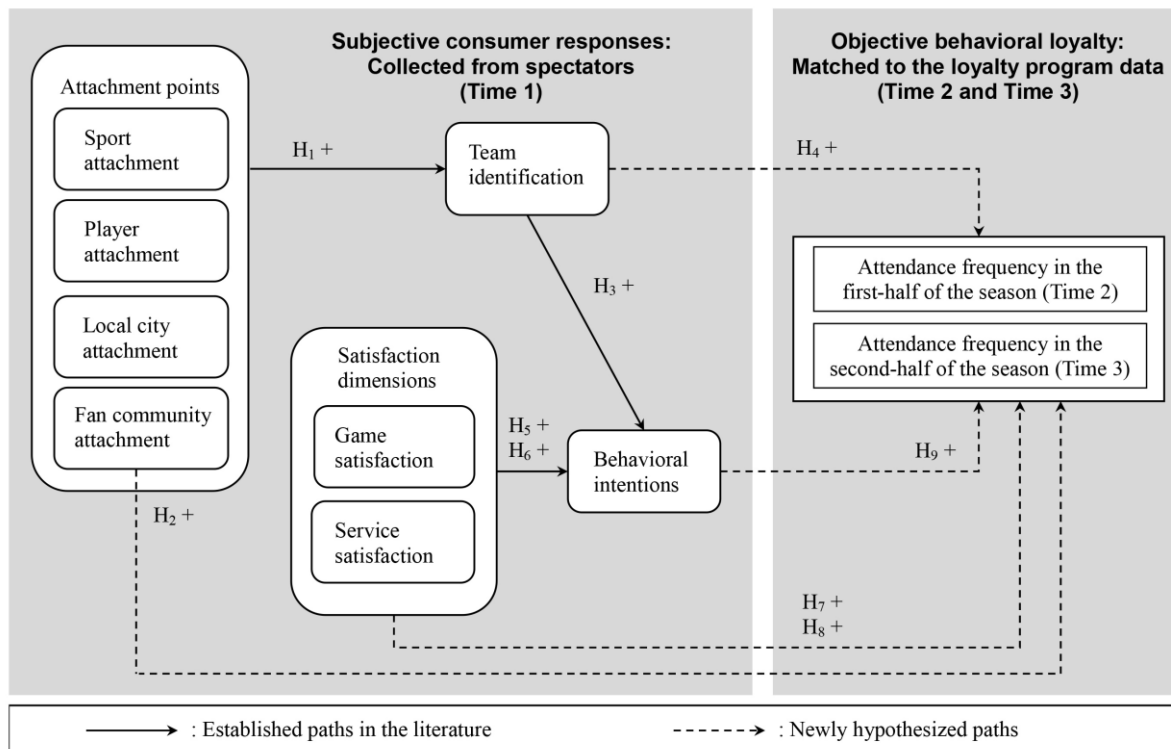


Figure 13: Fan Community Model

The figure above explains the theoretical framework developed by Yoshida, Heere and Gordon. At the base of the model is the attitude theory and suggests consumers' cognitive, affective and conative responses to a specific object influence their consumption behavior (Eagly & Chaiken, 1992; Oliver, 1999). There are different attachment points (sport, player, local city, fan community) that influence team identification, that in turns affect behavioral intentions (Mahony et al, 2002; Trail et al, 2003).

The satisfaction dimension is divided in two, game and service, and it's expected to have positive impact on behavioral intentions (Yoshida & James, 2010). This framework is extended beyond the existing literature integrating objective longitudinal outcome measures (attendance frequency in the first and in the second half of the season) into a model of consumer loyalty formation, providing the first evidence of predictive validity of these measures.

To test this model, they chose a soccer club in the Japanese profession football league (J. League), that is considered to have the right characteristics. The authors chose a professional

soccer club based in a large-sized city in Japan. This club has a fan loyalty program that racks consumers' attendance frequency. The subjects of the study were the participant to this program and the objective was to collect data about satisfaction, team identification, attachment points and behavioral intentions. The sample was formed by 233 cases, with different demographics characteristics.

The model tests different hypothesis related to the fans and their behaviors. As it is possible to see, some of these hypotheses come from the existing literature, instead others are created by the authors basing on their studies. In particular, sport consumers have different attachment points that contribute to their team identification that drive his or her consumption behavior. The Fan community element is particularly important because is the only one of the four attachment points believed to predict attendance because it fulfils the desire to be with other fans and become more involved in social experiences at live events when watching games in a group situation rather than alone (Swanson et al, 2003). The model stress also the importance of team identification and consumer satisfaction, divided in game satisfaction, related to the experience on the field, and service satisfaction, related to the overall general experience. In fact, the more a fan identifies himself with the team the more is willing to pay for the team and also, consumer satisfaction with a sport product can create long-term benefits for sport organizations, including positive word-of-mouth, cross-buying, and consumer loyalty (Cronin, Brady, & Hult, 2000; Trail et al., 2005; Yoshida & James, 2010). On the basis of this, it is possible to say that consumer satisfaction will have positive effects of both behavioral intentions and actual repurchase behavior. This means that the behavioral intentions in Time 1 are then translated in repurchase in Time 2 and 3. Derived from these arguments, it is expected that consumers' satisfaction assessments and behavioral intentions have positive effects on behavioral loyalty over time. These considerations are resumed in nine hypotheses:

- The attachment points of sport, player, local city and fan community have positive effects on team identification. (H1)
- Fan community attachment has a positive effect on attendance frequency in the first half of the season and in the second half too. (H2)
- Team identification has a positive effect on consumer behavioral intentions. (H3)
- Team identification has a positive effect on (a) future attendance in the first half of the season and (b) future attendance in the second half of the season. (H4)
- Game satisfaction has positive effect on consumer behavioral intentions. (H5)
- Service satisfaction has positive effect on consumer behavioral intentions. (H6)
- Game satisfaction has positive effects on attendance frequency in the first half of the season and in the second too. (H7)
- Service satisfaction has positive effects on attendance frequency in the first half of the season and in the second too. (H8)

- Consumers' behavioral intentions has positive effects on attendance frequency in the first half of the season and in the second too. (H9)

The results obtained said that sport attachment and fan community had significant positive effects on team identification, while local city was not significant. Furthermore, fan community has also positive effect both on attendance frequency at Time 2 and Time 3. Team identification positively influence behavioral intentions, but the results of team identification on the future attendance frequency were not significant. Testing the relationships between consumer satisfaction, behavioral intentions and attendance frequency they obtained that the consumer satisfaction effect on behavioral intentions are not significant, because team identification exerts a greater impact. Moreover, consumer satisfaction, behavioral intentions and attendance frequency are not good predictor of future attendance frequency. Looking at these results, the authors discovered something that deviate from the standard theories.

First, one of the most important theoretical findings discovered in this study is the impact of fan community attachment on attendance frequency. In both the first half and the second half of the season, fan community attachment is the primary predictor of attendance frequency. The horizontal relationships between fan community members are the most important predictor of the continued attendance at sporting events. These findings provide support for the importance of fan-to-fan interaction at sporting events (Holt, 1995). What is really impressive is the extent to which fan community attachment could serve as a predictor for a continued behavior, far more predictive than other constructs utilized in previous research (team identification, consumer satisfaction, behavioral intentions, etc.). They did not find a significant relationship between Time 1 team identification and Time 2 and Time 3 attendance frequency. This furtherly supports the view that sport spectatorship is very much a communal activity. Furthermore, game satisfaction and service satisfaction were also found to be nonsignificant predictors of behavioral intentions and actual behavior, as previously sustained by other researches.

From this study results evident the importance of fans, that create a community that will lead to higher commitment a higher attendance frequency to sporting events. Sports organization should be able to enhance the fan experience of their customers in order to facilitate the creation of this community that will bring to them really positive effects. In order to do this, clubs have to take into account all the channels through which a fan can interact with it. So, in the next paragraph, fan experience touchpoints found in literature will be shown and explained.

2.3 Fan Experience Touchpoints

The sport customer experience includes a multitude of interactions that occur between the fan and the experienced environment produced by the sport organization. These interactions between fans and sports organizations are the touchpoints. The concept is the same that we have cited above discussing about a general customer experience: a touch point refers to all direct and indirect interactions customers experience across multiple channels and at various points in time during their relationship with an organization (Bradbury & Coons, 2007). Numerous touchpoints exist throughout the journey which create a series of interaction episodes during a customer's navigation of an experience. A sport customer has a very high potential number of touchpoints attending a live sporting event from start to end. These interactions could range

from searching for information about a match, purchasing tickets (online or not), travelling to the game, enjoy pre-match activities, listening to music and announcements, watching the game, using social media through mobile device, sharing contents, etc. The fan interacts with different entities and has different touchpoints, with the team's website, organization's employees, volunteers, vendors, other spectators, mobile technology platforms. There are many different ways of engaging customers for sports organizations, using many different channels. Since in the literature is not a present a model for the touchpoints in sports fan experience, we adapted what we found in precedence to our scope. So, all the consideration made in the previous part of customer experience.

Throughout the journey done by the fan there are several interactions with sports societies and organization, before, during and after the event:

The atmospheric elements are represented by the physical aspect related to the encounters between the customers and the society. These physical elements should be appellative, attractive and promote fans' energies and feelings. Two elements require being developed for introducing an appropriated physical evidence to customer-fans (Sawyer, Judge, & Gimbert, 2015): sports facility design, which is the most tangible and visible physical evidence sports marketers can have for their products.

In addition, banners, photographs or statues of sporting heroes can decorate the inside and outside and, still, inner walkways of the facility. Hight-tech scoreboards (as big screens) showing sports club's achievements and victories, as well as its history and tradition, may evoke feeling and enhance the tangibility of the event and atmosphere; the second element is promotion, done using instant communication for promoting products and/or services using social networks and sports club website to interact with fans before and during the matches, events or activities inside the arena and creating games to entertain the audience using sponsorship products and services.

The communicative elements are represented by one-way communication from the societies to the fans. This includes all the messages that the organizations send to who is recognized as a fan, informative messages but also promotions, discounts and also ad hoc messages (for example for the customers' birthday). This is done through different channels, via mail, e-mail or SMS.

The process elements are understood as the activities or tasks which are visible and non-visible. Being a service (a match, an event, a competition) requires the definition of the processes to produce and deliver benefits and value to customer-fans. The process is the method as well as the sequence of actions in the performance of the services (Moore & Levermore, 2012). If a process is badly projected will create a slow and ineffective delivery that will result in dissatisfaction of target audience around the service performance. Because that, if a process is not well aligned and designed can produce low performance of the service of the frontline team, before long the efficient and effectively of the service can be compromised, as effect of lack of synchrony between what has been offered and what has been "sold", in terms of benefits, to target fans. The processes must be planned and designed continuously in seeking of (Ratten, 2012, Rundh & Gottfridsson, 2015): reducing failures extinguishing possible steps that do not

“add value” to target customers-fans; introducing processes-orientation in order to produce the best service possible in addition to increase productivity and quality; finding out the average time per activity cycle; managing physical evidence visible to customers-fans, such as facilities, receptions, parking, ticket machines, seats, small restaurants, people, etc.; identifying failure points and think about all that could be wrong; and preparing flowchart or blueprint to document the service processes produced in a match, an event, an activity, store, and others. The final objective of the process is clarifying all the progression of tasks and steps required for delivering a good and/or service appropriate to fans.

All the interactions between the employees and fans, and between fans and fans can be summarized in a unique section related in general to people. In a match, an event, an activity, etc., people (or professionals) are essential and crucial to get the great performance. In the view of customers-fans, the staff team of service represents the provider of services. The assessing the quality of the match, event and activity are based on the customers-fans’ interactions with the frontline team. The staff team must be prepared, it should have all the knowledge around the whole service from the begin to the end in order to attend the service performance expected by the fans. These skills increase the potential success of the event, since the professionals meet interact and engage and understand the fans and communicate with them. But also the interaction between fans is an important slice of the pie, since people interact with each other, in particular during the match. A bad experience with the other customers can transform an event in a bad experience, deleting all the rest.

The technological touchpoints are the most spread in the sports industry, as in all the other. With the increase in innovation and the diffusion of websites, platform, mobile apps and mobile devices, the sports organization must adapt to this new digitized world and be able to exploit also this channel. Many customers are online 24 hours a day, and so available to interact with the societies and with other fans. It is evident that technology is related not only to one digital touchpoint, but it overlaps also the others: to create atmosphere technological elements like screen and cameras are fundamental, the interaction with employees and other customers can be indirect, through the use of chat or mails, the ticketing is mainly online, and so on. In particular one particular type among these points of interactions increased its importance in the past two decades: the social media. Social media, or social network sites, operate as virtual communities where users create a public or semi-public profile to communicate and network with friends or others with similar interests (e.g., Balas, 2006; Boyd & Ellison, 2007; Kasavanam, Nusair, & Teodosic, 2010). The increase in the use of such networks, as for example Facebook or Twitter, is explained by the improvement of the accessibility of smartphone and other mobile devices. At the most basic level, interaction between consumers via social media can be viewed as an extension of word-of-mouth communication and consequently as a hybrid element of the traditional marketing mix (Mangold & Faulds, 2009). Social media differ from previous vehicles for marketing communication by allowing customers to communicate directly and easily with each other and to co-create value with an imagined community at a time, place and frequency that best suit the individual fan. The customers themselves generate media that other customers will going to see, looking for information, reducing the reliance on the other traditional media (Jayanti, 2010; Lempert,

2006). Within specific industries such as sport, the advantages of social media appear well-suited to building relationships with fans. Enhanced fan connectedness can result in, amongst other benefits, longer and more profitable relationships through increased consumptive behaviour (End, 2001; Trail, Fink, & Anderson, 2003; Wakefield & Wann, 2006). As the popularity of social media continues to grow, brand managers must maintain a cohesive presence while also maintaining a delicate balance between protecting the brand's image, facilitating new customer touchpoints, and encouraging deeper connections between the consumer and the brand. It results evident that social media are a very important tool that can play an important role in different moments of the fan journey. Social media offer managers a unique tool for building and maintaining relationships with their fan. Clubs and societies use them as relationship sites, keeping in contact with fans directly. People can find news about the team, images, videos and all kind of information that the clubs can share. Sports organizations can also use social media in order to gather news and understand the preferences of fans and classify them, making tailored offers to customers, relevant to their needs. Social channels serve a distinct benefit, as compared to existing traditional media channels, in that utilizing social media at specific touchpoints can help brand managers direct customers and prospects to an online location matching the consumer's interests and needs. Furthermore, the flexibility of online channels allows brand managers to do this in a more efficient manner.

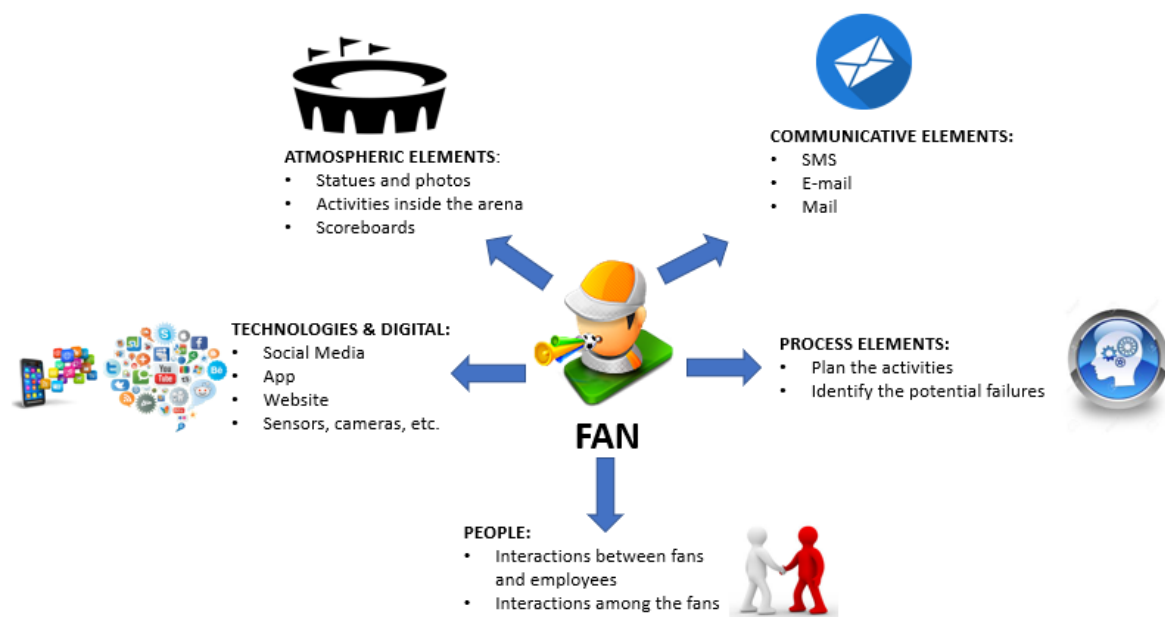


Figure 14: Fan Touchpoints

To conclude this section, Fan experience is composed by different points of contact between the customer and the sport organization. There are different channels through which the two parts can get in touch. What is really important is the communication strategy; all the different channels must communicate the same thing. To achieve authenticity, a fan's interaction with a brand in a touchpoint must be consistent with other brand-related interactions. A mismatch may leave the customer wondering which interaction represents the true character of the brand. All the channels must communicate a consistent message in terms of content, timing and tone. The

customers must be able to understand clearly which is the essence of the message that the organization wants to communicate.

After the analysis of the touchpoints we retained fundamental present the figure of the sport marketers, a role that is increasingly growing its importance in terms of Fan Experience.

2.4 Role of Sport Marketers

At this point, we want also to give an overview about the role of sports marketer figure. The aim of this paragraph is to depict the role and the responsibilities of today sport marketers. First of all, it will be presented a description of what sport marketing is, and then it will be shown a model of sports marketing plan proposed in literature by Da Silva and Luzzi Las Casas in 2017.

As it is well known, Marketing focuses on the customer and the goal is attracting and satisfying them. Then, the goal and objective of marketing are to satisfy customers, determine what they want, what they are seeking for and sell it to them with profit. In other words, offering the product or service in the given place at the correct time, with the appropriate price. By now, sport and marketing, in several occasions, are still becoming familiar to each other. Since the 1970s, most sports managers did not understand that the function of marketing was pertinent (Ratten, 2016). Nonetheless, as the sports perspective got increasingly competitive, sports managers started to fit their thinking. Now, several sports club have created marketing sectors and many smaller sports clubs are opening them to employ marketing skills to manage fans and get advantage from them (The Future of Sports, 2015).

The term “Sports Marketing” was first used in the United States by Advertising Age in 1978. Sports Marketing is essential in the global sport environment, since it is very important for the business growth as well as survival. Chadwick & Thwaites (2005) understand that Sports Marketing is a process through which a contest with a doubtful result is arranged in order to fulfill concurrently objectives among sports customers-fans, sports businesses, participants and other associated people, bunches and organizations. From a business perspective, the goal of Sports Marketing is to provide business companies with strategies to promote the sport or to promote products and services through sports events.

In general, Sports Marketing is both a social and a managerial process by which the sports managers look for obtaining what sporting companies require and desire through creating and exchanging products and benefits with people and other companies (Shilbury, 2009). Fullerton & Merz in 2008 introduced another view: “Sports Marketing is the activity of planning and implementing processes for production, pricing, promotion and distribution of sports products to satisfy the needs or desires of customers in order to achieve the organization’s results”. For Smith & Westerbeek (2003), Sports Marketing must have focused on Marketing of Sports products as a basis for the creation of revenue for sport organizations. In this context, it’s necessary to make a distinction between two different streams within the broad concept of Sports Marketing: Marketing of Sports and Marketing Through Sports.

Marketing of Sports includes marketing sporting events and equipment to fans and participants. Marketing through sport, instead embodies communications with media, sponsorships and also enterprise products. While Marketing of Sports is an approach for promoting events and goods

directly linked with the main object of sports, the match, to sports fans and spectators, Marketing through Sports means the promotion of non-sporting products and/or services at sporting events and the use of players to support non-sport products and/or services. Thereby, Sports Marketing consists of all activities designed to meet needs and wants of sports customers through exchange processes. So, sports marketers need to know three different dimensions of Sports Marketing:

- advertising in relation to sport and sport associations such the Olympics and Sports Leagues, for instance British Premier League, which can be labelled “Marketing of Sports”;
- promotion of sport in relation to the public to increase the participation at sport events or other kinds of arrangements;
- promotion of products in relation to sports events such as “Marketing Through Sports”. In this context, sponsorship plays an important role. Sponsorship is a powerful device for communicating with spectators at sports events and fans watching events on TV at home. So, the marketing of sports products may provoke a positive idea through the inclusion, within a well-defined communication plan, of the sponsorship of an admirable sports property (Collignon & Sultan, 2014; Rundh & Gottfridsson, 2015).

The principles and tools of Sports Marketing represent the essential knowledge that sports marketers require for developing strategies of events, matches and activities focused on customer-fans within a sports club. Sports marketers research demographic characteristics and consumption habits of fans to get more revenues from the items, goods and/or services offered at sporting events. Fans usually buy team identified clothing or equipment, but also food and travel to and from a match. It is up to the sports club creating conditions so that their fans consume products and services and want to be a fan member. Sport managers, studying, applying and researching this subject of improving the strategies for the planning, carrying out and assessing the Sports Marketing strategies, assists sports clubs professionalizing its business management and improving its exchange process with their customer fans.

The goal of Sports Marketing is to apply suitable marketing mix to let customers-fans meet their needs (Shilbury & Rentschler, 2007). In summary, marketing-driven strategies enable the sport club to better respond to the fans’ needs and to reach even more fans. So, in this actual environment, also the sports business has become more customer-oriented. Therefore, the sports marketers must identify what needs and wants of fans are satisfied through the exchange process with them.

In fact, understanding fans as a customer is the first challenge, identifying different needs from different segments of fans is another challenge inherent in the early phase of the marketing process. According to Collignon & Sultan (2014) and KPMG Report (2014), obtaining this data and information from fans will help the organization to determine the sports club positioning and communicate in such a way with fans. Sports club should design an appropriated marketing mix to influence customer-fans to acquire their benefits, by means attendance or participation.

Da Silva and Luzzi Las Casas in 2017 proposed a Sports Marketing plan framework for sports marketers to plan, carry and finally implement marketing strategies to create customer-fan-orientation philosophy within a sports club.

In order to assist to “art” of Sports Marketing as well as figure out new opportunities to undertake new innovations and solutions in the sport arena, these authors propose a Sports Marketing Plan framework, for understanding the steps required to set up sport products, services and events in view to respond the sport customer-fans’ claims in terms of efficient, effective and marketing orientation from a sports club. The framework, shown in the figure xxx, has several processes which are grouped in three levels: diagnosis of the situation, goals and fan’s audience and marketing mix

- *Diagnosis of the Situation*: this step is formed by a set of activities in order to research, collect and analyses data from external and internal environments, and factors which are affecting the fan’s behavior. It also includes the SWOT (Strong, Weakness, Opportunity and Threat) analysis to diagnose the real situation;
- *Goals and Fans’ Audience*: it encompasses the goals and objects of the marketing plan. It embodies activities such as selecting and defining the target customer-fans audience and finally positioning the value position and brand on the market, which it will guide the Sports Marketing strategies;
- *Sports Marketing Mix*: this step encompasses the tools that will provide and ensure mechanisms to measure, analysis and asses of results of marketing actions on fans as well as sponsorship and partners. These tools may be handled with the purpose of fit 9 Ps (Product, Price, Place, Promotion, Physical, Process, People, Performance and Program).

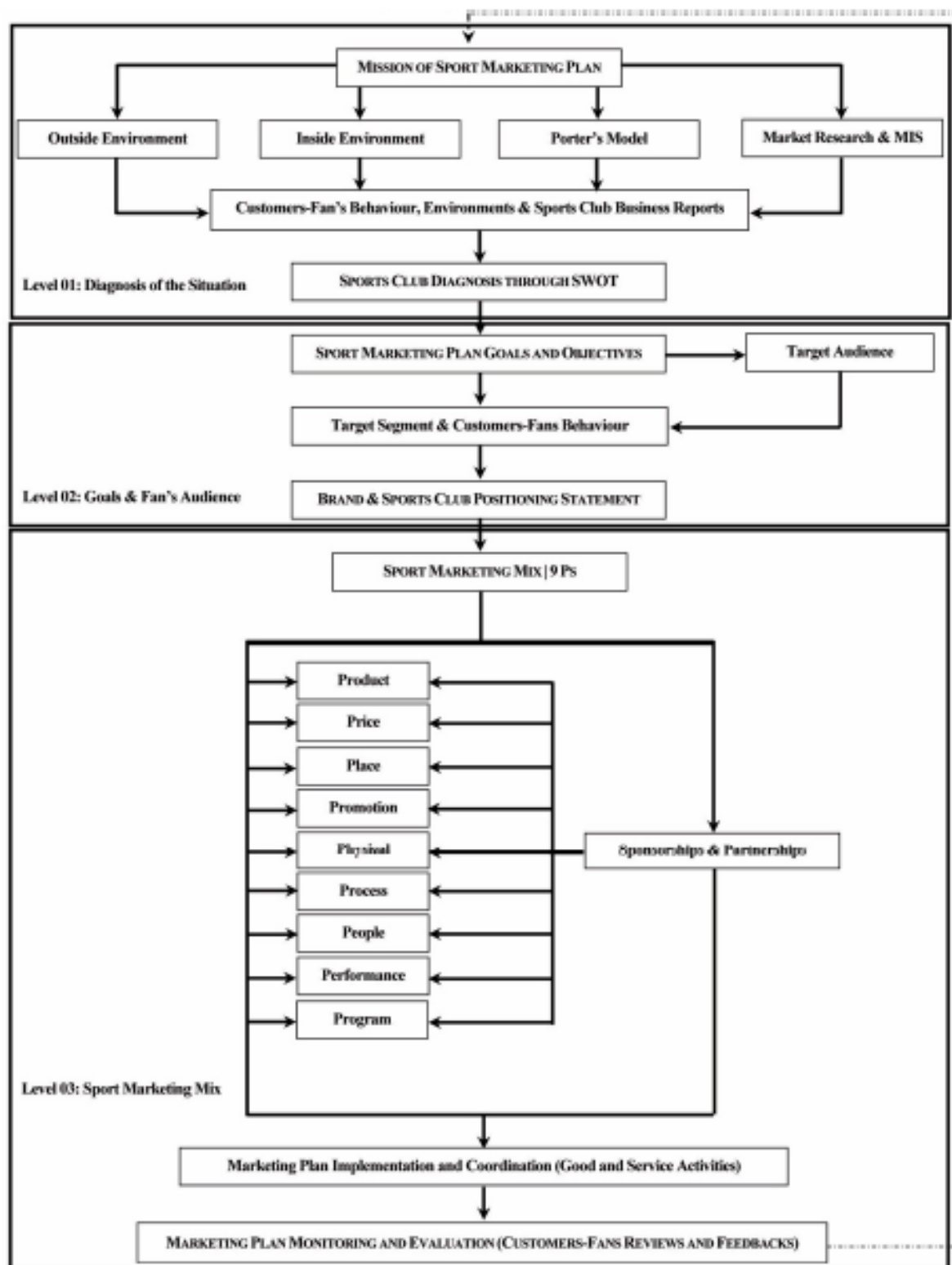


Figure 15: Sports Marketing Plan

After showing the touchpoints, which sports organizations can exploit for enhancing the fan experience, and the role sport marketers should play in order to implement it an effective way, it's the time to explain in detail a strategy through which organizations can acquire and satisfy fans and finally make them loyal.

2.5 Fan Funnel

In order to conclude the chapter, we are going to present a strategic framework through which sports organization can create brand awareness in the minds of the fans, engage them, acquire them and finally make them loyal. This framework is the Fan Funnel, a model in which the organization include the fan in different phases. Unfortunately, in the existent literature, there isn't any studies regarding the funnel used in sports industry, having the fan in the place of the consumer, except the Fan Funnel developed by SAS Marketing Automation, that however it's not adapt to our intent if not for its last two phases (Monetization and Loyalty), that we will recall at the end of this chapter. So, in this section, we are going to show the common Purchase Funnel of a general consumer, but it can be used also by sports organizations considering the consumer as a fan and considering the product to sell as the merchandising, the services, the experiences offered to the fans.

We found the Purchase Funnel in the book “Marketing Calculator: Measuring and Managing Return on Marketing Investment” written by Guy R. Powell. The Model was originally developed by McKinsey & Co., and then adapted in different way by the companies on the basis of their objectives. The purchase funnel models how consumers process information about brands, regardless of the source. With this understanding of consumer information processing, marketers can direct specific messages in specific media to drive the preferences for one brand over another.

In his book, he explains that consumers process the information delivered to them from competitors, the channel, influencers, and other consumers in the marketplace. Based on that information consumers, but in our case fans, form a “mental model”, an image of the brand or products in their minds. They become aware of the product, add the brand to their consideration set, and build brand equity. Based on their particular needs and preferences, consumers in every industry will value one brand over another.

The purchase funnel concept was developed to provide an understanding of how consumers move through different steps starting from nonawareness, through awareness to purchase consideration and, finally, to purchase. The version of the model represented by Powell in the study is a generalized one, since companies can tailor the description of the purchase funnel to fit their markets and improve their understanding of how and why consumers move from one level in the funnel to the next.

The purchase funnel is made by eight steps, that are represented in the image below.



Figure 16: Purchase Funnel

Here below the steps of the purchase channel are shown in detail:

- **Category Awareness:** Most consumers are aware of most categories. However, as new products are developed, and new technologies become available, consumer must be made aware that the particular category exists. If the products offered in the category are not needed, then the consumer may be aware of the category but may never purchase in the category.
- **Brand Awareness:** Once consumers are aware of the category, they must learn that a particular company provides a product or solution within the category. Category and brand awareness are often accomplished through the mass media, but they can also take place through direct marketing, the distribution channel, and advocacy, word of mouth and social networking.
- **Brand Consideration:** Consumers, who are aware of the category, and the various brands within it, must now begin to consider which brands they might purchase; the brand enters the consumer's consideration set.
- **Brand Preference:** Consumers who are considering a particular set of products generate preference for one brand over another. The levels between brand awareness and brand preference are often referred to as "upper funnel" components of the purchase funnel.
- **Purchase Intent:** Once there is consideration and preference for a brand, the consumer develops an intention to purchase a product. The consumer visits the desired channel with the intention of making a purchase in the chosen category. Purchase intent can then be further influenced either through the channel or through direct marketing means.

- **Purchase:** The consumer actually chooses the product, and purchases the product through a preferred channel at a certain price. Purchase intent and purchase are together often referred to as the “lower funnel”.
- **Loyalty:** Once purchased, the product experience must be satisfying enough that the consumer will become a repeat and loyal purchaser. High post-sale customer satisfaction can lead to high loyalty and the willingness to continue purchasing from the brand. Loyalty programs are necessary in this step of the funnel.
- **Advocacy:** There is no better result for a product than to have consumers advocate its value to other ones. This is often described as the “holy grail” of marketing, positive word of mouth. Social networking, word-of mouth and viral marketing are essential for marketers to take advantage of the mechanics of advocacy marketing.

Operating in parallel with the purchase funnel is the sales funnel. The sales funnel is what the company observes as the consumer traverses the purchase funnel. Through persuasive marketing communications, marketers can target consumers at specific stages in the purchase funnel and speed their progress toward purchase.

As already said, the purchase funnel could also be used by sports organizations considering the fan as the consumer. Obviously, in the case of a fan, the first four phases, the ones embedded in the “upper funnel”, in some team sports such as football and basketball, could be considered negligible since, theoretically, a fan is already engaged with the club. A fan is already identified in the club, but however a sports organization should work in order to increase his club identification. However, in other sports where being fan is not derived by “faith”, sports organizations should execute marketing action through different channels (media and social media in particular) in order to attract fans to the club and the sport.

