

# Module 4. The New Reality in Football

## The Future in the Football Industry

### Introduction

In this module we will look at two factors that are changing the football industry and are defining the new reality of the sport: **the evolution of football consumption** and **the impact of innovation driven by emerging technologies**. These factors should be taken into account when making decisions in daily activities; but, above all, they should be considered when designing strategic planning for any sports club or institution.

The first factor, the evolution of football consumption, refers to the transition of the sports industry towards the entertainment industry. Sport adapted to global audiences and the content offer was digitalised across distribution platforms and media, both conventional and emerging.

The second factor, as we said, is the impact of innovation promoted by emerging technologies. These are already shaping sport and spawning new services and businesses.

Both factors were affected by the outbreak of the COVID-19 pandemic, which has highlighted their relevance for the future of the football industry.

## Unit 4.1 Changes in sports consumer behaviour and media consumption

In this unit we will focus on the evolution of sport towards entertainment and its impact on the industry. Both the practice of sport and its consumption have many perspectives and have been progressively evolving as a consumer product over the past few years. There is a theoretical strand, set out by Dr. Klaus Heinemann in the paper *Sport as Consumption* (1993), which explains how healthy sport evolved into a type of entertainment, how it became an economically dynamic and attractive industry and how this led to social change.

Further information is presented in the following articles:

**Source: Gobierno de España; Consejo Superior de Deportes [Government of Spain; Sports High Council], (n.d.).** *Sports as consumption and entertainment for the masses.* Retrieved from <https://www.csd.gob.es/es/el-deporte-como-consumo-y-espectaculo-de-masas>

**Source: Heinemann, K. (1993).** Sports as consumption. Paper presented at the *World Congress of Physical Activity and Sport Sciences*. Retrieved from <https://docplayer.es/21387153-El-deporte-como-consumo.html>

Specifically, in this unit we will focus on the recent aspects that are conditioning professional sport that is directly or indirectly marketed by sports clubs and competitions. We will also look at the evolution of fan consumption and how fans have adapted to the media.

Then, we shall refer to the concept of **sportainment**, which is used to define the mix or blend of sport and entertainment. **In particular, it is the "fusion between sport and entertainment for the creation of an integral concept that broadens horizons and creates new formats for commercial and media exploitation"** (Lacasa and Blay, n.d., <https://bit.ly/3szsofF>).

## 4.1.1 Changes in sports consumer behaviour

### 4.1.1.1 Digitalisation: omnichannel and second screen

Sport, and especially football, has historically been consumed through television and radio. Audiences are national, except in international competitions, where the audience is the sum of the participating countries. In countries where football is the number one sport, it is clearly the main entertainment for a large part of that society.

Sport is now consumed across many channels, especially by younger people; smartphones are the preferred channel in most countries. According to Kantar's Global SportScope study (2021), conducted in 41 countries around the world, 40% of people use smartphones to consume sport; while 18% prefer radio. The report also highlights that the sports content that attracts the most interest is NBA highlights. It also highlights other sports with large global audiences with sponsorship impact, such as tennis, Formula 1, etc.

Below are two Kantar publications that provide further insight into the above statistics:

**Source: Kantar, (2021).** *Tennis, F1, and basketball, the most popular sports in Spain after football.* Retrieved from <https://www.kantar.com/es/inspiracion/consumidor/el-tenis-la-f1-y-el-baloncesto-los-deportes-mas-seguidos-en-espana>

**Source: Kantar, (s.f.).** *Tracking earned media and reputation. Global SportScope.* Retrieved from [Global SportScope](#)

Beyond knowing which is the preferred channel for sports consumption, the challenge is to understand that all channels should be unified in a hybrid experience. This is where the concept of omnichannel becomes relevant. The barriers between physical and digital must be removed and all communication and marketing actions should be merged in a coherent way. To do this, data must be analysed and digital channels provide valuable information that allows us to know our customers.

**Figure 1: Omnichannel**



Source: Gugel, n.d., <https://bit.ly/3oCPQaP>

The following paper will provide an understanding of what the "omnichannel experience" is and what impact it has on sport consumption.

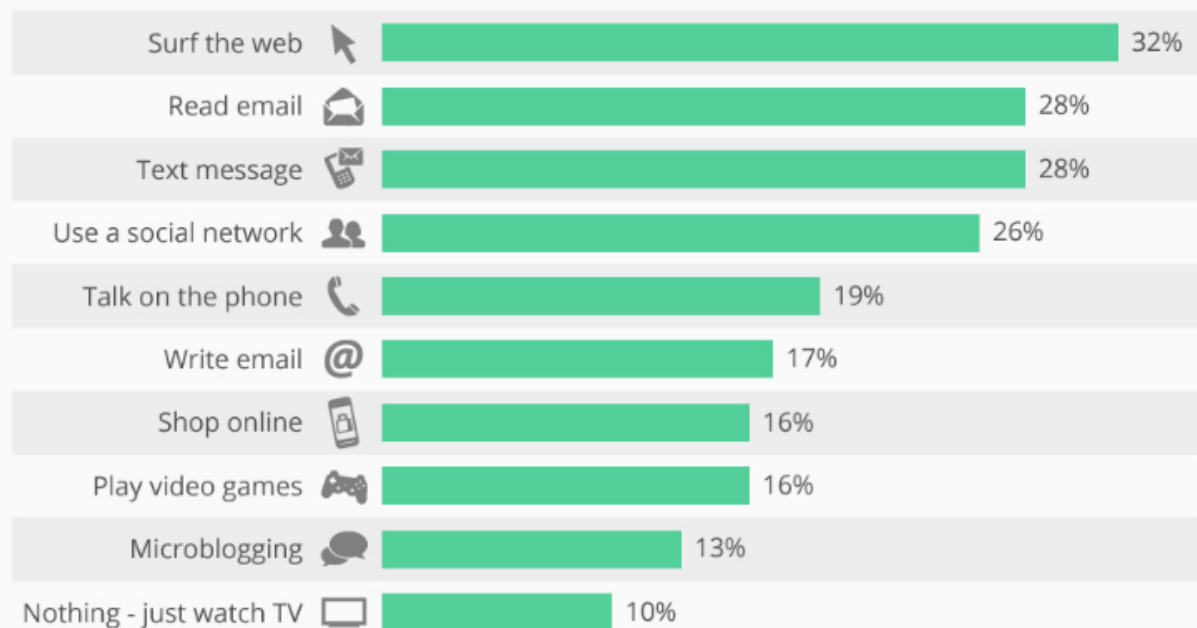
**Source: Ferluga, G.** (2021). Omnichannel experience, why is it the key to more customers? In *El País*. Retrieved from <https://elpais.com/economia/estar-donde-estes/2021-07-21/experiencia-omnicanal-por-que-es-la-clave-para-lograr-mas-ventas.html>

Today, the experience for sports fans is complemented. On the one hand, there are more and more real-time information and statistics, i.e. it is possible to know how consumers interact with the clubs or even with the players themselves. On the other hand, football has always been a social event followed both on television and through social networks, messaging applications, etc. This means that social use can be extended and the evolution of matches can be commented on publicly or privately with other people remotely, even from the stadium itself.

**Figure 2: North Americans perform many activities while watching TV**

## 9 in 10 Americans Multitask While Watching TV

% of Americans who always / almost always do the following while watching TV



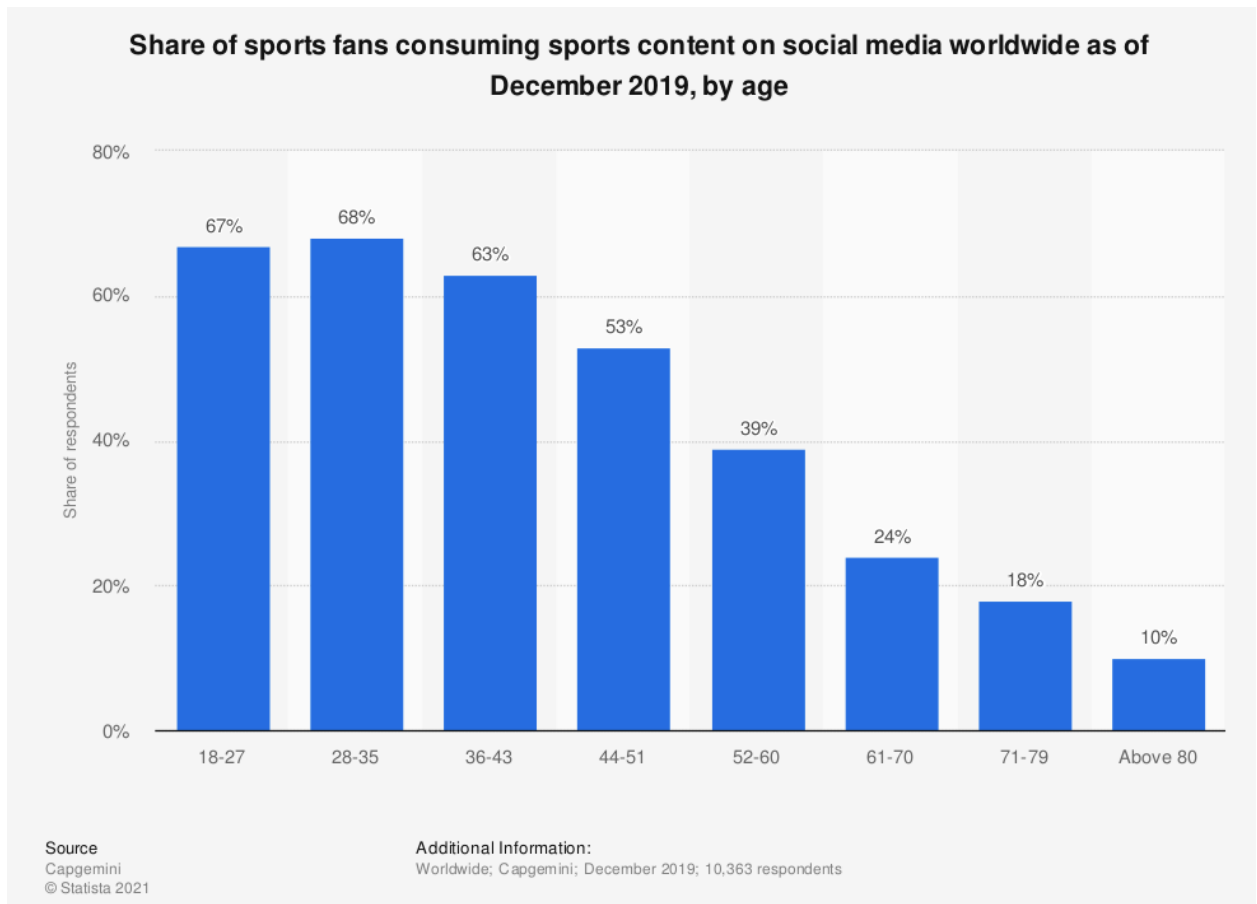
Based on a survey among 2,076 U.S. consumers conducted in November 2014  
Source: Deloitte

statista

Source: Deloitte, 2015 cited in Richter, 2015, <https://bit.ly/34F25wy>

Some people consume sports through social media or additional sees to the main screen. This is known as *second screen*. Such a concept should be taken into account as a relevant part of the customer experience, especially among younger audiences.

Figure 3: Percentage of sports fans consuming sports content on social media (by age)



Source: Gough, 2022, <https://bit.ly/3rFjG0e>

#### 4.1.1.2 Global presence and distribution platforms

Football has become globalised and, as a result, sales of marketing, commentary and interaction rights during events have increased. In addition, and due to the spread of sports content around the world, the strategies of the major paid content marketers have also emerged.

The main product for which rights are marketed is live football matches; they are usually marketed in the form of packages containing an entire competition for several years.