In the “lower funnel” phases sports organizations should drive fans to buy tickets for attending the matches, buy club merchandising and participate to club initiatives and social network pages. This step is translated in a monetization for the sports organization. Here, Monetization phase of Fan Funnel developed by SAS Marketing automation in MLS joins the game. The organization should measure the success of its marketing campaigns basing on sales. For example, MLS measures it through ticket, merchandise and digital subscriptions sales. The final goal of a club, obviously is to increase in these kinds of sales. “To maximize ticket sales, MLS sends out personalized email based on a fan’s profile and transaction history. We also want to retain our most valuable customers, our season-ticket holders,” Shin, Director of CRM and Analytics at MLS, said. He added that, “for merchandise sales, we focus on new sales, cross-selling, up-selling and understanding past purchase histories. Increasing digital subscriptions involves behavior and geo-targeted offers.” An organization could increase ticket sales personalizing offers and proposing the season-ticket retention, increase merchandise sales through new sales, cross-sales and up-sales and increase digital subscriptions ones promoting behavior-targeted offers and geotargeted offers.

In the last two steps, sports organization should develop a great fan experience in order to make fans return to the stadium every Sunday, repurchase merchandising etc. and transform

occasional fans into club members and everyday fans with the final objective of developing fan loyalty. Also in the Loyalty phase, technology and analytics support the organizations. Clubs should have and implement their own loyalty programs. Nowadays, these programs focus mainly on providing value to season-ticket holders. They are designed to influence fan behaviors, for example, getting fans to enter the stadium an hour earlier, which would then impact the food and beverage sales at the stadium. Loyalty programs provide incentives fans can't buy with money. For example, walking with the players into the games, or talking with the coaches. "You can only be part of those experiences if you are part of the loyalty program as a season-ticket holder," Shin said.

As highlighted in these last paragraphs, technologies are essential across all the purchase channel, and in particular the Fan Funnel. Technologies for acquiring and integrating Fans data, for analyzing them, for executing the communication and marketing campaigns through different channels (website, social networks, mail etc.), for enhancing the experience at the venue (app, "smart arenas", etc.) are fundamental for creating and offering an advanced Fan Experience. For this reason, the Chapter 4 is totally dedicated to explain in detail all the technologies available for doing these activities.

3. RESEARCH DESIGN

The Thesis has a precise and defined structure that has been established in order to ensure a detailed and complete research.

Objectives of the research

The Thesis investigates deeply the interactions between the fans and the teams in the sports industry. The particular relevance that has assumed the sports industry in the last years, both in economics and in social terms, justifies the choice to study this market.

In today's marketplace, the customer is the gravity center of all the businesses. Companies analyze the market in order to find always new ways to engage new clients and to obtain loyalty from the old ones. The same happens also in sports, in which the customer has particular characteristics, because it is not a simple client, but it is a fan. Being a fan is different from being a customer. A fan proves a sense of belonging to team, to the societies, it is a very strong bond that usually lasts forever. This customer centered approach in the business can be unified to a trend that has characterized the sports industry: the digital innovation.

Starting from these considerations we have developed the main objective of the research: investigate the importance of the Fan Experience in the sports organizations and understand the impact that the digital innovation has on it.

Once identified this aim, we have developed a precise pattern to follow in order to reach it.

Methodology

The Thesis is based on the scheme in the figure below. The first chapter is the Introduction chapter, where we explained the reasons behind the importance of Fan Experience, explaining its role in sports industry, investigating the evolution of the costs in the sports organizations during the last decades and understanding how digital innovation can improve the Fan Experience.

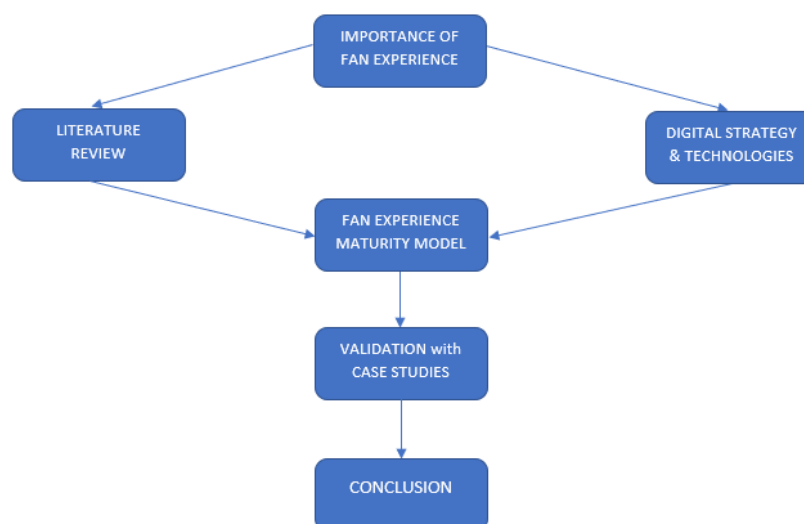


Figure 17: Structure of the Thesis

After the introduction, the second section is dedicated to the Literature Review. In this part we investigated the Fan Experience and the relationships it has with the Digital Innovation. We have analyzed deeply the traits that characterize the figure of the sports fan, why it could be considered a different type of customer. Once established who is the fan, we have searched for model of Fan Experience already existing in literature, stressing on points of interests of the fan journey, and always taking in consideration the influences the Digital Innovation has taken and the related changes.

The next step in the scheme is the description of the digital strategies and the technologies that are now used in the sports industry for managing the Fan Experience. The objective of this sections was to find and explain in detail the main digital technologies useful for creating better and more effective experiences for their fans, with the final target to build a strong Fan community, compound of very loyal fans. We presented the technologies subdivided on the basis of their function: Data Collection and Integration, Analysis, Execution.

The next chapter is the core of our thesis: we develop a Fan Experience maturity model. This framework represents a series of sequential steps that the different sports organizations should face in order to transform their management from traditional to smart. It is also valid to understand which position a society occupies and how it should act to improve. We have developed this model thanks to the information collected in the previous sections of our work.

In the Case Studies chapter, we interviewed different figures that works on Digital Innovation and/or the Fan experience in Italian sports clubs or in Italian sports societies. We asked them how they manage the digital evolution in the sports world and in particular what they are doing for the fans and for the future. The objective of the chapter is to validate the Fan Experience maturity model that we have developed.

3.1 Literature Review Methodology

Fan experience is not a usual theme, in order to increase our knowledge about the topic we started our research from the most spread browser: Google. We built a knowledge basis in order to understand better what is the real meaning of being a fan and the concept of Fan Experience. Then we used some information that were given by Osservatorio Innovazione Digitale nell'Industria dello Sport of Politecnico di Milano, in order to have also some indications about the general sports industry and its relationship with Digital Innovation.

After we built a solid basis of knowledge related to this theme, we can start with the research in the Literature. In doing this research we have used different types of digital archives. Our main sources of information were biblio.polimi, Google scholar and Research Gate. The initial objective was to find the different Fan Experience models existing in literature and show their development with the introduction of new technologies. Unfortunately, our research revealed to be much harder than we thought. We encountered lots of difficulties and problems and we found out that in the existing literature, the information related to the Fan Experience are quite limited. So, we changed our strategy, we started from the more general concept of Customer Experience and we adapted what we found to the sports industry.

Our research was based on different key words and were organized in two ways: a first part in which we dedicate our attention to the concept of fan, and then, since the numerous difficulties that we found we shifted our research towards the more general idea of customer. So, we had two main streams of research and key words:

- The Fan stream: *Fan Experience; Fan journey; Fan Touchpoints; Fan management; Fan Satisfaction; Fan Funnel;*
- The Customer stream: *Customer Experience; Customer Satisfaction; Customer Journey; Purchase Funnel.*

Basing on what we found, we chose to structure the chapter following a logical scheme. The first section is dedicated to final objective of sports societies, the fan satisfaction. Starting from the concept of customer satisfaction and then adapting it to sports industry. To do so we start from the Disconfirmation of Expectations Model, from which generates the Sport Spectator Satisfaction Model. After the presentations of these frameworks and of the related characteristics, we linked this concept to the Fan Experience model. Starting from the general definition of customer experience, we explained its main features and evolution, arriving to present the Fan Experience concept. We represent it through a model, describing also all the main factors that has influence on it. After that we presented a very important feature related to the Fan Experience and the Fan Satisfaction, the creation of a fan community, that contribute to increase the loyalty of the supporters. Then, we defined the different touchpoints between the fan and the sports clubs, and how they are managed. In parallel with touchpoints, we decided that was also useful to explain the figure of the sports marketer, that is the role dedicated to the management of the fan in a sports organization. At the end of the chapter, we proposed the Purchase Funnel of a general consumer, comparing it with the one of the fan and highlighting the activities that a sports organization should do across all the funnel thanks to digital technologies. So, the chapter resulted to be organized in this way:

- Fan Satisfaction Model
 - Disconfirmation of Expectations Model
 - Sport Spectators Satisfaction Model
- Fan Experience Model
 - Customer Experience
 - Fan Experience
 - Fan Community
- Fan Experience Touchpoints
- Role of Sports Marketers
- Fan Funnel

Once finished our research, it was possible to start with the part related to the Digital Strategies and the related technologies.

3.2 Digital Strategy and Technologies Methodology

The aim of “Digital Strategy and Technologies” is that of present and explain in detail the necessary digital strategy behind a sports organization in order to offer fans a complete and advanced experience. In particular, in this chapter, the focus is on the available technologies useful for developing and implementing the digital strategy for Fan Experience.

First of all, we decided to present technologies subdivided on the basis of their function. After a session of brainstorming, we decided to divide them on three phases: Data Collection and Integration, Analysis and Execution.

We made a research on these three steps for defining well them, through the research engines of the website used for the literature part, such as Scopus, Biblio.Polimi, Research Gate and Google Scholar.

After a brief description of the phase, we have inserted the identified technologies adapted to implement the phase and achieved its objective. Before doing that, we had to identify which technologies introduce in each phase of the model. An overall overview of technologies useful for the management of customers was given us by a model developed by the “Osservatorio Innovazione Digitale nell’Industria dello Sport” of Politecnico di Milano.

In the below scheme, we have summed up the technologies of each phase.

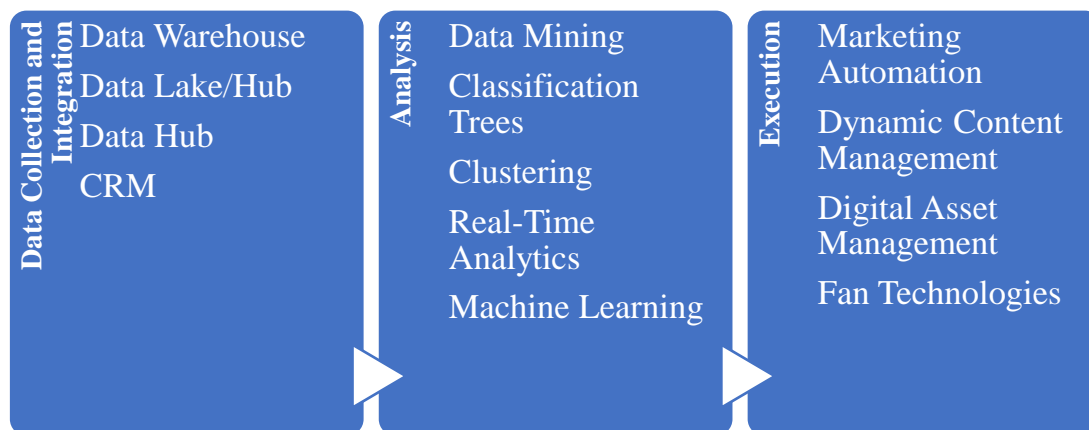


Figure 18: Technologies Partition

In Data Collection and Integration phase, we included technologies necessary for data collection, storage and management such as Data warehouse, CRM, Data Lake and Data Hub. In the Analysis phase, we showed Business Intelligence techniques from the most basic ones, such as Data Mining, Classification Trees and Clustering until the most advanced ones, such as Real-Time analytics and Machine Learning, for extrapolating insight and segmenting fans. In Execution phase, Marketing Automation and Dynamic Content Management are essential for using data acquired in the first phase and analyzed in the second one, and launching targeted

marketing campaigns to fans. In this phase, a Digital Asset Management system is useful for making more efficient and effective the digital strategy implemented. Finally, in the, we embodied on field-technologies, such as virtual reality, social media and platforms, which provide value with those fans that are more identified with the club.

The description of each technology was structured in the following way: general description about the technology and how it works based on literature papers, an explanation of how it can bring benefits in the sports content and finally we provided real examples of how sports organizations use it. For the literature review part, the research was made on the usual websites (Scopus, Google Scholar, Biblio.Polimi etc.). Regarding the explanation of how the different technologies can be used in sports organization we made simple research on Google search engines and we extrapolate information from different marketing websites and journals. Finally, for the example we have cited, we found them on the web, in particular searching on websites such as Sporttechie.com and Sloansportconference.com.

3.3 Fan Experience Maturity Model Methodology

The aim of the Chapter 5 is that of creating and developing a model about the topic of the entire research. In particular, we wanted to create a maturity model of Fan Experience management, showing the evolutive steps, made by always more advanced competences and technologies, between a traditional Sport Club management towards a Smart Club one.

First of all, we explained in the chapter the meaning, the definition and the components of a maturity model. In order to do so, as already done for the Literature and Technologies parts, we search the expression “maturity model” on the scientific search engines but with poor results, and so we look for those information on the common search engine Google.com. Thanks to it, we found three interesting and useful articles regarding Capability Maturity Model, whose information and suggestions we can use for developing our model.

After that, we tried to define the sports digital strategy starting from the general definition of strategy. For doing it, we explored the slides of “Strategy and Marketing” course of Politecnico di Milano, developed by professor Antonio Ghezzi. Then, to define the Sports Digital strategy we retook some considerations made in the Introduction chapter and finally we depict the components of the sports digital strategy with the model developed by the Osservatorio Innovazione Digitale nell’Industria dello Sport of Politecnico di Milano, which is developed on 4 different aspects: Fan Experience, the one we explored in detail, Athletic Performance, Events Management and Sports Club administration.

Then it was the time to build the Fan Experience Maturity Model. First of all, we had to define the structural elements and the maturity levels of our model. Both the choices were based on a draft of the Maturity Model developed by the Osservatorio Innovazione Digitale nell’Industria dello Sport for the workshop of 12th October 2017. Moreover, the choice of the three structural elements (Data Collection and Integration, Analysis and Execution) was aligned with the phases defined in “Digital Strategy and Technologies” chapter. Regarding the maturity levels, in the draft model there were only three levels, that we expanded to five in our Maturity Model. The choice of the five levels (Single-Channel approach, Few-Channel, Multi-Channel, Cross-Channel and Omnichannel) was derived by a web research where we looked for marketing and

communication strategies used by common companies. After defining the elements of the model, we passed to show in detail each structural element for each maturity level, explaining in particular the technologies necessary to pass to the next level. The technologies of the different levels are the ones presented in the Chapter 4 along the Fan Funnel. For deciding which technologies and competences assign to each maturity level, we analyzed some existing Fan experience case studies on the web, not only the ones cited in the chapter, such as F.C. Arsenal and Oklahoma City Thunder ones, but also other ones not cited in the chapter, but that inspired us for developing each step of the model, such as Dallas Mavericks case study, Sacramento Kings one, Denver Broncos one, Manchester United one, Manchester City one, etc. In this way we were able to link distinct digital competences and technologies to each single maturity level.

At the end, we use a matrix, having on the two axis the structural elements and the maturity levels, for displaying the model in a single view. Here below there is the sample Matrix.

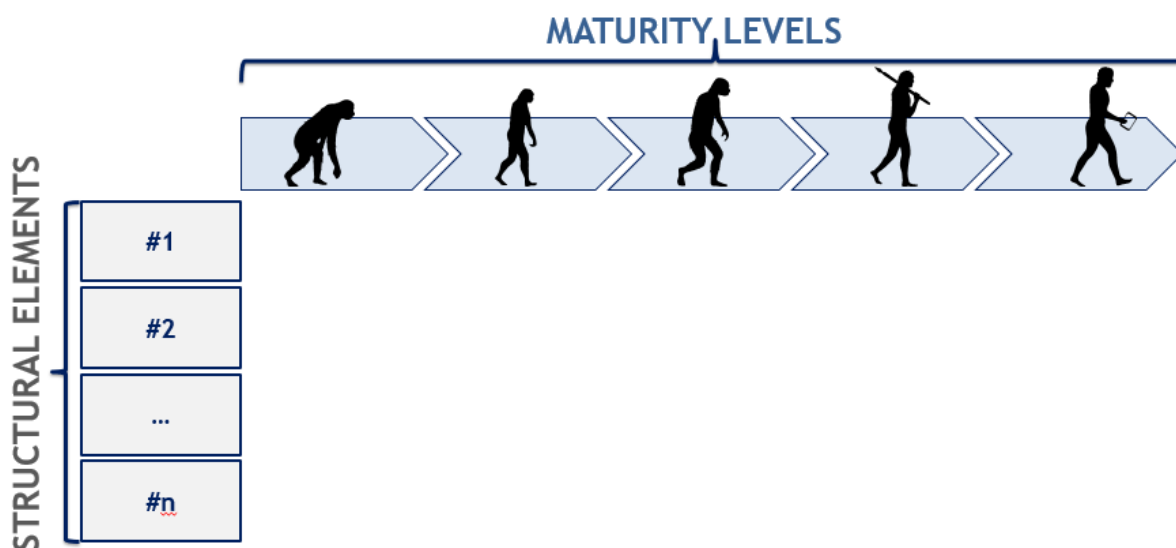


Figure 19: Maturity Model Sample Matrix

The need of the Case Studies chapter was born as a direct consequence of this chapter. In fact, we needed cases for validating our Fan Experience Maturity Model.

3.4 Case Studies Methodology

The aim of Case Studies has been to validate the Maturity Model developed in chapter 5 finding information not extractable by literature and internet. In fact, some qualitative evidence, is clear only for who works on the field every day. Accordingly, we developed case studies in order to understand how sports organizations, large and small ones, approach to fan experience with the aim to enlarge our research and collect “on the field” opinions. Moreover, a particular focus is on digital strategies and technologies used by companies for developing a greater fan experience and creating loyalty among supporters. In next paragraphs you will see the necessity, the objectives of Case Studies’ chapter and in detail the methodology adopted for elaborating cases.

The Necessity

Due to the lack of robust online material related to Fan Experiences and its Case Studies, even if some online case studies (F.C. Arsenal, for instance) proved to be complete and exhaustive to justify the developed Maturity Model, many issues were impossible to study without a research on the field; in other words, collecting the voice of Sports Managers can be considered essential. In order to understand issues related to the digital strategies developed by Italian sports clubs, their organizations, the technologies used for acquiring, manage and analyze fans' data, the benefits generated by a Fan Experience that works till the future trends of this field, it has been considered necessary to investigate sports organizations' leaders' opinions.

In particular, we tried to understand if the fan plays a central role in the strategy of Italian sports clubs and how they are organized for developing an effective fan experience (which figures are responsible of it). Furthermore, we searched for benefits and criticalities identified by organizations actuating their digital strategies and for future trends emerging in fan experience field.

Moreover, Case Studies have been developed after collecting Literature Case Studies, which are mainly related to foreign clubs, hence the opportunity to analyze some the differences between Italy and Rest of the World in term of growth and future directions in digital and obviously in Fan Experience management.

Objectives

The aim of this research was firstly to **find out all the aspects not observable on the web**, since many operative topics are visible only gathering the opinion of whom works day by day in sports industry, and in particular to **validate** all the components (Structural Elements, Maturity Levels, features of each level) of the **“Fan Experience Maturity Model”** designed in chapter 5. Thus, we built an interview scheme, addressed to 8 sports managers, belonging to sports clubs or leagues. After the collection of the opinions, we developed and elaborate 8 case studies. At the end, therefore, it was possible to identify common traits which characterizes Italian sports organizations' way of implementing Fan experience. Finally, once validated the model through these case study, we tried to put each single organization within a level of the maturity model.

Framework of Analysis

In the selection of the sports organizations to interview and dimensions of analysis to investigate, we relied on the main team sports played in Italy (Football, Basketball and Volleyball), the dimension of the company and the league attending. According to this, we were able to contextualize Case Studies according to the belonging to a sport and to a league.

Methodology

A. Deciding unit(s) of analysis

In order to provide a support to our model, we tried, as previously explained, to look for Italian examples in managing fans' data. Thus, we chose a multi-cases approach in order to select

sports organizations with different characteristics trying to identify different maturity levels we depicted and common traits of Italian reality.

The units of analysis used, explained in “D” section, are related to four main areas of discussion:

- *Strategy and Organization*: looking for the role played by fans in the organization;
- *Technologies*: identifying the technologies use for collecting, managing and analyzing fans’ data and for managing Fan Experience;
- *Future and Geographic Trends*: understanding the future trends of this field and the differences between Italy and Rest of the World;
- *Benefits and Criticalities*: discovering the advantages and the existent constraints of developing a good Fan Experience in Italy.

B. Case Studies selection

Sports organizations have been chosen trying to represent different sports. Thus, we interviewed sport managers operating in sports organizations belonging to Football (5) and Basketball (2), and a manager of a technologies vendor company, that has partnership with other sports such as Rugby, Tennis and SuperBike, for having a different point of view. We have tried, in the limits of the availability of the companies, to interview at least for football, the sport most represented, examples with important difference in terms of dimension and reputation.

Due to the low availability of time and the territory constraints, we could interview only Italian organizations, but it would be good comparing the approaches of Italian clubs and foreigners’ ones in order to emphasize better the difference between Italy and Rest of the World in digital field.

Interviewing Italian organizations’ managers allows us to understand and then illustrate in deep Italian issues and to gain, however, information useful for the comparison with the RoW. Moreover, it is useful for understanding the importance for the organization of the sport tourism in Italy and the relationship of the local territory.

In the table below, the organizations selected are summarized.

Table 2: Case Studies

Sport	League	Organization	Role Interviewed
Football	Serie B ConTe.it	Lega Nazionale Professionisti Serie B	Digital Area and Fan Relationship Responsible
Football	Serie A TIM	Atalanta Bergamasca Calcio	Ticketing Coordinator and Supporter Liaison Officer
Football	Serie A TIM	ACF Fiorentina	Fan Relationship Manager

Football	Serie B ConTe.it	Brescia Calcio	Marketing and Communication Responsible
Football	Serie B ConTe.it	Parma Calcio 1913	Brand and Digital Marketing Manager
Basketball	LegaBasket Serie A	Olimpia Milano	Head of Marketing and Sponsorship Club
Basketball	LegaBasket Serie A	Pallacanestro Varese	Marketing Assistants
Vendor	Digital Consulting	IQUII	Head of Digital and Accounting Manager

As, you can see from the table, the role of the interlocutors of interviews changes on the basis of the organization of the companies. Mainly we interviewed people working in the marketing department of the organization or in the digital area.

C. Collection of data

Before to direct contact companies, we have already gathered information which allowed us to have already a suitable knowledge about company and the person/people interviewed on LinkedIn and to in depth investigate some aspects during the interview.

The tools used to contact companies have been different:

- E-mail
- Private message on Company's site
- Private message on social networks: LinkedIn, Facebook

Also interviews took place in different ways:

- Phone Call
- Written interview
- Face to face interview

The interview has been divided in four different areas according the topics indagated through them. The four areas which compose the interview are Strategy and Organization, Technology, Future and Geographic trends and finally Benefits and Criticalities. Their content and aim are explained below. The questions are reported in the precise way through which, more or less, they have been submitted to the interviewed.

D. Interview

We standardize an interview framework in order to create comparable Case Studies. The text has been structured as follows, divided in the four areas cited above. In the interview of the technologies vendor person, we changed and personalized the questions, belonging to the four areas, given the different nature of the organization interviewed.

Strategy and Organization

With the questions of this area, we wanted to investigate the importance of the figure of fans within the club's strategy and how consequently sports organizations develop their digital strategy towards their customers, the fans. Moreover, the focus is also on the organization of the companies, looking for understanding the department/s, the role/s in charge of Fan Experience. Here below the questions of this area.

1. Which is your background? Which is your role within the organization?
2. How is your company strategically organized? Which role do fans play for your club?
3. What does it mean Fan Experience for your organization? Is an important point for your Business Strategy?
4. Is present a specific department dedicated to Fan experience? If so, how it is managed?
5. The fan experience context is embedded in a more general digital strategy? Which are the main points of this strategy?

Technology

In this section, we analyzed the technologies used by the interviewed sports organizations for collecting, integrating, managing and analyzing fans' data and for launching the marketing campaigns on the basis of them. The focus is on the three structural elements of the maturity model (Data Collection and Integration, Analysis and Execution). An important point of this area is also represented by the way organizations manage social media. Finally, we investigated the ability of clubs of creating Fan Experience at the arena. The questions of this area are listed below.

1. Which are the technologies that you use to improve the Fan experience?
2. Where do you store data? Do you have a Data Warehouse or a Data Lake? Data are included in a unique CRM or FRM (Fan Relationship Management)?
3. How does your organization make analysis for creating insights on data? Do you use techniques of business intelligence (Data Mining, Clustering etc.)?
4. Does your organization use Marketing automation, Digital Asset Management or Dynamic Content Management for executing personalized marketing campaigns?
5. Do you have an app or a platform? Which kind of service do you offer through this?

6. Social media is now part of everyday life. How much are you present on this social media? Which are your interactions with fans through them? Which kind of campaigns you develop on them? Do you use it also for other reasons like marketing or sponsorships?
7. How do you manage Social Media? Are they integrated together? Is there only a person responsible for this integration? Are the contents developed upstream and then personalized or is there a specific strategy for each social media?
8. Smart Arena is an emerging concept in the sports industry. Are you already using some technologies of this concept? Do you think that in the future your organization will introduce this?

Future and Geographic Trends

In this area of the interview we asked for opinions about the future of the industry: we were interest in understanding the future trends of fan experience and the possible new technologies useful in this field. Not only, we asked managers to make a comparison between Italy and Rest of the World on Fan Experience. Finally, we posed the attention on the phenomenon of sport tourism and the opportunities generated by it for sports organization. The opinion of the interviewed is considered clear and reliable, and offers a point of view unique that only a person inside the industry can provide. The three questions of this area are shown here below.

1. Given your experience in this sector, where is it going? Can you described the most important trends that will characterize it the closer future? Which are the technologies that could be introduced?
2. Can you make a comparison between Italy and the rest of the world?
3. Since sports is always more related to tourism, do you think is it possible to exploit this to provide benefits also to the local community?

Benefits and Criticalities

In the last section of the interview we wanted to understand which are the benefits generated by the application of an advanced Fan Experience and which issues and constraints sports organizations have to face for developing it. Eventually, we moved the attention to an actual important point: the relationships between organizations and external parties, in particular sponsors. In the list below, the questions of this area are written.

1. Which are the criticalities you saw in developing the Fan experience model (data collection, integration, insights, communication) in your organization? How did you evolve in terms of technologies, with the passing of time? Which difficulties do you meet during this evolution?
2. Which are the benefits that Fan experience generate for your organization? Having a good Fan experience strategy really increase the company profitability?

3. Which relationships exists between your organization and sponsors? Have they visibility on your data? Can they use and integrate them? How sponsorship impacts on the organization turnover?

E. Case Studies' creation

Once made the interview, we spooled it word by word in Italian language and then we elaborated the case study summarizing the main relevant aspects of the interview for each area of the case study, translating the information in English. In the initial part of the case, we made a synthesis of the organization information and the interviewed person/people's data in a table. So, basically a **case study report** is formed by a table summarizing the club and managers' data and by 4 paragraphs, which explain in a brief but clear way the relevant information given by the interviewed person regarding each single area of the case study.

Data Analysis and Maturity Model Validation

Once we gathered all 8 Case Studies reports, we started to analyze results. For each area, we identified the main considerations and thoughts of the managers interviewed. We proposed a general overview of each of the 4 sections on the basis of the case studies, focusing in particular on the information gained on the three structural elements of the maturity model, the phases of Data Collection and Integration, Analysis and Execution. These pieces of information were useful for reaching the objective of the chapter: **validating the Fan Experience Maturity Model**. Finally, as a proof of the validation, we insert each of the 8 sports organizations within a maturity level of the model

4. DIGITAL STRATEGY AND TECHNOLOGIES

In Chapter 2 you have seen the existent models in Literature of Fan Experience and from them it is perceived how much digital and technological innovation is important in order to create a more personalized and addressed fan experience, with the final goal of creating a Fan community, compound of very loyal fans. In this regard, technologies are essential for developing an efficient and effective digital strategy addressed to fans. So, in this chapter we are going to present, with also some examples of application in Fan Experience field, all the available technologies for the sports organizations in order to create an advanced Fan Experience.

We structured this chapter dividing the technologies on the basis of their functionalities. So, we divided them in three categories, which represent the intervening phases between the acquisition of fans' data and the launch of a communication or marketing campaign:

- **Data Collection and Integration:** technologies dedicated to the acquisition of fans' data from different sources, to the integration of them and generally to their management;
- **Analysis:** technologies that allow sports organization to cross information available in order to cluster the customers and create insights on data, as a basis for the execution;
- **Execution:** technologies useful for launching marketing and communication campaigns, managing the content sent to fan, for directly involve the supporters.

In the following paragraphs we are going to explain in a more detailed way the three phases, and above all we will deeply explain all the existent technologies devoted to each phase.

4.1 Data Collection and Integration

The goal in this phase is to collect information as a way to establish a relationship with the fan. This is done by building a solid fan database.

First of all, data related to fans have to be found. So, which are the sources of these data? The sources can be categorized in: Internal, External and Third Parties.

A sports organization can collect its data from many different internal sources, including its website, where fans sign up for online accounts to purchase tickets. "A lot of information exists within organizations that is not integrated, and that people may not even be aware of. I'm sure our case is similar to a lot of companies out there," Shin said. **Internal sources** are, for instance, ticket purchase and merchandising and digital subscription.

To expand its fan database beyond what it collects from the internal, the club should organize promotions and sweepstakes with its partners. These activities involve getting fans to register for events or even to initiate grassroots activities. So, fan sweepstakes and co-promotion are examples of **external sources** of data.

After collecting data from internal sources and partnership programs, data have to be sent through a cleansing process. This is a very important step since it increases record accuracy,

eliminates redundant and incorrect data, and merges fragmented profiles. The next step is filling in the blanks; that is, adding additional (external) information to existing records so the information on each fan is more complete. Generally, this additional data comes from third-party sources. It might include household income, age, occupation, education levels, presence of children and other lifestyle characteristics, so demographic and behavioral characteristics of the fan. These two important phases are called Data hygiene and Data Appending/Matching.

“A variety of information allows us to analyze and better understand our customers, so we can target our communications more accurately,” said Shin, Director of CRM and Analytics, Major League Soccer. *“A lot of information exists within organizations that is not integrated, and that people may not even be aware of.”*, he added.

In order to accomplish this phase, it is important to have a strong data base that allows to collect a large amount of data. To reach this objective some tools are needed, like data warehouse, data lake and CRM systems. In the following sections there is a further description of these technologies.

4.1.1 Data Warehouse

A data warehouse is a federated repository for all the data that an enterprise's various business systems collect. The repository may be physical or logical. In computing, a data warehouse (DW or DWH), is a system used for reporting and data analysis, and is considered a core component of business intelligence. DWs collect information from one or more sources and put them in central repositories where data are integrated. They store historical and current data in one single place and then, these data, are used for creating analytical reports for knowledge workers throughout the organization. The data stored in the warehouse is uploaded from the operational systems, for example marketing or sales. The data may pass through an operational data store and then, to ensure data quality, may require data cleansing for additional operations. before it is used in the DW for reporting. Data warehousing emphasizes the capture of data from diverse sources for useful analysis and access, but does not generally start from the point-of-view of the end user who may need access to specialized, sometimes local databases. These local databases are known as data marts. There are two approaches to data warehousing, top down and bottom up. The top down approach, starts from the creation of the complete data warehouse, and then spins off data marts for specific groups of users data warehouse. The bottom up approach builds the data marts first and then combines them into a single, all-encompassing data warehouse. Typically, a data warehouse is housed on an enterprise mainframe server or increasingly, in the cloud. Data from various online transaction processing (OLTP) applications and other sources is selectively extracted for use by analytical applications and user queries. The term data warehouse was coined by William H. Inmon, who is known as the Father of Data Warehousing. Inmon described a data warehouse as being a subject-oriented, integrated, time-variant and nonvolatile collection of data that supports management's decision-making process. Clarifying the definition:

- **Subject-Oriented:** a data warehouse can be used to analyze a particular subject area. For example, specific department of the enterprise can be a particular subject.

- **Integrated:** a data warehouse integrates data from multiple data sources. For example, source A and source B may have different ways of identifying a product, but in a data warehouse, there will be only a single way of identifying a product.
- **Time Variant:** historical data is kept in a data warehouse. For example, one can retrieve data from 3 months, 6 months, 12 months, or even older data from a data warehouse, differently, for instance, from a transaction system that can treat only recent data. For example, a transaction system may hold the most recent address of a customer, where a data warehouse can hold all addresses associated with a customer.
- **Non-volatile:** once data is in the data warehouse, it will not change. So, historical data in a data warehouse should never be altered.

Creating a Data Warehouse is a complex process not only in the construction of the data model, but especially in the cataloguing process that goes through three phases: Extraction, Transformation and Loading. These three phases represent the main operations done with the data warehouse: extract the data from the data warehouse, cleaning, combining and improving the data, so transforming them and finally load the data. ETL (Extract Transform and Load) system is much more than a tool for getting data from a source system to a central repository. It removes errors and corrects missing data; metrics provides confidence in data; data sets from multiple sources to be analyzed together; data is structured to be used by end users tools. ETL is more than just data flow. It has the power to correct data errors and transform raw data into information that can be readily consumed by business users.

Implement a data warehouse can get lots of benefits to the organization. First of all, the data warehouse provides an environment separate from the operational systems and is completely designed for decision-support, analytical-reporting, ad-hoc queries, and data mining. This isolation and optimization enables queries to be performed without any impact on the systems that support the business' primary transactions. Fundamentally, a data warehouse helps solve the on-going problem of pulling data out of transactional systems quickly and efficiently and converting that data into actionable information. Additionally, the data warehouse allows for processing of large and complex queries in a highly-efficient manner. Upon successful implementation of a data warehouse or data mart, business will realize numerous improvements and positive gains. Some of them are:

- **Improved Business Intelligence:** managers and executives can take their decision basing on credible facts and actual data; decision makers are better informed as they are able to query actual data. Data warehouses and related business intelligence can be used to can be applied directly to business processes including marketing segmentation, inventory management, financial management, and sales.
- **Increased Query and System Performance:** data warehouse allows to store a very large volume of data and rapidly query this data.
- **Data from multiple sources:** for the majority of the enterprises the information come from multiple sources. With the warehouse firms have the possibility to merge this data and having them available in one place. Consolidating enterprise data into a single data

repository alleviates the burden of duplicating data gathering efforts, and enables the extraction of information that would otherwise be impossible.

- **Quality and Consistency of data:** the data warehouses convert the data coming from the different sources and transform the different file into a common format. Furthermore, business units and departments take data from a unique repository in which all data are standardized, and so produce results that are consistent with all the other units within the organization.
- **Timely access to data:** data warehouses allow to users to have the data they need when they request for them, spending little time for searching them, thanks to ETL systems. Business user can access to data from one interface and make query with less informational support.
- **Historical Intelligence:** data warehouses store data from the different periods, in this way business users can base their actions also considering past events.
- **High Return on Investment (ROI):** ROI represent an index that calculate the earnings that a business is able to make from an investment (e.g. a project). Data warehouses and business intelligence have enabled business to generate a very high amount of revenues, and also save a lot in terms of costs.

Data warehouses could be extremely useful also in sports industry. Sports teams are facing a tremendous need for a data warehouse to capture and store business operation information and being able to analyze the data in real-time. Without a data warehouse information is fragmented across the enterprise and the different departments are unable to process information in a timely matter. Furthermore, considering that this industry is extremely growing, it is very important to have a complete knowledge of the needs and preferences of fan, extrapolating these from all the different types of information that come to the organizations. As the volume of data generated by business systems continues to grow, teams must address three key challenges: how do they aggregate disparate data systems, how can they analyze and visualize key metrics, and finally, how do they best use this data to drive revenue. Having an effective data warehouse is the answer to these questions. A good example of this is the OKC case. Oklahoma City Thunder (OKC) is a basketball team that plays in the NBA league. The club already invested lots of money in their system, but it was not so advanced and suited for what it needed. The obstacles they had were: excel overload; “spaghetti bowl” of data; no automated reporting; inability to correlate data; limited upside for data growth. To solve these problems OKC was searching something more centralized that allows to have a more integrated approach, in order to develop a singular view of their business. OKC decided to ask to KORE software, a company that offers these tools, to implement a solution for its problem. KORE offered to OKC a single platform in which they integrate the data warehouse with the other applications that were previously used by the team for sponsorship and ticketing. The platform allows to get data more quickly, increase the data capacity since it uses Amazon Web Servers, relieving the stress on OKC data load and optimizing the speed of the performance. KORE was able to connect the email marketing, food and beverage, TV rating, and merchandise data all through its data warehouse. The OKC Thunder now had a wealth of powerful insights displayed through

KORE's integrated Tableau BI visualization tool. These improvements allowed OKC to increase the service level offered to fans. This case study is the perfect example that in sports industry the analytics field has always much importance, and the right use of instruments like a data warehouse can lead to a very good advantage for a sports organization in managing fans.

4.1.2 Data Lake

A few years ago (in 2010) a new concept of “data lake” or “data hubs” has been appears. The term itself was introduced by James Dixon (Dixon, 2010), but sometimes it is disparaged as being simply a marketing label for a product that supports Hadoop. Or we know also another vision: yesterday's unified storage is today's enterprise data lake (McClure, 2016).

A data lake refers to a massively scalable storage repository that holds a vast amount of raw data in its native format (“as is”) until it is needed plus processing systems (engine) that can ingest data without compromising the data structure (Laskowski, 2016). Usually, data lakes are constructed to operate with large and quickly arriving volumes of unstructured data from which further insights are derived. The lakes use dynamic analytical applications, not static and pre-build because the data they handle are not structured. The data in the lake becomes accessible as soon as it is created. This type of repository often includes a semantic database, a conceptual model that leverages the same standards and technologies used to create Internet hyperlinks, and add a layer of context over the data that defines the meaning of the data and its interrelationships with other data. The data lake strategies can combine SQL and NoSQL database approaches and online analytics processing (OLAP) and online transaction processing (OLTP) capabilities. Data lakes have a flat architecture, where each data has one identifier and a set of extended metatags. They do not require a schema or an organization of the data. It is possible to compare them as a large data pool in which are accumulated different types of data, historical, new, structured or unstructured, in which the schema and the data requirement are not specified until the data is queried.

The data lake serves as a cost-effective place to conduct preliminary analysis of data, while flexible and task-oriented data structuring is implemented only where and for what it is necessary (Stein, 2014). The data lake outflow is the analyzed data and it forms a key component of the extended analytical ecosystem. The data lake should be integrated with the rest of enterprise's IT and the data inside it should have few very important characteristics:

- A scale-out architecture with high availability that grows with the data;
- Governance and enforcing policies for retention, disposition, identification of data to be tired;
- A centralized cataloguing and indexing of the inventory of data (and metadata) that is available, including sources, versioning, veracity and accuracy;
- Data cardinality means how it relates to other data;
- Data transformation lineage (tracking) means what was done with it, when and where it came from (the evaluation of internal, external, and acquired third party's

data sources), who and why changed it, what versions are exist, how long it will be useful or relevant, etc.;

- A single easy to manage and fully shareable data store being accessible to all the applications;
- A shared-access model so that each bit of data would be simultaneously accessible in multiple formats to eliminate the extract, transform and load process and allow data-in-place analytics, accelerated workflow support between disparate applications, etc.;
- Access from any device (a tablet, smartphone, laptop, desktop) to support mobile workforce;
- Agile analytics into and from the data lake using multiple analytical approaches and data workflows as well as single subject analytics based on very specific use cases;
- Some level of quality of service with securely isolate consolidated workflows in their own zones within the system for safeguarding or performance;
- Efficiency including erasure coding, compression, deduplication;
- You never move the data as the processing goes to the data, not the other way around.

The data that are contained in a lake logs, sensor data, social media, document collections, images, video, etc., coming from different sources. All these data are useful to be used in an integrated analysis. The data lake governance includes application framework to gather the data, contextualize them by indexing and further advanced metadata management. It helps to collaboratively create models (views) of this data and then gain more visibility and manage incremental improvements to the metadata. And for the data lake itself as it is a single raw-data store ensuring its operational availability, integrity, access control, authentication and authorization, monitoring and audit, business continuity and disaster recovery is of great importance.

It is evident that data lake is a very powerful tool: it is flexible; it can derive value from unlimited types of data; store all types of data, structure or unstructured; there are unlimited ways to query data; etc. For all these reasons the applications of data lakes in the sports industry can get to the teams and clubs great improvement in terms of enhancing fan experience. It is possible to gather in the lakes the different types of data coming from the multiple sources, in whatever format they are, and operate with them in very different and numerous ways.

The next step after Data Lake is **Data Hub**. **A Data hub is a database which is populated with data from one or more sources and from which data is taken to one or more destinations.** It is a hub-and-spoke approach to data integration, where data is physically moved and re-indexed into a new system. The difference with data lakes is that data runs the same process, but it must always keep the source format. Data is ingested in as close to the raw form as possible without enforcing any restrictive schema. The main characteristic of a Data Hub is

that the system has to support discovery, indexing and analytics. This is a step forward Data Lake, that cannot index or harmonize because of the incompatible forms that be hold. The prime objective of a Data Hub is to provide a centralized and unified data source for diverse business needs. These systems are designed to address the challenge of data that is expanding in terms of variety, volume and velocity.

A good example of using a data lake for treating fans data is Fanatics. Fanatics is the market leader for authentic, officially licensed sports merchandise and offers the world's largest collection of timeless and timely gear from every pro and college team. In order to take their business intelligence to the next level, the team at Fanatics knew they had to find a better way to store and analyze their data. They would move their data that was on SQL Server using SSIS packages for ETL into a data repository (Amazon S3) on the cloud: the better to store raw data in its native format, without the need to transform it and store it in traditional column based databases until it is needed for analysis. To move the data, Fanatics identified Amazon Web Service and Attunity as the best partners, The end results with the introduction of the data lake was a win: Fanatics is now able to analyze the huge volumes of data from their transactional, e-commerce, and back office systems, and to make this data available immediately for analytics. Furthermore, the company was able to get actionable, real-time insights into key customer behavior and purchasing patterns and share these findings with employees globally.

The same thing can be done by sports clubs, that can use a tool like a data lake in order to reach a more advanced level of business intelligence.

4.1.3 CRM (Customer Relationship Management)

Organizations expert efforts to develop stronger connections and loyalty with their most important customers: the supporters. According to Søren Hougaard and Mogens Bjerre, the customer relationship management is a process of establishing, maintaining and extending the relationship with the customers in a lucrative way, directed towards achieving the goals of both parties, through inter-favourable exchange and promises keeping.

Customer relationship management (CRM) is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers, assisting in customer retention and driving sales growth. CRM systems are designed to compile information on customers across different channels, or points of contact between the customer and the company, which could include the company's website, telephone, live chat, direct mail, marketing materials and social media. These systems are aimed for managing the relationship with the customers and include all processes, through which a company tracks and organizes information and interactions with its current and potential customers. The software maintains information about the customers and each communication with them can be entered, preserved and accessible for employees from various departments. CRM main goal is to improve services offered to the customers and to use their contacts for target marketing campaigns. Better services create loyal customers and thus generate more income. The clients are the center of attention. Through these systems, the organization obtains the maximum possible information about is customers and their needs, basing on this it can develop its

strategy The CRM system's key functions are: Information collection and Export of Information. There are three types of standard CRM:

- CRM systems with operative application. The system is used by the enterprise's employees for operative access to information about particular customer in the course of the immediate relation with him, mainly in the process of sale and service.
- CRM systems with analytical application. This type of systems is used for analyzing various data that concern the customers themselves as well as the enterprise's activity.
- CRM systems with collaborative (communication) application. This system is meant for collaboration between the company and the customers as well as for the communication between them. The idea is realization of interactive dialogue with the customers.

In the last years the sports industry has increased their investments in the CRM area, since the need for fan relationship management is one of the basic requirements. There are, however, crucial differences compared with conventional businesses. So, the classic CRM models need to be adapted for such a specialist sector. The unique characteristics of the sport and its fans need consideration when developing or implementing CRM techniques. For the purpose of sports organizations and sporting events, CRM seeks to achieve three goals through precision marketing: generate new fans; enlarge attendance and purchases of current fans; motivate and maintain current fan loyalty and identification (Wakefield, 2007). It is not loyalty itself that is unique to the sports industry but the potential degree and level of passion and loyalty that can be achieved, a level which arguably cannot be matched within any other industry. Given these characteristics particular to the sports industry it is quite striking to see that the industry has not adopted a clear leadership stance within the world of CRM. In some case the industry is even lagging behind and is currently facing many of the same difficulties in adopting CRM that other industries have dealt with in the past. The sports industry is simply the most "appropriate" of all industries in terms of creating, maintaining and developing strong customer relationships and it is thus also the industry which has the potential to reap the greatest benefits from CRM initiatives and focus.

Considering sports industry, only some aspects of the CRM armory can be applied because are more suitable respect than others, other can be considered as optional refinements. The first stage, the primary initial strategic platform for sports club CRM, is segmentation. Segmenting works well when there is considerable heterogeneity in the customer base, as in the case of sports. The gathering and organizing of the supporter transaction and characteristics data that CRM demands for its channel integration and direct marketing activities allows a variety of segmentation approaches. Supporters may be split by their differing value to the club, their differing loyalty, their differing psychological and physical needs from the club and their geodemographic characteristics. The societies should be able to identify the different type of fans they have, in this way they can identify their needs and balance these with the economic necessities of the club to organize a mixed transaction-relationship delivery according to the different segment of supporters. What is also important to develop is the relationship approach demanded by supporters, what they are really searching, what they want for being fan. They

may feel a strong sense of ownership, of wishing to actively input into the club or desiring recognition for their loyalty, or on-field success. This is the second stage for sports club CRM. The last step in developing this system is the evaluating it respect the clubs' primary objectives, but rarely it is put in practice beyond basic profit/loss measures.

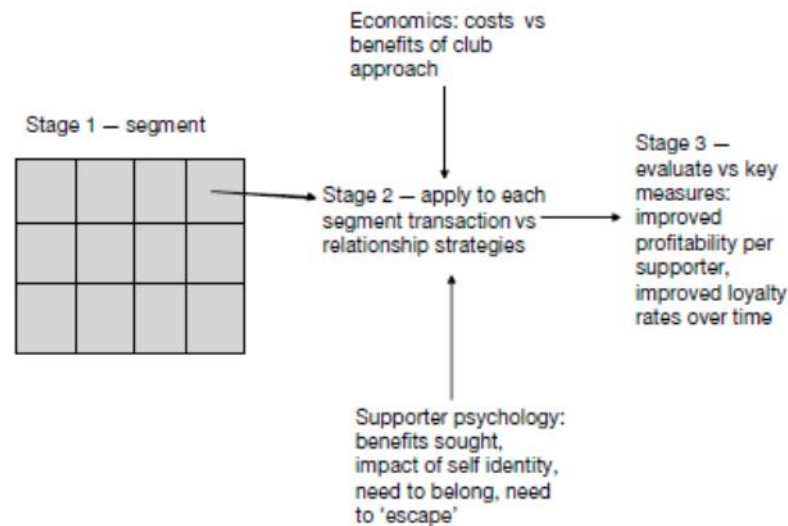


Figure 20: CRM developing steps

This demonstrate the importance of having a clear strategy in developing this system. Supporting this argument, Adamson, Jones and Trapp, showed a case study of an English Championship football club, Albion FC (fake name), that wanted to introduce a CRM system. This decision was made mainly to replace the IT systems with an enterprise-wide modular solution, but the project resulted to be technology-led and not customer-led, as should be. One of the problems that stemmed from a poor planning phase was the lack of consideration of either supporter or employee needs or interests. There were no plans to consider the different customer touch points to ensure a consistent service or how employees should be rewarded for new behaviors. There were no customer service measures in place and therefore employees could not determine the levels of service given. Furthermore, the management and the staff did not communicate well, leaving the staff confused and demotivated. Staff were not trained about CRM and there were no plans in order to align the organization to the new practices required for the change. They were not consulted, advised or involved in any project issues and policy decisions were made without their awareness. Fans were regularly frustrated at the lack of consistency between what was communicated by the club. There was a functional approach to working which restricted the information flows between the customer and back office functions and severely restricted the ability to develop an integrated approach. Departments did not communicate effectively with each other and generally considered other departments as insignificant in the fulfilment of their own functional roles. The launch of CRM systems caused several problems, also in very important aspects as ticketing. For instance, some fans were left without ticket, several of them were forced to queue for hours. This caused bad publicity and rather than helping to build relationships with fans, it produced the opposite effect where any new initiatives would be significantly set back. Overall, it appeared that the club did not really see the fans as customers. Employees saw fans as enemies that always complain about the clubs,

and they reacted bad towards them. This case study demonstrates all the argument cited above. The main problems encountered by the club were too little communications, customers seen only as a source of income and not as fan, no alignment between the top management and the other departments and little communication. All these elements are fundamental in developing a successful CRM, this is true in particular in a sector like sports, in which its unique characteristics require greater attention. Developing a successful CRM leads to improve customer relationships and increased efficiency of internal processes.

Considering the particularity of the sector, it is interesting make a comparison with the non-sports industry. Standard CRMs allow the companies to increase the visibility into the activities and opportunities for management. These functions include:

- Performance metrics
- Contact lists
- Account activities
- Client interactions

But beyond reporting, what is very important are the analytic capabilities, that allow to combine historical information with real-time data. In this way for the company is possible to create meaningful insight by tracking key information.

It is possible to do the same also in the sports industry, in which through the collection of the information from very different sources, it is possible for the clubs to improve their Fan Experience. There some examples of this, as Oklahoma City Thunder, that deploy a CRM solution in which integrate Twitter and Facebook information. Furthermore, the club develop an analytics system that deliver monthly trending reports and snapshot views of the current level of customer service to the Thunder executive team. In this way the society manages to create accountability for customer care. The CRM serves as the centralized repository for all customer information, and it is possible to measure customer satisfaction. The 99% of the guests have rated their overall experience as “good” or “excellent”. Another example of successful CRM is the Colorado Rockies, a Major League Baseball club. The company tries to achieve rich engagement with the fans at the game through their mobile phones, enrich their CRM database with fans mobile number. Rockies built a mobile application for the fan engagement in the game and the customer database is enriched with their mobile numbers. This allowed to reach fans with team news, special offers, sponsorships, and also to capture new fans not in the CRM system.

After the phase of Data Collection and Integration, with the use of different instruments described in that section, it is possible for the societies collects a large amount of data. These data come from different sources, are of different types and have different formats, but it is possible to convert such data into information and knowledge for the organizations, that can know better their fans and use them to improve their decisions and actions. To do this the data collected must be analyzed, filtered and transformed, and this happens in the Analysis phase. It is possible thanks to Business Intelligence that it is defined as a set of mathematical models and

analysis methodologies that exploit the available data to generate information and knowledge useful for complex decision-making processes.

4.2 Analysis

The aim of the second phase is to analyze fans data acquired in the first phase for creating relevant insights as basis for the launch of the communication campaigns to fan of the sports organization. Data Analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. Data from various sources is gathered, reviewed, and then analyzed to form some sort of finding or conclusion. (<http://www.businessdictionary.com>).

In this phase fans' data are filtered, crossed and analyzed in order to segment the fan audience in target clusters and in this way relevant insights for the execution phase are generated.

There are a variety of specific data analysis method, the most of which belongs to Business Intelligence techniques. Here below a simple definition of Business Intelligence

“Business intelligence may be defined as a set of mathematical models and analysis methodologies that systematically exploit the available data to retrieve information and knowledge useful in supporting complex decision-making processes.” (Carlo Vercellis, 2009)

Data Analytics is totally changing the Fan Experience. The fans can exploit data analytics and through it make their experience more exciting. The National Hockey League (NHL) dates back to 1917. The NHL has taken every statistic from its nearly 100-year history and made them easily digestible for even the most casual of fans. The user-friendly interface of the new NHL statistics site allows fans to easily find the information they're looking for. Whether it's comparing their favorite players from the past and present or simply looking for last night's stats on a home team, every bit of information needed is in an easy-to-read format. This means that hockey fans can compare years of data and statistics at the drop of a hat. In essence, the fan experience is like never before. Everyone benefits from sports data analytics, with the insertion of statistics section in the website NHL.com , engagement and time on the NHL website has increased by 45%. Just like in any other organization, more engaged fans mean higher profits for the NHL. Thanks to new technology that improves the fan experience, the sport of hockey seems poised to only increase in popularity. More important, the real winners are the fans.

In the next sections we are going to describe some of these methodologies in order to treat data and obtain an insight of the behaviors of the fans: from the most basic ones (Data Mining, Classification Trees and Clustering) to the most advanced ones (Real-Time Analytics, Machine Learning, Artificial Intelligence). Finally, in this phase of Analysis, we are going to present a paragraph dedicated to Measuring and Tracking, since starting from the measurement of their actions, sports organizations will go to execute new analysis crossing these data with the already existing one.

4.2.1 Data mining

Data mining activities constitute an iterative process aimed at the analysis of large databases, with the purpose of extracting information and knowledge that may prove accurate and

potentially useful for knowledge workers engaged in decision making and problem solving. With data mining is intended the overall process made by data gathering and analysis, development of inductive learning models and decision-making activities and related actions based on the knowledge acquired through the process. The process is based on inductive learning methods cause the main purpose is to draw conclusions starting from a set of past observations collected in one or more databases and then generalize the conclusion obtained to the entire population. The model achieved in this way may have different form, like for example, clusters and tree.

Data mining activities can be divided into two main streams, according to the objective of the analysis: interpretation and prediction.

- Interpretation: the purpose of the stream is to define regular patterns in the data in order to express them using rules and criteria that are easily comprehensible for the experts in the application domain.
- Prediction: the aim of prediction is to anticipate the value that a variable will assume in the future or to estimate the probability that an event will happen in the future.

As already said above, data mining is a process composed by a series of subsequent steps, as it is represented in the figure below.

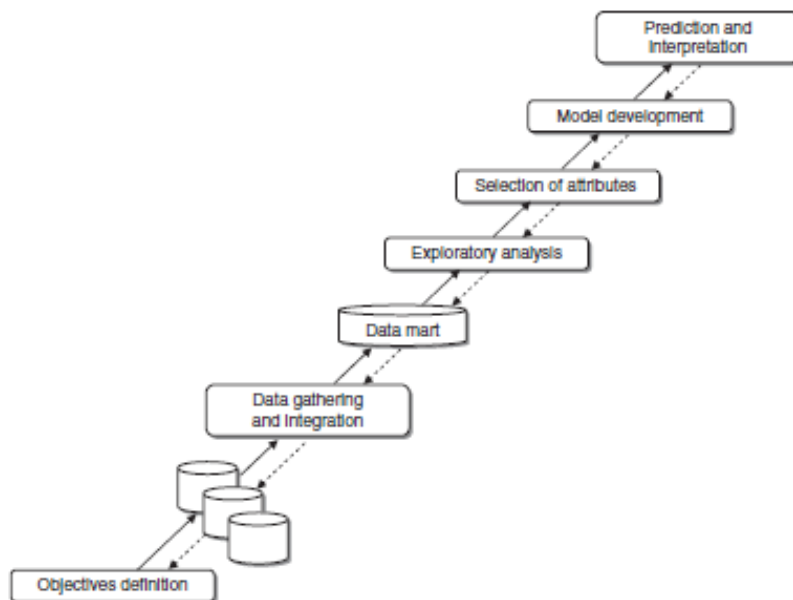


Figure 21: Data Mining Process

The first step is the objectives definition. This phase is very important, because the analysis with data mining methods are carried out in specific domain and should provide the appropriate knowledge to decision makers. The experts should be able to formulate defined and specific investigation objectives. If the objectives are not adequately defined the risk is to undermine future effort in data mining activities.

Data gathering and integration is the second phase. Once defined the objective, it is possible to start with the gathering of data. But data may come from different sources and they may probably need an integration, may be to enrich them with new descriptive dimension that are not present in the organization information system.

Exploratory analysis is the third step of the process. The objective is to conduct a preliminary analysis of the data, in order to understand deeper the available information and carrying out data cleansing, removing the existing inconsistencies and identifying the outliers.

The next phase is the attribute selection, in which it is established the importance of the different attributes respect the goals of the analysis. The attribution that are considered not useful are removed, to clean the irrelevant information from the dataset. Furthermore, new attributes coming from the original variables through appropriate transformation are included in the set of data. This phase with the exploratory analysis are very critical and may influence the success of the successive stages.

Model development and validation comes after assembled the dataset with the right attributes. During this phase there is the recognition of patterns and the development of predictive models. The dataset is divided in two subsets: the training set, used to identify a specific learning model, and the test set, used to assess the accuracy of the models generated during the training.

The last phase is the prediction and interpretation, in which the model chosen among those generated in the development phase should be implemented and used to reach the objectives defined in the first phase.

Data mining allows to marketers to figure out how to target and deliver the best experience possible to their customers and in sports industry is the same. By gathering data on how sports fans are interacting with their favorite teams, talking about games and analyzing coverage, marketers are able to ensure that they're correctly tailoring new products and services to them. The power of connectivity in sports is fundamental, Fans turn to their phones, TVs, computers and any internet-connected device when they want to partake in sports-centric dialogue. The fan experience happens online, all the time. According to writer Eric Adams and the National Football League, more than 10 terabytes of data was transferred over the Wi-Fi network at this year's Super Bowl. The average photo is 1 MB, which means that 10 million photos could have theoretically been sent over the Wi-Fi. Even though the most exciting game of the year was going on around them, fans still felt inclined to be on their phones, generating data. In order to exploit data mining power it is necessary to pay attention to three main points:

- Monitor social media: by looking at who's tweeting, commenting, liking, Instagramming and sending Snapchats, marketers can determine who is engaged with sports
- Look at viewing habits: marketers can collect data on fans that watch sports content from their internet-connected TVs
- Track website clicks: Every time someone logs onto a sports-themed website, their clicks should be tracked. Marketers need to look at which pages are the most popular,

which content is being opened and how often visitors are going to the e-store to purchase sports merchandise

It results evident that exploiting the power of data mining techniques allows the clubs to deliver the best possible Fan experience to their supporters.

4.2.2 Classification trees

One of the most spread learning methods used in data mining applications are the classification trees. Their diffusion is due to their simplicity, the easiness of using them, their speed and robustness but, in particular, the ease of interpretation of the rules they create.

The development of a classification trees is set by a recursive procedure, known as top-down induction of decision trees. The mechanism that regulate the procedure can be accomplished using different approaches. Thus, it is possible to define the classification trees as a broad class of methods. This procedure starts from a root node where all the observations are, and from this there is the subdivision in different nodes of the trees, following a splitting rule. The observations of the dataset initially contained in the root node of the tree are divided into different subsets that are tentatively placed in two or more descendant nodes (branching). To all the nodes created in this way, is applied a check to verify if it can be furtherly divided or not. To do this it is necessary to verify if the stopping conditions are respect. If at least one of these conditions is verified, the development of the node is stopped and it becomes a leaf of the tree. Otherwise, the actual subdivision of the observations contained in the node is carried out. The procedure end when the node cannot be furtherly subdivided. At this point to each node is associate a label with the value of the class to which the majority if the observations in the node belong, according to the so-called majority voting. At the end of the procedure, the set of splitting rules that are used along the process constitutes a classification rule.

4.2.3 Clustering

Clustering means partitioning customers into market segments. Clustering models are mostly applied in marketing and the aim is to subdivide the set of data recorded into homogeneous groups of observations, called clusters, so that observations belonging to one group are similar between each other but different from the observations present in all the other groups.

Clustering have long been used in different and various disciplines and can be useful for different purposes. In some applications, the clusters created could furnish a meaningful interpretation of the phenomenon of interest. For example, if the customers are clustered according to their purchase behaviors may show that a group corresponds to a market niche to which it should be better to address some specific marketing actions. Otherwise, partition in clusters may be the preliminary phase of a data mining project that will be followed by the application of other methodologies within each cluster. Finally, subdivision into clusters may be useful, in the data analysis, to highlight outliers and to identify an observation that might represent on its own an entire cluster, in order to reduce the size of the dataset.

There are different clustering methods that can be classified in few main types that are based on the logic used for deriving the clusters. These methods are: partition methods, hierarchical methods, density based methods and grid methods.

- Partition methods: subdivided the set of data into a predetermined number K of non-empty subsets.
- Hierarchical methods: accomplish multiple subdivisions into subsets, based on tree structure and are characterized by different types of homogeneity in each cluster and inhomogeneity among the different clusters.
- Density-based methods: derive clusters from the number of observations that fall in a neighborhood of each observation, that has a specified diameter that contain a number of observations that should not be lower than a minimum threshold value.
- Grid methods: it is based on grid structure composed by cells that derive from the discretization of the space of the observations. The clusters generated are efficient in terms of computing times but a lower accuracy. It is useful when there is a huge number of observations.

To have clusters that are significant and meaningful, these different methods should respect some requirements:

- Flexibility: clustering methods should be based on flexible algorithm that should be able to analyze datasets containing categorical attributes.
- Robustness: this property measures the stability of the clusters generated respect to small changes in the values of the attributes of the different observations. The robustness ensures that the clustering method used is not affected by the possible noises existing in the set of data.
- Efficiency: it could happen that there is a very large number of observations and clustering algorithms must be able to create groups efficient in terms of computing times, that must be reasonable. It is possible that, in some cases, as massive datasets, are extracted samples of reduced size to generate clusters more efficiently. Inevitably, the consequence is a lower robustness for the clusters. Clustering algorithms must be efficient also respect to the number of attributes existing in the dataset. Using clustering techniques in sports industry it is possible to ensure incredible experiences to the fans and also gather new fans insights that allows to be more efficient in the analysis phase.

Partitioning the fan base is extremely important, and the same it is valid also in the sports industry. IBM has developed a solution in this sense: IBM Behavior Based Fan Insight. This is a customer intelligence solution that will give business professionals in marketing, sales, operations, and finance fast access to actionable insights. It aims to enable companies to engage with data to answer the business questions, uncover patterns and pursue breakthrough ideas. The Ottawa Senators (a Canadian Hockey team), decided to exploit the potential of this solution to gain a deeper understanding of their fans in order to build a more engaging experience. The Senators plans to use some of the key areas of the IBM's analytic technologies and in particular, fan insights and clustering. These strategies help identify fan preferences, personalize interactions, and offer incentives for the fans. All the data captured goes into a cloud-based warehouse.

Using clustering techniques in sports industry it is possible to ensure incredible experiences to the fans and also gather new fans insights that allows to be more efficient in the analysis phase.

In the end, the societies obtain the results to have their fans clustered in subsets with specific characteristics and they can address them tailored strategies and actions.