**Figure 4: The value of sport on television**

## El valor del deporte en la televisión

Coste de los derechos de televisión de las principales ligas deportivas del mundo\*



\* Estimación de la temporada 2016/2017  
Fuentes: Sportcal, Oliver & Ohlbaum

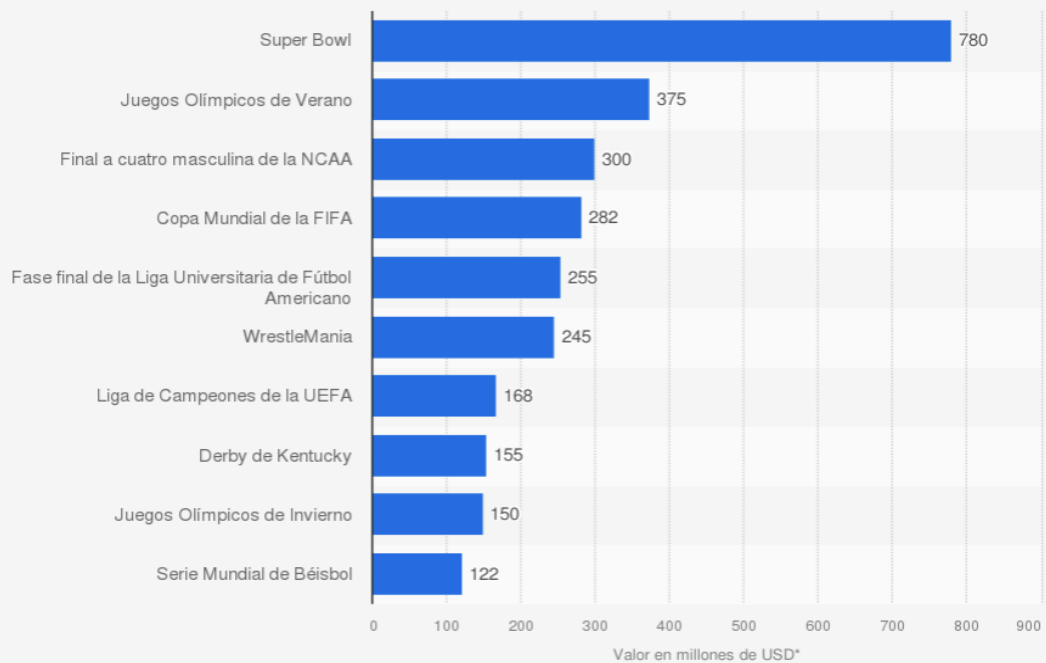
statista

Source: Oliver & Ohlbaum Associates, 2016 cited in Statista, 2016a, <https://bit.ly/3rKLujC>

Original	Traducción
El valor del deporte en la televisión	The value of sport on television
Coste de los derechos de televisión de las principales ligas deportivas del mundo	Cost of TV rights for the world's major sports leagues
Estimación de la temporada 2016/2017	2016/2017 season estimates

Figure 5: Ranking of sports events by worldwide brand value in 2019

### Ranking de eventos deportivos por valor de marca en el mundo en 2019



Fuente  
Forbes  
© Statista 2021

Información adicional:  
Mundial; 2019

statista

Source: Forbes, 2019 cited in Statista Research Department, 2021, <https://bit.ly/3GDg0QU>

Original	Traducción
Ranking de eventos deportivos por valor de marca en el mundo en 2019	Ranking of sports events by worldwide brand value in 2019
Juegos olímpicos de verano	Summer Olympic Games
Final a cuatro masculina de la NCAA	NCAA Men's Final Four
Copa Mundial de la FIFA	FIFA World Cup
Fase final de la Liga Universitaria de Fútbol Americano	College Football League finals
Liga de Campeones de la UEFA	UEFA Champions League
Juegos Olímpicos de Invierno	Olympic Winter Games
Serie Mundial de Beisbol	Baseball World Series
Información adicional: Mundial 2019	Additional information: 2019 World Cup
Valor en millones de USD	Value in millions of USD

The following is a news story about how Puma became the world's most valuable brand in 2019:

**Source: Ozanian, M.** (2019). The Forbes Fab 40: Puma Debuts On 2019 List Of The World's Most Valuable Sports Brands. In *Forbes*. Retrieved from <https://www.forbes.com/sites/mikeozanian/2019/10/16/the-forbes-fab-40-puma-debuts-on-2019-list-of-the-worlds-most-valuable-sports-brands/#d0be4fed356a>

The entertainment industry is more developed and the sports industry is following suit. This is why, nowadays, all kinds of content are produced, which can be consumed before, during and after the matches.

From this perspective, the formats of sports content have also evolved: sports is no longer only about information, but there is also room for entertainment. In this sense, not only the traditional match highlights with goals and best plays are produced, but there are also many opinion shows. There is also a lot of content related to stories about past and present players, clubs, competitions, club-related personalities and the fans themselves.

Streaming platforms are becoming increasingly prominent and sport is no stranger to this development. Clubs and competitions have diversified their business to commercially exploit their own content through these platforms. Some examples of streaming platforms are Netflix, Amazon Prime, HBO, Disney+, RakutenTV. There are other platforms linked to pay-TV contracts that include phone and internet services, such as Movistar+, OrangeTV, VodafoneTV and, in the case of Spain, there are also specific platforms for sports, such as ESPN+ or DAZN, Sky, Bein Connect.

### **Figure 6: Evolution of pay-TV (2015-2020)**

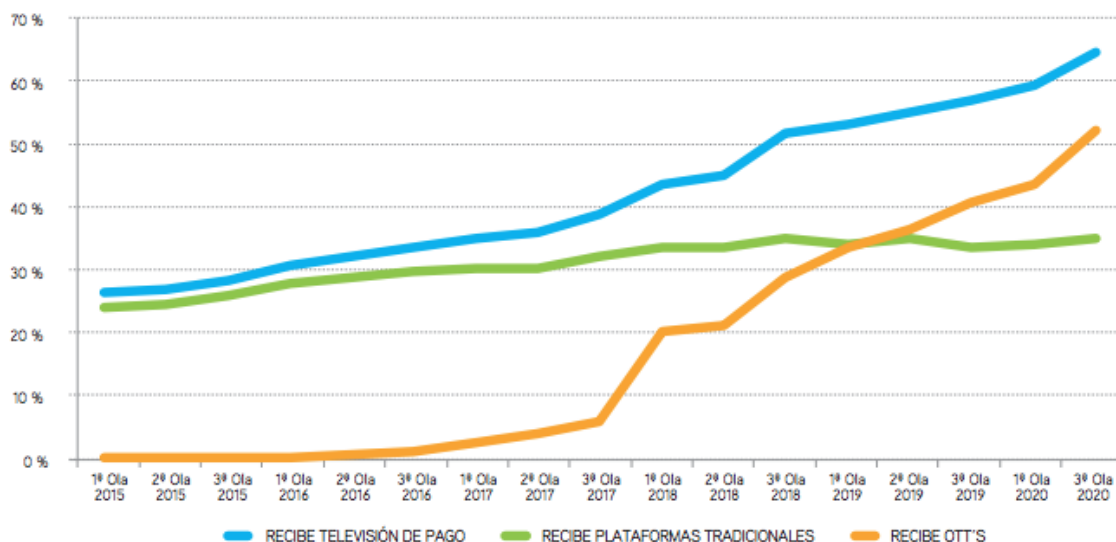
## EVOLUCIÓN DE LA TELEVISIÓN DE PAGO - 2015-2020

(% Individuos)

	1ª Ola 2015	2ª Ola 2015	3ª Ola 2015	1ª Ola 2016	2ª Ola 2016	3ª Ola 2016	1ª Ola 2017	2ª Ola 2017	3ª Ola 2017	1ª Ola 2018	2ª Ola 2018	3ª Ola 2018	1ª Ola 2019	2ª Ola 2019	3ª Ola 2019	1ª Ola 2020	3ª Ola 2020
<b>RECIBE TELEVISIÓN DE PAGO</b>	<b>26,5</b>	<b>26,8</b>	<b>28,6</b>	<b>30,8</b>	<b>32,3</b>	<b>33,5</b>	<b>35,2</b>	<b>35,9</b>	<b>39,1</b>	<b>43,7</b>	<b>45,2</b>	<b>51,6</b>	<b>53,3</b>	<b>55,3</b>	<b>57,0</b>	<b>59,3</b>	<b>64,8</b>
<b>RECIBE PLATAFORMAS TRADICIONALES</b>	<b>24,1</b>	<b>24,5</b>	<b>26,0</b>	<b>28,0</b>	<b>29,1</b>	<b>29,9</b>	<b>30,5</b>	<b>30,2</b>	<b>32,4</b>	<b>33,6</b>	<b>33,9</b>	<b>35,3</b>	<b>34,3</b>	<b>35,3</b>	<b>33,6</b>	<b>34,0</b>	<b>34,9</b>
Movistar TV	16,2	16,0	16,4	17,0	17,0	17,2	16,7	16,6	18,4	19,9	19,4	21,3	21,0	21,8	20,0	21,2	21,1
Vodafone TV/Ono	4,7	5,5	5,5	6,0	6,2	7,0	7,6	7,5	7,5	7,2	7,6	7,2	6,5	7,0	6,8	6,4	7,4
Orange TV	0,7	0,6	1,6	1,8	2,4	2,6	2,9	2,7	3,1	4,1	4,4	4,4	4,8	4,5	4,8	4,4	4,6
Euskaltel TV	1,0	0,7	0,8	1,1	1,1	1,1	1,1	1,2	1,2	1,1	1,1	0,9	0,9	0,9	0,8	1,2	0,8
Telecable Asturias	0,8	0,8	0,7	0,8	0,8	0,6	0,7	0,8	0,8	0,7	0,8	0,7	0,8	0,6	0,7	0,5	0,7
R Galicia	0,8	0,7	0,6	0,8	0,7	0,7	0,8	0,7	0,6	0,6	0,6	0,9	0,6	0,6	0,7	0,5	0,6
Jazztel (1)	0,1	0,1	0,4	0,5	0,6	0,7	0,8	0,8	0,9								
<b>RECIBE OTT'S</b>	<b>0,0</b>	<b>0,0</b>	<b>0,1</b>	<b>0,5</b>	<b>0,6</b>	<b>1,2</b>	<b>2,6</b>	<b>4,1</b>	<b>6,1</b>	<b>20,4</b>	<b>21,1</b>	<b>28,9</b>	<b>33,7</b>	<b>36,5</b>	<b>41,0</b>	<b>43,9</b>	<b>52,3</b>
Netflix				0,4	0,5	1,1	2,5	3,8	5,5	16,3	17,8	23,9	28,5	30,6	35,3	37,4	44,9
Amazon Prime Video							0,0	0,1	0,3	3,3	3,5	7,1	9,7	10,8	13,4	17,0	25,4
HBO							0,2	0,3	1,3	5,4	5,1	7,9	8,1	11,3	11,7	11,0	13,0
Disney+																	7,9
DAZN														1,3	1,9	2,3	1,7
Rakuten TV	0,0	0,0	0,0	0,1	0,1	0,1	0,1	0,1	0,0	0,2	0,3	0,8	0,9	1,3	1,2	1,2	1,4
Filmin														0,7	0,8	0,8	1,4
Sky										0,6	0,4	1,2	1,5	1,3	1,1	1,0	
beIN Connect										0,2	2,0	1,4	0,8	0,8	0,7	0,5	

Notas: Se incluye tanto a individuos que pagan por ello como a los que acceden gratuitamente.  
A causa de la pandemia de Covid-19 hubo que suspender la realización de la 2ª ola 2020.

(1) A partir de la 1ª Ola de 2018, Jazztel pasa a ser Orange TV



Source: AIMC, 2021 cited in Orús, 2022, <https://bit.ly/3rHt6YV>

Original	Traducción
Evolución de la televisión de pago – 2015-2020	Evolution of pay-TV (– 2015-2020)
(% individuos)	(% individuals)
Recibe televisión de pago	Receives pay-TV

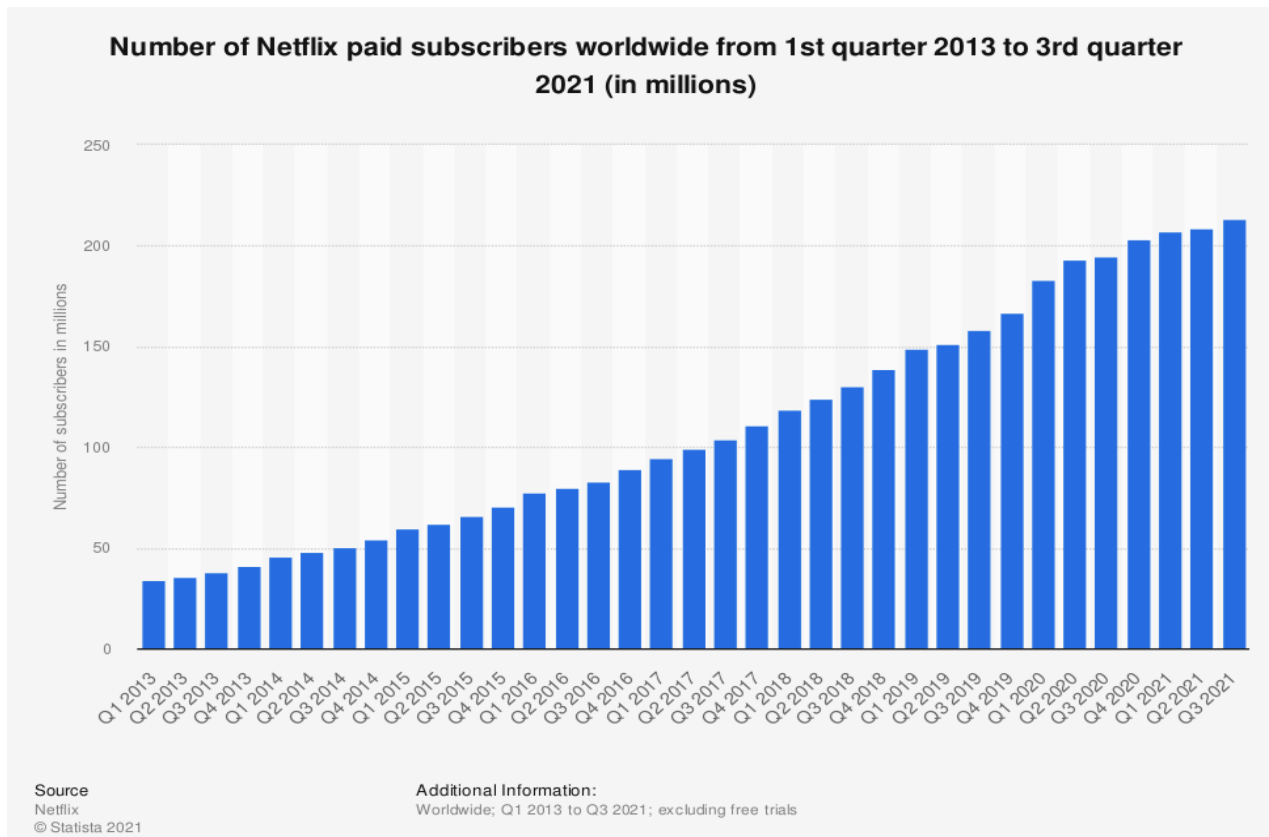
Recibe plataformas tradicionales	Receives traditional platforms
Recibe OTT'S	Receives OTT'S
Notas: se incluye tanto a individuos que pagan por ello como a los que acceden gratuitamente. A causa de la pandemia de Covid-19 hubo que suspender la realización de la 2º ola 2020.	Notes: this includes both individuals who pay for it and those who access it for free. Due to the Covid-19 pandemic, the implementation of the 2nd 2020 wave had to be suspended.
A partir de la 1º Ola de 2019 Jazztel pasa a ser Orange TV	From the 1st wave of 2019 Jazztel becomes Orange TV.
Recibe televisión de pago	Receives pay-TV
Recibe plataformas tradicionales	Receives traditional platforms
Recibe OTT'S	Receives OTT'S

The data shown in the figure above is from a report presented by the Association for Media Research (2021). You can read the full report below:

**Source: Association for Media Research [AIMC], (2021).** General framework of the media in Spain. Retrieved from <https://www.aimc.es/aimc-c0nt3nt/uploads/2021/02/marco2021.pdf>

Netflix leads the ranking of OTT (or streaming platforms) and its global number of subscribers continues to rise.

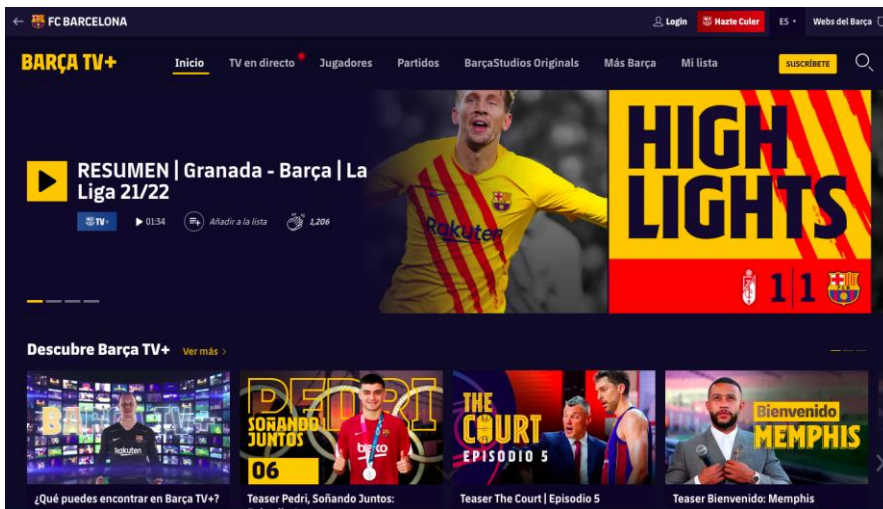
**Figure 7: Number of Netflix subscribers worldwide from Q1 2013 to Q3 2021.**



Source: Netflix, 2021 cited in Stoll, 2022, <https://bit.ly/3swS7W1>

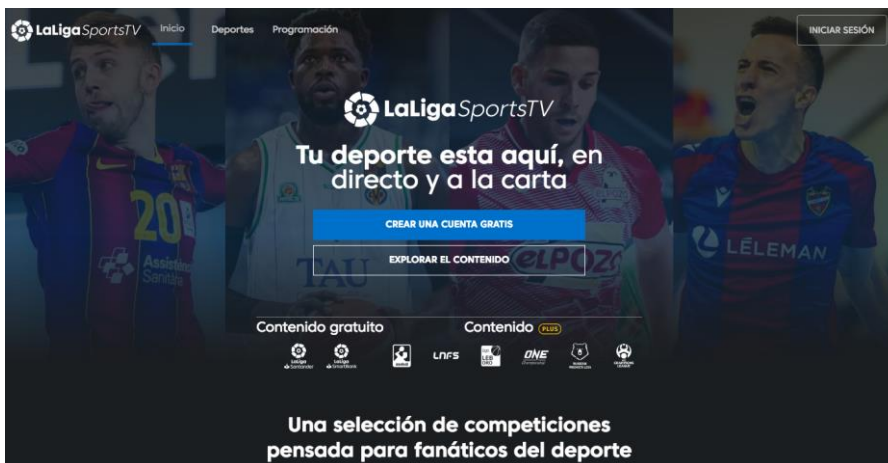
There are also platforms owned by clubs and competitions, such as BarçaTV+ (FC Barcelona) or LaLigaSportsTV (La Liga). In most of these, the subscription model is also the most common.

**Figure 8: Club-owned platforms: Barca TV+ - FC Barcelona**



Source: screenshot of the Barca TV+ - FC Barcelona website ([www.fcbarcelona.es](http://www.fcbarcelona.es))

**Figure 9: Competitions-owned platforms: LaLiga SportsTV**

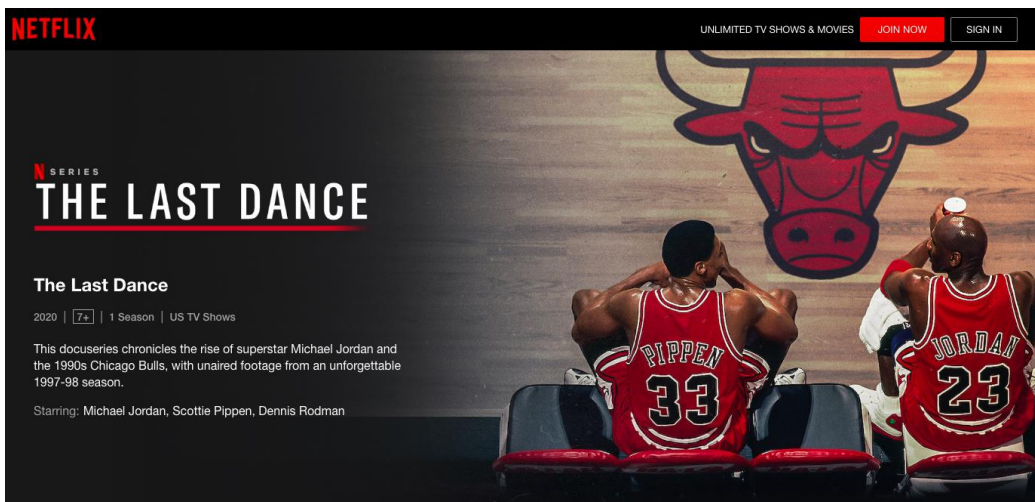


Source: screenshot of the LaLiga SportsTV website ([www.laligasportstv.com](http://www.laligasportstv.com))

Social networks are also key players in the changes in sports consumption. In recent years, Facebook (now Meta) acquired live rights to Copa Libertadores, Champions League and major leagues in Asia and America. Although Facebook no longer holds these rights, the social network will continue to promote content and services for both users and sports brands.

In this context, even the players themselves exploit their personal brand. A clear and successful example was the documentary *The Last Dance* (Michael Jordan). This documentary was released during the COVID-19 pandemic, when competitive sport was slowing down and there was a lot of demand for sports content consumption. Perhaps this was the reason for its success.

**Figure 10: Documentary *The Last Dance* (Michael Jordan)**



Source: Netflix screenshot ([www.netflix.com](http://www.netflix.com))

#### 4.1.1.3 Vicious circle: audiences and revenue

In order to optimise audiences and economic benefits, the match schedules were redistributed and the calendars were adapted, so that there are live matches on most days. In addition, there is a constant supply of sports-related content. Faced with this situation, a debate arises: Is there a saturation of offer and will a football "bubble" be generated?

In addition, we should point out that sport as entertainment competes against other content offers, such as series or eSports. This competition generates a drop in demand from the new generations, leading to a decrease in interest in the medium term.

A reduction in audiences would have a direct impact on the main revenue streams, as it would affect sponsorship income, the value of rights, tickets and membership subscriptions. Therefore, clubs and competitions will have to invest in marketing strategies.

However, some sectors argue that there is still room for growth in the market, arguing their position with audience data conditional on whether the match is free-to-air or not (pay-TV channels); relevant free-to-air matches have been shown to have large audiences. They also argue that this is a shift in the way people follow sport, so audiences from Twitch, YouTube or TikTok should be added, but that football remains and will remain very much part of our society.

Below there are some articles related to sport audiences:

**Source: de la Calle, F. (2021).** Have you lost interest in football? You're not the only one, and the pandemic is to blame. In *El Confidencial*. Retrieved from

[https://www.elconfidencial.com/deportes/futbol/2021-02-08/burbuja-futbol-tebas-laliga-audiencias-publico-covid\\_2931576/](https://www.elconfidencial.com/deportes/futbol/2021-02-08/burbuja-futbol-tebas-laliga-audiencias-publico-covid_2931576/)

**Source: de la Calle, F.** (2021). Deloitte report: how each of Europe's main clubs are undergoing COVID. In *El Confidencial*. Retrieved from [https://www.elconfidencial.com/deportes/2021-01-28/informe-deloitte-futbol-real-madrid-barcelona-atletico\\_2925756/](https://www.elconfidencial.com/deportes/2021-01-28/informe-deloitte-futbol-real-madrid-barcelona-atletico_2925756/)

**Source: Gantman, M.** (2021). Facebook will not renew its rights to Copa Libertadores and Champions League, but will continue to offer live sport. In *Big Data Sport*. Retrieved from <https://bigdatasports.media/2021/03/03/facebook-no-renovara-sus-derechos-de-copa-libertadores-y-champions-league-pero-seguira-ofreciendo-deporte-en-vivo/>

**Source: de la Calle, F.** (2021). "Clubs are in a vicious circle: less audience, less revenue and less marketing investment". In *El Confidencial*. Retrieved from [https://www.elconfidencial.com/deportes/futbol/2021-08-19/clubes-futbol-crisis-audiencia-ingresos-inversion-marketing\\_3239170/](https://www.elconfidencial.com/deportes/futbol/2021-08-19/clubes-futbol-crisis-audiencia-ingresos-inversion-marketing_3239170/)

## 4.1.2 Media consumption

### 4.1.2.1 Traditional media

Mass media have a great influence on sport, not only to inform and entertain, but also to influence public opinion and football fans. Also to influence the economy of the clubs, since, depending on the club's and players' image in the media, the brand image could be modified, indirectly affecting sponsors. Moreover, the mass media are a relevant channel for advertising and have contributed to the process of globalisation of football.

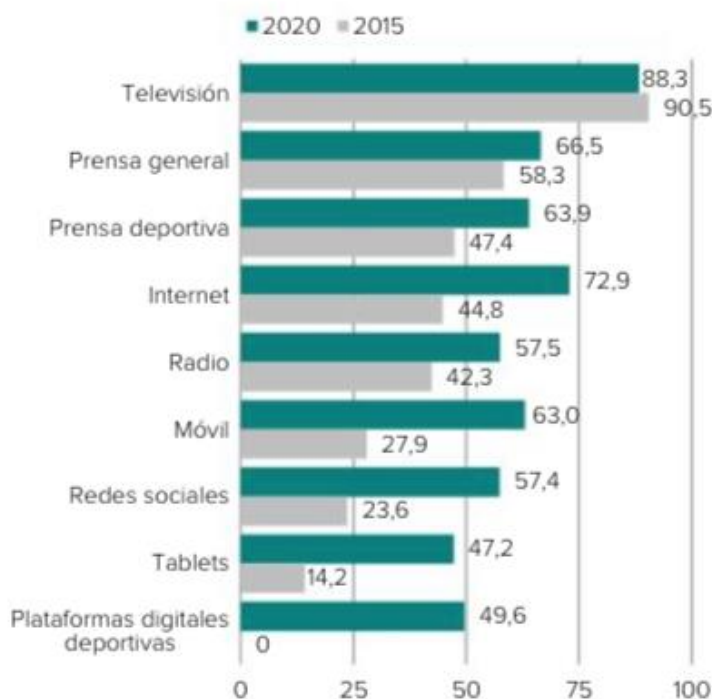
While the traditional media have been the written press, radio and television, in the last 20 years the media spaces on the Internet (including mobile phones) and social networks have seized control, both in terms of audience and publication time. Online media are always looking to generate content and the fastest possible reactions to any new developments.