In conclusion, Business Intelligence techniques are a very useful instrument to get important and useful knowledge about the fans, to create the so-called customer insights. This definition comprehends the identification and comprehension of consumer attitude, behavior trends and psychographic characteristics. The purpose is to understand the real motives behind the decisions taken by the fan, in order to develop tailored and personalized offers to the fans.

4.2.4 Advanced Technologies

Real-Time Analytics

Real-time analytics is a special kind of Big Data analytics in which data elements are required to be processed and analyzed as they arrive in real time. It is important in situations where real-time processing and analysis can deliver important insights and yield business value. Examples of real-time analytics would be any continually updated or refreshed results about user events by customer, such as page views, website navigation, shopping cart use, or any other kind of online or digital activity. These kinds of data can be extremely important to businesses that want to conduct dynamic analysis and reporting in order to quickly respond to trends in user behavior. It is evident that the application of this technology in the sports industry will take a great step forward and it will be very useful for the different societies. An emblematic example is represented by Real Time IBM Sport Analytics. This is a solution developed by IBM that is applied to football, but it could be extendible also to other sports. This system gives the possibility to have real-time, advanced analytics and predictive insights. It is useful for different type of users, broadcasters and analysts, commentators and media, but in particular for fans, that could have different and new kind of interactions with their teams:

- App available which allows fan to carry out their own ad hoc analysis
- Gain insights that will add to the viewing experience
- Steady introduction to the idea of advanced analytics alongside consumption of sport broadcasts

This IBM solution provides new insight into the game, through the use of sophisticated analytics that make measures in real time during the match, and that are always possible to view for the end user. It delivers a compelling viewer experience, with interactive interface that permits the fans to perform their own analysis. In particular, it is possible to do so, before, during and after a match and share this analysis with other users. In this way the fan interacts with the team and becomes an active participant in the match.

Machine Learning

Machine Learning is a type of artificial intelligence that afford to software to predict, in a more effective way, outcomes without being explicitly programmed. The basis of this method are the

algorithms, because to solve a computer problem we need an algorithm. With advances in computer technology, we currently have the ability to store and process large amounts of data, as well as to access it from physically distant locations over a computer network. Most data acquisition devices are digital now and record reliable data. Think, for example, of a supermarket chain that has hundreds of stores all over a country selling thousands of goods to millions of customers. The point of sale terminals records the details of each transaction, collecting gigabytes of data every day. What the supermarket chain wants is to be able to predict who are the likely customers for a product. The algorithm for this is not evident; it changes in time and by geographic location. The stored data becomes useful only when it is analyzed and turned into information that we can make use of, for example, to make predictions. We do believe that there is a process that explains the data we observe. We may not be able to identify the process completely, we can still detect certain patterns or regularities. This is the niche of machine learning. Such patterns may help us understand the process, or we can use those patterns to make predictions: Assuming that the future, at least the near future, will not be much different from the past when the sample data was collected, the future predictions can also be expected to be right. But machine learning, as already said, is part of artificial intelligence, and to be intelligent, a system if it is in a dynamic environment should have the ability to learn.

These kinds of technologies could be very useful also in the sports field. Since machine learning allows to the computers to learn and recognize patterns and create insights, it could be used to improve the Fan Experience. In fact, it is a very useful tool in the marketing campaign for sports societies, that could use to implement only ad hoc marketing campaigned with targeted offers learning from the consumer habits of the fans. And, in the same way, it could be useful also for clustering techniques of fans. Machine learning is also used on the pitch. In fact, through some systems, as Ghosting implemented by stats, teams can improve their performances. These systems learn from past actions (through the use of cameras, sensors, etc.) and predict the possible movements and development of future matches. Hypothesizing to furnish some of this information to fans, it represents a further way to enhance their experience and their involvement in the team.

4.2.5 Measurement and Tracking

In order to execute marketing campaigns successfully, a club needs to measure and track their success. So, it's necessary to be able in doing that. Clubs should align each phase with KPIs for measuring its success.

In data acquisition, clubs could measure the growth and overall size of their databases, looking also at where the data is coming from (internal or external source). Organizations should also look at the partner campaign they held, in order to quantify the number new data acquisition through this channel and so verify its successfulness.

Regarding engagement, the club could aim to grow its newsletter subscriptions and make sure fans are signing up. It would be better if people would sign up for a variety of newsletters, not just one.

When it comes to monetization, the goal is to measure overall gross sales, the frequency at which customers are purchasing products, and conversion rates in order to evaluate the successfulness of the marketing campaigns.

In terms of loyalty, a club should measure club affinity. This information gives the clubs the ability to communicate with those fans and build engagements. “An increase in engagements leads to an increase in monetization and loyalties, and ultimately, an increase in lifetime value”, said Shin.

4.3 Execution

After collecting, compiling and pulling together all fan data to make them more meaningful, the organization can begin engaging with its fans. According to SAS Fan Funnel model, three aspects are really important in customer engagement: newsletters, personalization and contact strategy.

Clubs send out several newsletters to their fans via email. Email is considered the number one preferred method of communication by fans in MLS. And so, in America and Canada it is the main method for how teams engage with them.

Newsletters can be personalized as much as possible through profile targeting, fan recognition and behavior targeting. “*Everything is personalized, and all our newsletters are dynamic, based on fan profiles,*” said Shin regarding MLS personalization. “*We have seen measurable success through those efforts.*” The company backs up the success of its personalization efforts with data. Personalized emails are based on fan’s club affinity and geolocation. Depending on his club affinity, the fan sees different images along the top of the email highlighting his teams. In addition, the personalized email contains tune-in information for national and local broadcasting. Referring always to the implementation in MLS, based on email response data, the personalized email saw a 39 percent increase in unique click rate versus a non-personalized version of it.

An organization should also have a clear contact strategy. Two factors trigger the type of email a fan receives:

- How a fan’s information was acquired (for example, whether it was via a sweepstakes, Web registration or another method);
- How a fan responds to an email.

In the following paragraphs three important tools for the achievement of this phase will be presented and explained in detail: Marketing Automation, which is particularly focused on the aspect of Personalization, Dynamic Content Marketing, mainly devoted to newsletter and mail management and Digital Asset Management, which harmonize and handle the content in a clever way. In the last paragraph of this section, we are going to show the digital technologies made available to fans by sports organization such as team mobile app, platform, stadium wi-fi etc. We will call them “Fan Technologies”. These are tools through which the clubs try to engage the fan.

4.3.1 Marketing Automation

The term “Marketing automation” was first introduced by John D.C. Little in his presentation at the 5th Invitational Choice Symposium UC Berkeley in 2001 and refers to the automated marketing decision support on the Internet (Little 2001; Bucklin et al. 1998, 2002).

According to Bucklin, an automated marketing decision support promises enhanced productivity, better decision- making, higher returns on marketing investments, and increased customer satisfaction and loyalty through customization of marketing activities.

But, why is Marketing automation is necessary? The motivation of its introduction in 2001 was just the same as today: the lack of appropriate models while facing huge amounts of data automatically collected by online companies. Obviously today, the reason is even more evident, due to the presence of an “infinite” number of data available for the companies.

Little in 2001 proposed five levels of system operation:

- (1) Data inputs
- (2) Real time decision rules
- (3) Updates of the decision rules
- (4) Feedback to site management
- (5) Strategy choice.

This framework suggests deploying real-time decision rules which are calibrated using historical data and updated by conducting adaptive experimentation (Little 2001; Bucklin et al. 2002). The developed systems are expected to give feedback to site management and to provide directions to adapt retailers’ strategies.

Marketing automation is often associated with Customer Relationship Management Systems (CRM systems), already explained in paragraph 4.1.3. The core function of marketing automation is an automatic “customization” or “personalization” of marketing mix activities. It was born in the business-to-business (B2B) area, but then it has been developed also for B2C area. Applying marketing automation transfers key qualities of the B2B model to the B2C area by addressing customers with personalized content and customized offers. As a result, customers are assumed to show increased involvement and pay more attention to the brand’s communication due to the enhanced relevance of the provided information (Dijkstra 2008). Consequently, companies using marketing automation may enhance their conversion rate, cross- and up-selling, and retention rate. In the final part of the paragraph, we will show the main benefits generated by Marketing Automation in the sports industry.

Marketing automation is based on data, that need to be collected and analyzed. The data sources, as already explained, are multiple and Marketing automation intends to exploit all of them in order to reach also unknown users and design the communication in real time for all kind of touch points (e.g., website, smartphone app, email, etc.).

But how does marketing automation work? Little's (2001) system operation corresponds to the classical marketing management process: evaluate the status quo situation (data analysis), derive objectives that can be fulfilled, define a set of (automated) action to be undertaken, implement them, measure the outcome and if necessary adapt the action plan. As already said, data are essential for marketing automation and so the availability of them represents a critical factor. Data are an important element beyond the analysis, since all automated marketing actions are a direct response to existing, incoming or changing customer/user information. Marketing automation actions are linked to the information by simple rules: if a customer shows a certain behavior, then a predefined marketing action is initiated (Level 2). The main advantage of this tool lies in the automated execution of these actions for thousands of events once a rule is determined. For this purpose, managers should exploit historical customer data, which are then used, for example, to create customer segments based on interests (observable through purchase behavior or click-paths on the website), response to direct communication (e.g., newsletter) or demographics (e.g., age). Managers draw insights from these segments (e.g., segment X is interested in category Y) and schedule rules for future marketing actions (e.g., send customized offers every month) dependent on the pursued objective (e.g., increase sales). However, even the learning process itself can be automated to some extent (Level 3). Marketing automation software is able to apply the available options randomly and successively can favor the objective maximizing alternative. This optimization process and the performance of the above-mentioned rules can be monitored and adjusted by the manager at any time, since they receive direct feedbacks from the system (Level 4).

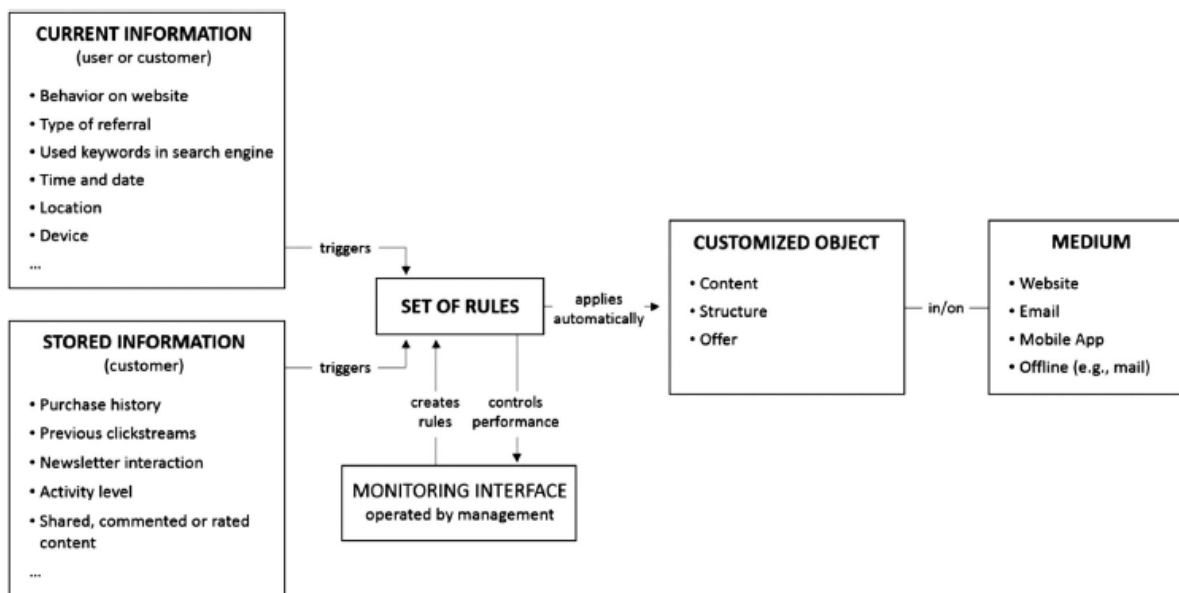


Figure 22: Marketing Automation Process

Marketing automation can be used to customize and personalized content, structures or the attributes of an offer. In addition, one can automatically customize an email (as explained in the paragraph above) and other communication channels (e.g., smartphone app) or a landing page and webpages beyond that. Even traditional channels could be improved by marketing automation (for example backside of a match ticket).

One can adapt content as a function of technical facts like time (elapsed time or time of day), date, IP address (for location based marketing), device or browser.

What are the requirements of a Marketing Automation system?

First, a well-defined and well-working data storage, as the one described in previous paragraphs with data warehouse, data lake and a CRM system, is necessary to systematically collect and analyze data on customer and user behavior. Second, a software is essential in order to create the rules and execute the marketing actions. Many software providers offer a combination of data analysis and execution tools whereby the range of functionalities varies a lot. Third, although most software has an intuitive user interface and does not require a technological background, expertise in both professions (computer science and marketing) are necessary within the organization to make the system working in an effective way.

The applied business model (Veit et al. 2014) affects the relationship between a customer and a firm. These marketing actions give a pulse the number of online customers and sales, follow-up purchases, products & brands, communication channels and competitors. For this reason, online retailers are in general more interested in marketing automation than companies without an online shop, but nowadays substantially all the sports club of a high level have one. The success of every activity of customer relationship management or a customized user journey is conditional to the efficiency and creativity of applied marketing automation.

Marketing automation is based on the integration of different kinds of knowledge and approaches: consumer psychology, marketing, and information systems. Systematical integration of IT and marketing would then be the central activity fields for companies who intend to develop a marketing automation system.

Modern IT allows inferring consumer preferences and behavior from clickstream and historical purchase behavior data which enables companies to personalize the customer's journey (fan's journey) and experience on the Internet. The development of marketing decision support should integrate also external data sources, utilizing user data from online social networking platforms to generate product recommendations in online stores or to reach new people who are similar to the customer base (Gottschlich et al. 2013). So, what an organization has in hand is an increased amount of user data from multiple, heterogeneous sources, commonly called Big Data. In order to manage them, obviously the adaptation of the technological infrastructure and the design of effective and efficient applications to store, process and apply data and models are required.

The development of software which autonomously recognizes or at least visualizes complex patterns and relationships in data is needed. Because of the increased usage of mobile devices, the decision rules might become dynamic and adaptive to the context. In this scenario, a self-learning system could be the solution for reaching a higher level of adaptivity.

All what was said above can be applied also for a sports organization in the context of fan management. In particular, in the following part, it's interesting to see which are the benefits generated by marketing automation for the sports club and for the fans themselves. Benefits can

be categorized in 4 groups: benefits relative to fan engagement increase, to sponsors' relationship improvement, to media's relationship improvement and community creation.

Marketing automation can help boost fan engagement by allowing a club to:

- Create an omnichannel fan experience that connects digital, social and media environment with fans at the venue and at home (e.g. by creating an immersive, second-screen experience for fans watching the game both at the stadium and at home);
- Personalize engagements and drive conversions by tracking fan behavior, sentiment and preferences across multiple channels (e.g. by identifying the best times to send offers to specific fan segments, such as those who just attended a winning game);
- Measure the success of fan awareness campaigns and track 'word of mouth' online;
- Develop more meaningful, two-way relationships with fans by communicating with them in real-time through app and social media.

In general, the more you can engage with fans and deepen their connection to the team, the more they are willing to purchase tickets and merchandise and even interested in co-creation of content which can help in the activity of attracting other fans and third-party sponsors.

Sponsors are a particular kind of customers for sports organizations, since their loyalty is not only influenced by traditional factors within the customer experience, but also by the team's fan base. For example, the more channels on which fans engage with the team, the more opportunities a club has to expand sponsorship activities. Furthermore, deeply knowing its fan base, a sports organization can present more targeted, personalized and often successful campaign offers to sponsors. Marketing automation can help achieve these goals and improve relationships with sponsors by:

- Enabling greater engagement in the relationship through integration with club's CRM program;
- Providing more transparency and accuracy around club's fan base, including both measurement of joint marketing campaigns and details on fan segments to provide more specific direction for targeted sponsorship activities

Media could not consider a customer in the real sense of the word, but sports marketers need to nurture media relationships just like customer relationships in order to ensure the best possible coverage for the team and its sponsors. In this case, marketing automation can help clubs develop a closer relationship with the media by:

- Providing more relevant, personalized information to media contacts based on their coverage angle;
- Identifying the most valuable media contacts based on factors like amount of coverage and downstream results of a story (e.g. did a cover piece on a player result in more ticket or merchandise sales?);

- Understanding what type of information and which channels of diffusion and engagement work best for each media.

Sports teams typically become closely intertwined with a city's culture and identity. Although a team's presence within a city is often enough on its own to help build a fanbase, secure sponsors and obtain local media coverage, the right community outreach efforts can supercharge the results. Last but not least, marketing automation can help improve community outreach by making it easy to:

- Better understand fan profiles to promote events and support causes that interest most to the fans and the community at large (which in turn deepens fan attachment to the team);
- Close the loop between how team-hosted events and player appearances affect fan engagement and purchases, sponsorships and media coverage.

User data gives to clubs the power to engage with fans one-on-one, allowing their marketing team to create a unique, personable communication experience across all touch points. So as final result, a loyal fan feels valued by the organization and ready to buy tickets, buy shirts, share opinions and be active creating content for the club to be a brand ambassador for seasons to come.

4.3.2 Dynamic Content Management

First of all, let's define what is Dynamic content and the reasons why it is so important for a company nowadays.

With the rise of low-cost computing and faster Internet speeds, developers created server-side platforms and architectures that could generate user-specific content on the fly. This form of content is known as dynamic content. Some of the world's largest websites are mainly driven by dynamic content. For instance, search engines, social media networks, wikis, even some blogs, rely on dynamic content to deliver pages to users. Without dynamic content, these websites would need to pre-generate almost all of their unique content. If Wikipedia stored all of its pages as static files, it should manage almost 40 million individual HTML files. So, through the use of Dynamic Content, companies can tailor the web experience to each individual customer. In simple terms, dynamic content is HTML content on your website, forms, landing pages, or emails that changes based on the viewer. So, there is a variation of content will display that's relevant to that viewer.

Dynamic content is mostly powered by applications and scripts that run on the server hosting the website. When a user makes a request, these applications work in tandem with the web server to analyze the request, generate content based on the request, and deliver the content to the user as if it were static content. After a web server receives a request, it passes it on to a scripting language such as ASP.NET, Perl, or PHP, which then build an HTML file that the web server can deliver back to the user. Once the resulting HTML file has been delivered to the web server, the server then forwards the content to the user.

Dynamic content can be used for several activities such as:

- *Personalize emails:* dynamic content can be used in a monthly newsletter, webinar blast, or other marketing-related email. For example, a newsletter can display upcoming events based on the recipient's location. Since 56% of people unsubscribe from emails due to not relevant content, personalized content could be a winning weapon in fighting subscriber attrition.
- *Tailor the web experience:* dynamic content is a powerful tool for personalizing the web experience. The 74% of online consumers get frustrated with websites when content (e.g. offers, ads, promotions) appears that has nothing to do with their interests (*Janrain & Harris Interactive*) and so dynamic content is the cure for this frustration. It boosts personalization, allowing marketers to deliver individual subscribers different content, all from a single email. A company can use web visitors' demographic information and activity data to display website content that will speak to them. Using dynamic content, a retailer can send an email that shows each buyer a different new product based on purchase history.
- *Enhance landing pages:* dynamic content is useful on landing pages, and can be used above or below the form on your page, in the body content, for images and more.
- *Increase form effectiveness:* for example, using a marketing automation tool, use progressive profiling to display new form fields each time a prospect submits a form, instead of having them enter repeat information.

So, as a result, we can say that dynamic content is:

- *Personalizable:* since every single response can be created based on the user's request or previous visits to the site.
- *Extensible:* the scripting languages that power dynamic content can tap into a variety of external resources including the local file system, databases, or other servers.
- *Interactive:* dynamic websites are a two-way street: they provide content to users, and they allow users to submit information back to the server.
- *Seamless:* by combining server-side scripts with scripts that run in the browser, websites can load dynamic content over an already-loaded web page without the user being aware of it.

As already said, the current generation of web technology is built around dynamic content. With dynamic content, developers and content creators can easily create user-driven websites, web applications, and web platforms, exactly what people expect. Implementing a dynamic-content strategy is easy and allows marketing departments to make the most of their resources and all that customer data they're collecting, using them in every way to customize content: there is no limit to how a marketer can use customer's data to personalize content. The more personalized the content, the more effective the message.

Looking at the results of developing dynamic content, AVARI reports that it can improve click-to-open rates by as much as 73 percent. According to Experian, personalized promotional

emails also lift transaction rates and revenue six times higher than non-personalized emails. For businesses marketing to web users, this could mean a 20% increase in sales.

But how to manage in a simple and precise way dynamic content? The solution for handling it is a Dynamic Content Management System. Dynamic Content Management System (DCMS), is an evolutionary application of static Content Management System, which also offers the possibility of generating and reusing a whole document flow, thus enabling a single application program to create document-type, manual, lists and everything that is composed of pictures, tables and texts. The founder of this evolution is an Italian project called Structured Knowledge Software (SKS).

Dynamic content management radically simplifies the Web publishing process. In fact, it separates content from template: page templates are built once, stored in a database, and used many times. It automatically and instantly combines templates with the written content when the user hits the publish button. Any visitor to the site will instantly see the newly published content. There isn't any need to wait for the weekly site builds. Moreover, it allows to edit the site using a browser. So, it's possible to add new content or change page templates using a simple browser interface.

Today's technologically savvy customers also want content that includes visual enhancements such as graphics and videos to assist them in the learning process, as well as a variety of multimedia assets and interactive technologies for a more personalized user experience. So, a Digital Content Management System should have the following features:

- *Multilingual content management tool*: a dynamic CMS can be a vital publishing tool for meeting multilingual content management needs. It ensures consistency of content replication and translation, no matter how many different languages your business operation entails. So, as a benefit, it provides consistency of project allowing to save millions of dollars on translation costs;
- *Multichannel Publishing CMS*: gives a company the ability to publish large amounts of content across multiple publication channels in order to maximize efficiency while preserving the integrity of the content;
- *Energized content creation*: since DCMS is component-based, it's possible to mix and match content components to create new publications on the fly. So, in this way, it provides flexible components that facilitate the process of content creation;
- *High-speed content distribution*: you can search for relevant topics, and then build a new document to create new information sources for your customers in a few minutes. So, companies can promptly find the needed content to create content customers want;
- *User-friendly interface*: users of a DCMS don't need to possess a high level of technical savvy or computer programming skills. Most users require less than a week of training to become proficient in the system's operation. So, it brings to lower training costs and higher productivity.

- *Customizable cross-platform solution:* DCMS is highly customizable, allowing users to tailor numerous features to meet their unique dynamic content management needs. Content can be conditionalized for different customers or different media channels. In this way, a company can deliver multiple solutions to fulfill your customers' unique needs across a variety of platforms.;
- *Streamlined publishing process:* DCMS decreases the editorial timelines on average, meaning finished products can reach the marketplace faster. So, this results in increasing the productivity results in a faster turnaround time;
- *Long-term solution:* purchasing a dynamic content management system represents an investment in the future success of an enterprise, since it guarantees a significant return on investment.

Now let's see some examples of how dynamic content can help sports teams in order to harness the power of contextual marketing, in particular in email, to boost fan engagement and sales.

- *Personalize images:* fans feel like they're actually part of the team before, during, and after a game. Email marketers can simultaneously provide contextual content and leverage fan psychology with personalized images, like showing the fan's last name on the back of a team jersey or other merchandise.
- *Create anticipation:* there's nothing like the excitement leading up to a big game. With dynamic content, marketers can create further anticipation for game day with a countdown clock, reminding fans during the workweek exactly when their hometown team takes to the field. Other useful content are live weather forecasts, which can help fans look forward to their tailgating plans.
- *Make ticket purchasing easy:* marketers with sports teams can use dynamic content to make finding and buying tickets right from an email a seamless experience. Using Application Programming Interface integrations, marketers can pull live seating charts and availability right into an email, allowing fans to browse and buy without having to start a new web search. Using geo-targeting, marketers can also detect a fan's location and if they're close to where the game is, show them ticketing options through a ticketing API. Another idea is to show nearby locations where fans can watch the game on TV.
- *Recommend products right from club's site:* with live web cropping, marketers can pull merchandise from their e-commerce site directly into an email and personalize on the basis of location and past purchases.
- *Let fans relive glorious moments:* fans really love instant replays and highlights. Clips of monster dunks, amazing one-handed receptions, and game-winning grand slams enable fans to savor epic moments over and over. Integrating video into email is a proven way to boost engagement, and email marketers can keep fans enthusiastic by including videos of key plays from previous games.

- *Gamify the game*: one of the easiest ways to keep fans engaged is to give them something to do and let them express their opinion, even if just for fun. Email marketers can provide live voting or polling into an email, for example, allowing fans to vote on a game's MVP.
- *Stay social*: integrating social content into email is proven to boost engagement. Inserting for instance live Twitter feeds in email, fans can keep up with the latest buzz all in one place. Moreover, live Instagram feeds in email can show user-generated content from the game, which shares the experience with fans around the world.

Innovations like streaming media, video-friendly social networks, have created a huge market for content in alternative formats in sports industry. So, sports success content brands are exploiting these ways to get fans access to the content experiences they desire most. Creating immersive content can also bring brand benefits that go beyond the views and social “likes” the club assets earn: it can incentivize fans to subscribe to the brand and provide valuable personal data in exchange for the entertainment value the club offers. Enabling audiences to personalize the content experience is another way sports organizations can motivate fans to provide the brand with personal information, which club can then merge with other insights to perfect content for deeper engagement.

4.3.3 Digital Asset management

Digital content represents the true heritage of every business. Digital Asset Management (DAM) is a centralized archive that companies can leverage to archive and manage their content, that is made of images, documents, audio, video and any kind of files. New generation DAMs have the ability to share the digital resources they host on any channel without losing control. What does it mean to not lose control? Essentially one thing: avoid duplication, that is, make sure that the same used content is utilized for the different channels guarded by the company. With a new generation Digital Asset Management, you can organize and categorize the entire digital content library.

In addition to providing operational efficiencies, this aspect allows to collect more consistent information about the use of these content by users (which can be of any kind: B2C end-customers or a B2B dealer). In recent years, the volume of digital content has grown exponentially and, according to some research, over 30% of the content a person has to handle on his work day is made up of multimedia assets. For this reason, a system capable of efficiently managing digital assets can lead to a better use of time in the enterprise and consequently to an overall increase of productivity. In detail, DAM allows to:

- Reduce time searching for assets: quickly and easily find the right assets, in the right format;
- Guarantee the access to collection of assets that are pre-packaged for campaigns, sales enablement etc. in a consistent and complete way;
- Benefit of others' experiences (what works, what doesn't) automatically through rating and comments;

- Collaborate across internal and external teams;
- Allocate better the resources (both time and labor);
- Support marketing, sales, channel management;
- Support manufacturing, production, distribution and benefit on other departments.

According to an IDC research mad by Nuxeo management, DAM let the organization to improve team productivity of 34%.

Furthermore, the ability to track all the changes made to the content, having also visibility on the author of these changes, enables more streamlined and efficient workflows.

Optimizing content usage reduces production costs and, at the same time, providing a single hub of reference allows an organization to protect its digital heritage. In particular, asset creation costs are reduced of 28%, according to IDC research, since DAM allows to:

- Optimize creative spend by eliminating rework, duplicative effort that let the organization to reduce both internal staff costs and external agency spend;
- Reduce the cost of provisioning assets to distribution partners via self-service.

Not only the application of a DAM system reduces costs, but also risks since it manages rights and ensure license compliance, it controls the use of licensed content and ensure brand consistency and compliance worldwide. The reduction in risk is about 23%, according to Nuxeo management.

The introduction of a DAM system, as explained above, generates an improvement in organization's efficiency, but also effectiveness is enhanced, since also revenues are increased (according to IDC research, the 79% of companies, which have introduced a DAM system, have increased revenues by 10% or more). This is due to the fact that DAM:

- Launches more campaigns in the same period of time, increasing conversions and revenue;
- Delivers tailored brand portals to distribution partners;
- Accelerates global launches (time to market) and time to revenue.

If Digital Asset Management represents the foundation for building the entire strategy, it is essential that DAM can be easily integrated with other systems and applications, speeding up and automating workflows, and creating a more consistent ecosystem with respect to the data and the information that it manages.

In addition to internal content management and consultation, a Digital Asset Management solution is essential to transfer any asset to customers, collaborators, partners, and other entities outside the company. In all these cases, the safety, solidity and speed of the system are fundamental.

In the list below, all the key capabilities, which an Enterprise DAM should have, are summarized:

- *Scalable, reliable, highly available repository services*: ability to manage digital assets in any format (image, audio, video, 3D, HD, etc.) and to give a flexible support for metadata and complex data models;
- *Robust workflow capabilities*: DAM has to support all the processes involved in creating, managing, governing, transforming and publishing digital assets;
- *Flexible and configurable user interfaces*: Customizable user interfaces to support all who create, manage, govern, transform and publish digital assets, including external users;
- *Integration and extensibility*: available microservices, pluggable architecture integrated with popular applications such as Google Drive, Microsoft OneDrive, Dropbox, etc.;
- *Architected for the cloud*: this feature enables organizations to leverage several benefits such as scalability, availability, elasticity, avoidance of capital expenditure, flexibility, easier collaboration, etc.

Now, it's time to understand why DAM is useful also for sports organization and which are the particular benefits generated by it in this context. After that we will present some examples of how some sports teams use Digital Asset Management.

Sports fans have an insatiable demand for content. They want to know everything about their favorite teams, from score updates during the game to behind the scenes stories about the players. Teams are constantly creating new photos, videos, GIFs, graphics and more to engage their fans. But the problem is that storing, organizing and sharing visual content isn't easy. Teams struggle to get their best assets out to their fans in real time. Once the game is over, for example, photographers have to mail or hand deliver hard drives of photos. Connecting with media, fostering marketing opportunities and growing revenue have become critical tasks for any sports team or league. So, also sports organizations need a centralized location to create, collect, manage, share, archive and analyze assets. Trends with sports teams and leagues driving the need for a DAM system for several reasons:

- Because of mobile devices, sports fans expect to be connected to their teams anytime, anywhere;
- Big data is changing the game of sports in general, including how it's played;
- Sales opportunities driven by sponsorship, social media and die-hard fans;
- The globalization of hometown teams into new markets, stimulated by mobile and social media.

A digital asset management (DAM) system is able to eliminate common roadblocks and get content out to their audiences faster. As already said, DAM system gives an organization exceptional control over digital assets and ensures the right assets are available to the right

people in the right formats at any time. Particular assets of Sports organization are for example multiple brands and teams, product and service launches and content capture and distribution from live events.

Before we have seen the general benefits achieved by introducing the DAM system, now we propose a list with particular strong benefits delivered to sports teams and leagues by DAM, some of them supported by a real example:

- Upload share, and distribute game-day photos in real time: for example, the Colorado Rockies, American professional baseball team that compete in Major League Baseball (MLB), use FTP (File Transfer Protocol) to send photos from the team photographer's camera straight into their cloud-based media library. In seconds, the digital media team can access the photos and send them to social media. Fans get to see and share the best quality images from the game as soon as they happen.
- Easily access and share files in the best format for print, web and social: if an organization has easy access to all its creative assets, it can use them to their full potential. In this way, a club can reduce the risk of wasting, forgetting about, and even recreating valuable assets. For example, before using a DAM system, the Sacramento Kings struggled with file sharing. Photographers hand delivered cards or sent them to the team using Dropbox or a zip file. The Kings were constantly running out of server space, and they didn't have a centralized location for all their assets. Now, they can easily browse and search all of their photos, share them quickly, and incorporate them into their storytelling.
- Save time finding and sharing files: for instance, the United Soccer League (USL) invested in DAM for saving time finding and sharing photos. Before, the league's collection of thousands of photos was housed in a basic file structure on a server, which made searching for assets time consuming and tedious. Now, everything is centralized in one easy-access media library. The images are tagged with robust metadata, so anyone looking for an image can run a quick keyword search to find exactly what they need in seconds.
- Control user permissions, uphold property rights and protect assets;
- 24/7 access to your content via cloud-based DAM software-as-a-service (SaaS);
- Leverage assets across multiple channels for better ROI (Return on Investments);
- Provide access to new online channels in a more efficient and effective way;
- Report and track usage and activity for future budgeting and resource allocation;
- Allow authorized partners, sponsors, press and media access to the assets they need: for example, the entire archive of Baltimore Ravens, an American professional football team that plays in NFL (National Football League), now is stored on Libris, a DAM provider, so their management can dig into their collection by running one quick search. Every week, the team shares sponsored images, like a Throwback Thursday photo and

a Photo of the Week. These popular social media posts are a great way to engage fans and generate revenue through sponsorship.

- Preserve brand's history: it's important to have a way to protect visual assets and make sure they're available for years to come. On top of all of the benefits listed above, digital asset management allows teams to keep an archive of all of the most important moments in their history. Erin Herbert, Digital Media Manager of Baltimore Ravens, about this point, said: "I think it's important to get photos of these important experiences to keep on file, so we can go back and use them for content later in the future, and to also keep a record of it. It's really neat to see a team huddle from ten years ago that was led by Ray Lewis and then one from today that's led by Terrell Suggs, and you still see the team camaraderie."

Digital asset management has become a must-have for sports teams and leagues because it can easily store, manage, share, track and analyze thousands of digital assets from one central, well-organized place.

4.3.4 Fan Technologies

Based on the articles read, it is possible to list and describe the main technologies that are or are going to be utilized in order to allow fans to enjoy their sports experience and make more loyal, not only during the events but also pre and post it. The technologies are:

Internet of Things

Internet of Things (from now on reported with the acronym IoT) is the internetworking of physical devices, vehicles (also referred to as "connected devices" and "smart devices"), buildings and other items embedded with electronics, software, sensors, actuators and network connectivity that enable these objects to collect and exchange data (Brown, 2016).

Sports could be a very interest domain for the development of this field and provide lots of opportunities. For what concern the Fan Experience a very high number of different technologies are bringing fans much closer to the sports event. Fans want to be more connected to the events, they want be part of them and not only spectators. With the use of technology as the IoT, it is possible to make the fan feeling more engaged during the live events.

The use of this technology is various. The use of different cameras that show the match from different perspective and allow to the fans to watch a particular action from different angles, check them thanks to replay. But also allows to get in some places that are never explored before, for example the dressing rooms, before and during the events.

Another technology that is used are the sensors. These are connected with the athletes and allow to have live statistics on them, how they are playing, etc.

The use of these technologies permits to collect a great amount of data that can be treated and provided to the fans, that feel to be part of the event, really enjoying their experience.

Wi-Fi service

Nowadays, having a wireless connection is considered fundamental. Everybody wants to be always connected with their smartphone, sharing with friends what they are doing and where they are. This desire to be connected increase even more when people are at events like sports matches. For this reason, in always more stadiums and arenas, sports club provide to their fans a wireless connection, in this way are born the so called “Connected Stadiums”. Basically, this typology of stadium gives the possibility to the fans to be always connected with their smartphones, sharing what they are seeing and what they are feeling. This technology is strictly related to the use of social networks and other mobile apps, each fan during a sporting events can exchange a great amount of data, sharing them with other fans, publishing them on the social networks. But the wireless connection is not used only with social purpose, but also with other objectives, for example giving information about the match or about the facilities that are present in the stadium, through the use of specific apps. For example, a fan can check where it is the closest bathroom, or see in which bar there is less waiting time. There are many examples of this technology: the Barclays Center in New York, that is one of the most advanced arenas in terms of wireless capacity and connectivity, their free Wi-Fi service is one of the best in the industry, with two 1-GB circuits; another example is the Levi’s stadium in San Francisco, it has more than 1200 access points and it has a specific app that give to all the people connected information about the stadium and what is happening around it.

Virtual and Augmented Reality

Virtual reality technology facilitates the creation of real-life simulations, and creates an immersive experience for any user that makes them feel as if they are actually interacting with their digital environment. Augmented reality, on the other hand, layers digital enhancements geared to enrich an existing real life setting by appealing to the senses. The Virtual Reality market is born in the 90’s and then it is spread during the last decades, with also the introduction of the Augmented Reality. Then in the last years with the introduction of some innovations like Samsung Gear VR, Oculus Rift or Google Cardboard and the intensive use of Augmented reality mainly due to the spread of Pokémon Go, a new trend raised: the Mixed Reality, defined by analysts as the combination of Virtual Reality and Augmented Reality (VR/AR) for creating new environments and visualizations where digital and physical objects coexist and interact in real-time. Sport is one of the areas where Mixed Reality technology will be used effectively and aggressively because athletes, sports companies, fans, enthusiasts and supporters are already accustomed to the use of VR and AR technologies, because of, for example, training simulators for F1, cycling, football, etc. According to Deloitte, in sports industry, investments in virtual and augmented reality are increasing. Teams and leagues believe that these technologies may be the solution to increasing the “casual” enthusiast’s experience and will make fans feel from other parts of the world as if they were seated on the side-lines. In particular, the augmented reality can give a great impulse to the fan experience at stadiums, with the use of apps that provide information to fans like real time statistics of athletes, or customize the seats of every fan. An example of this kind of technology is the one provided by Sky and Fox sports, that provide displays with info related to the player, and by using sensor, IoT and micro-cameras that allow fans to see and hear what players are hearing and seeing on

the pitch. Mixed Reality will revolutionize Sport starting this year both in the field of entertainment and in improving the experience of fans and supporters through the enjoyment of interactive content and information on both home TV displays and smartphones/tablets or even with devices and screens that increase reality by offering new services to fans who are already at the stadium, at the arena, at the pool, or at any other sportsground or facility.

Social Media

Clubs and Leagues must have a solid fan base to have success, and the performance on the field are no more sufficient, it is necessary to build a clear and consistent brand identity. One way to do this is leveraging the social media. Social media are a perfect tool that allow to the club to keep the fans within their ecosystems and also to have another revenue stream. Each professional club has at least one account on social networks (Facebook page, Instagram, Twitter, etc.), and exploiting these tools they share information, contents and every kind of information with their fans. In this way fans feel to be more involved in the clubs, they play an active role in the society, because also fans can generate contents that can share with the society and other fans, create a sense of community. Furthermore, through the social network, clubs can have another source of income, both from sponsorship and marketing content that they can share on their pages, but also gathering information of the fans, that share and publish contents. It results evident that social media needs to be part of an integrated brand strategy that creates a seamless fan experience across a club's various media channels. Integration of social media into a club's own digital environment makes the club's online presence more visible and captivating. Fan communities will become more segmented, thus making social media platforms a valuable tool for addressing specific fan groups. Having a great social media strategy so results fundamental for clubs, because they make the fans feel part of the team and get them involved not only during the live match, but also during all the week, for example through the sharing of photos and videos of trainings, or of other non-sports event of the club. Social media is the best way of fulfilling the desire of affiliation the fans with their favorite clubs.

Platform & Applications

The direct interaction between users' world and digital world of data happens through platforms and apps. With evolution of the world, the sports societies have to go mobile in order to meet the need of the fans and their desire to be always connected. These technologies can be used to process the huge amount of data provided by IoT devices, cameras and sensors, gained from databases or from a wide number of sources, but also support other technologies such as VR and AR. They can also be the point of meeting for virtual profiles of people, as it happens for community or social networks, provide management solutions and a lot of other different functionalities. The field of application of these technologies could be considered infinite. The use of these technologies contributes to make the fan feeling engaged with the clubs, enhancing their experience. Furthermore, platform and apps are used to offer some services like the possibility to purchase ticket online or to buy merchandising of the team directly using them, providing the fans with more service and functionalities.

Smart Arena

Even if we have described these technologies as separated results evident that their application could not be seen separately, but they are all strictly related. In particular, there is an environment that represent the perfect combination of these technologies applied in sports: Smart Arenas. This typology of stadiums represents the future, the objective that every sports society should reach. They represent a big improvement towards the full exploitation of the fan experience. With these smart stadiums the fan interactivity is significantly increase with new technologies, new capabilities such as augmented reality, interactive seats, and big screens go well beyond what is possible at home. Fans can also have real-time access to player profiles, statistical data, and fantasy performances of teams and players on their smartphones, stadium and stadium kiosks.

A smart stadium integrates a large number of sensors, cameras, and digital signs that connect to wired and wireless networks and servers. Sensors provide up-to-date information on empty parking spots, waiting lines, hot dogs available, other stadium data. Tech companies are reshaping the sports and entertainment experience for fans and sponsors by introducing new tools and mobile platforms. Wi-fi and Lte networks inside the stadium give fans access to the information they desire. Stadium Networks and apps enable the marketing staff to connect with fans on a whole new level, building important bridges with their customer base. In general, smart arenas provide:

- Valuable information for fans: points of interests; news about the event; parking information; don't miss any actions thanks to the monitors, etc.
- Convenience: allow fans to order items directly from their seats; enable cash payment via apps or mobile phones, etc.
- More Fun: sensors to detect cheering fans and show them on monitors throughout the stadium; wireless networks that allow fans to post on social media during the event; etc.
- Security: the great number of cameras and sensors increase the security of fans at the stadium.



Figure 23: Smart Arena

Smart stadiums require a sophisticated mix of hardware, software and wireless connectivity is required to establish communication links between stadium operators, fans, and social networks. Smart stadiums collect and analyze data using cloud infrastructure, allowing stadium operators to make data-driven decisions that impact many aspects of the business.

4.4 Summary of the Technologies

In this paragraph, we are going to present a table that summarize all the different technologies, already explained in the chapter, with their main objectives in the Fan Experience field.

Table 3: Technologies Summary

<i>Technologies</i>	<i>Functionality</i>	<i>Objective</i>
Data Warehouse	Data Collection and Integration	Collect in a central repository the fans' data, facilitating the analysis
Data Lake	Data Collection and Integration	Repository that holds a vast amount of raw data, to conduct preliminary analysis
CRM	Data Collection and Integration	Collect all the fans' data coming from different sources in a unique central repository that allow the data integration
Data Mining	Analysis	Gather fans' data and understand how they interact each other, extrapolating insights
Classification Trees	Analysis	Predict the classification of the fans basing on the available data
Clustering	Analysis	Divide the fan base in segments according to some characteristics to address better the communication

Real Time Analytics	Analysis	Analyse rapidly and in real time the data that arrive, providing them also to fans, enhancing their experience
Machine Learning	Analysis	Predict in a more effective way fans' behaviors, recognize patterns and learn insights from past data
Marketing Automation	Execution	Automatize the marketing processes to personalize as much as possible the offer
Dynamic Content Management	Execution	Manage rapidly and in a more effective way the digital content of the club
Digital Asset Management	Execution	Manage and harmonize the content in an intelligent way
Fan Technologies	Execution	Allow to interact directly with the fans and maintain the engagement with them

After listing and explaining in detail all the technologies useful for generating a great Fan Experience, the necessity of creating a model that helps the sports organizations to understand the importance of Fan experience concept, and in particular the importance of digital technologies in this field, arises. So, in the next chapter we are going to develop a model which should show sports organizations:

1. Which are the technologies made available for improving Fan experience;
2. Which are the necessary steps to fulfill for transforming a traditional club in a “smart” club;
3. Which is the position that the organization occupies in the model;
4. Which are the development to implement to improve their condition;

5. FAN EXPERIENCE MATURITY MODEL

The aim of this chapter is to build a maturity model regarding the “Fan Experience” branch of the digital strategy of a sports organization, including all the existent possible steps between a traditional Sport Club management and a Smart Sport Club management on the basis of the framework introduced by the Osservatorio di Innovazione Digitale nell’Industria dello Sport of Politecnico di Milano.

So, before developing the model, it’s necessary to explain what we intend with the expression ‘maturity model’ and also show the definition of digital strategy.

5.1 Maturity Model

A maturity model can be viewed as a set of structured levels that describe how well the behaviors, practices and processes of an organization can reliably and sustainably produce required outcomes. The Maturity Model exemplifies a path consisting of single steps, each one represents an evolution of the previous ones. The transition from one phase to the following one is made possible by a series of actions that allow you to achieve more integrated and complex functionalities and needs. So, a maturity model is a structured collection of elements that describe characteristics of effective processes. A maturity model provides:

- a place to start (in our case the traditional approach of sports club management);
- the benefit of a community’s prior experiences;
- a common language and a shared vision;
- a framework for prioritizing actions;
- a way to define what improvement means for your organization.

So, a maturity model can be used as a benchmark for comparison and as an aid to understanding, for example, for comparative assessment of different organizations where there is something in common that can be used as a basis for comparison. In the case of the CMM (Capability Maturity Model), for example, the basis for comparison would be the organizations' software development processes. Consequently, it is a tool that helps people assess the current effectiveness of a person or group and supports figuring out what capabilities they need to acquire next in order to improve their performance. Working with a maturity model begins with assessment, determining which level the subject is currently performing in. Once you've carried out an assessment to determine your level, then you use the level above your own to prioritize what capabilities you need to learn next. The vital point here is that **the true outcome of a maturity model assessment isn't what level you are but the list of things you need to work on to improve.**

Finally, we can summarize in the list below the purposes for which a maturity model can be used. As a system it can be useful for:

- Identify Worst/Best Case and Worst/Best Practice;
- Make comparative analysis between different organizations;

- Understand some recurrent evolutive difficulties;
- Evaluate the maturity level of a sector as a whole.

Moreover, at single organization level, a maturity model is useful for:

- Be aware of their own maturity
- Understand which steps are necessary for reaching the next phases of evolution.

The information regarding the maturity model has been taken from martinfowler.com, selectbs.com and searchsoftwarequality.techtarget.com.

5.2 Sport Digital Strategy

Let's start with a general definition of business strategy: "an integrated, comprehensive plan which identifies the scope and the direction of the organization (decision maker), is aimed at obtaining long term performance superior to competitors (in relation to the goal) and integrates a coherent set of strategic decisions" (Antonio Ghezzi, 2015). So, in simple terms the strategy organizes the company's resources in a way functional to the strategic objectives defined by the organization.

Nowadays, the IT strategy is increasingly included within the business strategy for the company management, but the vertical approach still prevails on the horizontal one. Each business unit has its own IT strategy and there is not a global IT strategy integrated in all the existent business units within the organization.

The evolution of IT strategy and its approach is the Digital strategy. As already explain in the introduction chapter, we are in a digital era and companies has to exploit the pervasiveness of digital for business management, since technologies enable new forms of business and relationships. So, the digital becomes the strategy.

Now, the question is: "how define a Sport Digital Strategy?". As explained in the paragraph 1.1, the percentage of today revenues of a sport club are different from those of twenty years ago. Nowadays, ticketing represents less than 20% of total revenues, which are distributed among sponsor, merchandising, TV rights and brand value. This diversification of revenues is a direct consequence of the movement from the traditional sport club management to the digital one. New objectives arise from this new "smart" approach:

- Increase the power of the image and brand;
- Reach new market segments;
- Diversify revenues flows;
- Improve communication and sponsorship strategies.

From new technologies, new business opportunities arise. In addition to traditional revenues channel, clubs should invest in Media, Merchandising, FRM (Fan Relationship Management), Multimedia Approach, Big Data, Asset Management, as already said in previous chapters.

According to Osservatorio Innovazione Digitale nell'Industria dello Sport of Politecnico di Milano, Sport Digital Strategy should be developed on 4 different aspects: Fan Experience, Athletic Performance, Events Management and Sport Club administration.

Fan Experience is the core of this study and it has been already described in all its aspects. We are going to briefly define the other three areas of the sport digital strategy.

Athletic Performance regards performance measurement for improving training activities, preventing injuries and enhancing rehabilitation techniques.

Events Management includes the cultural promotion of the territory, the venues and arenas management and the organization of events.

Sport club administration, instead, embodies the team and staff management, talent scouting, safety management of the infrastructures and supplier and sponsor relationship management.

In the image below, we present the global maturity model related to the sport digital strategy encompassed of all its 4 branches.

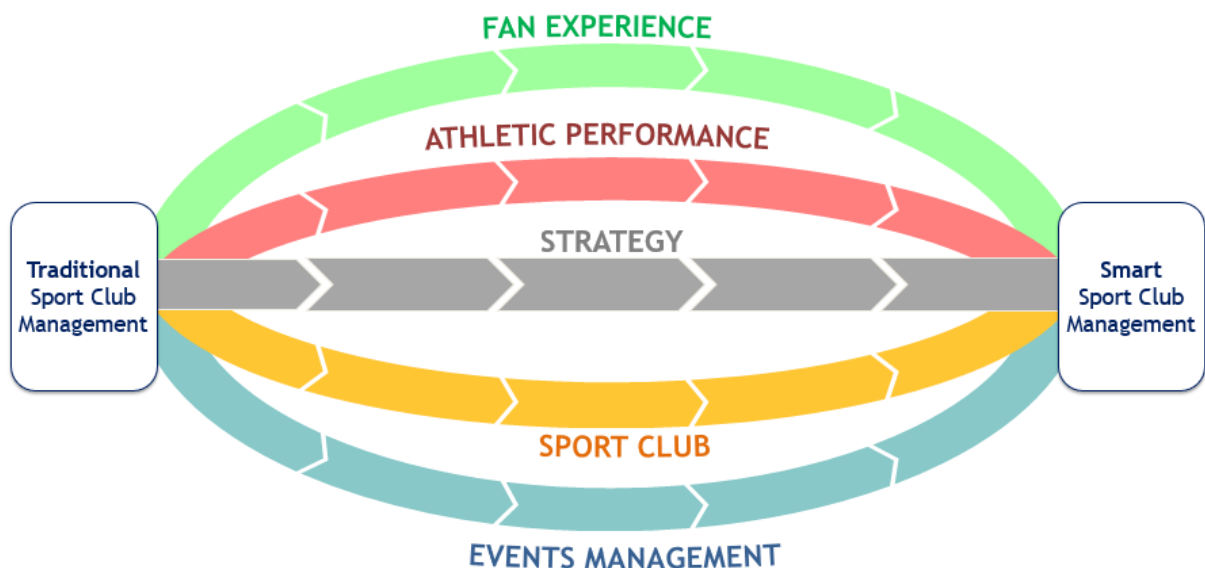


Figure 24: Global Maturity Model

Obviously, in the next paragraph we will focus on “Fan experience” branch of the global maturity model.

5.3 Fan Experience Maturity Model

First of all, it's necessary to define the structure of the maturity model:

- The Maturity Model works thanks to the interaction between the Maturity levels and the structural elements of the model.
- Maturity levels consist of objectives, functions of use and related enabling technologies.
- Structural elements are the elements that fully and comprehensively characterize the topic to be examined, in our case, Fan experience concept.

The model can be graphically represented by a matrix, composed by two axes: the horizontal one related to the Maturity Levels and vertical one relative to the structural elements of the topic. You can see an example of the structure of the maturity model in the methodology chapter.

Now, let's see in our situation, in the case of Fan Experience, which are the structural elements and the maturity levels.

We identified three structural elements and five maturity levels for our Maturity Model.

The structural elements represent the necessary three activities in order to collect, manage, analyze data and put in practice a campaign on the basis of them. They are the phases across which we subdivided technologies in the fourth chapter:

1. **Data Collection and Integration:** this element regards fans' data acquisition and their integration within the company. For this phase we investigated the typology of data collected from fan (qualitative vs quantitative, internal vs external, structured vs unstructured, aggregated vs individual etc.), the sources of these data and their quality, the capability of a club of identifying and monitoring the fan's behavior on several contact points in an integrated manner, the degree of integration of data between different touchpoints (app, store, website, stadium, etc.), and finally the technologies used to do it (Databases, CRM systems, Data Lake etc.).
2. **Analysis:** this structural element corresponds to the phase in which fan data are filtered and analyzed in order to cluster the fan audience in target segments and so create insights. For each maturity level, in this step, we want to understand if and how collected data are used for clustering and profiling fans, if these data are made available to the different touchpoints, the typology of analysis made on them, the degree of advanced analytics, and finally the technologies and techniques used for managing this phase (Business Intelligence techniques).
3. **Execution:** this structural element represents the activity in which, on the basis of analyzed data, marketing and communication campaigns are launched. Here, we analyzed how sports organizations exploit data for optimizing and personalizing fans' contents and experiences on the different touchpoints, the architecture of the touchpoints along the Fan Journey, the coherence of experience between different contact points, the communication typology (Mail, SMS, etc.), the personalization degree of this communication, and finally the technologies used in order to do all of these activities (Marketing Automation, Digital Asset Management etc.).

The Maturity Levels, instead, represent the steps a sports organization should cross for passing from a traditional way of management to a smart digital one. The maturity levels in the case of Fan Experience are five and are referred to the management approach of the different touchpoints between a fan and a club, in particular the number of contact-points and their integration within the organization. Let's explain them in detail:

1. **Single-Channel Approach:** in this approach fans' data are collected and managed in a different way for each contact point between the fan and the club. There is total absence of integration of fans' data and they are collected in distinct databases on the basis of the channel (sometimes only one, often few channels) where they are acquired. The communication launched is generally massive and with no personalization, usually through one single channel (mail).
2. **Few-Channel Approach:** this approach is an evolution of the single-channel one. Here, fans' data are inserted in less databases than in Single-Channel approach with little integration. There is a basic analysis on them, and communication is still massive with only few elements of personalization.
3. **Multi-Channel Approach:** in this approach there is a direct and indirect interaction between fans and the club through combined channel (email, events, website, store etc.), but data from these different contact points are not shared. Fans' data, in this case, are collected and managed in a more advanced system such as a CRM, where data are a bit integrated. On the basis of a basic analytics, the communication is personalized but not integrated through the different touchpoints.
4. **Cross-Channel Approach:** this approach is the evolution of the Multi-Channel one, but with an important different: channels don't work separately, but they collaborate in order to offer greater potentiality (for example online and offline channel directly collaborate for addressing the purchase of a club gadget). In this approach, data are more integrated within a central system of data management. Because of the collaboration between different channels, data analysis is more advanced, and consequently the communication is highly personalized.
5. **Omnichannel Approach:** this approach is similar to the cross-channel one, with the difference that the interaction between different channels isn't restricted to a fan's purchase. In this approach, the interactions between the fan and the club are a unique combination of forces that help the sports organization to communicate the right message, through the right channel at the right moment. There is the concurrent sharing of information and data through the different touchpoints. Data are collected in an always more advanced system, where data are totally integrated, also with external parties' ones (Partner, Sponsors etc.). On the basis of a real-time analytics, communication is as much personalized as possible (one-to-one marketing).

Once presented and briefly explained the structural elements and the maturity levels of the model, we are ready to show in detail each part of the model, analyzing it per maturity level. In fact, in the following paragraphs, we are going to present the main features of the three structural elements for each maturity levels starting from the single-channel approach and showing the evolution of technologies and techniques up to the omnichannel approach. At the end, we will post the matrix summarizing all the Fan Experience maturity model.

5.3.1 Single Channel Approach

This kind of approach represents the very first step of the maturity model. Each channel is handled autonomously, it doesn't exist any kind of integration, so, there is not a unified view of the fan. In the table below are showed the main characteristics of this approach developed in each of the structural elements.

Table 4: Single-Channel Approach

<i>Single-Channel Approach</i>	
Data Collection and Integration	<ul style="list-style-type: none"> - <i>Data Typology</i>: Demographical data - <i>Integration Degree</i>: No integration - <i>Technologies</i>: Different and simple databases
Analysis	<ul style="list-style-type: none"> - <i>Analysis Typology</i>: Basic analysis - <i>Technologies</i>: Excel
Execution	<ul style="list-style-type: none"> - <i>Communication Typology</i>: Massive communication - <i>Personalization</i>: No personalization - <i>Technologies</i>: Newsletter - <i>Fan Tech</i>: Social networks and website

Regarding **Data Collection and Integration**, in the Single Channel Approach, the fans' data that are collected are only the demographical ones, first and last name, age, address, etc. Since the typology of the approach other type of information are not useful because they do not take any kind of value to the society. The different data are collected in different databases that are very simple and there is not any kind of integration. Each touchpoint has its own database that contains the information coming from the related channel and that does not interact with the others. In this way the society can have only a partial and fragmented view of the fan, and not an overall and complete vision of the situation.

For what concern the second structural elements, **the Analysis of the data collected**, the analysis that could be done are very basic and simple. This is due to the typology of data, because with few demographical information and not integrated, it is not possible to perform effective and high-quality analysis. For this reason, also the technology utilized are very simple. To perform these analysis, it is mainly used Excel, in which are applicated some basic filter to organize the data in a better and more clear way.

The last phase, **the Execution**, reflects the two previous ones. The communication towards the different fans is done in a massively and indistinctly way. Since the nature of the data collected and of the analysis done, it is not possible to have any kind of personalization of the communication, and so all the fans receive the same type of messages from the society. In this

way it is not possible to address the most suited promotions to the different type of supporters. Using a total impersonal communication, usually the society adopts as technology to communicate with the fans, mails and newsletters. In terms of Fan Technologies, the technologies made available to the fans by the societies, in the Single-Channel approach are the basic ones, so the social pages on the main social networks (Facebook, Twitter and Instagram) and the websites, that all the clubs have.

An **emblematic case** that represents in an appropriate way the different steps of the maturity model is the **Arsenal Case** (that will be mentioned again in the chapter). Arsenal F.C., an English football team, in 2006 moved from its old stadium, Highbury, to a new one, Emirates Stadium. This was a crucial phase for the club, that decided also to renew its organization and in particular the way in which the data were managed, from there gathered in a unique CRM. But previously, Arsenal handled its data applying a Single Channel approach. As Angus Kinnear, Arsenal Marketing Manager, said *“To be effective in our communications to all of the different customer segments we needed to unify our information and make sure that it was centralized and available for use in a coordinated manner. **Previously, the club’s approach to data management lacked co-ordination with different departments in different parts of the ground working from different data systems, none of which were integrated. The Club’s interaction with its customers was not optimal but we could still function effectively, however success in the new world would have been impossible if we continued as we were.**”*

Starting from this approach, also looking at the case showed, it is evident that it is needed an evolution of the model. This next step is the Few-Channel approach.

5.3.2 Few-Channel Approach

As already said, this approach is a direct evolution of the previous one, the single-channel one, but with an important difference: integration of data coming from different channels in few databases, instead of distinct database for each different channel. In the table below, the characteristics of the structural elements in this step are summarized.

Table 5: Few-Channel Approach

<i>Few-Channel Approach</i>	
Data Collection and Integration	<ul style="list-style-type: none"> - <i>Data Typology</i>: Demographical data and some personal information - <i>Integration Degree</i>: Little integration - <i>Technologies</i>: few databases or data-warehouses
Analysis	<ul style="list-style-type: none"> - <i>Analysis Typology</i>: Basic analysis - <i>Technologies</i>: Excel or OLAP systems
Execution	<ul style="list-style-type: none"> - <i>Communication Typology</i>: Massive communication - <i>Personalization Degree</i>: Little personalization - <i>Technologies</i>: Direct Email Marketing (DEM) - <i>Fan Tech</i>: Official App with few content, personal account on the website

Regarding the first structural elements, **Data Collection and Integration**, in this approach, the typology of data is similar to the one of the single-channel approach: demographical information of the fan, but with some more personal information given by the integration of data coming from different channels. In fact, in this approach, there is the first form of data integration between different channels with the creation of few databases which collect data not only from a single channel but from some different ones. There isn't yet a single-view point of the fan, but some data are integrated: for example, there may be a database, where data from ticketing and stadium are collected, and another one, where store, website and e-commerce data are collected. An evolution of this approach is the collection of data in data-warehouses, instead of databases. The data-warehouse is a database with some special functions. There is a main difference between the two technologies: the database only registers the data acquired, while the data-warehouse, developed on OLAP systems, aggregates data for analytics aims.

In terms of **Analysis**, in the case of databases, it is similar to the one done in single-channel approach, described in the previous paragraph: simple and basic analytics, filtering data within the database through Excel application. Instead, in the case of presence of Data-warehouses,

the quality of the possible analysis and the speed of answers given by the analytics system are higher. A further evolution of Analysis from Data-Warehouses, could be the integration of them with Business Intelligence Platform and analytics, but they are more common in Multi or Cross channel approaches.

In the stage of **execution**, this approach, like the single-channel one, manages a massive communication through mail. The main difference between the two approaches is a first kind of personalization given by the more effective analysis done at stage two. For this reason, in addition to newsletter, a mail system more personalized is used: the direct email marketing (DEM). This system uses the mail as a mean for communicating commercial and marketing messages, coming from external partners or sponsors, personalizing the content on the basis of the recipient's data within the databases. In this approach, there isn't a data sharing with partners and sponsors, but they only push clubs to promote their campaigns through DEM managed only by the organization. At this stage, to the Fan technologies mentioned above, there is the introduction of an official app, not integrated with the other technologies and with only the core contents, and the possibility to have a personal account on the website.

The evolution of this approach is the Multi-Channel one where there is a greater integration of data and a more advanced analysis on them. It will be shown in the next paragraph.

5.3.3 Multi-Channel Approach

The Multi-Channel approach is the third step towards achieving a Smart Club Management. In this phase the data are collected from different sources and they are more integrated thanks to more specific and advanced technologies. This allows the clubs to improve also the communication with the fans, that becomes more personalized. In general, there is still not a single overview of the fan, but it turns more complete. The characteristics of the approach are summarized in the table below.

Table 6: Multi-Channel Approach

<i>Multi-Channel Approach</i>	
Data Collection and Integration	<ul style="list-style-type: none"> - <i>Data Typology</i>: Personal information - <i>Integration Degree</i>: Fan data integration - <i>Technologies</i>: unique CRM/FRM
Analysis	<ul style="list-style-type: none"> - <i>Analysis Typology</i>: Clustering and targeting - <i>Technologies</i>: Basic automatic Business Intelligence techniques embedded in the CRM
Execution	<ul style="list-style-type: none"> - <i>Communication Typology</i>: Personal communication but not integrated - <i>Personalization Degree</i>: medium personalization - <i>Technologies</i>: DEM, Mobile marketing, Social Media marketing - <i>Fan Tech</i>: Official App with more content (news, gaming, live matches, e-commerce)

Regarding **Data Collection and Integration**, the data comes from different sources and not from just one channel. These pieces information are also more elaborated, representing not only the demographical data of the fans, but also more personal characteristics like shopping habits, average price of the expenses, the location, etc. Data are more significative, and the societies can extract more value from them, and in particular they are collected in a unique CRM (or FRM). These systems are designed to collect information on customers across different channels or points of contact, which could include the company's website, telephone, live chat, society fidelity cards ("tessera del tifoso"), direct mail, marketing materials, advertising data.

In terms of **Analysis**, the data gathered allow for more meaningful and in-depth analysis. The main typology of analysis that is possible to perform with a CRM system are clustering and targeting. This means that the different fans are grouped in segments according to specific characteristics that the club wants and then it is possible to individuate target clusters to which address specific initiatives. The technologies that enable this kind of analysis are some

automatic Business Intelligence techniques that are embedded in the CRM systems, as for example clustering.

Considering the last structural elements, **the Execution**, there is an improvement in terms of personalization. The communications are no more generalized and massive, but they have specific target, thanks to the technologies of the CRM systems. There is no more the use of indistinct newsletter, instead are used technologies like DEM, Social Media marketing and Mobile marketing, that allows to develop more personal and suited offers for the different clusters of fans. There are still some lacks in terms of integration, because, even if the data collected and analyzed are more integrated, in terms of execution it is not still possible, but each channel is managed almost in an autonomous way. With this approach the Fan Technologies are improved, in particular the app becomes more integrated with the other systems (as the CRM), and the contents are enriched, with not only basic information, but also the e-commerce section connected to tickets and to the shops, virtual games, live news about the team, etc.