Therefore, from a club and sports institution management point of view, the stakeholders to be addressed within a brand strategy must be taken into account.

**Figure 11: People who usually get information about sport through the press or audiovisual media, according to type of channel**

**Gráfico 52. Personas que suelen informarse acerca del deporte por prensa o medios audiovisuales según tipo de medio**

*(En porcentaje de la población que suele informarse)*



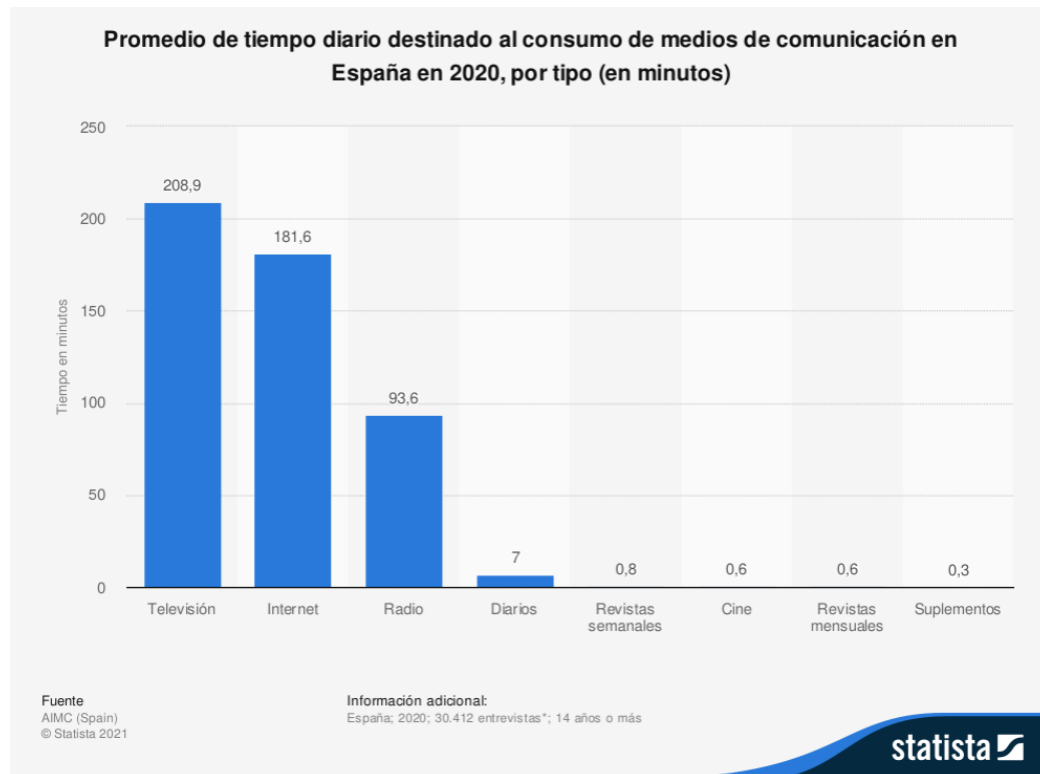
Source: Ministry of Culture and Sport. Spain, 2020, <https://bit.ly/3BfoxIu>

Original	Traducción
Gráfico 51. Personas que suelen informarse acerca del deporte por prensa o medios audiovisuales según tipo de medio	Graphic 51 People who usually get information about sport through the press or audiovisual media, according to type of channel
(En porcentaje de la población que suele informarse)	(Percentage of the population that usually gets information)
Televisión	Television
Prensa general	The press
Prensa deportiva	Sports press
Internet	Internet
Radio	Radio
Móvil	Mobile phones
Redes sociales	Social networks
Tablets	Tablets
Plataformas digitales deportivas	Digital sports platforms

The above image corresponds to statistics published in a report by the Spanish Ministry of Culture and Sport (2020). The full report is presented below: You can read the full report below:

Ministry of Culture and Sport. Spain, (2020). *Estadística 2020 [2020 Statistics]. Survey of sport habits in Spain, 2020.* Summary of results. Retrieved from <https://www.csd.gob.es/sites/default/files/media/files/2021-06/encuesta-de-habitos-deportivos-2020-sintesis-de-resultados.pdf>

**Figure 12: Average time spent daily on media consumption in Spain in 2020 (by type)**



Source: AIMC, 2021 cited in Orús, 2022, <https://bit.ly/3rHt6YV>

Original	Traducción
Promedio de tiempo diario destinado al consumo de medios de comunicación en España en 2020, por tipo (en minutos)	Average time spent daily on media consumption in Spain in 2020, by type (in minutes)
Televisión	Television
Internet	Internet
Radio	Radio
Diarios	Newspapers
Revistas semanales	Weekly magazines
Cine	Cinema
Revistas mensuales	Monthly magazines
Suplementos	Supplements

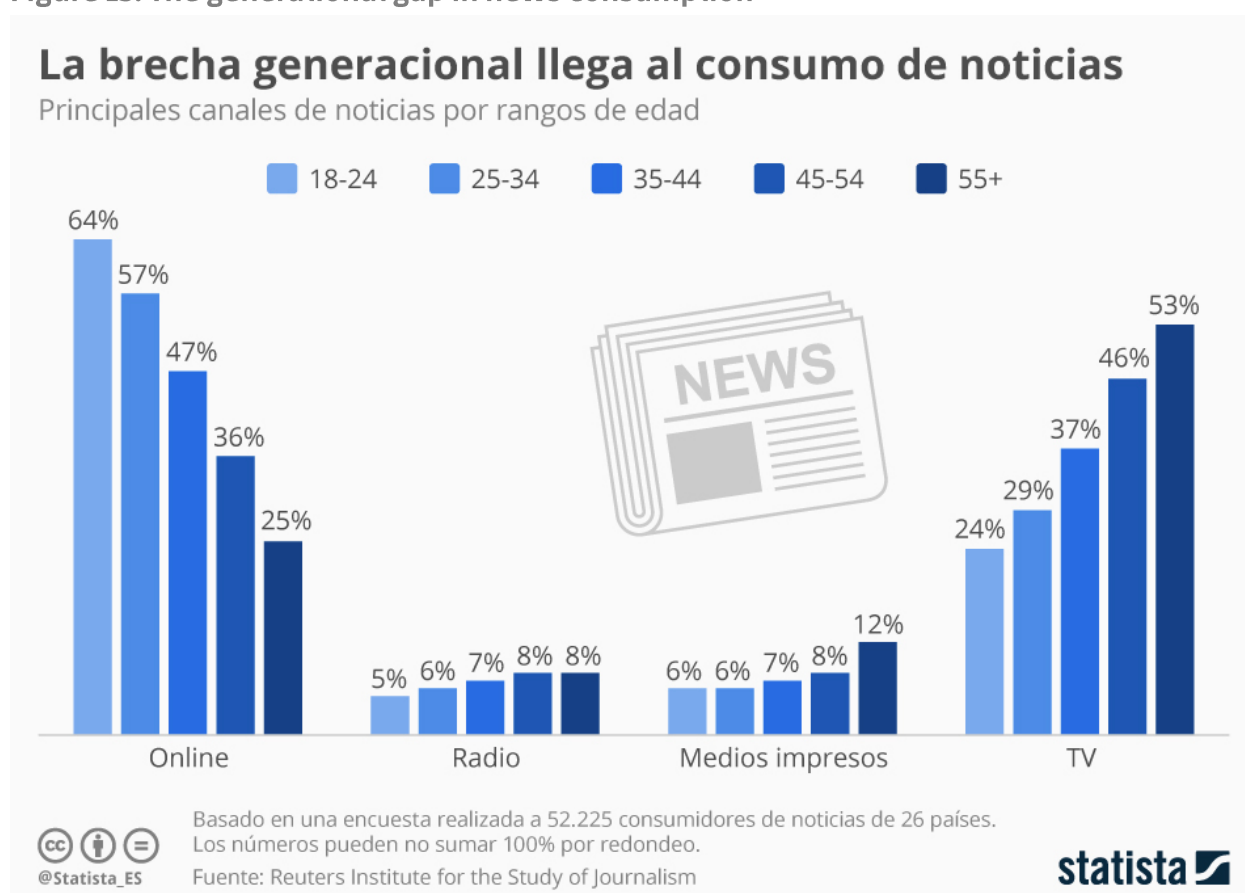
Complete report:

**Source: Association for Media Research [AIMC],** (2021). General framework of the media in Spain. Retrieved from <https://www.aimc.es/a1mc-c0nt3nt/uploads/2021/02/marco2021.pdf>

#### 4.1.2.2 Other developing media

For the younger generations, traditional media are taking a back seat and the internet is the main source of information. The Internet only competes with television in some niches.

**Figure 13: The generational gap in news consumption**



Source: Reuters Institute for the Study of Journalism cited in Statista, 2016b, <https://bit.ly/3uIHF0o>

Original	Traducción
La brecha generacional llega al consumo de noticias	The generational gap in news consumption

Principales canales de noticias por rangos de edad  Online Radio Medios Impresos TV  Basado en una encuesta realizada a 51225 consumidores de noticias de 26 países. Los números pueden no sumar 100% por redondeo.	Main news channels by age group  Online Radio Printed media TV  Based on a survey performed by 51225 news consumers in 26 countries. Figures may not add up to 100% due to rounding.
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**Figure 14: Ranking of the most popular televised sports events by total number of social media engagements in the US in 2019 (in thousands)**



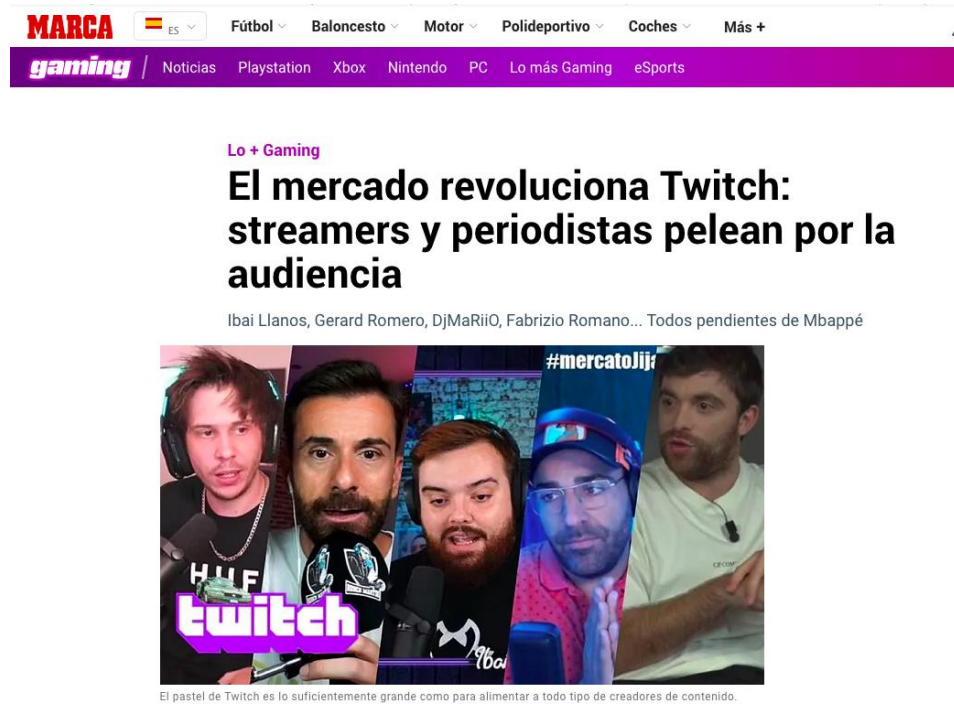
Source: Nielsen, 2020 cited in Orús, 2020, <https://bit.ly/33iQItK>

Original	Traducción
	Ranking of the most popular televised

	sports events by total number of social media engagements in the US in 2019 (in thousands)
Promedio de interacciones en miles	Average interactions in thousands

In the social media sphere, it is mainly Twitch streamers, youtubers and tiktokers that are having the most relevant impact in recent years.

**Figure 15: Market revolution in Twitch**



Source: Tejedor, 2021, <https://bit.ly/3LrxumQ>

**Figure 16: LaLiga Casters (La Liga partners with Twitch streamers)**

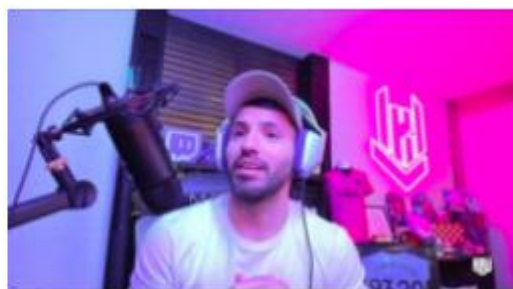


Source: LaLiga Digital, 2021, <https://bit.ly/34QowPo>

### Relation with traditional media

More and more players are taking to social media to comment on personal or current affairs without going through a broadcaster.