An example of a successful Multi-Channel approach is the Saskatchewan Roughriders case, a Canadian Football team, that in 2013 they ranked number one in attendance, TV ratings, digital engagement and revenues. The team has a unique CRM where collect their fans' data and they want to exploit it to improve the relationship with their fans and engage new ones. In order to do this, the society launched a loyalty program that would bring rewards to fans, with the aim of acquiring more data, improving engagement and generating extra revenues. The program started with the launch of a pilot the was successful *"We're happy with the results we have seen from our CRM activities and now the loyalty pilot. It has allowed us to bring CRM in house and launch a loyalty program for our fans."* says Ricardo Del Cid, Manager of CRM and IT. The results of the pilot test were optimal and the most part of the fans said that was happy of it. This allowed to Roughriders to reach the CRM key objectives:

- Relevant fan relationships and engagement;
- Acquire more data and deeper fan insights;
- Revenue generation.

5.3.4 Cross-Channel Approach

Cross-Channel approach is the evolution of Multi-Channel one, since, in addition to the integration of data coming from different touchpoints in a single place (CRM), the channels collaborate in order to guarantee a more and more effective system. In simple terms, channels are complementary with each other. The main features of this approach are summed up in the table below.

Table 7: Cross-Channel Approach

<i>Cross-Channel Approach</i>	
Data Collection and Integration	<ul style="list-style-type: none"> - <i>Data Typology</i>: Different sources and different typologies - <i>Integration Degree</i>: High integration of Fan Data (no visibility to sponsors) - <i>Technologies</i>: Data Lake
Analysis	<ul style="list-style-type: none"> - <i>Analysis Typology</i>: Advanced analysis and insights - <i>Technologies</i>: Advanced B.I. techniques (data mining, classification trees, etc.)
Execution	<ul style="list-style-type: none"> - <i>Communication Typology</i>: Personal communication, really integrated - <i>Personalization Degree</i>: Very high personalization - <i>Technologies</i>: Marketing Automation - <i>Fan Tech</i>: Platform with the possibility to upload customers contents

Considering **Data Collection and Integration**, in this approach data include personal information, purchasing habits, frequency of connection to the website or on the app etc., and come from different sources and channels and then are integrated in a single-view fan system, the CRM, where they are managed through a more agile system, the Data Lake. The Data Lake is able to manage structured, semi structured, unstructured and also raw data in order to make them analyzable by Data Scientists. The difference respect Omnichannel approach, is that partners' and sponsors' data are not integrated within the system.

Regarding the second step of the model, the **Analysis**, the techniques are more advanced than Multi-Channel one, since in this phase, and in the phase of execution different channel collaborate. In this way, it is possible to generate important insights with marketing objectives.

This phase is in charge of Data Scientists, who use advanced Business Intelligence techniques such as Classification Trees and Data Mining etc., on the basis of data treated by the Data Lake.

The communication, in the phase of **Execution**, is highly personalized as a direct consequence of the advanced analytics made on the fan data. It is not totally integrated as in the Omnichannel approach, but only channel which collaborate with each other share the same communication direction. On the basis of analysis, marketing automation techniques are used in order to personalized content for each fan moving towards a one-to-one communication. In this phase, you can already integrate a Digital Asset Management system and a Dynamic Content Management system, described in the fourth chapter, in order to execute this phase in a more effective and efficient way. A platform dedicated to the supporters is added to the Fan Technologies. This kind of platform is entirely dedicated to the fans, that can also upload contents on it (photos, videos, etc.). In this way it is increased the sense of community and the supporters feels more active in the club. Also the other Fan Technologies are improved, in particular the integration among them. An example is a unique account for app, website and platform, the possibility to buy online and retire the product at the store, etc.

Also in this case, **Arsenal represent a good example for the Cross-Channel approach**. As already said, Arsenal F.C. in 2006 decided to change the way in which the data are managed, introducing a unique CRM. As a result, the club brought all of its customer data together into CRM system so that there is one single repository. This include the integration of data from their other key information systems: the ticketing system that is used to manage ticket and membership sales; the retail system, which will be used at point of sale in retail and a new hospitality system with 250 tills; the access control system that manages audience access; the financial management system. *“All information relating to every aspect of a customer’s relationship with us will be available to all departments. This will enable every Arsenal employee to be customer facing and provide the club with the ability to analyze, learn from, and use our customer data to enhance our communication even further in the future”* said Kinnear, the Marketing manager. The main objectives reached with the introduction of the CRM were:

- Unify all customer data from other major systems in the club to provide one single view of all customer data;
- Enable all staff to be customer facing and to talk with one single voice to the customer;
- Support the interactive communication with all types of customer using multiple channels from call center to integrated e-mail;
- Allow the management of complex relationships with sponsors and corporate partners.

Another good example is represented by NBA basketball team Oklahoma City Thunder represents an example in the exploitation of this approach. It prides itself on giving fans the ultimate professional sports entertainment experience. They conduct surveys and use online forms to gather data about their fans and use that information to create customized, meaningful communications and online content, managing all these activities through a Cross-Channel marketing and Content Marketing system developed by Oracle.

5.3.5 Omnichannel approach

The last step is the Omnichannel approach, the evolution of the Cross-channel one. In this approach it is reached a very high level of integration, sharing data not only between the different touchpoints but also with partner and sponsor. Also the analysis and technologies become more sophisticated and complicated, adding further value to the data. In table below are showed the main features of this approach.

Table 8: Omnichannel Approach

<i>Omnichannel Approach</i>	
Data Collection and Integration	<ul style="list-style-type: none"> - <i>Data Typology</i>: Different sources and different typologies - <i>Integration Degree</i>: Total Integration also with sponsors - <i>Technologies</i>: Data Hub
Analysis	<ul style="list-style-type: none"> - <i>Analysis Typology</i>: Advanced analysis - <i>Technologies</i>: Very advanced analytics: real-time analytics, machine learning techniques
Execution	<ul style="list-style-type: none"> - <i>Communication Typology</i>: Integration among all the touchpoints - <i>Personalization Degree</i>: High personalized content - <i>Technologies</i>: Marketing Automation, Digital Asset Management, Dynamic Content Management - <i>Fan Tech</i>: Smart Arena

The first phase of **Data Collection and Integration** is similar to the Cross-Channel approach, with data coming from different sources and of different typologies. All these data are integrated and shared not only between the different parts of the clubs, but also with external entities like sponsors and partners. In this way the data gathered assumed more value, since can be interpolated also with information that the club alone cannot have. In this case the most appropriate technology that could be used is the Data Hub, that is a repository in which it is possible not only to store data but also adding other value to them as de-duplication, quality and security.

In the **Analysis phase** the data are handled in a more detailed way respect the previous approach. The analysis has a higher quality, thanks to the type of data and also to the technologies used as Data Hub. In this step there are utilized very advanced analytics

techniques. In particular real-time analytics, the capacity to use the data and the related resources as soon as they entered in the system, and machine learning techniques, that allows to make predictive analysis for the future

Regarding the last structural element, **the Execution**, the integration is complete. All the different touchpoints have access to the different fans' information collected during the previous phases. Thanks to the high level of the analysis is possible to have content very personalized and targeted to the different segments of fans. So, the promotion and the communication can be more effective and successful because are built ad hoc for the clusters of supporters. The technologies mainly utilized in this phase are Marketing Automation, Digital Asset Management, Dynamic content Management, that allow this level of integration and personalization. In this way the club can have a complete overview of the Fan Experience, because it can collect all the data in a unique structure, analyzing them in real time and create ad hoc communication for the different fans. In the Omnichannel approach all the Fan Technologies are resumed in one concept: Smart Arena. This is the final objective that the societies should reach to provide the maximum experience to their fans. In the Smart Arena all the technologies already cited reached their peak. The stadiums furnish all the main service, free wi-fi, the possibility to have food and beverage at the seat, etc. New technologies are introduced, like Virtual Augmented Reality, and the fans can interact with the use of their mobile app with the other systems, seeing for example live data about the match.

Arsenal F.C., already mentioned before, represents a good example also for the omnichannel approach. In fact, in addition to the introduction of the CRM, the club signed a partnership with SAP for the Hybris Commerce. This system is built with an omnichannel versatility and lets organizations engage and transact with customers regardless of place, time or device. The offering helps brands engage and understand their key audiences in every part of the commerce experience, from content creation to merchandising to fulfilment. This approach reduces the time and complexity of integrating with current systems. Additionally, with SAP Hybris Commerce, organizations can quickly react and engage with customers and fans, such as at events, new player signings or new kit launches, which may be accompanied by a significant peak in merchandising. The ready-to-use, flexible and scalable infrastructure helps organizations withstand major site traffic spikes to help ensure a seamless shopping experience at all times.

5.3.6 The Final Model

Once presented in detail each single maturity level with deep explanations about the features of the three structural elements, it's the time to show the overall model in a single view. In order to do it, we have built a matrix having on the vertical axis the three structural elements (Data Collection and Integration, Analysis and Execution) and on the horizontal one the five maturity levels (Single-Channel, Few-Channel, Multi-Channel, Cross-Channel, Omnichannel approach). In the internal points of the matrix the characteristics of the structural element in that approach are summarized. Here below, you can see the final matrix, representing the final Fan Experience Maturity Model.

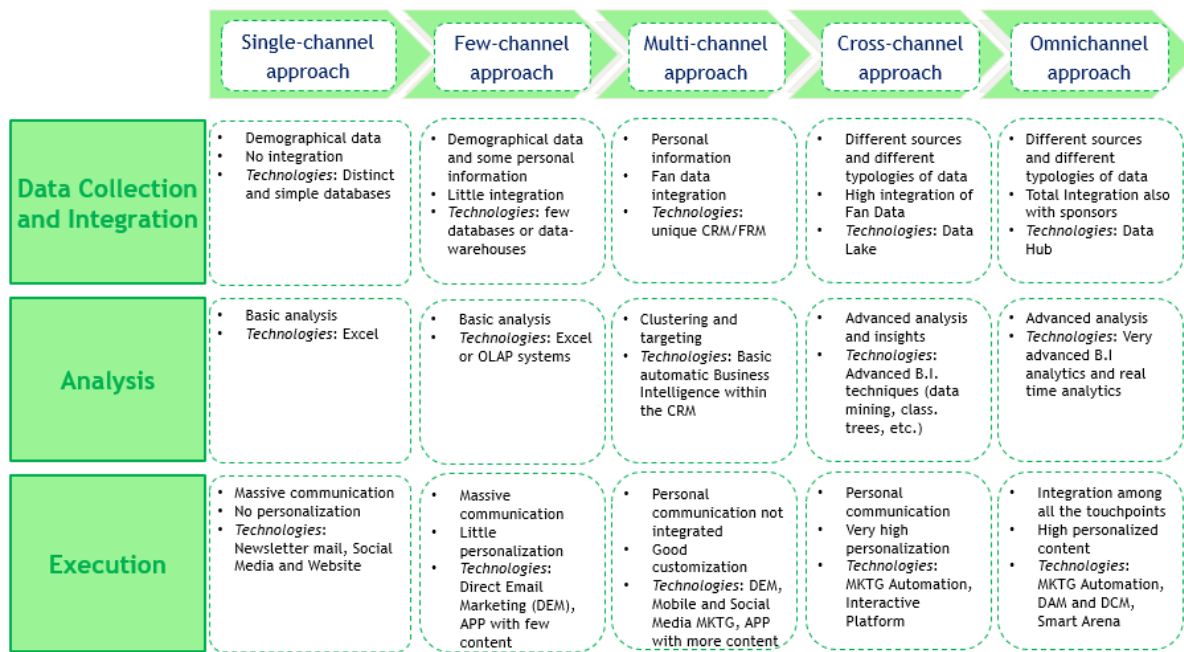


Figure 25: Fan Experience Maturity Model

As already said, this maturity model can be used by an organization in order to understand which is its evolution degree in terms of Fan Experience management and, in particular, which are the competences, the systems, the technologies necessary for passing to the following maturity level. The model could be used as a basis for designing a project with the aim of transforming a traditional club in a digital “smart” one, detailing all the steps to pass across along the time till reaching the omnichannel strategy. So, it’s an important framework that sports organization can use in order to assess their evolution in this field, positioning themselves on the route defined by the 5 maturity levels, showed in the image below).

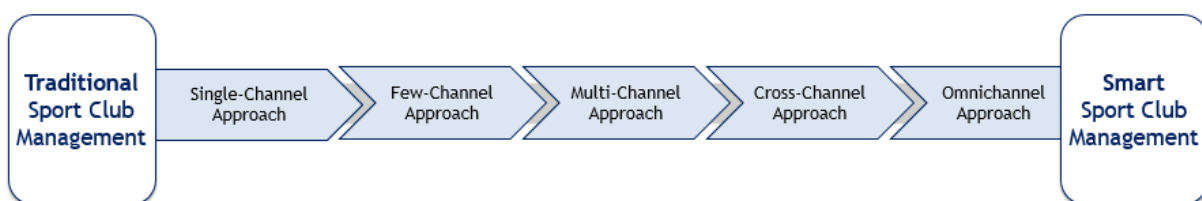


Figure 26: Fan Experience Evolution Framework

Taking as example Arsenal F.C. case, described step by step in the different approaches, before the construction of the Emirates Stadium, the club’s approach was the single channel one, managing data through separated databases for each channel. So, the English organization was at the first step of the route described by the image. With the construction of the new venue, in 2006, and in particular, the introduction of the CRM for having fans’ single-view, Arsenal F.C. passed to the Multi-Channel approach, where all data coming from different touchpoints were collected and analyzed all together in the central CRM. Then the club passed to the Cross-Channel approach: data from ticketing system, retail system, financial system etc. were totally

integrated and the systems collaborate to each other. Finally, recently, during this year, with the partnership with SAP, the club is now able to engage and understand its fans in every aspect of the fans' and club's life, creating content, merchandising and on-field experiences, in a more effective, agile and flexible way. This is possible since Data Integration in Arsenal F.C. is complete. It has reached the omnichannel approach.

After developing the model, in the next chapter, we are going to validate it through some case studies of Italian sports realities, created by interviews about the way they manage Fan Experience within their organizations.

6. CASE STUDIES

After examining the literature about the concept of fan experience, engagement and satisfaction and after scanning and showing the digital technologies available for collecting, integrating, managing, analyzing fans' data and consequently launching the communication campaigns, we developed the Fan Experience Maturity

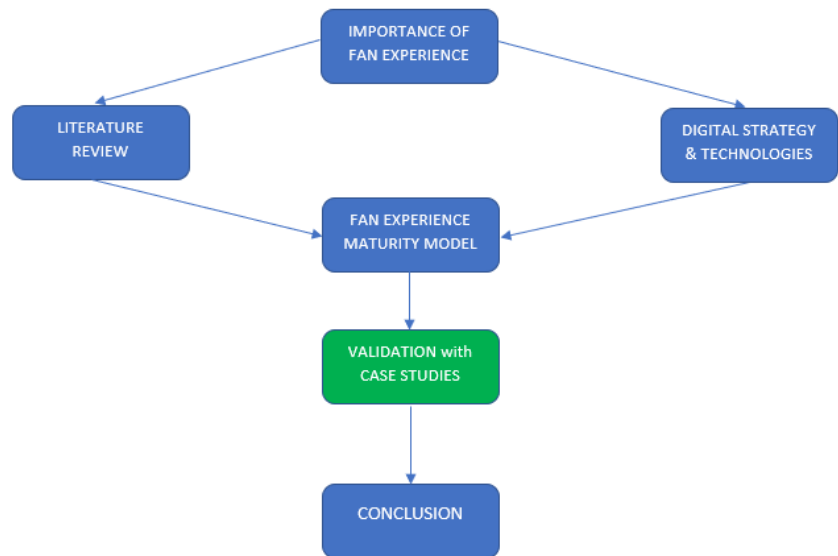


Figure 27: Structure of the Thesis: Case Studies step

Model, made by three structural elements (Data Collection and Integration, Analysis and Execution), and five maturity levels (Single-Channel, Few-Channel, Multi-Channel, Cross-Channel and Omnichannel approaches).

Now it's the time to give a validation to our model developed in Chapter 5. In order to do so, we created eight case studies about the way of managing Fans' data of sports organization, basing on the interviews made with managers of those organizations.

The aim of this research was firstly to **find out all the aspects not observable on the web**, since many operative topics are visible only gathering the opinion of whom works day by day in sports industry, and in particular to **validate** all the components (Structural Elements, Maturity Levels, features of each level) of the **"Fan Experience Maturity Model"** designed in chapter 5. Thus, we built an interview scheme, addressed to 8 sports managers, belonging to sports clubs or leagues or technologies vendors. After the collection of the opinions, we developed and elaborate 8 case studies. At the end, therefore, it was possible to identify common traits which characterize sports organizations' way of implementing Fan experience. Finally, once validated the model through these case study, we tried to put each single organization within a level of the maturity model.

In the next paragraph, after a brief introduction summarizing which case studies have been built, the reports of the eight case studies are shown.

6.1 Case Studies' Reports

The construction of each case study has been described in detail in the methodology chapter. We followed a specific path that you can see in all its parts deeply explained in the paragraph 3.4.

The aim of each case study is to acquire more information regarding existing digital strategies and technologies used for collecting, managing, analyzing fans' data and for managing the fan experience directly from the field. The focus is in particular on these two aspects (digital strategies and technologies) since we are looking for some relevant information for validating the components of our model, in particular the steps in terms of technologies from single-channel approach to omnichannel one. In the reports we have tried to identify the technologies used by companies for each structural element of the model (Data Collection and Integration, Analysis, Execution).

Here, in the table below, the list of the interviewed sports organization is reported.

Table 9: Case Studies: Interviewed People

Sport	Organization	Interviewed
Football	Lega Nazionale Professionisti Serie B	Federico Smanio, Digital Area and Fan Relationship Responsible
Football	Atalanta Bergamasca Calcio	Marco Malvestiti, Ticketing Coordinator and Supporter Liaison Officer
Football	ACF Fiorentina	Nicola Cecconi, Fan Relationship Manager
Football	Brescia Calcio	Luca Bercè, Marketing and Communication Manager
Football	Parma Calcio 1913	Jonathan Greci, Brand and Digital Marketing Manager
Basketball	Olimpia Milano	Ilaria Mazzeo, Head of Marketing and Sponsorship Club
Basketball	Pallacanestro Varese	Elisa Fabris and Luca Piontini, Marketing Assistants
Vendor	IQUII	Simone Cinelli, Head of Digital and Accounting Manager

In the following sub-paragraphs, the reports of the case studies are shown in the same order they are presented in the table above, subdivided in the four areas described in the methodology chapter: Strategy and Organization, Technologies, Future and Geographic Trends, Benefits and Criticalities.

6.1.1 Lega Nazionale Professionisti Serie B



SOCIETY	Lega Nazionale Professionisti Serie B
SPORT	Football
WHO	Federico Smanio
ROLE	Digital Area and Fan Relationship Responsible

Introduction and Background

Federico Smanio, Digital Area and Fan Relationship Responsible
<p>Education:</p> <ul style="list-style-type: none"> - Economics degree, Finance, Economy and Monetary Policy at Università di Bologna - Sbs Master in Strategies for the Business of Sport organized by Verde Sport - Master in Non-Conventional and Social Media Marketing, Digital Marketing, Social Media Strategy, Web Marketing in Milan - Digital and Mobile Marketing course at the School of Management (MIP) of Politecnico di Milano
<p>Personal and professional characteristics:</p> <ul style="list-style-type: none"> - Football player for 11 years in Serie B, Serie C1 and Serie C2 - Really passionate about internet, technology, and social media - Contributor to the "bee social net" Linkedin group in the area of sport, sports marketing, sponsorship and new media applied to sport - From 2013 Area Digital and Fan Relationship Responsible of Lega Nazionale Professionisti Serie B, with competences of Digital Transformation, Data Analysis, Project Launching (for instance Social Media Official Supporter), Social Media Management and SLO coordinator
<p>The society: Lega Nazionale Professionisti Serie B</p> <ul style="list-style-type: none"> - Lega Nazionale Professionisti Serie B was born in 2010 - It is commonly called “Il Campionato degli Italiani” - In this moment, there isn’t a president and it is governed by a commissioner

Strategy and Organization

Lega B is divided into departments, in areas that reflect the various activities done. In addition to the management and staff functions, there is a finance and control area, an administrative area (a soccer service league that runs both Serie A and Serie B), a communications and press office area, a marketing and commercial area, a digital area, run by Federico Smanio, an audiovisual rights area. Each of these areas has sub-areas. The digital area deals with all the communication and marketing activities on digital channels with the media, the non-media and in particular with the relationship with the fans. The relationship with the fans is central to the digital strategy of Lega B: it is inevitable in the sense that without fans there would be no more football, there would be no sponsors, there would be no more the game. The strategy that Lega B is developing is purely fan-centered with the aim of fueling a satisfying fan experience in order to increase traffic, attract fans, increase the frequency of use of its channels and consequently the interest of companies for its property.

At the heart of the digital strategy there must be the concept, the strategic and cultural approach to recognize the centrality of fans for the organization. The ideal digital strategy of Federico Smanio can be described by this virtuous circle:

- It starts from the acknowledgment of the centrality of the fan, the quantifiable and qualitative knowledge of fans that can be made with different types of techniques and methodologies (market research, listening to social media, dialogue and direct conversation with fans).
- It continues with the direct analysis of fan data, activities that are made by creating a system for managing relationship with fans (FRM or CRM), fostering culture, processes and technology that enables and facilitates the collection of data information on fans and allows to take actions that have a foundation on the data.
- Once you have the ability to analyze fan data in one place, you can take some meaningful actions (choice of content, services, activities, and initiatives Lega B wants to do to the various interesting targets).
- The end is the ability to draw a fan experience and engagement made well on all contact points, enabling you to create a quality network, a world of fans that follow you because they find on the other side entertainment, warranty, optimal services, fresh, interesting, fun content. Then there is monetization as a consequence.

Of course, this is the theory, then in practice Lega B (as most of Italian sports organization), like all clubs, is at the beginning of a path that needs a series of steps and challenges that are not so easily overcome in the short term. Middle-long term planning, top management commitment, development of an upstream and downstream relationship, involvement of the entire organizational structure, and KPI assessment are key aspects for developing a digital strategy.

Digital skills can also come from outside. It's vital to have quality project partners: with poor partners, even though you have the best idea, you cannot reach your objectives, you do not have

the strength to communicate what you want. So, it's important, within a strategy, to recognize mistakes and change the way.

Start-ups are very important as they give freshness, creativity, and the possibility to develop sustainable projects.

Technology

Lega B has both direct and indirect contact points with fans. Direct touchpoints are those channels through which a fan registers himself thanks to a form and his data are automatically inserted into the CRM. Indirect touchpoints are contact points that carry data that must be processed before inserting them into the CRM. The touchpoints directly controlled by Lega B are the website, the mobile application and Start platform, league of fans. Lega B is growing: it has been able to create a first official database of fan data that has reached 80,000 fans in 2 years. Indirect touchpoints are, for example, club membership campaigns, for which fans can give consent to transfer data to the league, so clubs send this data to the league (for 3 years, good results in quantitative terms, less in qualitative terms). Then there are co-marketing initiatives or partnerships with various realities (for instance Magic B, the fantasy game of Gazzetta dello Sport, where the fan could give consent to transfer his data to the league). Then you need to enrich your data to understand what fans' navigation habits are, which content is most used by fans, tracing contact points.

Lega B carries out data management and analysis and marketing campaign execution in this way:

- It has an integrated platform, CRM, where it *collects and manages all data* from all touchpoints;
- The current CRM allows Lega B to make segments and only basic *analysis*. So far, it can customize fan's content based on club preference: it's automatically done with the app, as the fan can choose his favorite team and receive notifications from one or more teams, and the CRM sends a newsletter to a fan with a minimum personalization on the club (last match result, upcoming match). Lega B is at the beginning of an evolution process, at the moment it does not have a business intelligence system. In the case of Start, the League of Fans platform, there is a different independent CRM, which allows a minimum of business intelligence and allows automation: if a fan does not log on one day, the system sends a mail to alert him that he may lose bonus points unless he logs in within a certain hour.
- On the *execution* side, Lega B sends newsletters and DEMs to fans in CRM via an external service called MagNews. The tool is integrated with the CRM, receives data from it, and returns data to the CRM, such as those fans who unsubscribe from newsletter service. The league has weekly and monthly newsletters, and sends DEMs especially when it is requested by sponsors, or to promote internal league initiatives, or for promotional purposes, which promote the brand of the Lega B partners.

Lega B is present on Facebook, Twitter, Instagram and Youtube. The league has made an analysis of what content works best on the different channels, as they are really different as for dynamics and mechanics, goals, and typology of use. Lega B, therefore, has 3 different editorial plans for Facebook, Twitter and Instagram, based on the dynamics that exist (for example, Live twitting on Twitter, main things Recap on Facebook, where you can discuss and comment, Snackable Vision on Instagram Post). So, the contents are either single-channel or are sent on different channels with different logic. Lega B has created a partnership with a Digital Agency in Turin (SportSuite), which helps it to manage social networks. There is a figure between the league and the agency, which design together with Federico the editorial plan, the publications and the management of the community. There is a constant dialogue with the agency, sharing the editorial plan, sharing publishing guidelines. Direct messaging, instead, is managed directly by the League.

The mobile app is used to keep in touch with fans and is based on fan-centered logic. The goal was to build a most immersive solution for fans on the championship, because it is what they are really interested in. A fan can see the matches, results, statistics, news, press releases, can be familiar with teams, players, has the ability to see official photos and videos, can choose his favorite club, navigation experience (in myclub section). Moreover, there is Tok.TV, a social section that allows users to interact with each other through gingles exchanges, selfie exchanges, chatting, calling and video calling during the match as a sort of second screen. Then, there is a portion of profile account management, where the fan can follow Lega B and decides which notifications he wants to receive. A classic simple app on Serie B, where a registration form has been entered to capture the most possible data on customers.

Start is a responsive web platform. It's an attempt to aggregate a fan-browsing experience based on a club's official theme: Club page of the platform as Home Page of the browser. It's a centralized platform, where the fan can switch from one club to another, he can follow the league and above all he can play by registering. At the moment there are 4 games: the prediction game, the MVP vote, the best goal of the week, and a weekly quiz with questions about football culture, game rules and so on. In addition, there are photo contests on themes through a hashtag (winning photos will appear in the screensaver running on start). Customizing the page on start is given by the buttons that move you to the club site, but above all by the backgrounds, uploaded by both the league and the clubs, that are running and can be shared on social. By participating in the games and sharing content or doing actions on the platform, logging on consecutive days, etc., the fan gains points by itself by climbing the individual rankings to win prizes made available by clubs (for example, a dinner with the coach), and for the club, because team's fans points are added up to compete in a parallel championship where real-world championship matches are played on the virtual in a week's time by comparing the points of fans of 2 clubs. At the end of the year, the winning club will win the trophy for the best fans and will play a game between the 11 club football players and the 11 top rated club fans. The underlying gamification logic and dynamics are a starting point for achieving something similar at Lega level to put fans in a loyalty scheme and offer them discounts for the purchase of goods and services.

Future and Geographic Trends

Federico's expectations for the future are:

- Significant development within the stadiums, from the revision of the current ones, the fan-engagement mechanics, never seen in Italy, can be activated, starting from simple things, such as ordering a sandwich or a drink from the place.
- Fan's holistic vision, both from the point of view of data and from the point of view of experience, the ability of sports organizations to map the fan journey through contact points and to design a satisfying experience, interesting and fun for the fan, in order to get fans more and more involved and even attract fans in this moment far from sports world.
- E-sports could create value for traditional sports.

According to Federico, Italy is lagging behind football top flight international countries, because so much of the fan experience lives also at the stadium and Italy is far behind on the smart arena as there are no properties' stadiums, and because digitalization in the sports societies is lagging behind due to the fact that our organizations are not evolved and do not have digital as a priority (CRM applied to football is not a common thing). Our country system is slower than in other countries, Germany and Anglo-Saxon countries, so in football we also have gaps in them. In Italy, the phenomenon of sport tourism is not very developed, because there are not many fans going away to watch their teams. There are developments that are emerging with the goal of expanding the offer beyond the match-view: tour package for fans who in addition to the game want to take advantage of the transfer to use discounts in the city where the match takes place. Italy, from this point of view, is rich in treasures of all kinds, food and wine, artistic and cultural, but has the inability to promote the territory through football and vice versa. The problem is always the Italian system, Italy isn't able to promote itself and its beauties and we cannot expect that soccer is different. This aspect is interesting, but at the base it is necessary to understand what is the fan's real need. However, you could create links between clubs and public institutions to link the game to other activities that can be done in the city.

Benefits and Criticalities

If the Fan experience works, you have a satisfied, involved fan base, it can share the positive experience and push other people to live this experience. There is a movement of sharing and spreading voice: more people talk about it positively, more appealing you become to companies and investors because they find a quality fan base and a connected network that you can link to your sponsors (indirect monetization). There is a direct monetization when a club or a league manages to sell products or services to fans, if it manages a relationship in a profitable, efficient and effective way, is able to increase its revenue from the sale of services and improving the fan experience, since a fan base involved is much more inclined to participate and buy.

The main problems in implementing fan experience are:

- Corporate governance of clubs since they are focused on the short term, on the sporting result, rather than considering the soccer company as a social entity that has a value that goes far beyond the game;
- Budget is small, especially in the case of Lega B, and resources that are scarce and increasingly focused on the sale of audiovisual rights when alternative sources of revenue should be explored;
- Infrastructures, arena, which are obsolete and not fitting clubs, fans and cities' needs;
- Difficulty of reaching fans for limited audience compared to major championships, the level of attention of people more and more small, and social media algorithms make life difficult for any brand aiming to distribute their content;
- Lack of culture towards data in general with no adoption of CRM systems in our world;
- Reputational issues because football is still struggling to eradicate match fixing and because owners have not proven to have a long-term vision and create sustainable organizations.
- The situation of League B is particular because it has to aggregate 22 realities that are not dependent but only associated. It's complicated to implement a strategy and impact on most clubs' bottom line.

Lega B does not share fans' data with its sponsors, but it performs activities on behalf of sponsors: Lega B sends sponsors' marketing communications to the fan base, branded as sponsors want.

6.1.2 Atalanta Bergamasca Calcio



SOCIETY	Atalanta Bergamasca Calcio
SPORT	Football
WHO	Marco Malvestiti
ROLE	Ticketing Coordinator and Supporter Liaison Officer

Introduction and Background

Marco Malvestiti, Ticketing coordinator and S.L.O. of Atalanta B.C.
Education: <ul style="list-style-type: none"> - Bachelor's in Economy and administration of companies, markets and financial intermediaries at Università degli studi di Bergamo
Personal and professional characteristics: <ul style="list-style-type: none"> - Long experience in Marketing and event management - Competences in social media marketing and ticketing - From 2015 Ticketing coordinator, Supporter Liaison Officer and SGSL responsible at Atalanta B.C.
The society: Atalanta Bergamasca Calcio <ul style="list-style-type: none"> - Atalanta B.C was found in 1907 - It has attended 57 editions of Serie A - Last season it obtained the best result ever in Serie A, finishing it at 4th place - In the season 2017/18 it is playing UEFA Europa League

Strategy and Organization

Fan Experience is a really important point in Atalanta's business strategy because it is considered one of the cores of its business. So, communication, marketing, ticketing (seasonal and matchday) are very important for fans.