Figure 17: Examples of players who use Twitch (Neymar Jr., Kun Agüero, Ronaldo Nazario)



Examples: Ayora, 2021, <https://bit.ly/3Lwo9Kr>

Sometimes, football players feel more comfortable with streamers than with the traditional press. Some players have even given exclusive interviews to streamers, competing (without seeking to do so) with the media and sparking controversy with some journalists.

### Figure 18: Lionel Messi debuts in Twitch with Ibai Llanos

#### Lionel Messi debuta en Twitch con Ibai Llanos



Reviva el debut de Lionel Messi en Twitch con Ibai Llanos, quien ha tenido cientos de reacciones en el mundo del deporte y el periodismo.



Source: Kienyke, 2021, <https://bit.ly/3szZAnj>

### Figure 19: Ibai Llanos' publication about Lionel Messi's involvement in Twitch



"La primera vez que Lionel Messi aparece en Twitch. Ibai hizo historia. Todo con un simple celular. No más", "Ibai en la cena de despedida de Messi. Esto es increíble"; "Por lo que sea, Messi prefiere una entrevista con Ibai que una con Juanma Castaño. No entiendo la razón", fueron algunas reacciones.

Source: Llanos, 2021, <https://bit.ly/3JskCeB>

In addition to influencers who create content and give their opinion on the sport and the players themselves, social networks are also used by some journalists who do not represent any media; for example, Fabrizio Romano is a specialist in the signing market.

**Figure 20: Fabrizio Romano, the man who anticipates all the signings**

### **El Confidencial**

#### **Deportes ■ Fútbol**

ENTREVISTA EXCLUSIVA

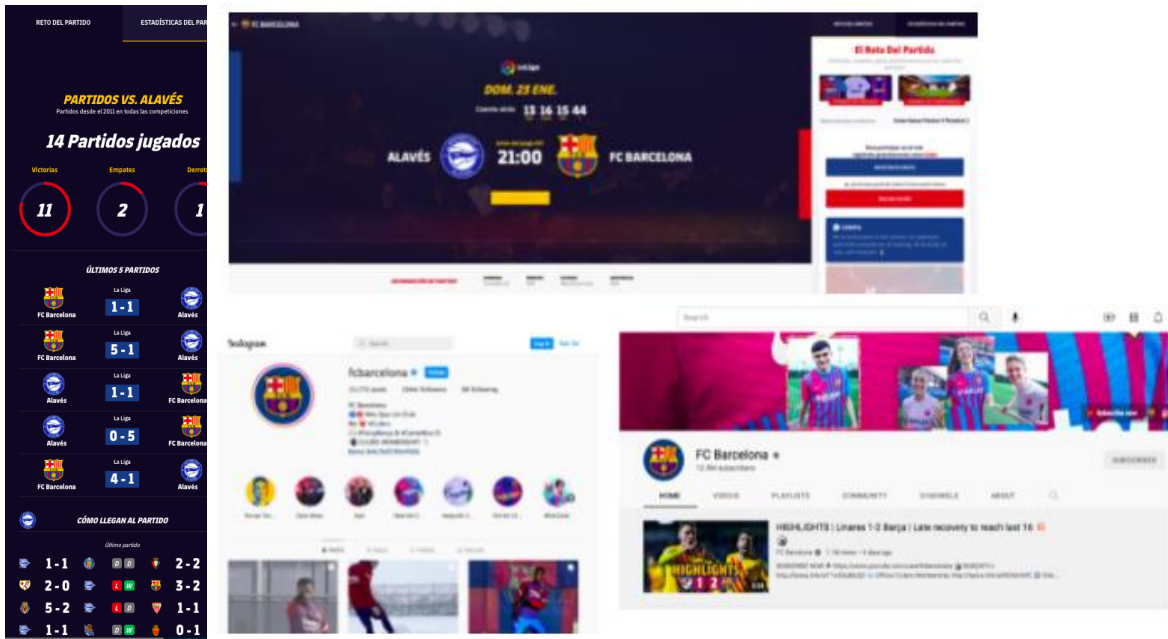
## **Fabrizio Romano, el hombre que anticipa todos los fichajes: "Mi misión es ser fiable"**

En el mundo del fútbol, un traspaso no ha sucedido de verdad hasta que este periodista italiano lo confirma. Así se ha convertido en la gran autoridad para millones de aficionados

Source: Villareal, 2021, <https://bit.ly/3Jdoi3E>

Lastly, we should note that clubs have to coexist within this digital ecosystem. Therefore, they feature their own content alongside content from the media, competitions and the players themselves. In other words, clubs, media, competitions and players are exploited together for simultaneous growth.

**Figure 21: FC Barcelona in traditional and social media**



Source: FC Barcelona, 2021a, <https://bit.ly/3oHvuxa>

Clubs' social media strategy is to generate content and increase interaction with followers so that they reach the website and get to know them better. On the websites, clubs provide better services and experiences and thus monetise.

Figure 22: FC Barcelona, world leader in interactions



Source: FC Barcelona, 2021a, <https://bit.ly/3oHvuxa>

Figure 23: FC Barcelona #1 in YouTube, Twitter, Instagram and TikTok



Source: FC Barcelona, 2021a, <https://bit.ly/3oHvuxa>

### COVID-19 and football consumption (at stadiums)

Early in the pandemic, competitions were cancelled and, although they were later resumed with crowd restrictions, it became clear that the capacity limit is indeed necessary for both the sport and the spectacle. This situation emphasised the idea that the offer of football consumption at home is becoming more comprehensive and more reasonably priced. For this reason, clubs need to work on the overall experience when a fan attends a club to watch a match, offering more than just the game, including additional services and activities and, ultimately, a unique experience.

Major clubs have recently revamped, or are planning to revamp, their stadiums to meet these needs. There are different strategies, from stadiums with more features, to smaller infrastructure approaches, but with many features, to make the experience more exclusive.

In conclusion, it is a priority to know the fans, to know how they consume football and to adapt the offer to appeal to the different segments. This includes the club's own fans, as well as sports fans in general, in order to emotionally connect them with the team's values and brand. To do this, it is necessary to use the channels and formats that are adapted to each case. Beyond values, the clubs' internationalisation strategy must adapt content to each country, language and culture, especially for those where football is not the main sport, but where there is room for growth in the market. In such cases, clubs have to take advantage of the effort to gain popularity for football as a sport.

It is advisable to monitor the information published by the media in order to avoid or resolve potential reputation crises and take action to turn them into partners. Also taking into account that although the main asset of football clubs today are the men's teams, it

is necessary to monitor the women's teams, as they are gaining weight and an increasing number of supporters, as well as the multisport clubs that have more teams in other sports and other relevant activities.

## Unit 4.2 Innovation and the future of the sports industry

### 4.2.1 Innovation in sport

Innovation has always been present in the context of sport. As a discipline that evolves over time, sport has constantly updated rules, elementary formats, organisations and the way it is played as an athlete and followed as a spectator.

Innovation management is more of a contemporary concept. The concept of innovation can be defined very simply and broadly as any change that adds value. However, in the context of organisations, value-generating ideas have been formalised into four types: organisational, process, business and technological, as set out by the OECD (Organisation for Economic Cooperation and Development) in its approach to defining innovation, formalised in its publication *Measuring Science and Technology Activities. Proposed guidelines for the collection and interpretation of technological innovation data: Oslo Manual (1997)*, known as a benchmark for measuring and formalising innovation. Subsequent versions have been expanded, the latest one, in 2018, already incorporates aspects such as global value chains.

Below you can find articles related to the definition of innovation and the Oslo Manual:

**Source: OECD**, (n.d.). Definition of innovation. Retrieved from [Defining innovation - OECD](#)

Source: **OECD; Eurostat**, (2007). *Oslo Manual: Guidelines for the collection and interpretation of technological innovation data* (3rd ed.). Madrid, Spain: Tragsa [Oslo Manual | READ online](#)

To the typical research process carried out by universities and R&D centres which companies transfer to the market in the form of products and services, we can add the impetus given to all sectors of society by the State (administration) and private organisations. In this sense, it has been necessary to establish an innovation process described as the 'triple helix' model (Etzkowitz and Leydesdorff, 1998), which made it clear in new versions that close cooperation between all parties involved was required.

All this involves sport, a very dynamic sector in which ecosystems are being generated with the emergence of start-up incubators and accelerators, even generating innovation hubs.

Examples: FC Barcelona and Barça Innovation Hub.

**Figure 24: Barça Innovation Hub**



Source: screenshot of FC Barcelona Innovation Hub website (<https://barcainnovationhub.com/es/>)

As an example of public-private sector investment and collaboration, the Spanish LaLiga agreement with the private investment fund CVC and the EU's Next Generation public funds can be cited as an opportunity to generate a sports-tech ecosystem.

Below you can find articles related to innovation hubs in sport: Below there are some articles related to sport audiences:

**Source: Hubb30**, (2021). Sports hubs, expert links. Retrieved from <http://hubb30.cat/es/los-hubs-deportivos-redes-expertas>

**Source: Palco23**, (2021). *The start of LaLiga Impulso: LaLiga and CVC sign an agreement*. Retrieved from <https://www.palco23.com/competiciones/arranca-laliga-impulso-laliga-y-cvc-firman-el-acuerdo>

Source: **European Union**, (n.d.). *NextGenerationEU*. Retrieved from [https://europa.eu/next-generation-eu/index\\_es](https://europa.eu/next-generation-eu/index_es)

**Source: Palco23**, (2021). *CeltaLab1923 boosts its innovation hub with a start ups competition*. Retrieved from <https://www.palco23.com/clubes/celtablab1923-impulsa-su-hub-de-innovacion-con-una-competicion-de-start-ups>

**Source: Palco23**, (2022). Barcelona devotes six million euros to promoting sport. Retrieved from <https://www.palco23.com/entorno/barcelona-destina-seis-millones-de-euros-a-fomentar-la-practica-deportiva>

In the current context of digital transformation of the sports industry, it is probably the innovation derived from technologies that is conditioning its future the most.

Below there are some relevant examples of how technological innovation is having an impact today and what will have the greatest impact in the future.

#### 4.2.2 Innovation: new uses of technology in sport

The influence of technology in sport affects all sport-related levels.

In the aspects most closely related to the practice of sport itself, there are developments in the format of competitions, in the evolution of training, and in physical preparation and, if necessary, recovery. New devices related to physical activity are being developed on a daily basis, making it possible to gather more useful information to monitor, optimise and personalise training sessions, while acting as a support tool for medical services to prevent, diagnose or treat injuries.

**Figure 25: Innovation and new uses of technology in sport**



Source: FIFA, n.d., <https://fifa.fans/3uGweX6>

Below there is an article about electronic performance tracking devices.

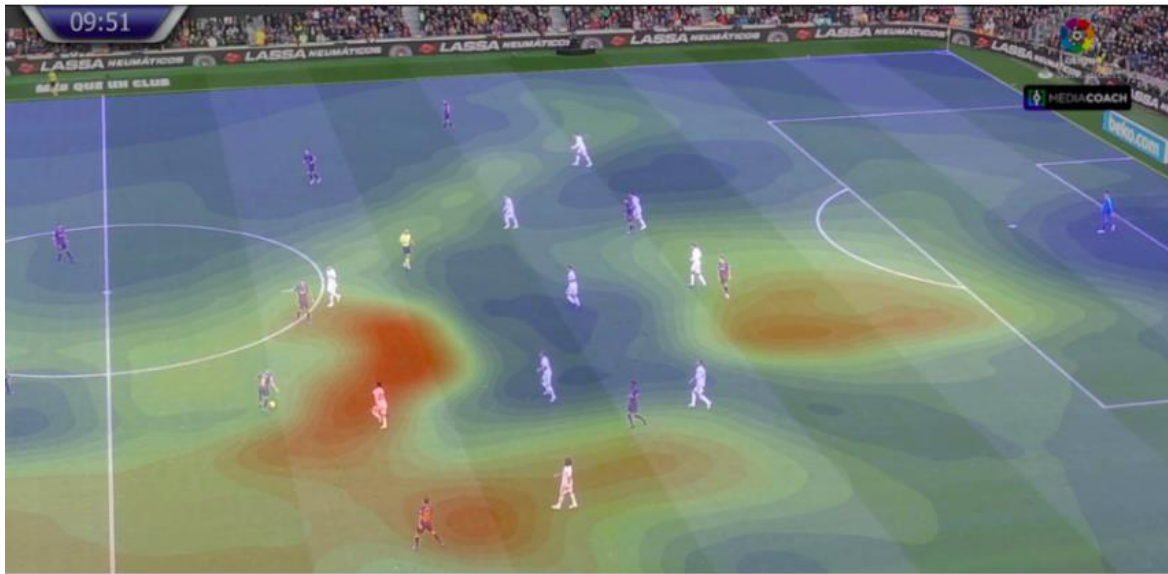
**Source: FIFA**, (n.d.). Electronic performance tracking devices. Retrieved from <http://quality.fifa.com/es/media-tiles/epts1/>

Historically, an individual and their coach have been responsible for managing and monitoring training regimes and performance. Apart from watching video replays and analysing techniques, there were few ways to capture and analyse different biomechanical (limb movement) or biometric (heart rate) variables. Today, using a combination of big data, video recognition and IoT, we can generate an incredibly rich dataset for each athlete.

For example, 3D athlete tracking technology relies on computer vision and deep learning algorithms to create 3D representations of athletes during training and competition. The system uses the athlete's real-time biomechanical data to produce an accurate digital performance model, allowing for granular analysis of each movement. (MIT Technology Review, 2021, <https://bit.ly/3oIgeq8>)

The sports-related information is in turn used to monitor technical and professional sports practice by coaches, to referee matches or for technical teams and scouts' monitoring, and even by the athletes themselves for self-awareness, gaining a competitive advantage over their opponents.

## **Figure 26: Sports practice monitoring**



Mapa de calor de los movimientos de un partido del Barça / FOTO: BARÇA INNOVATION HUB

Source: FC Barcelona Innovation Hub cited in Pérez Ramos, 2019, <https://bit.ly/33ejaga>

Below there are some articles related to sports practice monitoring:

**Source: Álvarez, D.** (2021). From the god particle to the ball. In *El País*. Retrieved from <https://elpais.com/deportes/2021-10-15/de-la-particula-de-dios-al-balon.html>

**Transfermarkt website:** [Transfermarkt](https://www.transfermarkt.com)

**Advanced search of players on Transfermarkt:**  
<https://www.transfermarkt.com/detailsuche/spielerdetail/suche>

**Source: Magaña, D. M.** (2022). *Bill Manning*: "I looked on Transfermarkt for players who were out of contract and Lorenzo Insigne was on the list". Retrieved from [https://us.as.com/us/2022/01/11/futbol/1641915159\\_672120.html](https://us.as.com/us/2022/01/11/futbol/1641915159_672120.html)

Information on sport consumption as entertainment is also of great interest. The media and the platforms that offer match coverage and sports news increasingly present statistics in real time and are used as a basis for analysing the evolution of teams and the competitions in which they participate.

The following is a news article on the new ways of watching football:

**Source: Pascual, M.** (2021). Camera selection and replay and statistics interaction, the new ways of watching football. In *El País*. Retrieved from <https://elpais.com/tecnologia/2021-05-19/elegir-camara-e-interactuar-con-las-repeticiones-y-las-estadisticas-las-nuevas-formas-de-ver-el-futbol.html>

In turn, all this volume of data serves to generate knowledge. From historical data to profiling and contrasting with the information available on professional or amateur athletes, it produces more knowledge within the industry. This process, although already in place, is being digitalised and automated, increasing its potential. Technology allows

data and images to be processed and shared in both real-time and deferred, and can be analysed in a much more advanced way through the involvement of data scientists, big data tools and artificial intelligence.

Below there are articles that elaborate on this topic:

**Technology and innovation in football. FIFA:** <https://www.fifa.com/es/technical/football-technology>

**Source: FC Barcelona Innovation Hub,** (2020). *Tracking technologies for sports analysis*. Retrieved from <https://barcainnovationhub.com/es/tecnologias-de-monitorizacion-para-el-analisis-deportivo/>

**Source: Telefónica Tech,** (2019). *Data and artificial intelligence: key in sports strategy*. Retrieved from <https://empresas.blogthinkbig.com/big-data-estrategia-deportiva/>

There are a variety of technologies to collect and exploit this data, many specific devices and tools for medical or fitness tasks, game monitoring systems to track individual players and all members of a team (in the case of matches) including field position, team, opponents and the ball, which is applicable to any team sport.

Image-related uses and technologies play a prominent role. From the most supervised uses of video, such as the application of VAR as support for football refereeing, to automatic systems based on image recognition, such as the automatic detection of goals in football, or solutions for the partial or total automation of the audiovisual production of training sessions and matches, which will increasingly have to be captured in more formats.

Example of automatic production: [Pixellot You | Graba Deportes, Analiza Juegos, Comparte Vídeos y Ahorra Tiempo](#)

The following is a news article on automatic reruns in sports:

**Source: Cifuentes, P.** (2020). The death of camera people? The boost of automatic reruns in sport. In *El Confidencial*. Retrieved from [https://www.elconfidencial.com/deportes/2020-11-24/produccion-automatica-retransmisiones-deporte\\_2845188/](https://www.elconfidencial.com/deportes/2020-11-24/produccion-automatica-retransmisiones-deporte_2845188/)

## **Figure 27: Example of new formats**



Source: Álvarez, 2019, <https://bit.ly/3Lp06xf>

### **More information:**

**Source: Pascual, M.** (2021). Camera selection and replay and statistics interaction, the new ways of watching football. In *El País*. Retrieved from <https://elpais.com/tecnologia/2021-05-19/elegir-camara-e-interactuar-con-las-repeticiones-y-las-estadisticas-las-nuevas-formas-de-ver-el-futbol.html>

Sports fans around the world have much to gain from the increasing digitalisation of sports and sports events. For decades, spectator sports were largely passive and episodic, with fans attending occasional events and watching others on television or reading about them in newspapers. Nowadays, social media and smartphones have enabled interactive sports experiences across multiple platforms in a perpetual stream. Fans no longer just want to see their favourite player on a Sunday night; they want to see how they are recovering on Monday, watch them train on Tuesday and discuss their fashion choices on Wednesday. (MIT Technology Review, 2021, <https://bit.ly/3oIgeq8>)

The introduction of technology in all layers of sport is shaping the rules and formats of professional matches and competitions, but it is also affecting spectator watching as entertainment with the potential for real-time consumption of content in addition to live matches. In March 2015, the IFAB decided to allow the use of technology in football. This trend widens the gap between elite and amateur sport. There are critics who argue that the essence of football could be lost and that this could lead to the extreme of differentiating between traditional and non-traditional sports, a situation that will not be without debate.

Meanwhile, new industries such as e-sports are growing, drawing a great interest from the younger audience.

Below there are two articles related to e-sports:

**Source: Antón, M.** (2019). *Traditional sport vs. E-sports: a comparison*. Retrieved from <https://www.marca.com/esports/2019/12/01/5de37734e2704e20928b4575.html>

**Source: CISESports; PwC,** (2016). *The burgeoning evolution of eSports From the fringes to front and center Consumer Intelligence Series*. Retrieved from [https://www.pwc.es/es/publicaciones/entretenimiento-y-medios/assets/pwc\\_intelligence-series\\_esports.pdf](https://www.pwc.es/es/publicaciones/entretenimiento-y-medios/assets/pwc_intelligence-series_esports.pdf)

Even in the long term, technology will enable more sports variants, from real-time spectator interaction to robot-played football.

**Figure 28: Example of robot-played football**



Source: Euronews, n.d., <https://bit.ly/3Bg7WEt>

## Video

**Source: Euronews** [euronews ( Spanish)]. (n.d.). *Robots also play football* [YouTube]. Retrieved from: <https://www.youtube.com/watch?v=saS-pZKSZxk>

### 4.2.3 Stadiums of the future

The new stadiums will be increasingly more intelligent and with great technological advances, and they will differ from the previous ones in their multi-purpose, multiple-use and multi-sport approach. As they are large spaces that, in many cases, are used only on match day and then remain unused or underused for many days, it will be important to promote different activities in them, adapting the operations, services and business offer, turning them into even greater assets for clubs to increase and generate new lines of revenue.

To this end, technology will be omnipresent in the stadium of the future. Current projects already include retractable turf, 360° video scoreboards, 5G connectivity, design covers with projection capabilities, availability of immersive technologies and, especially, an enhanced sport-centric experience, seeking interaction with users.

On match day, the stadiums will contribute to the spectacle and enhance the experience. New features and services will be complemented by an increased use of visual elements such as large screens, three-dimensional or holographic projections in main spaces such as the field, thus creating an augmented experience for event watching.

Stadiums will have to become increasingly sustainable in terms of energy consumption and carbon footprint. Energy consumption should be reduced to zero, and there are even plans for buildings that are capable of producing the energy they need themselves and even commercialising or collaborating with society's energy production. In the case of Ajax FC's Amsterdam Arena, the roof consists of 4200 solar panels that enable it to obtain 10% of the energy consumed, and its structure reuses rainwater to irrigate the grass. In turn, the Nuevo San Mamés (Athletic Bilbao) was the first stadium in Europe to be awarded the LEED (Leadership in Energy and Environment Design) certification due to its innovations that reduce consumption by 40%.

Below there are some articles related to the stadiums of the future:

**Source: Redacción As,** (2021). *Ras Abu Aboud sets new sustainability standards*. Retrieved from [https://as.com/futbol/2021/02/24/mundial/1614158378\\_428359.html](https://as.com/futbol/2021/02/24/mundial/1614158378_428359.html)

**Source: NAN Architecture,** (2021). Fenwick Iribarren's dismountable, transportable and reusable stadium for Qatar 2022 will be unveiled on 30 November. Retrieved from <https://nanarquitectura.com/2021/10/07/el-estadio-desmontable-transportable-y-reutilizable-de-fenwick-iribarren-para-qatar-2022-se-estrena-el-proximo-30-de-noviembre/51411>

On a business level, stadiums themselves are already large commercial centres, and will need to adapt to be the epicentres of fan interaction, generating the possibility to give additional value to sponsors and to access, measure and collect important data on their relationship with the institutions, and to do so in a way that is fully integrated into digital interaction.

In terms of technology and connectivity, in recent years, fans attending a match at the stadium used the high-speed wifi network to receive match information and statistics on the spot, share content on social media and order food and beverages online and have them delivered directly to their seats. However, with the vast capacity of 5G connectivity, the deployment of IoT technology devices, on top of the current computing power of the new stadiums being planned, this experience is being upgraded.

The design, management and running of these events are also strongly optimised and, in some way, connected to the rest of the cities where the stadiums are located, regulating public transport, traffic, distributing visitors in a safer and more efficient way, assessing densities, contrasting data and acting in real time, thanks to technologies such as digital twins, which are also applicable to football stadiums.

**Figure 29: Example of technologies applied to football stadiums**



Source: FC Barcelona, 2021b, <https://bit.ly/3oIiCqw>

Below there are some articles related to the stadiums of the future:

**Source: López Egea, M.** (2021). In between the USA model and the Tottenham Stadium: how Barça envisions its future stadium. In *Palco23*. Retrieved from <https://www.palco23.com/equipamiento/entre-el-modelo-usa-y-tottenham-stadium-como-imagina-el-barca-su-futuro-estadio>

**Source: Santamaría, A.** (2020). Stadiums of the Future, the base of football business. In *Expansión*. Retrieved from <https://www.expansion.com/directivos/deporte-negocio/2020/01/10/5e0a39bae5fdeaad548b45ea.html>

**Source: FC Barcelona,** (2021b). *How will the future Camp Nou be like?* Retrieved from <https://espaibarca.fcbarcelona.com/es/futuro-camp-nou/como-sera-futuro-camp-nou/>

**Source: Corchero, A.** (2019). This is what the stadiums of the future will be like. In *Mundo Deportivo*. Retrieved from <https://www.mundodeportivo.com/futbol/20190402/461429332230/asi-seran-los-estadios-del-futuro.html>

**Stadiums of the future:**

**Source:** GOL [GOL]. (n.d.). Stadiums of the future [YouTube]. Retrieved from <https://www.youtube.com/watch?v=HjGaepaA7g4>

#### **Digital twin of the FC Barcelona stadium:**

**Source:** Cordis Europa, (n.d.). Supercomputing at the service of Barcelona football fans. Retrieved from <https://cordis.europa.eu/article/id/428483-supercomputing-at-the-service-of-barcelona-football-fans/es>

#### **UEFA Guide of quality stadiums:**

**Source:** UEFA, (n.d.). *UEFA Guide of quality stadiums*. Retrieved from [https://es.uefa.com/MultimediaFiles/Download/uefaorg/Stadium&Security/02/11/78/29/2117829\\_DOWNLOAD.pdf](https://es.uefa.com/MultimediaFiles/Download/uefaorg/Stadium&Security/02/11/78/29/2117829_DOWNLOAD.pdf)

### **4.2.4 Innovation to create new business models**

The main revenue streams for clubs are participation in competitions, TV rights sales, match ticket sales, sponsorship, licensing, T-shirt sales, as well as player sales and membership fees, depending on the type of club. There is some scope for optimisation and growth in all of these, for example, revenue from participation in competitions can be increased by a reorganisation of schedules with better global audiences and better local ticket sales. Also, competition formats could be adapted, with a more dynamic entertainment focus, or improving the business around match attendance to increase match day revenue.

In addition, there are new business opportunities for clubs to explore, but this will probably require an innovative mindset, a broader vision and medium-term results.

In order to establish how sports innovation can be deployed through new collaboration models that clubs are proposing, the collaborative model structures of companies and research centres can be taken as reference, implementing different procedures, but sharing the same challenge of innovating, updating and becoming increasingly competitive.

In this aspect, clubs are becoming increasingly professionalised, incorporating ideas from other industries into their value chain and opening up to cooperation with agents from other fields such as technology companies, content producers, data processing and exploitation specialists, companies specialising in renewable energies and sustainability, medicine and nutrition, sportswear and many others, with which synergies can be sought in any sport-related aspect. This means jointly developing and generating products, sharing knowledge, training networks, continuous and collective improvement in common interests, thereby generating an innovation ecosystem.