In the club's organization, the SLO (Supporter Liaison Officer), Marco Malvestiti, is responsible of Fan experience and he manages it staying in directly contact with direction, marketing, communication and all departments areas in the Club. The Supporter Liaison Officer (SLO) has the fundamental task of having proper relations with the audience of the football club in which it lends its service; the purpose of its function is to build, maintain, consolidate

and develop the "unique bond" of the soccer company with its own supporters. This role was introduced by UEFA to engage clubs to make the relationship with their supporters functional and effective in order to enhance participation in events and initiatives in football. The main objective is to create a channel of direct and bidirectional dialogue between the Club and fans. The SLO has to welcome groups of fans, propose initiatives and, more generally, be available to favor the positive participation of the supporters in the club's activities.

The digital strategy of the club is focused on the management of two touchpoints with fans:

- the official website;
- the official social pages.

Technology

Atalanta B.C. has implemented, as provided by the Italian regulations dictated by the Osservatorio Italiano sulle manifestazioni sportive, a fan fidelity program through the "tessera del tifoso" (the fan card) required to buy subscriptions and coupons (where provided). The "Dea Card", the "tessera del tifoso" of Atalanta B.C. is a "loyalty" tool adopted by the club in order to create the category of "official fans".

So, regarding *Data Collection and Integration*, The Fan data coming from Dea Cards and subscriptions are collected in distinct databases. These data are then used for newsletter and several marketing activities.

Regarding the *Analysis* phase of the model, the club don't use business intelligence techniques and there aren't data scientists within the organization.

As already said, the *Execution* phase is based on communication through the website, the social medias and the newsletter, but there are not particular marketing automation techniques or systems, such as Digital Asset Management or Dynamic Content Management, for developed them.

Regarding social medias, Atalanta is present in the main social realities (Facebook, Instagram, Google, Youtube, etc.) with targeted and in-depth marketing and communication campaigns. They are managed by the Communication and Press Office.

Unfortunately, due to the limited availability of the interviewer for Serie A and Europa League commitments of the team, we couldn't collect information about the other 2 sections of the case study: Future and Geographic trends and Benefits and Criticalities.

6.1.3 ACF Fiorentina



SOCIETY	ACF Fiorentina
SPORT	Football
WHO	Nicola Cecconi
ROLE	Fan Relationship Management

Introduction and Background

Nicola Cecconi, Fan Relationship Management at ACF Fiorentina
Education: <ul style="list-style-type: none"> - Bachelor's in Statistics and Economics at Università degli Studi di Firenze
Personal and professional characteristics: <ul style="list-style-type: none"> - Different roles covered related to data analysis - Experience in Marketing and Communication - Deep knowledge of CRM, Data Warehouse, Networking, Digital Strategy and Social Media
Society: ACF Fiorentina <ul style="list-style-type: none"> - It was born in 1926 - It won two national tournaments and reached important results also in European leagues - The society failed in 2002 and in the same summer was founded a new club

Strategy and Organization

In ACF Fiorentina **the fan represents the team itself**. The society starts five years ago with the introduction of a CRM, initially with low costs software, with the idea of improving them later. The CRM collects the ticketing data of the supporters with the aim of doing a deep study of the fan base and launch marketing outbound ad hoc campaign for the different clusters of customers. Another important point of the strategy about the fan relationship management is the creation of a loyalty membership, through the platform InViola, with some points and coupons that the fans can spend in different ways, like shops or online on the platform for some loyalty rewards. ACF Fiorentina is starting now **a new project with the aim of re-digitalize**

all the society, in order to stimulate the fan base and engage new supporters. The strategy can be summarized in some main points:

- New society app
- New website
- Total integration of all the social networks in a single platform
- A data processor that sends all the data to a new CRM

Fiorentina wants to have a new platform that can provide **better performances** and that is **aligned with the market expectations**.

In the society organization there is a department dedicated to the fan management, in particular with six people that are dedicated to the call center for a direct touch with the fans and also other two people dedicated to the management of the CRM.

Technology

The technologies that are present in ACF Fiorentina for *Data Collection and Integration* are two and distinct: the **CRM** and the **InViola platform**. In the two systems are collected **different types of data**. The CRM collects all the data relative about ticketing both in the physical points and online. The data collected are about the access of the supporters to the stadium and all the related information. From the CRM data are use do launch outbound campaign, in particular phone campaigns addressed to people that live outside Florence and cannot direct be reached by other marketing initiatives. InViola is a platform different from the CRM, in which are collected different type of data. Through this platform Fiorentina has created a **loyalty membership**, the first football society in Italy. The fans can interact with the team in different ways, for example with the gaming section. There are different prizes that the fans can win collecting points, for example the tour of the stadium, meet some players, discounts in some associated shops. The data that are collected are related to the shopping habits of the fans (the average price, what buy, where, etc.).

To *analyze* these data are not used Business Intelligence techniques, but some basic analytics that allows to do only some promotions, not focused on the increase of the fan base, that need too complicated type of interpolations of data.

In the phase of launching of the campaigns, *execution* phase, are used newsletters and DEM that in some cases are contained in the contracts with the sponsors. In this moment, since the new project that is starting, in this moment the most part of the newsletters is suspended, in order to reach an alignment with the re-digitalization.

The social networks represent a very important part of the fan management. Fiorentina is present in all the main social media, Twitter, Facebook and Instagram. There is also a LinkedIn account and a YouTube channel, but it is no more used, always for the reason of being aligned with the new digital strategy. **The different channels are autonomously managed, and they are not integrated**, but the **final objective** of the new strategy is to reach a **perfect integration** between the different social networks, thanks to a new platform. The socials are also used for

marketing and sponsorship reasons. In the last years the companies request a specific number of post and shares on the social channels, since the greater visibility.

In the new strategy, the concept of Smart Arena is only at the begin, because the society prefers a step by step approach. In this moment there is only the access to the stadium through the app.

Future and Geographic trends

In this moment Nicola Cecconi sees as the most probable and strong trend to exploit, the **Virtual Augmented Reality**. This trend is very useful to enrich the Fan Experience, for example during a tour stadium, with the augmented reality it is possible to see on the pitch or in any other room of the arena something related to the history of the club, some old players scoring famous goals, etc. This technology represents the most immediate innovation that will become a trend.

ACF Fiorentina can exploit a very important factor: the city, Florence. **Florence** is one of the most important **capital of arts** and the city is wonderful, with many different places to visit. For this reason the society has created **a figure that is dedicated to the tourism**. The club has signed agreement with municipal and provincial bodies, trying to engage with different initiatives sport tourist, providing benefits both to the club and the city.

Benefits and Criticalities

The main benefits of this improvement in the Fan Relationship Management are two:

- **The increase in the loyalty of the fans**, that means more and more satisfied fans. In fact, in terms of improvements, with the phone campaign started with the old CRM, there was an increase of the sales, and they occupy around the 8% of the total sales of tickets. The hope is that with a new digital strategy, the results will be better also in terms of profitability, since for the fans will be easier interact with the society.
- **The credibility** gained by the society towards the sponsors. In fact, being one of the few society with this kind of strategy allows to be considered more credible and reliable to the companies that could become sponsors. The data collected are more valuable and this means being more profitable, because having more sponsor means also having more money.

In terms of criticalities instead, the main problem encountered is **build a strong structure**, that allows to analyze in a really good way the data. There must be a unique criterion that allows to put together all the data coming from the different sources. It is not important to have so many data, but to have high quality data.

6.1.4 Brescia Calcio



SOCIETY	Brescia Calcio
SPORT	Football
WHO	Luca Bercè
ROLE	Marketing and Communication Manager

Introduction and Background

Luca Bercè, Marketing and Communication Manager of Brescia Calcio
Education: <ul style="list-style-type: none"> - Bachelor's in Economics of Banks, Insurances and Brokers at Università degli studi di Milano-Bicocca - Advanced course in Sports organizations management at Università degli Studi di Bergamo - University Master in Sport Management, Marketing and Sociology
Personal and professional characteristics: <ul style="list-style-type: none"> - Back-Office Manager for 6 years at Visiant Contact where he developed Report and Data Analysis competences - Competences in social media marketing, event management and customer service operations - From 2013 Marketing and Communication Manager at Brescia Calcio comprehending activities of Merchandising, Data Analysis, Social Media Management and Event Organization
The society: Brescia Calcio <ul style="list-style-type: none"> - Brescia Calcio was found in 1911 - It has a new property since President Cellino acquired it in August 2017 - Actually, Brescia Calcio competes in Serie B

Strategy and Organization

Brescia is a small reality that has changed properties recently. Many aspects of the business strategy are neglected because of lack of human resources. Luca Bercè takes care of the marketing and communication part alone and he is the figure responsible for dealing with the club's relationship with fans. He deals with fan data management, but he would like to be able to manipulate it better to extract information useful for club purposes.

Brescia's digital strategy is mainly based on content, which changes from channel to channel as we will see in the paragraph related to Technology when we will talk about Social Media. For Brescia Calcio, it's necessary to have a graphic part, a video maker, since today's videos go far above Facebook and involve a lot of fans. The important thing is therefore creating content and video, according to Luca, is the way through which communicate content in an effective manner. So, Brescia Calcio work towards Video Content Marketing, and in its own small way, it is trying to develop it.

In addition, Brescia is designing a new website that will integrate all social networks and an app in order to cover on 360 degrees all that Brescia Calcio communicates to the outside.

According to Luca Bercè, top management should be open to change, because, sooner or later, it has to come in contact with the reality.

Brescia has not yet seen the possibility of creating a partnership with start-ups for data management and analysis.

Technology

Regarding the technology used by Brescia Calcio in the three phases of the Maturity model we developed, all the information is summarized in the following points:

- In terms of *Data Collection and Integration*, Brescia Calcio is trying to develop a platform (CRM) to include all the fan base, which is currently subdivided into different areas (football camp, members, e-commerce, etc.), in order to cross the fan data and know what they are doing in relation with the club, what are the fan's needs, for developing a more personalized strategy for them. Brescia Calcio collects fan information from subscription forms, profiles created on the site for e-commerce, while it is struggling to manage social contacts since there is no personal communication with the single fan through this channel.
- In the data *analysis* phase, at the moment the club does not use business intelligence techniques, but Luca filters the data, subdivided in different areas, on Excel. With the introduction of CRM Luca thinks it can filter data automatically.
- Regarding the *execution* phase, sub-databases are created per area and targeted e-mail communications are sent through a software. SMS are not used because they are considered invasive and therefore a mean through which lose the customer.

According to Luca, the app that the club is developing must be a conglomerate of all the digital communication of the Club, and it should not be a copy of the website. It must always be up to date, the fan with one click must be able to buy the gadget he wants. The app needs to give more content than the one offered on all other channels. The idea is to use it to involve more fans at the stadium, making a subsection of the app reserved to the stadium with push notifications, with the ability to shoot selfie at the stadium and publish, comment, and so on. It's important to have **a structure that will allow the club to develop different content.**

Brescia Calcio is present on Facebook, Twitter, Instagram, Google Plus and Youtube. According to Luca, it is crucial to have a defined editorial plan: what do you want to communicate? To Whom? Through which channel? Every social network tells the same thing in a different way. "If you are able to differentiate, both in terms of content and communication, you can expand your pool of users." In fact, Brescia posted a different content on every social network, otherwise a fan would follow the team on a single social media. For example: the name of the referee is posted on Twitter, the announcement of the coach's exemption is posted on Twitter, the club post on Facebook something more exciting for fans (for example, the enrollment of the app), the results are posted on all channels but in a different way (on twitter there is the live of the match with GIFs relative to Brescia's goals, while the club puts on Facebook posts only when Brescia scores). Brescia is not conducive to promoting the social advertising campaigns of sponsors that offer discounts to its fan base on social media, but it prefers to promote campaigns that include players with the sponsor because in this way the club tell supporters a moment of life of players. All social medias are managed in an integrated way by Luca. There are no specialized figures for the single social network.

The stadium in Brescia is very old and there is the intention to rebuild it, so all that concerns the concept of 'smart arena' will be postponed to when there will be a new stadium. The only activity at the stadium to entertain the audience is a game on the field among young children who then end up receiving applause under the fan curve.

Future and Geographic Trends

In the future, the fan should be involved more and more in the life of the club so that it becomes a twelfth player. The goal must be to make fans live more and more exclusive experiences and increase their life within the club. In this way you can also benefit in terms of sales (fan buy merchandising, ticket, etc.). At technological level, apps will go to replace the websites and virtual reality represents the future of the experience. But the basis must be the mentality of making the fan live every moment of the club's life.

Considering football alone, Italy is back from the top European clubs in terms of digital experience. There are offers from English or Spanish clubs that allow the fan to make a virtual tour of the stadium through the site, or that show the view from the selected seat the fan is going to buy. If you consider other sports, the USA is even more advanced. For example, an American baseball team promoted a campaign on twitter with #twittmeabeer: twittering with this hashtag the seat number, they bring you the beer in place. There are arenas where there is no cash and you pay with membership cards. In the NBA, behind the bins there are a lot of PCs, with analysts who analyze all the games in real time and the fan can see the statistics in real time on the app.

Regarding the link between fan experience and territory, Brescia has been offered VisitPass, an app that is currently in partnership with another Serie B club, through which all fans who buy a ticket for a game have the option during the day to have discounts in the city's business points.

Benefits and Criticalities

The benefits of Fan experience arise from the involvement of the fan in real time. The more you are able to put in contact fans with the club life, the more you loyalize them, the more the fan feels loyal to the club, the more he buys merchandising, the more he supports the club even when the results do not arrive. The experience must remain to the fans, regardless of the result of the match. Loyalty brings money through ticketing and merchandising (for example, Las Palmas, who has the same technical sponsor of Brescia on 10/15 thousand members every season, has been able to sell 10/15 thousand t-shirts through a more advanced fan experience).

The company has evolved over the last few years with regard to digitization: 4 or 5 years ago, there was a website, a Twitter page with 600 followers and a Facebook page with 600 followers, while now on social networks almost 200,000 followers follow Brescia Calcio. The CRM will definitely help the club, because it will switch from separate databases to a single centralized system. The new stadium will do its part, and digitization will go hand in hand with the development of the company's infrastructure (both stadium and corporate structures).

Privacy is a critical issue since today it's necessary to specify what the fan is giving to privacy (some years ago, only for profiling and sending marketing content, assignment to third parties, etc., but now many more, such as the transfer of data to the league).

Sponsors nowadays are increasingly interested in having fans' community contacts. First, they started to have the billboard on the pitch, now they are increasingly focused and interested in finding your club's data for all of their marketing initiatives. They want to get in touch with the fan base. For example, through the membership card of Brescia, a fan can receive discounts at club's sponsors' stores. This initiative brings excellent results for sponsors. Up to 8,000 subscribers, enough that 10% (800) go there to buy and have already created a higher return than what would be created by putting a billboard on the field. So, fan experience generates profitability, especially for sponsors. Not only that, even league Serie B asks clubs to send in their newsletters initiatives of league's sponsors.

6.1.5 Parma Calcio 1913



SOCIETY	Parma Calcio 1913
SPORT	Football
WHO	Jonathan Greci
ROLE	Brand & Digital Marketing Manager

Introduction and Background

Jonathan Greci, Brand & Digital Manager of Parma Calcio 1913
Education: <ul style="list-style-type: none"> - Istituto Europeo di Design (IED) - Bachelor's in Communication Design at Politecnico di Milano - SDA on Big Data Analytics at Bocconi
Personal and professional characteristics: <ul style="list-style-type: none"> - Long experience in Digital Marketing - Professional experiences in different companies working in digital field - Teacher at "Università degli Studi di Parma" in Master Sport Internazionale - Now responsible of digital projects in Parma Calcio 1913(e-commerce, apps, museum, etc.)
The society: Parma Calcio 1913 <ul style="list-style-type: none"> - Bankruptcy in 2015 - Reborn in 2015 thanks to seven Parma entrepreneurs - In two years the club arrive from Serie D to Serie B
Notes: all the information not related to the society Parma Calcio 1913 are Mr. Greci's personal opinions

Strategy and Organization

The concept of Fan is central for the society. The club has directly experienced the importance of having real fans, that are not present only when the team wins. After the bankruptcy in 2015, all the city and in particular the supporters, demonstrated their real attachment to the club. For this reason, it is possible to say that for Parma Calcio the fan represents even more the core of

its business, all the decisions of the club turn around the desires of the fans. In particular, the club maintains a direct and continuous contact with the supporters through coordination centers, as “Centro di Coordinamenti dei Parma Club” (CCPC) and “Parma Partecipazioni Calcistiche” (PPC).

The club follow a strategy to optimize the Fan Experience in order to improve it, collecting the data coming from the highest number of possible sources. The strategy is organized according different levels. A first level in of **Collection and Integration of data collected**. The real important thing in this phase is the ability to make the data valuable, otherwise it is impossible to create value for the fan. If the data arrived are not treated and integrated with other information in the right way they are unuseful. The most important part is collected the totality of data, but respecting the laws, the norms and the fans’ privacy that must be protected. The second phase is the **data analysis**, in which the data that have already been organized are analyzed through Business Intelligence systems. The last phase is the **push**, the most critical phase, in which the theory meets the reality. The objective of this structure is to give to the fans a better service and increase their loyalty. To reach the goal in each phase of the strategy are used different types of technology.

The club is organized in a different manner respect the traditional Italian football organization. Usually, there is a clear distinction between Communication and Marketing, in which few people have digital knowledge. Instead, Parma has a hybrid solution with different people that together occupy the triangle formed by Commercial, Digital and Marketing. There is also the figure of Support Liaison Officer (SLO) dedicated to the relationship with the fans and responsible of managing all the contacts with them.

Parma Calcio, is one of the few clubs that has a Digital Marketing Manager. In order to cope with these developments, the society is structuring itself with an internal team, partners and collaborators with Data Analysis competencies.

Technology

Parma Calcio uses different types of technology to assist and support its strategy. In general, the football clubs don’t treat Big Data, but only Small Data, with the exception of some very big clubs, in this way it is possible to work very well, also with limited investments. What Parma is trying to do is the next step. The club wants to:

- *Collect* data from all the possible sources, like e-commerce, social pages, the stadium, the Parma museum and in general the fan community. For this reason, Parma is going to develop a Fan (Customer) Relationship Management in which it is possible to organize the data gathered.
- All the information is linked together but to get value from them it is necessary to *analyze* this data. To do this it is necessary to use techniques of Business Intelligence. For this reason, Parma Calcio is forming some figure of Data Scientists that can analyze the data, but now the club relies on external companies which can provide a greater experience in performing this type of analysis.

- Regarding *Execution*, the society has decided to do not use direct marketing push technique, like DEM or newsletter or Marketing Automation activities. This choice is due to the internal belief that these actions are needed only when the fan really demonstrated to want this information. In this way the club can provide value to its fans.

Parma is also present in the app market with two different apps: the Parma App, that is dedicated to the society, with a news section, a part dedicated to the live matches, a gaming section, a video and photo gallery and the possibility to shop online; the Museo del Parma app, that is entirely dedicated to the museum in the stadium, that was built thanks to the crowdfunding campaign #weareparma.

The club is present in all the main social networks, Facebook, Twitter and Instagram, and Parma is also conversing for a deal with a social network totally dedicated to football, Dugout. The media are managed by a team directed by the responsible of the communication. This team is constantly in contact with the digital team of the club. In particular each social media has its dedicated content. From a strategical point of view, the channels are managed in dynamical way, but without a real Dynamic Content Manager software.

Another important initiative is dedicated to the stadium, that is moving towards the concept of Smart Arena, with service like Wi-Fi, the museum, the augmented reality services. And it is become a monument of the city, that tourist and people can visit every day.

What Parma Calcio has done is break a paradigm, the society decided to do not follow the classic division between communication and marketing, but applies a hybrid solution, in which more figure have overlapping competencies in marketing, communication and digital.

Future and Geographic trends

In this moment the football world is organized in three main positions about the digital innovation: at the top there are the very big clubs, like Real Madrid, that is using technologies that come from other markets for managing the club; the second level is a middle position in which clubs collect lots of data, but they do not have the infrastructure to do Business Intelligence; in the lowest position there are the clubs that do not even have the capabilities to collect data. The most part of the Italian football clubs occupy the second and the third position, they do not use lots of these technologies and they are more related to the more traditional way to manage the business. However, there are not so many differences between Italy and the most part of the clubs in the world.

The future trends are moving the technologies towards the mobile application, everything that it is possible to bring with you, then there is the proximity market, the use of unique FRM and the introduction of Data Lake systems. About the arena, the improvement will be related to the Internet of Things. The concept is to make the stadium a benefit for the community.

Benefits and Criticalities

The introduction and the improvement of the Fan Experience takes different benefits. Moreover, the better services that could increase the loyalty of the fans, it is possible to have

new sponsors and partnership. For example, if thanks to the data collected and organized from the CRM and analyzing them it is possible to see if there are fans that are interested to a particular sponsor and only in that case it is possible to make an agreement with it, offering to the fans what they want, a win-win relationship.

Obviously, there also some criticalities. The technical ones can be easily solved, since these technologies are already used in other fields. There will be economics challenges, but these technologies are always cheaper and affordable. The real challenge is the shift of paradigm, the introduction of this new “model of business” in the management of the clubs.

6.1.6 Olimpia Milano



SOCIETY	Olimpia Milano
SPORT	Basketball
WHO	Ilaria Mazzeo
ROLE	Head of Marketing and Sponsorship Club

Introduction and Background

Ilaria Mazzeo, Head of Marketing and Sponsorship Club
Education: <ul style="list-style-type: none"> - IED, Istituto Europeo di Design - Kaplan Aspect School, New York - London College of Fashion
Personal and professional characteristics: <ul style="list-style-type: none"> - Long experience in Italy and abroad - Different roles covered in Marketing and Communication - Now responsible of Marketing and Sponsorship at Olimpia Milano, in particular ticketing, merchandising and digital - Present in the Armani group in the last 7 years
The society: Olimpia Milano <ul style="list-style-type: none"> - Born in 1936 - The most winning Italian team - From 2004 the team's owner is the designer Giorgio Armani

Strategy and Organization

The **fans are the real target**, the final objective of all the strategic activities developed by the society. They represent the main point of the Business Strategy of Olimpia Milano. The club every year invests lots of money and effort to improve and implement new and old activities that can create engagement with the fans, both at the arena but also off-the pitch. Olimpia Milano wants to maintain the historical supporters, attract new ones and get loyalty from the

occasional ones. There is not a specific department that is dedicated to the fan management but there is a **cross working between different areas, creating a strong network**. In particular the Marketing and Sponsorship department is dedicated to the management of ticketing, merchandising, digital, sponsorship and institutional communication. So, the Fan Relationship Management is embedded in the Digital Strategy of the society. In the last two years Olimpia Milano invested a lot into **digital world** and represents the actuality and the **best asset to reach and communicate with the fans**.

Technology

Olimpia Milano uses different types of technologies with different characteristics with the aim to improve the Fan Experience. For example, surveys through Jumbotron, a mobile application, single sign on the website and, in particular, the **new CRM system**, *where all data coming from different sources are collected and integrated*. The CRM has been just implemented and allows to the society to clean all the old data and databases and acquire with a better efficiency and facility the new data in real time. In this way it is possible to **realize very effective and targeted activities**.

The club uses also some Business Intelligence techniques in the *analysis* of its data, exploiting service like **Google Analytics and Contact Hub**, that allow to get more value from the data collected.

Regarding *Execution* phase, in this moment in the launch of the campaign for the fans are not used techniques like Marketing Automation or Digital Asset Management, but this represent one of the next objective that Olimpia Milano wants to reach in short time.

The club has a mobile application that has mainly informative objectives, with news section, videos and photos. This **app is updated in real time** and in particular with **interaction with the Jumbotron** installed on the field, for example with surveys. The aim is to improve the experience of the fan and get them more involved in the match.

Social media are a really important informative channel with daily contents that have an editorial format, ticketing, merchandising and in some cases also the activation of some sponsorship agreements. There is an editorial calendar that the society follows with the different contents and posts to publish on the social networks. There is a unique person that utilize the **Hootsuite platform** for the management of the social networks. This platform allows **to manage all these media in an integrated way**. So, there is a unique strategy for the social media, but in some cases the contents are different, according to the type of channel.

For what concern the concept of Smart Arena, Olimpia Milano has a limitation because it doesn't have an own arena. However, the society has implemented some improvements, as the Jumbotron, that allows to implement fan engagement activities. In the future there is the will to implement other innovative technologies.

Future and Geographic trends

In the future the aim will be always the fan, this means that is necessary to have **state-of-the-art club** with always new and innovative technologies that offers different services and

facilities, following **the model of the American clubs**. In fact, USA represents the top, the objective that clubs have to reach. However, Olimpia Milano is not comparable with the other average Italian clubs, because the society has a more European model that is closer to the American model, it is the start point to reach the NBA teams.

In terms of tourism, the society is conscious of the great potential of this kind of economy and has already signed some partnerships with hotels in order to exploit the tourism related traffic.

Benefits and Criticalities

The real benefit of improving Fan Experience is increase the customer satisfaction, because it is the only way to reach a greater profitability. So, before thinking about money is important to understand that **increase the revenues is only the final step that totally depends on the initial satisfaction of fans**. The **main criticalities** encountered in the development of this strategy are related to the **technologies themselves**, that are not so easy to implement, time spending and expensive. For this reason, the other main problem to face is **the budget** that the club has to introduce these innovations.

An important part of the strategy are the **sponsors**. They are really important and represent one of the **main assets in terms of revenues**. In this moment Olimpia Milano has 210 sponsors. What is really important is valuable data that the society gives to them, but now with a direct access. The data are really valuable, and they are fundamental, both for the society and both for the sponsors, for this reason it is needed a clear communication.

6.1.7 Pallacanestro Varese



SOCIETY	Pallacanestro Varese
SPORT	Basket
WHO	Elisa Fabris and Luca Piontini
ROLE	Marketing assistants

Introduction and Background

Elisa Fabris: Marketing, Communication and Events Assistant	Luca Piontini: Marketing and Merchandising Assistant
Education: <ul style="list-style-type: none"> - Bachelor of Media Languages at Università Cattolica del Sacro Cuore - Master Digital PR Specialista at IL SOLE 24 ORE Business School - International Summer School in Sport Marketing Management at Università Ca' Foscari 	Education: <ul style="list-style-type: none"> - Degree in Giurisprudenza at Università degli Studi di Milano - Master in Diritto Sportivo at Università degli Studi di Milano Bicocca
Professional Experience: <ul style="list-style-type: none"> - Different experiences in communication developed working for Radio and Television groups - Now responsible of Fan Experience at Pallacanestro Varese 	Professional Experience: <ul style="list-style-type: none"> - Worker at EXPO - Now responsible of Fan Experience at Pallacanestro Varese
The society: Pallacanestro Varese <ul style="list-style-type: none"> - Born in 1945 - 10 Campionati italiani - 4 Coppe Italia - 1 Supercoppa italiana - 5 Coppa dei Campioni - 2 Coppa delle Coppe - 3 Coppe Intercontinentali 	

Strategy & Organization

The fan is the leading actor of the strategy of the club, without them it is not possible to do nothing. The importance of fans is even more accentuated by the fact that the main revenue item is ticketing and sponsor, so the care of the supporters is crucial. In the last years, Pallacanestro Varese started to study deeply its fan base and their preferences. The supporters of the club, averagely, are not so young, but they represent a fundamental part that is always present. The objective of Pallacanestro Varese is to maintain this part of supporters but also to engage younger fans, for this reason they proposed different activities trying to make fans interactive, like music during the break between the periods, dancers, food and beverage, etc. Furthermore, the society has just opened a new store, with all the merchandising of the club, both for increasing the incomes coming from this type of sales and for giving an additional service to the fans. What makes fans really central in the society's strategy is the particular environment of Varese. In fact, the team and the local community are very close, the supporters wait for the team at the end of each match, it is possible to meet the players around the city and there are events in which they participate together. These reasons push the club to find initiatives to engage their fans.

In the organization Elisa Fabris and Luca Piontini are the two figures that are dedicated to the management of the relationship with the fans. There is a communication department that follows also the management of the social channels, but actually who publishes the content in the social pages is an external agency, Mas Factory.

Technology

Pallacanestro Varese thinks that the technologies are fundamental to improve the Fan Experience, for this reason the club wants to introduce some innovations. The first is the introduction of a jumbotron that can be exploited in different ways to enhance the experience at the arena, like highlights of the match, fan cam, kiss cam, etc. Another improvement that is going to be introduced is the possibility to order food and beverage at your seat. Both these technologies are related to another important digital instrument that is the app of Pallacanestro Varese. At the moment the application offers different service, ticketing, merchandising, news, web radio, photo and video gallery, but now it will be equipped to interact with the jumbotron and the food and beverage delivery service.

The data represent a very important value for the society and Pallacanestro Varese the last year introduced a CRM system to *collect* the data of its supporters. The CRM is integrated with the ticketing service and the e-commerce, but these are not the only services. During the period of subscription of the seasonal ticket, the fans that do it at the arena are manually registered in an Excel database and then insert in the CRM. The objective of the club is to create an archive in which the most important information is registered. The CRM represents a fundamental strategical element. To *analyze* the data the society does not use any type of business intelligence techniques, but the CRM provide some basic analysis. Instead, the launch the campaign, in the *execution* phase, is done in different ways, through DEM, newsletter and also social media. From this year all the offline methods were eliminated. It is also used a mailing

system that tracks all the mails sent, with also the period of time in which they are received and opened.

The social media are another important technological element in the strategy of the club. Pallacanestro Varese is present in all the main social networks, Facebook, Instagram, Twitter and also on LinkedIn and YouTube. As already said, in the management of these channels the society relies on another agency, Mas Factory. There is an internal editorial plan developed by the club, so Pallacanestro Varese prepare the content, when it is needed to share, etc., and then communicate this to Mas Factory that publish the content on the social channel. There is a strong collaboration between the two parts, that share ideas and proposals. For each of the different social networks there is a dedicated content, according to the type of media. The social media are also used with the scope to promote sponsors or partnership with other company, and in additional were dedicated specific events for sponsors, for example matches with gadgets and dedicated contents.

Pallacanestro Varese is also moving towards the creation of a Smart Arena. There is a free Wi-Fi service in all the arena and the other additional services that are going to be introduced are a further improvement.

Future and Geographic Trends

The fan will be always in the middle of the projects, all the new trends will be aimed at actively engaging the fan. The innovations that in this moment are really interesting are technologies that measure the athletic performances of the team and that can be shared with the supporters, then all the content related not to the match, but what happen before and after the match, to participate to the life of the team, in the dressing room, during the trainings, etc. Another very important trend is the gaming section which is becoming increasingly important.

The Italian basketball, in terms of Fan Experience, is lagging behind the rest of the world. The final objective is to reach the NBA level that represents the highest point for engaging fans, it is not only a matter of Italy, but also for many other European leagues. It is important to consider the differences between Italian fans and American ones, it is needed a step by step approach to get used to this new concept.

An important factor that Pallacanestro Varese can exploit is its territory. The society wants to exploit also the tourism and has tightened synergies with some provincial bodies, that give the possibility to the club to use some infrastructures, like for example ancient villas. The tourism is also an incentive for the club to find new sponsors and partnerships.

Benefits and Criticalities

The evolution of the Fan Experience has led to the society both benefits and criticalities. The main advantage is the loyalty of the fans that is increased. The supporters are more active in the life of the team. This means a better profitability, because an improvement in the participation of the fans results in an increasing of the revenues in terms of ticketing, merchandising, etc. More supporters, means also more visibility and so more sponsors that can support the club. The possibility to have numerous sponsors give to the society the chance to create a network of

companies that collaborate with each other, providing value both for them and both for the Pallacanestro Varese. A very important fact is that the club and the sponsors share the data, so both have the possibility to see if what they are doing is valuable or not. There are also different criticalities. Some are related to the technologies, one of the main is the collection of the data of the fans that buy ticket or merchandising in the physical location, because it is not always possible to register them. Another important issue is the possibility to analyze the data, in particular the ones coming from the social networks. The media give the possibility to use some basic analytics techniques for free, but for more elaborated analysis the society has to pay. And this is another criticality, the budget, because not all the clubs can have the possibility to spend lots of money for these issues. It depends on the commitment of the top management. In Pallacanestro Varese there is awareness about the necessity to improve the Fan Experience, but the budget dedicated to this matter depends on different factors (the performance of the team, the sponsors, the moment of the season, etc.).

6.1.8 IQUII



SOCIETY	Iquii srl
FIELD	Digital Consulting
WHO	Simone Cinelli
ROLE	Head of Digital and Account Manager

Introduction and Background

Simone Cinelli, Head of Digital and Account Manager of Iquii srl
Education: <ul style="list-style-type: none"> - Bachelor's in Economy and Business Administration at Università degli Studi di Cassino - Master in Trade Marketing and Commercial Strategies at Università degli Studi di Parma
Personal and professional characteristics: <ul style="list-style-type: none"> - Different roles covered related to the digital and communication - Long experience in digital strategy and marketing - Work in Iquii since 2013, Head of Digital and Account Manager since 2016
The society: Iquii srl <ul style="list-style-type: none"> - Founded in 2011 - Digital Consulting society that provides support to its customers - Operate in different fields

Strategy and Organization

Iquii it is a digital consulting agency, born in 2011, and in the last years has expanded a lot. Iquii works in the Digital Transformation, providing consulting services, software development, social media, etc. In particular, there are three main fields in which Iquii operates: Banking, Sport and Retail.

For what concern Sport, the company has collaborated with different societies developed different solutions. In all of these projects, but also in others collaboration, the central theme is the Fan Experience. The attention of Iquii's customers is moved towards the fan, because it is evident that without the fan the sports industry has no more sense. For this reason, Iquii is studying and deepening the concept of Fan Experience on its own. Obviously, Iquii put this

attention towards the fan within a more comprehensive digital strategy. The main point that the companies want to reach is the integration between the online and the offline activities. The objective is to give to the supporter something more, not only during the event, but also pre and post the event. So, Iquii provides different solutions to its client that wants to entertain the fan during the match, as statistics, results, etc., but also off the pitch, like surveys, videos, etc. Underlying the importance of the fan, Iquii has an Innovation Hub, totally dedicated to Sport. Called Iquii Sport, in which one of the main points is Fan Engagement.

Technology

Iquii is fully aware of how technology is totally revolutionizing the sports industry, for this reason it does not only offer technological solutions, but it also continues to study new technologies. Another aspect has always more importance in the digital sports industry, *the collection of data*. Iquii considers fundamental being able to collect data from very different sources, from customers, from fans, and in particular, being able to treat data in an effective way. For this reason, having a CRM is fundamental. This system allows to collect the data coming from the different sources in a unique place, and also allows to do activities targeted to the different targets of customers. CRM system is also really useful for long-time relationship, that are what Iquii is searching with its customers. In fact, having this kind of technology allows to maintain in the system the fans' data, and it is possible to maintain the contact with them also out of the period of the event, and it is possible to re-contact the fans in the future. In this way, the data assume a greater importance, since are not related to a particular event, but they could be used in long term perspective. And also the fans have not the impression of being exploited.

In terms of *analysis*, there are different tools that Iquii exploits, some are internal and in some other case it relies on third parties that conduct deeper analysis. The value of this analysis, exploiting Business Intelligence techniques, is to elaborate the different typologies of data and organize them in an organic way, so the data is valued.

For the *execution*, there are different techniques that are used to communicate with the customers, like SMS, push notifications, e-mails, but also Marketing Automation techniques. With the use of Marketing Automation it is easier to communicate in an effective way, and it is possible to create ad hoc offers for the fans automatically, according to their characteristics. This type of solutions is all in the portfolio of technologies offered by Iquii, but not all the companies that collaborate with them have the possibility to invest in this kind of solution, that are not so cheap initially. But Iquii is confident that in the future lots of partners could afford to buy these solutions.

It is interesting to see some of the projects that Iquii has undertaken in these years. Some of these collaborations are with Federazione Italiana Rugby, SBK, Federazione Italiana Tennis, Lega Basket Serie A, Lega Serie B, etc. It is possible to present some of the main characteristics of these projects:

- IBI app, with Federazione Italiana Tennis. This project is strictly related to the event of Internazionali d'Italia. Iquii has improved the app, provide services like Food Delivery, daily quiz with awards for the fans. In particular Iquii has introduced live statistics and

results with data coming directly from ATP. Furthermore, the company is organizing a contest to maintain the contact with the customers, avoiding they uninstall the application and so saving the costs of reacquisition of data for the next event.

- FIR Live Score, with Federazione Italiana Rugby. The objective is to provide a platform for Eccellenza league, the top Italian championship. Iquii furnished them an app, with live results, the possibility to vote the MVP, listen to the referee during the match and watching the matches in live streaming. There are also other services like awards for fans, quiz, etc. In this way Iquii managed to achieve the loyalty of the rugby fans, that are always more.
- WorldSBK app, with SBK. Iquii has completely redesigned the experience and the interface, developed and improved “Second Screen” functionality, Live Audio Commentary, Tracking, videos and photos.

Another important technology on which Iquii is trying to act is Smart Arena. This represent the maximum peak of fan engagement and of the digitalization in the Fan Experience field. Unfortunately, in Italy only few teams have property stadiums and the possibility to invest on this type of technology, but they represent a great improvement towards the enhancement of Fan Experience. Iquii is trying to offer some of the technologies relate to Smart Arena, some quite cheap, like Wi-Fi services, interactions with maxi-screens, Virtua Augmented Reality in museums and tours, and other more expensive, like the proximity market and the beacons.

Future and Geographic Trends

The future trends are all related to concept of engage the fan, in a 360° view perspective. The main trends in term of technologies are:

- Creation of Loyalty and Membership community;
- Data Analytics at all levels, in order to collect and integrate better the data and communicate more effectively;
- Smart Arena, to improve the fan journey, pre, during and post the event;
- Proximity market and beacons;
- The introduction of new actors like Facebook and web societies that could change the broadcasting market, since their nature;

Italy respect the rest of the world is less advanced, in particular compared to U.S.A and England, from whom come all the innovation. Italy is following them and also producing some good innovations and ideas, but the problem is that level of adhesion is not so high, and these deficits are due the mentality and the culture of lots of Italian companies.

Benefits and Criticalities

The concept of Fan experience is crucial, both for the fan and for the team, is indispensable to today's sports. At the same time, conceiving the fan, but without digitizing, is still something

very difficult. All the different technologies described really brings the fan to living the sport experience in a livelier and increased way. There are a number of incredible information available, the content has become very personal and is demanded by the consumers themselves, and it is transmitted through different channels. The path that Iquii is following, is to make our customers understand the need and importance of being able to give rich and personalized contents and activities to the fans. This ecosystem includes lots of stakeholders, whose center is the fan, and each of these players can enrich the Fan Experience. A cheerful fan will be more pleased and will be more inclined to spend and give more value information. A satisfied fan could become an ambassador and share the experience through word-of-mouth, widening the base fan. From this depends credibility of the society itself, that if it promises services and experiences it must be able to keep it, increasing the brand's credibility. You have to have a long-term strategy and not just think about the short-term gain. These are the main benefits of improving the Fan Experience.

Obviously, there are also some issues and criticalities that it is needed to face:

- The culture, that it is not easy to change but it is possible to do it. In Italy there is the necessity of a greater mental openness;
- Wrong investments, on outdated and unnecessary assets, without a measurable return;
- Data not collected in the right way, but now this problem is diminishing;
- Old infrastructures on which it is not possible to act;

These represent the main problems that a company has to face in Italy.

6.2 Case Studies' Analysis

Once developed all these Case Studies, it was possible to understand better which is the current situation of the Fan Experience in Italy and in which direction the sports societies are moving. In particular, these interviews validate the maturity model developed in the previous chapter and clarify which are the positions of the different sports societies interviewed. Even if it was a small sample, these case studies can make clear which role plays now the digital innovation in terms of fan management in the Italian sports industry, comparing it with the rest of the world. Furthermore, from the interviews emerges also the possible future trends that can be exploited. In this chapter we decided to divide our analysis basing on the four main topics of the question of the interview, intersecting the contents with the Fan Experience maturity model, positioning the different societies according to it.

6.2.1 Strategy & Organization

All the case studies have one main point in common: for all the societies the **fan represents the central point of the strategy**. Regardless of the size of society or the type of sport, fans are essential, without them the concept of sport loses its meaning. It is inevitable, without supporters there will be no sports, no sponsors and no game. All the clubs have or are developing a fan-centric strategy with the aim of enhance the Fan Experience of their supporters, attract new segments of customers and increasing the strength of their brands. But if the centrality of the fan is the heart of the different strategies, what changes it is the way in

which the strategies are developed. It results evident from “Literature Review” and from “Digital Strategies and Technologies”, that there is a **shift in the paradigm of the sports management**: from a more traditional way of managing the club, mainly linked to the ticketing, to new one, in which the **digital side assumes the main role**. From the interviews emerged that not all the societies are at the same level in this innovation. These differences are mainly due to some issues, like the dimension of the societies, usually strictly related to economic possibility, but also respect the type of sports and the related visibility. However, in general we have identified some main points that mark the Digital Strategy of a club:

- **the fan-centric approach**
- **the ability to collect and analyze data**
- **the right technologies**
- **have specific resources dedicated**

As already said, from the case studies emerge different situation of this type of strategy. Some societies are at a more advanced level, and other instead are still more traditional. Clubs like Parma or Olimpia Milano have a clear strategy, embedded in the digital context, with new and advanced technologies and with a clear vision about the future steps that they have to undertake. Instead, clubs like Atalanta or Brescia, results to be more technologically backward, although they intend to improve. The strategy is also related to **the way in which the societies are organized** to manage the relationship with the fans. Although, all the club recognize the centrality of the supporters, they are not organized in the same way. For example, in ACF Fiorentina there is an entire department dedicate to the management of Fan Experience, both in terms of direct contact with the customers and both in terms of technologies. Instead, in Olimpia Milano case there is a collaboration with different areas for the management of the fan relationships. In the most part of cases there are one or more figure that could be totally or partially dedicated to the fan management. In conclusion, after this overview of the Italian situation, it results that in the Italian sports industry coexists different reality, some more modern and digital, and some still more traditional. But, what it is evident is the fact that all the societies are aware of the importance of its fans and they are moving towards an improvement of their Fan Experience.

6.2.2 Technologies

From the development of the case studies emerge that in the Italian sports scene, different types of technologies are used. Analyzing the information extrapolated from the interviews with the maturity model developed in the previous chapter, it is possible to spot which are the most used technologies in the Italian sports societies, for each of the three structural elements.

- Regarding **Data Collection and Integration** what the most part of the societies is doing is the introduction of a **unique CRM/FRM**, in which they can collect the fans' information coming from different sources. So, the majority of the clubs is applying what in the maturity model is called **Multi-Channel approach**: gathering together the data coming from the different channels in a single repository in order to have a higher integration. Some clubs are more advanced than others, for example Pallacanestro

Varese, ACF Fiorentina and Olimpia Milano already have a CRM, instead other are developing one, like Parma Calcio. Also Lega B has a CRM that integrate the information of the different supporters. A particular case is Atalanta B.C., that has still a **Single-Channel approach**, in which the different data collected are inserted in **different databases**.

- For what concern the **Analysis** of data, from the case studies results that are used **basic Business Intelligence techniques** of analytics that allows, thanks to the CRM, to create clusters and segments of fans with specific characteristics. Only in Olimpia Milano the analysis is more detailed, with the used of Business Intelligence techniques more advanced (Google Analytics and Contact Hub), in all the other cases there are more simpler technologies. So, also for the Analysis, the Italian sports scene is situated in the **Multi-Channel approach** section, trying to **organize the fans in clusters and segments** more homogeneous, easier to target, through the use of simple Business Intelligence tools embedded in the CRM.
- In the **Execution** phase all the different societies use a quite personalized integration. The technologies that are most used are **Direct Email Marketing and Newsletters**. Obviously, with such types of technologies is not simple hit the right segment of fans, the level of personalization depends on the integration reached with the CRM. In some cases, the customization is more advanced, with the targeted communication as in Olimpia Milano and in Lega B, instead in other are more general, like in Brescia. Another important type of technologies are the ones available to the fans- The most diffused in all the societies are the **social networks**, that are exploited by all the different organization, because represents a fundamental tool for manage the Fan Experience, and the websites. In almost all the cases analyzed there are official **mobile applications** of the different societies, that could be used by the supporters, with news section, gaming, e-shops. Other Fan technologies are the **platform totally dedicated to the customers**, like “InViola” for ACF Fiorentina or “Start” for Lega Serie B. This type of technology is a further step towards the improvement of the Fan Experience and increase the sense of community and of involvement of the supporters.

To conclude, the level of technologies emerged from the case studies is similar in the most part of the interviews. All the societies interviewed, that should represent some of the main technologically advanced realities in Italy, are organizing in order to have more integrated and meaningful data, to create more value that can enhance the experience of the supporters. To do this, there is the introduction of technologies of CRM, Business Intelligence Techniques, Social Media Marketing and Email Marketing that can take great improvement to the Italian sports situation.

6.2.3 Future and Geographic Trends

In the different case studies, the people interviewed are expert of the field of Digital in sports and of Fan experience. From the interviews it is possible to identify some main trends that will play an important role in the future, always maintain the fan as the center of the strategy.

- **Improvement in the data analysis**, because data represents the main source of value for the societies and they must be able to extract value from them. So, there should be an improvement in these technologies, with the introduction of tools like **Data Lake** and **Data Hub**.
- **The creation of loyalty membership**, through which the fans can feel to be really part of the club and not only a spectator. This is possible for example with the introduction of platform that are integrated with the other systems, that register the fans' data and habits, and allows to create a community, as done in ACF Fiorentina case study.
- **The Smart Arena** will become a fundamental aspect for the future, because it allows to fully exploit the experience to the stadiums and the fans can actively interact during the game and having news and real-time information. The technologies that are related to this innovation are mobile applications and all the different aspect of Internet of Things, in particular, the **Virtual Augmented Reality**, a technology already used but that can really help to enhance the experience, making fans feel interactive.
- **The exploitation of the territory**, in particular in Italy, could represent a very important trend that can increase the revenues for sport societies, but also to the local community, in a win-win relationship. It is emblematic the growth of the **Sports Tourism** industry in the last years.

From our analysis results that the situation of the case studies is backward respect the rest of the world, in particular looking at the U.S.A. The American sports represent the model that Italy has to follow, always considering the differences between the fans. But U.S.A. represents the state-of-art of Fan Experience management, both in terms of entertainment and engagement, but also in terms of technology, that are really advanced respect the ones used in Italy.

6.2.4 Benefits and Criticalities

From the case studies emerged that the main benefit that brings a better Fan Experience is the **fan loyalty**. Fans if have a good experience, if they feel part of a community, if they participate actively to the life of their clubs, are happier. This feeling is translated in more loyal fans, that means that they spend more and frequently in ticketing, merchandising and at the stores. Furthermore, there is a **positive word-of-mouth**, allowing to engage a larger number of new supporters. In this way, the increase loyalty of the fans reflects also an **increase in the profitability** of the societies. Another important benefit is related to the sponsors. A club with lots of fan, technologically advanced and with a strong economic base, has **more credibility and represents a better partner** for a potential sponsor that wants to invest. So, it is very important for the Italian sport industry keep up the pace of the innovation.

In terms of criticalities instead, some issues arise frequently from the case studies:

- **Budget issues**, being digital has a cost and not all the societies can invest a lot in this;
- **Obsolete infrastructures** and **non-property arenas**, on which it is not possible to act easily;
- **Difficulties in collecting and extracting the right data**;

- **Lack of culture** in the Digital field;

For Italian clubs is not easy having a good and effective Digital Strategy. Especially for the smaller clubs (in particular for non-football clubs), technologies and software have a very high cost and it is not easy to justify this necessity to top managers. So, for the clubs results difficult collect important data, analyze and extract value from them.

6.3 Conclusion

To conclude this analysis, we wanted to give an overview of the Italian sports industry scene, positioning the different societies interviewed in the maturity model that we developed.

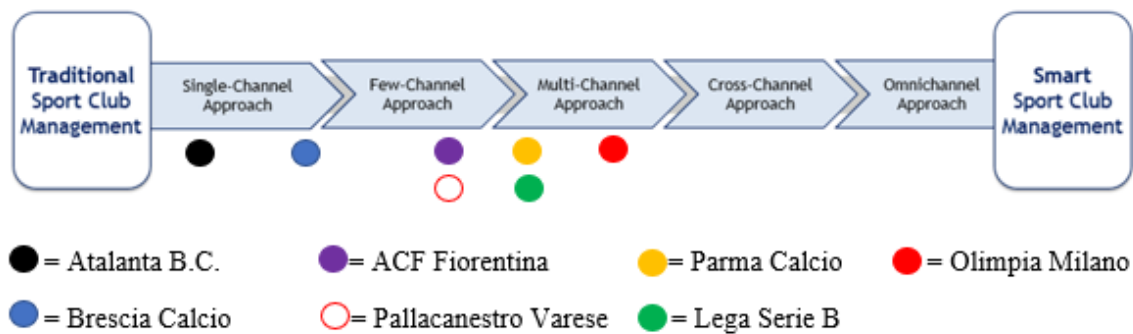


Figure 28: Case Studies Positioning in Fan Experience Maturity Model

In the image above there is the representation of the actual situation of the clubs and leagues interviewed. There are two realities that are backward respect the rest of the case studies: Atalanta B.C. and Brescia Calcio. Atalanta is in the Single-Channel approach phase, with the use of different databases, totally no integrated and with very little analysis done on the data collected. Brescia instead, is still in the Single-Channel approach but it is more advanced, closer to the Few-Channel approach. In fact, the society now has different database for each channel it uses, but Brescia is moving to introduce a CRM to have more integration through this single repository. Furthermore, the analysis done is very basic, using only Excel and the communication is only based on e-mails.

ACF Fiorentina and Pallacanestro Varese are almost in the same position according to our model, in the final phase of the Few-Channel approach, even if for different reasons. The football club already has a CRM for the demographical data, but it is not the unique repository used, it also has a platform “InViola”, in which other type of information are stored. So, there are two databases that are not integrated, but their totally re-digitalize the strategy with a unique platform that will afford a total integration of the different technologies. Instead, Varese introduced a unique CRM only one year ago, so it is not able to have an historical database to which take the data, so in some case it is obliged to use old information that are not contained in the new CRM. Both the societies use newsletters and social media to launch offers to the fans.

Also Lega Serie B and Parma Calcio occupy the same position, at the begin of the Multi-Channel approach. The first has a CRM with some basic Business Intelligence techniques used in the analysis, but it uses the platform Start that is still not integrated. Instead, the former one

has still not introduced a CRM, but it is going to do, and already has technologies like V.A.R., apps and a clear vision of the future. The most advanced club is Olimpia Milano. The basketball society has a unique and integrated CRM system, with the use of more advanced Business Intelligence techniques and there is the intention to introduce technologies like Marketing Automation and Digital Asset Management in the Execution phase, to have targeted and more effective communications.

Looking at the model, results that the different societies analyzed are backward and still in the development phase for what concern the digital innovation field. But all of them are aware that the Fan management is essential for their strategies, they must be able to maintain the relationships with the supporters and engage always new ones. Without the fan the sports have no reason to exist, for this reason a fan-centric approach is a must that no one can afford not to have. In fact, in almost all the case studies results that the societies are moving towards this vision and they are investing on it, and in particular on the most probable future trends. So, on the data analysis, for example forming internal data scientist. It is very important also the concept of Smart Arena, that in Italy is difficult to implement, since the infrastructure are old and very often do not belong to the clubs, that could not act easily to improve them. From the cases studies results that another trend is now being exploited, the Sport Tourism, that is greatly increased in the last decades, and that in Italy has a great potential. Obviously, investing on Fan Experience is an expense that not all the clubs can afford to do, since the daily budget problems. But the interviews made demonstrate that all the societies, according to their possibility, can act in order to provide a good experience to its fans. It is fundamental to exploit the sponsorships and partnership with other companies, that could bring new incomes and also new customers. If the objective of create an unforgettable Fan Experience is reached, for the clubs this means more loyal fans and more revenues from different streams. In conclusion, basing on the case studies, it is possible to validate our maturity model. The different organizations interviewed respects or are going to follow the different steps that we have developed in our Fan Experience maturity model, and they are aware of future improvement that they should implement to reach the objective of a Smart management of the club.

7. CONCLUSIONS

The main objective of Master Thesis was the creation of a maturity model regarding the Fan Experience, in which are explained all the main steps that a sports society should take to move from a Traditional to a Smart Sport Club Management.

The work started with an analysis of the general sports industry, in particular for what concern Fan Experience and how it is changed in the last decades, in particular related to economy that exists around the fans and its relationship with Digital Innovation. Then, we did a deep research in the Literature existent on the concept of Fan Experience, that allowed us to better understand the topic that we faced. We analyzed, collaborating with Osservatorio Innovazione Digitale nell'Industria dello Sport of Politecnico di Milano, the meaning of being a fan and of Fan Experience in the sports industry. After deepening our knowledge, we examined the main technologies that are spread in the sports industry to deal with Fan Experience, divided according to the function for what they are used. Starting from this basis, we were able to build our Fan Experience maturity model. The aim of this framework was to show which steps should be faced by the sports societies in order to reach a Smart Sport Club Management. Starting from the concept of Sports Digital Strategy, our final maturity model is structured as a matrix, in which on the horizontal axis there are the Maturity Levels, objectives, functions of use and related enabling technologies, and on the vertical one the structural elements, the elements that fully and comprehensively characterize the topic to be examined. We identified three structural elements and five Maturity Levels. The structural elements are: Data Collection and Integration, that regards all the aspects related to fans' data acquisition and their integration within the organization; Analysis, the phase in which fan data are filtered and analyzed in order to cluster the fan audience in target segments and so create insights; Execution, the activity in which, on the basis of analyzed data, marketing and communication campaigns are launched. Instead, the five maturity levels are referred to the management approach of the different touchpoints between a fan and a club, and are: Single-Channel approach; Few-Channel approach; Multi-Channel approach; Cross-Channel approach; Omnichannel approach. The Maturity Model works thanks to the interaction between the Maturity levels and the structural elements of the model. Starting from our framework we interview 8 sports societies, four football societies, one football league, two basketball clubs and one sport technology society. With these witnesses we allowed to better understand which is the situation of part of the Italian sports industry, positioning the different societies in our framework, and, furthermore, thanks to them we could validate our Fan Experience Maturity Model, because reflects a good representation of the digital evolution of the sport club management.

In the next sections are presented the main findings of the work, with some personal considerations about what we have found, the limits encountered in the research of these Thesis and some possible future improvements.

7.1 Findings

In this section we present the main results that we found in our work. The paragraph is divided in three parts, according to the main theme that we identified: Fan Experience Concept, Sports Digital Innovation and Fan Experience Maturity Model.

7.1.1 Fan Experience Concept

Fans: an asset to be valued

Fans, as already explained in the Literature Review section, can not be considered as simple customers. In fact, a sports fan is defined as “individuals who are interested in and follow a sport, team and/or athlete” (Wann, Melnick, Russell, & Pease, 2001). It is not a simple client, fans have their particular and unique characteristics, they are emotionally linked with their team, it is not a shopping relationship, but true feelings, fans are loyal and they are active and proactive toward their teams. Societies in the last years have understood these particularities and they are investing a lot to provide them initiatives and new activities to give them unforgettable experiences. The importance of the fans lies in the characteristics of the sport itself: a sports club without supporters has no sense. It does not mean that there is no one that support the team, but the fact that there are no revenues. Having no fans means no tickets sold, no media interest and no sponsorship: such kind of team is a failure. But why fans have become so important? The motivation stays in the revenues of the sports organizations and in the exponential increase of the costs of sustaining such societies. Watching the financial statements of different sports societies, we noticed that the economic situation is extremely changed in the course of the last decades and the fan is a leverage that can not be neglected. So, as our title says, fans represent an asset to be valued.

Fan Experience: key to success for sports organizations

The importance of the fans is strictly related to the Fan Experience concept. In parallel with the increasingly significance of the fans, the Fan Experience has extremely expanded its limits and it is not merely related to the stadium and the event, but embedded different fields, from psychology to economy, from communication to digital technologies, and all of them are overlapped and interact each other. So, for sports clubs Fan Experience means that they should be able to encounter their supporters every time and everywhere. We noticed that this fact has accompanied by a change in the sports organizations. In fact, the most part of the societies, according to their dimension and economic possibilities, has a dedicated part to the Fan Experience management that is embedded in the business strategy of the organization. The poorer societies have only a figure, instead the biggest ones have entire departments. Two examples of this last case, already cited in the thesis, are ACF Fiorentina, that has a small unit that is dedicated to interact with the fans, and Liverpool, that have a Fan Experience section in its organization. So, it results evident that the Fan Experience management represent a key tool for the success of the sports societies.

7.1.2 Sports Digital Innovation

No Digital Technologies, No Fan Experience

As already said in the Introduction, the world is digital, and it is evident in every aspect of the daily life. Almost all the people have a smartphone or a smart device that can be connected to Internet, there is the proliferation of social networks, there are always more platform that provide innovative content. People are always online and connected. This digitalization has obviously involved also the sports industry in all its aspect. In particular, digital and technological innovation is fundamental to have an effective Fan Experience management.

Without technologies results difficult to implement any kind of activities. We founded that two main concepts emerged from the digital innovation: the importance of data and the Digital Strategy. The data represents the real value of any kind of business, and also in sports this paradigm is valid. Knowing fans' data is fundamental, because societies can reach them with more effective and hoc communication. And the technologies are moving towards this direction, with tools like CRM, B.I. techniques, that could allow to collect, integrate and analyze the data coming from the customers. But this is not sufficient, it is very important having a Digital Strategy that is clear and coherent and that embed all the technological innovations in a unique plan towards the goal: become a Smart organization. This importance has been highlighted by all the managers interviewed. So, according to us, digital innovation is fundamental to have a successful Fan Experience.

7.1.3 Fan Experience Maturity Model

Fan Experience Maturity Model: a useful tool for every sports organization

The Fan Experience Maturity Model represents the heart of our research. It is composed by different steps, that represent the different phases that a society should pass from moving from a Traditional Sport Club Management, still linked to the old paradigm of revenues coming from ticketing only, to a Smart Sport Club Management, strictly related to a digital logic, in which the main points are strengthen the brand, new revenue streams, improve communication and sponsorship strategy. Evolving in this type of environment is not easy, and this type of framework could be very useful in this sense. In fact, it could be used in order to understand the actual situation of a company, the improvements that it is needed to take to pass to the next level and furthermore it is a common language and a shared vision that can be used as a benchmark for comparison between different sports organizations that have something in common. In our opinion, the maturity model should be used in this way by sports club: first of all, the organization should understand its own position within the model, knowing its evolution degree in terms of Fan Experience competences and technologies, and then it can see the level above its own to prioritize what capabilities, competences and technologies it needs to pass to the next level. As already said in the dedicated section, the true outcome of this maturity model assessment is not only what level you are but, in particular, the list of things you need to work on to improve. Moreover, according to us, the model can be used by every kind of sports organizations, from the lower-class and poorer ones to the top-class and richer ones, from the ones which approach the Fan Experience Concept for the first time to the ones that have already developed a digital strategy for Fan Experience, since it presents all the evolution steps and the available technologies, from the most basic and cheapest ones to the most advanced and expensive. So, each organization can find its position and understand the possible future improvements which suite better to its own situation. So, the Fan Experience Maturity Model is a useful tool for every sports organization.

Italian backwardness

From the interviews results that the seven sports societies considered are in the left side of our model, so they have just begun, or they are going to begin the innovation that seems to be necessary in the sports world. The technology used are not so advanced, the infrastructure is still obsolete, it is not always present a clear figure that is responsible only of the Fan

Management. They don't represent a consistent sample for generalizing the situation for all Italy, but however speaking with their managers the backwardness of Italy respect to the rest of the world in terms of digital proliferation in the sports field emerged. So, in general we can say that Italy is still lagging behind the rest of the world, in particular the top European clubs (for example Arsenal F.C. described in Chapter 5) and above all the US organizations (NBA, NFL and MLB ones). The American model represents the top of Fan Experience: US organizations have transformed the sports event in a real entertaining show and use very advanced technologies, such as sensors, real-time analytics etc., that allow them to collect, integrate and analyze every kind of data, creating in this way a constant contact with fans. There are different reasons that could explain the backwardness of Italy: the lack of digital culture and mentality of Italian top managers that do not push always the management to invest in this field, budget issues, problems of having the right data, etc. It is evident that in Italy is needed a deeper change in different aspects, that could fill the gap between Italy and rest of the world. A solution, in our opinion, could be that of taking the US model as example from which create the basis for future improvements with the right proportions in Fan Experience aspect.

7.2 Limits of the research

In the development of this work, there are two main limits that emerged: the acquisition of data and the Maturity Model validation.

For what concern data acquisition there was one main problem, very few materials in the Literature. Since the concept of enhancement of the Fan Experience, however important in the sports industry, is quite new, we have difficulties in finding valuable information during the review of the existing Literature. So, there are not lots of theoretical models and frameworks on which we can base our work. For this reason, we were forced to find information through also "unofficial" sources, trying also to gain data through some existent case studies or other thesis. However, we managed to solve this issue using the more general concept of Customer Experience, that is a central point for all the companies, and adapting it to particular and unique characteristic of the sports industry.

The second limit that we encountered in the research is related to the validation of the Fan Experience Maturity Model that we developed. The central point is the fact we could use only eight cases. This is evident a limit for the Thesis, because in this way we could not provide a so general overview. However, our case studies represent some of the most advanced realities in Italy, but they are quite limited because are not presented many sports, but only two that are the most spread in Italy, football and basketball, and only one vendor that can give a more general view of the situation. So, in general the problem is not the fact that the model does not represent a good framework, but actually that the societies interviewed can give only a restricted representation of the general Italian sports industry.

7.3 Further Improvements

In this Thesis we can clearly imagine one main improvement to develop in the future: enrich the case studies. As said above, the limited number of observations could give to our work a strict point of view, that in the future could be interesting to enlarge.

Since the continuous improvements of the technology and also of the sports industry, the situation is rapidly evolving, and our work should need to be updated and completed. In this sense, the direction of the improvements should be searching new case studies and in particular:

- Case studies that are more advanced in terms of technology, to have also a view of the right side of the model;
- Case studies with societies of different sports respect the ones already interviewed, like volleyball or rugby, in order to can look also at other sports environments;
- Case studies with other vendors that could give a more general overview of the Italian sports industry situation;
- Case studies also with foreigner sports clubs and societies, in order to assess which is the actual gap between Italy and the rest of the world;

Structuring the work in this way it is possible to complete and develop in a better way the Fan Experience Maturity Model, with new technologies and also with more steps. In this way it is possible to create a more powerful tool for the sports fan management.

7.4 Contribution to Literature

This work leaves to the Literature an exhaustive picture of the concept of Fan Experience, the importance of the fans for sports organizations' strategies and digital technologies trends for supporting its management, all of this supported by a deep analysis of literature itself and the existing technologies and a good number of real and deepened case studies found on the web or based on face to face interviews. No one before has published any material similar to this one for size and scope related to Fan Experience: it is offered a complete overview of the concept given by the multiple point of views analyzed. Therefore, the script could be considered a solid source of information for those who want to do researches and deepen the argument treated. Furthermore, we leave to literature and in particular to companies a new model, never existed before. The Fan Experience Maturity Model, designed by Osservatorio Innovazione Digitale nell'Industria dello Sport and developed and enriched by us, is the first model that give to the sports organizations some helps and hints for understanding which steps and technologies consider for improving their Fan Experience Management. A company could base the main points of the Digital Strategy addressed to fans on the suggestion given by the model.

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