It is important to have an innovation process to transfer the knowledge generated to the departments in charge of the needs of sports, fans or any other key actor, agent or activity within the clubs, as well as to monetise this knowledge through the development of new

marketable products or services, either by the club or through third parties, thus generating the much-needed diversification of the industry.

To cite one example, Barcelona is leading an initiative along these lines with the Barça Innovatio Hub, an ecosystem that promotes knowledge and innovation, in collaboration with prestigious brands, universities, research centres, startups, entrepreneurs, students, athletes and investors from all over the world. The aim is to generate new knowledge and create new products and services that can benefit not only its own athletes, but also society at large.

Social impact is in line with FC Barcelona's motto, "more than a club", and is combined with innovation leadership in the form of positive social impact through the development, support or visibility of social projects, which have an added value by positively impacting the brand. This value contributes to generating additional value that has an impact on the rest of the business lines, especially sponsorships. Ideally, part of this profit should be reinvested back into research and keep the circle going, growing and contributing more and more to sport.

We must keep in mind that there are new industries linked to sport and technology that are on the rise. A great example of this is e-sports, gaming applied to sports. This is an industry that continues to see great growth, with the presence of most of the major leagues and the main clubs, and where football is just another type of game, mainly FIFA and PES football tournaments, some of which are exclusive to football clubs, such as eFootball.Pro. There are other games in addition to sports, such as real-time strategy, wrestling or racing. These are games like Fornite, League of Legends or Counter Strike, with more than 500 million followers worldwide, big leagues and tournaments with thousands of spectators - mostly very young - watching the games live. They also have a strong online presence, especially on YouTube and Twitch. Brands and investors are predicting a great future in this area. All clubs and entities in the sports sector should have their own e-sports strategy to avoid being left behind.

Below there are two articles related to e-sports:

**Source: Antón, M.** (2021). *Traditional sport vs. E-sports: a comparison*. Retrieved from <https://www.marca.com/esports/2019/12/01/5de37734e2704e20928b4575.html>

**Source: CISESports; PwC,** (2016). *The burgeoning evolution of eSports. From the fringes to front and center Consumer Intelligence Series*. Retrieved from [https://www.pwc.es/es/publicaciones/entretenimiento-y-medios/assets/pwc\\_intelligence-series\\_esports.pdf](https://www.pwc.es/es/publicaciones/entretenimiento-y-medios/assets/pwc_intelligence-series_esports.pdf)

Another example of new industries linked to sport and technology, which are also experiencing great growth, are those derived from blockchain technology. This is a decentralised network that manages information in a very consistent way, as it does not

allow modifications to transactions already carried out, thus providing guarantees to identify the authors or owners of any transaction. It has a number of applications, the best known of which is the management of units of value assigned to a business model, the tokens. These can be differentiated between fungible tokens -that is, those that can be divided like cryptocurrencies, for example-, and non-fungible tokens (Non-Fungible Token, NFT), which are peculiar in that they are unique, each one becoming a one-off asset with which to invest, something very similar to works of art, which has also generated a large collector's market with a speculative background aimed at earning money after their revaluation.

**Figure 30: Example of *tech blockchain* or blockchain applied to sport**

**Blockchain** — Es la tecnología que se inventó para desarrollar la criptomoneda más famosa (y más cara) del mundo, el bitcoin. Es una inmensa base de datos que se distribuye entre varios participantes (nodos) de la red. Un libro de registro que deja constancia de todas las transacciones realizadas allí. Todo a partir de, y esto es lo diferencial, una base descentralizada, sin un ordenador principal. Si bien comenzó como la estructura del bitcoin, la tecnología blockchain puede utilizarse para cualquier proceso en la red que requiera de una verificación porque su seguridad es inalterable.

**Token** — Cada interacción entre participantes o nodos, cada mensaje que emiten entre ellos da como resultado un token, que **no es más que una representación de la información que aloja la red y que puede tomar la forma de cualquier tipo de activo, bien o servicio**, como por ejemplo bitcoin, fan tokens o, como veremos ahora, NFT.

**NFT** — Son las siglas inglesas de Tokens no fungibles, es decir que **no se consumen, que permanecen, que no sufren las alteraciones físicas del paso del tiempo** y, por tanto, no son reemplazables. Esto significa que no son intercambiables. Cada NFT es único. Y de esa escasez digital nace su valor. Pueden ser una obra de arte digital, un tuit, un libro, o el vídeo del primer gol de tu jugador favorito en un derbi.

Source: El País, 2021, <https://bit.ly/3Jlu03p>

Original	Traducción
Es la tecnología que se inventó para desarrollar la criptomoneda más famosa (y más cara) del mundo, el bitcoin. Es una inmensa base de datos que se distribuye	It is the technology that was invented to develop the world's most famous (and most expensive) cryptocurrency, bitcoin. It is a huge database distributed among

<p>entre varios participantes (nodos) de la red. Un libro de registro que deja constancia de todas las transacciones realizadas allí. Todo a partir de, y esto es lo diferencial, una base descentralizada, sin un ordenador principal. Si bien comenzó como la estructura del bitcoin, la tecnología blockchain puede utilizarse para cualquier proceso en la red que requiera de una verificación porque su seguridad es inalterable.</p>	<p>various participants (nodes) in the network. A logbook that records all transactions made there. All from a decentralised base, without a main computer, which is what makes it so different. Although it began as the bitcoin structure, blockchain technology can be used for any process on the network that requires verification because its security is unalterable.</p>
<p>Cada interacción entre participantes o nodos, cada mensaje que emiten entre ellos da como resultado un token, que no es más que una representación de la información que aloja la red y que puede tomar la forma de cualquier tipo de activo, bien o servicio, como por ejemplo bitcoin, fan tokens o, como veremos ahora, NFT.</p>	<p>Each interaction between participants or nodes, each message they send to each other results in a token, which is nothing more than a representation of the information held on the network and can take the form of any type of asset, good or service, such as bitcoin, fan tokens or, as we shall see now, NFT.</p>
<p>Son las siglas inglesas de Tokens no fungibles, es decir que no se consumen, que permanecen, que no sufren las alteraciones físicas del paso del tiempo y, por tanto, no son reemplazables. Esto significa que no son intercambiables. Cada NFT es único. Y de esa escasez digital nace su valor. Pueden ser una obra de arte digital, un tuit, un libro, o el video del primer gol de tu jugador favorito en un derbi.</p>	<p>These are the acronym for non-fungible tokens, i.e. they are not expendable, they are permanent, they do not suffer the physical alterations of the passage of time and, therefore, they are not replaceable. This means that they are not interchangeable. Each NFT is unique. And it is from this digital scarcity that their value is derived. They can be a piece of digital art, a tweet, a book, or the video of your favourite player's first goal in a derby.</p>

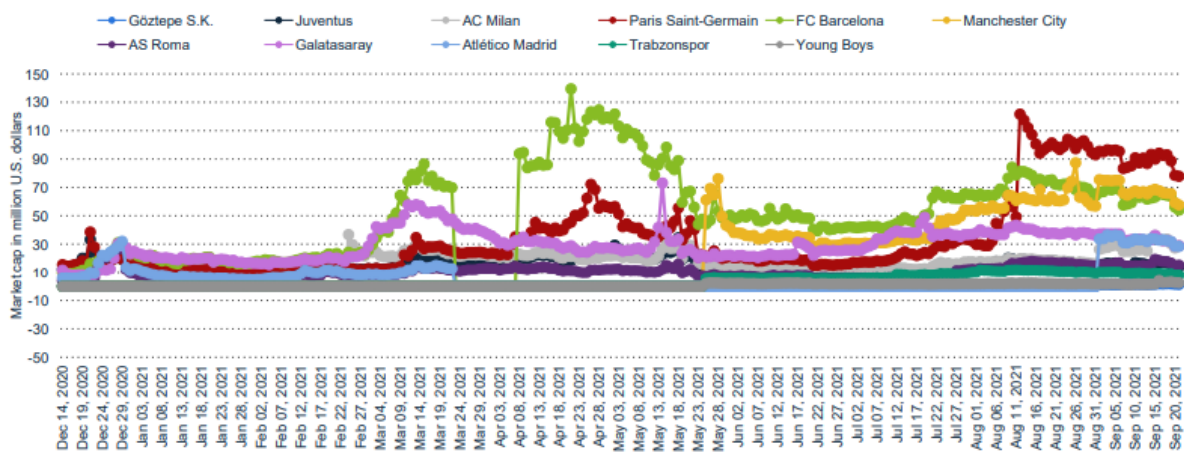
Sports clubs and institutions are already including tokens in their business, generating new revenues linked to their main assets: athletes, facilities and fans. Applications range from player stickers, such as one of Cristiano Ronaldo's that fetched over €242,000 on Sorare, to collecting exclusive moments in assets such as a goal in LaLiga or a dunk in the NBA (e.g. NBA TopShot owned by Dapper Labs, creators of NFT). This opens the door to commercial agreements between clubs and blockchain companies to incorporate innovations such as allowing subscribers to tokenise their seats, or convert tickets into NFT assets, auctioning live the equipment used in the match among fans - as the Sacramento Kings do in the NBA by certifying it through the blockchain company ConsenSys - or participating in decision-making, such as new models of fan loyalty and monetisation, so that fans can own assets of their favourite teams and competitions.

Through the issuance of fan tokens alone, LaLiga clubs have placed more than €200 million in cryptocurrencies on the market.

**Figure 31: Market capitalisation of fan tokens with more than 10,000 owners until 21 September 2021.**

Market capitalization of NFT football fan tokens with more than 10,000 owners up until September 21, 2021 (in million U.S. dollars)

Daily market cap of NFTs from selected soccer clubs up to September 21, 2021



Note(s): Worldwide; September 21, 2021; Some fan tokens existed before December 14, 2020, - up to six months - but did not register any market cap whatsoever. The starting date is the earliest date with an available market cap; Ownership figures per club can be found under the "Details" tab  
Further information regarding this statistic can be found on [page 73](#)  
Source(s): CoinMarketCap; [10.12654/00](https://doi.org/10.12654/00)

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Sports **statista**

Source: de Best, 2021, <https://bit.ly/361KwHr>

Ifunanyachi Achara, Nigerian striker for Toronto FC (Major League Soccer team), became the first football player in the world to receive part of his salary in bitcoins. Premier League side Southampton, after teaming up with a cryptocurrency platform, is giving its players the option to pay their bonuses in bitcoins. Premier League clubs have fintech companies among their sponsors, and there are also clubs sponsored by blockchain-based companies such as Bitci.com, Socios, Digitalbits or Binance. There are even examples such as Watford in England, which charges its main sponsorship in cryptocurrencies, as is also the case of the Dutch club PSV Eindhoven, which is sponsored entirely in bitcoin by Anycoin Direct.

In addition, it should be noted that this is one of the uses that blockchain offers; there are other applications derived from optimising and certifying all kinds of processes and operations, such as smart contracts.

On the other hand, the use of cryptocurrencies has its detractors as they are not regulated and the high environmental impact of some systems such as bitcoin, whose annual energy consumption (121.36 TWh) is higher than that of countries such as Argentina (121 TWh) or the Netherlands (108.8 TWh).

Below there are some articles related to cryptocurrencies:

Cambridge Bitcoin Electricity Consumption Index: [Cambridge Bitcoin Electricity Consumption Index \(CBECI\)](#)

**Source: Colorado, M.** (2021). Not all cryptocurrencies are designed equally, nor do they all have the same environmental impact. In *France 24*. Retrieved from <https://www.france24.com/es/programas/medio-ambiente/20210923-ni-todas-las-criptomonedas-est%C3%A1n-dise%C3%B1adas-igual-ni-todas-tienen-el-mismo-impacto-ambiental>

**Source: Fernández, Y.** (2021). What NFTs are and how they work. Retrieved from <https://www.xataka.com/basics/que-nft-como-funcionan>

**Source: Pastor, J.** (2021). *What NFTs are, the digital assets that are transforming art collection and digital goods*. Retrieved from [Qué son los NFT, los activos digitales que están transformando el coleccionismo de arte y bienes digitales](#)

**Source: Blockchain Economía,** (2019). *How will blockchain evolve the sports industry?* Retrieved from <https://www.blockchaineconomia.es/blockchain-revolucionara-el-deporte/>

**Source: Carrertero, A.** (2021). Tokens, NFT and blockchain: the who's who of the digital metaverse that sport aspires to build. In *2Playbook*. Retrieved from [https://www.2playbook.com/mas-deporte/tokens-nft-blockchain-quien-es-quien-metaverso-digital-aspira-construir-deporte\\_5165\\_102.html](https://www.2playbook.com/mas-deporte/tokens-nft-blockchain-quien-es-quien-metaverso-digital-aspira-construir-deporte_5165_102.html)

**Source: Forbes Staff,** (2021). Sports firms prepare NFT collections for the metaverse. Retrieved from <https://forbes.co/2021/12/22/forbes-life/firmas-deportivas-preparan-colecciones-en-nft-para-el-metaverso/>

**Source: Erdozain, A.** (2021). The gold-priced tokens of the future: what NFTs are and how they work. In *Palco23*. Retrieved from [Los cromos del futuro que se pagan a precio de oro: qué son y cómo funcionan los NFT | Palco23](#)

**Source: Palco23,** (2021). Sorare teams up with the Bundesliga after its agreement with LaLiga. Retrieved from <https://www.palco23.com/competiciones/sorare-se-alia-con-la-bundesliga-despues-de-su-acuerdo-con-laliga>

**Source: Socios,** (s.f.). *Pioneer Agreement: Valencia CF will launch its Fan Token and advertise it on the first team shirt*. Retrieved from <https://www.socios.com/es/acuerdo-pionero-el-valencia-cf-lanzara-su-fan-token-y-lo-publicitara-en-la-camiseta-del-primer-equipo/>

**Source: Palco23,** (2021). Watford will collect its main sponsorship in cryptocurrencies. Retrieved from <https://www.palco23.com/fuera-de-juego/el-watford-cobrar%C3%A1-su-patrocinio-principal-en-criptomonedas>

Strategies in the football industry must take into account industry trends to align medium-term planning and innovation objectives.

As an example, we provide an overview of the key topics in the *Sporting goods 2021 report: The next normal for an industry in flux*, realized por la consultora McKinsey & Company (2021).

Source: **Becker, B.; Berg, A.; Kohli, S.; Thiel, A.** (2021). *Sporting goods 2021: The next normal for an industry in flux*. In *McKinsey & Company*. Retrieved from <https://www.mckinsey.com/industries/retail/our-insights/sporting-goods-2021-the-next-normal-for-an-industry-in-flux#>

The report presents key trends set to shape the sports goods industry that were already emerging before COVID-19, but whose introduction has been accelerated and their impact increased with the pandemic. The trends can be broadly described under three flags: adapting to consumer change, digital leap and industry disruption.

**Figure 32: Trends to shape the industry in 2021**

**Eight trends are expected to shape the sporting goods industry in 2021.**



McKinsey & Company

Source: Becker, Berg, Kohli and Thiel, 2021, <https://mck.co/3Bfvut4>

**Winning in the new normal**

The main conclusions of the report presented by the consultancy McKinsey & Company (Becker et al., 2021), ahead of COVID-19, stress the need for investment to align with an increasingly dynamic industrial landscape. In the next normal, winners will be characterised by:

- Having a strong presence in growing sports segments and categories, including women, large markets such as China and sports such as athletics (which accounts for around two-thirds of growth in 2020 to 2023).
- Having an excellent direct-to-consumer business model, including communications, marketing and omni-channel retail offerings to constantly adapt to consumer habits and formats.
- Direct connection with consumers through digital loyalty programmes.
- Adapting to specific formats for different types of shops.
- Relying on the support of influencers to penetrate and grow in new digital channels.
- Sustainability, either as a differentiator or at least on pace with the industry.
- Supply chain optimisation, (e.g. local sourcing and closer partnerships).
- Agility in scenario planning and budgeting to respond quickly to changes in the market environment (including a possible resurgence of crises such as COVID-19). (Becker *et al.*, 2021, <https://mck.co/3Bfvut4>)

**Figure 33: Relevant elements in the new scenario**

**Players with attributes of winners will enter a virtuous cycle—players without may find themselves falling behind in a vicious cycle.**



Source: Becker *et al.*, 2021, <https://mck.co/3Bfvut4>

In conclusion, strategic planning should include monitoring new emerging technologies and all innovations in the industry, and linking their potential impact with the internal strategy and trends of the sport industry. This should help set strategic priorities in which to invest in order to adapt and exploit the potential of all the technologies that are being consolidated and, in this way, generate greater competitiveness, improve sporting results, enhance experiences, provide differential offers for consumers and achieve greater sustainability.

Below there are articles related to the topics covered in this module:

## Competitions / Federations

### UEFA

**Source: Palco23**, (2021). UEFA is looking for partners to launch Champions League fan tokens. Retrieved from <https://www.palco23.com/competiciones/la-uefa-busca-socios-para-lanzar-fan-tokens-de-la-champions>

### LaLiga

**Source: Palco23**, (2021). LaLiga joins the NFT market with a sponsorship agreement with Sorare. Retrieved from <https://www.palco23.com/competiciones/laliga-entra-en-el-sector-de-los-nft-con-un-acuerdo-de-patrocinio-con-sorare>

**Source: Palco23**, (2021). Dapper Labs raises 250 million after closing a deal with LaLiga. Retrieved from <https://www.palco23.com/equipamiento/drapper-labs-levanta-250-millones-tras-cerrar-un-acuerdo-con-laliga>

### RFEF

**Source: Palco23**, (2021). RFEF relies on Bitci to launch national team fan tokens worth 12.5 million. Retrieved from <https://www.palco23.com/competiciones/la-rfef-se-apoya-en-bitci-para-lanzar-fan-tokens-de-la-seleccion-por-valor-de-125-millones>

### Bundesliga

**Source: Palco23**, (2021). Sorare teams up with the Bundesliga after its agreement with LaLiga. Retrieved from <https://www.palco23.com/competiciones/sorare-se-alia-con-la-bundesliga-despues-de-su-acuerdo-con-laliga>

### MLS

**Source: Crypto Currencies**, (2021). Major League Soccer launches NFT, exploiting blockchain. Retrieved from <https://cryptodivisas.net/major-league-soccer-lanza-nft-explorando-blockchain/>

**Source: Palco23**, (2018). A blockchain is launched so that clubs sell voting rights in management. Retrieved from <https://www.palco23.com/entorno/nace-un-blockchain-para-que-los-clubes-puedan-vender-derechos-de-voto-en-la-gestion>

**Source: Wilson, T.; Irrera, A.** (2021). Football clubs embrace cryptocurrencies, but fans are torn. In *Reuters*. Retrieved from <https://www.reuters.com/article/futbol-clubes-criptomonedas-idARXXN2NX05E>

**Source: Europa Press,** (2021). *Valencia and 'Socios.com' will give away their space on the Copa del Rey shirt to fans.* Retrieved from <https://www.europapress.es/deportes/futbol-00162/noticia-valencia-socioscom-cederan-espacio-camiseta-copa-rey-aficionados-20210913181915.html>

## **Examples of clubs:**

### **PSV (acceptacio cripto!)**

**Source: Palco23,** (2018). PSV Eindhoven will collect in Bitcoin. Retrieved from <https://www.palco23.com/fuera-de-juego/el-psv-eindhoven-cobrara-en-bitcoin>

### **Real Madrid (Sorare)**

**Source: Ramírez Escudero, D.** (2020). Real Madrid gets blockchain collectible NFTs with Sorare. Are football and cryptocurrencies the future? In *Be in crypto*. Retrieved from <https://es.beincrypto.com/real-madrid-obtiene-nft-coleccionables-blockchain-sorare-futbol-criptomonedas-futuro/>

### **PSG**

**Source: Palco23,** (2018). PSG take a technological leap and team up with a blockchain platform. Retrieved from <https://www.palco23.com/clubes/el-psg-da-un-paso-tecnologico-y-se-alia-con-una-plataforma-de-blockchain>

### **Atleti**

**Source: Palco23,** (2018). *Atleti is looking to monetize its expanded social base via blockchain.* Retrieved from <https://www.palco23.com/clubes/el-atleti-busca-monetizar-su-ampliada-masa-social-via-blockchain>

### **ManCity**

**Source: Palco23,** (2018). Manchester City delves into the world of Fan Tokens. Retrieved from <https://www.palco23.com/fuera-de-juego/el-manchester-city-se-adentra-en-el-mundo-de-los-fan-tokens>

### **Milan**

**Source: Ferrer, A.** (2021). Milan delves into the world of cryptocurrencies. In *Palco23*. Retrieved from <https://www.palco23.com/fuera-de-juego/el-milan-entra-en-el-sector-de-las-criptomonedas>

### **Arsenal**

**Source: Palco23**, (2018). Arsenal reactivates its revenues with CashBet Coin cryptocurrencies. Retrieved from <https://www.palco23.com/clubes/el-arsenal-reactiva-sus-ingresos-con-las-criptomonedas-de-cashbet-coin>

### **Real Sociedad (NFTs)**

**Source: Palco23**, (2021). Real Sociedad makes its debut in NFTs with the Copa. Retrieved from <https://www.palco23.com/fuera-de-juego/la-real-sociedad-se-estrena-en-los-nfts-con-la-copa>

**Source: Ferreira, D.** (2021). From Messi to the NFL, elite athletes are now paid in cryptocurrencies. In *El Empresario*. Retrieved from <https://www.elpais.com.uy/el-empresario/messi-nfl-deportistas-elite-cobran-criptomonedas.html>

**Source:** <https://www.criptonoticias.com/comunidad/adopcion/futbolista-mls-toma-mitad-salario-bitcoin/>

**Source: Ibarra, J.** (2021). This MLS football player takes half of his salary in bitcoin. In <https://www.businessinsider.es/ganaria-messi-recibiese-salario-5-principales-criptomonedas-913521>

**Source: La Información**, (2021). *Messi receives part of his salary in cryptocurrencies and triggers PSG's 'fan token'*. Retrieved from <https://www.lainformacion.com/deporte/messi-salario-criptomonedas-dispara-fan-token-psg/2846547/>

### **Clubs Premier League (eToro -fintech vs. cripto-)**

**Source: Palco23**, (2021). Seven Premier League clubs sign up investment firm eToro as a 'sponsor'. Retrieved from <https://www.palco23.com/clubes/siete-clubes-de-la-premier-league-fichan-a-la-empresa-de-inversion-etoro-como-sponsor>

### **Betis (Bitcicom)**

**Source: Palco23**, (2021). Betis signs the sponsorship of the blockchain company Bitci.com until 2024. Retrieved from <https://www.palco23.com/clubes/el-betis-firma-el-patrocinio-de-la-compania-de-blockchain-bitcicom-hasta-2024>

### **Valencia (Socios)**

**Source: Socios**, (s.f.). *Pioneer Agreement: Valencia CF will launch its Fan Token and advertise it on the first team shirt*. Retrieved from <https://www.socios.com/es/acuerdo-pionero-el-valencia-cf-lanzara-su-fan-token-y-lo-publicitara-en-la-camiseta-del-primer-equipo/>

### **Inter (Digitalbids)**

**Source: Palco23**, (2021). Inter Milan signs an 85 million sponsorship with DigitalBits. Retrieved from [palco23.com/clubes/el-inter-de-milan-firma-un-patrocinio-de-85-millones-con-digitalbits](https://www.palco23.com/clubes/el-inter-de-milan-firma-un-patrocinio-de-85-millones-con-digitalbits)

### **Lazio (Binance)**

**Source: Palco23**, (2021). *La SS Lazio firma un patrocinio de 30 millones con la empresa de 'criptos' Binance*. Retrieved from [www.palco23.com/clubes/la-ss-lazio-firma-un-patrocinio-de-30-millones-con-la-empresa-de-criptos-binance](https://www.palco23.com/clubes/la-ss-lazio-firma-un-patrocinio-de-30-millones-con-la-empresa-de-criptos-binance)

### **Watford (patrocini amb cripto)**

**Source: Palco23**, (2021). Watford will collect its main sponsorship in cryptocurrencies. Retrieved from <https://www.palco23.com/fuera-de-juego/el-watford-cobrara-su-patrocinio-principal-en-criptomonedas>

### **Other sports**

#### **Dorna**

**Source: Palco23**, (2021). Dorna gets on the blockchain wave. Retrieved from [palco23.com/fuera-de-juego/dorna-entra-en-la-ola-del-blockchain](https://www.palco23.com/fuera-de-juego/dorna-entra-en-la-ola-del-blockchain)

#### **Kosmos Tennis**

**Source: Palco23**, (2021). Kosmos Tennis teams up withunch Davis Cup fan token. Retrieved from [palco23.com/competiciones/kosmos-tennis-se-apoya-en-socios-para-lanzar-el-fan-token-de-la-copa-davis](https://www.palco23.com/competiciones/kosmos-tennis-se-apoya-en-socios-para-lanzar-el-fan-token-de-la-copa-davis)

#### **NBA (Coinbase)**

**Source: Palco23**, (2021). The NBA joins the cryptocurrency market with Coinbase sponsorship. Retrieved from [palco23.com/competiciones/la-nba-se-suma-al-mercado-de-las-criptomonedas-con-el-patrocinio-de-coinbase](https://www.palco23.com/competiciones/la-nba-se-suma-al-mercado-de-las-criptomonedas-con-el-patrocinio-de-coinbase)

#### **Fórmula 1**

**Source: Palco23**, (2019). Aston Martin Red Bull Racing closes Formula 1's first cryptocurrency sponsorship. Retrieved from <https://www.palco23.com/competiciones/aston-martin-red-bull-racing-cierra-el-primer-patrocinio-de-criptomonedas-de-la-formula-1>

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