

October 2024

The video game industry in Catalonia



The video game industry in Catalonia. Sector report

ACCIÓ
Government of Catalonia



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Carried out by:

Strategy and Competitive Intelligence Unit of ACCIÓ
Directorate General of Innovation and Digital Culture. Catalan Institute of Cultural Enterprises

Barcelona, October 2024

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1. The video game industry

Definition of the video game industry

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The video game industry encompasses the entire sector related to the creation, development, publishing, distribution and monetization of video games. It's a rapidly growing industry, with millions of people worldwide playing video games and generating billions of dollars of revenue each year.



Depending on the platform chosen by users, it's possible to segment the global video game market into three large and distinct groups: video games for **mobile devices**, **console** video games and **PC** video games.

Production process for a video game



Pre-production

In essence, this phase defines what the game's about, why it should be made and what it should cost to make it.

Production

This phase may last between one and four years, and it's the time when the game takes shape: the story is refined, the assets (e.g. characters and settings) are created, the rules of the game are established, the code is written, and so on.

Post-production

After the production is completed and the game is released, the maintenance (fixing of bugs, creation of patches) and the generation of additional and downloadable content (DLC) takes place.

Source: ACCIÓ, based on Statista and CG Spectrum

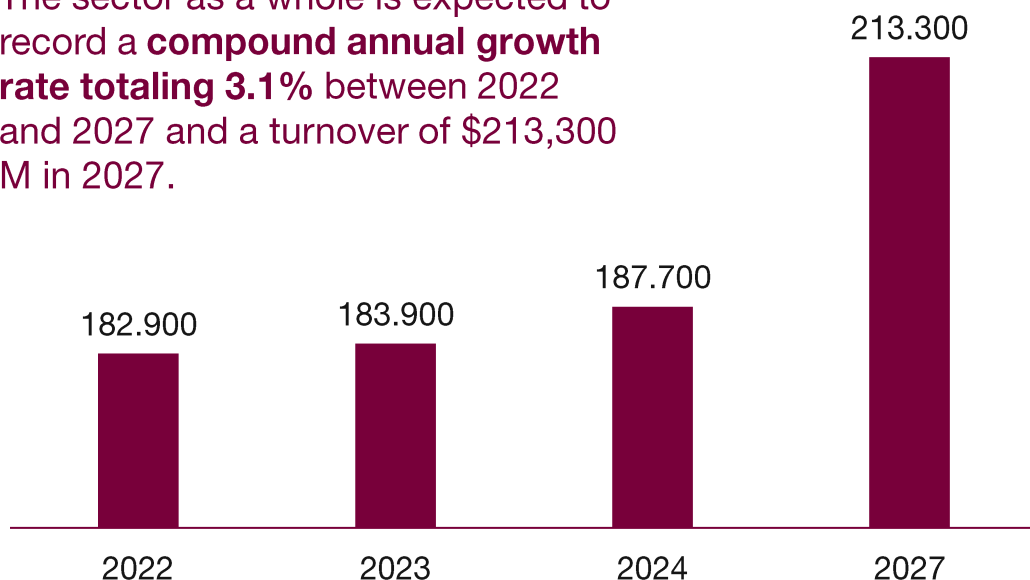
The global video game industry (I)

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The global video game market will record a turnover of \$187,700 M in 2024, constituting 2.1% year-on-year growth. The PC segment will grow steadily from 2025 onwards and account for 22% of the total market by that time. As console revenue growth recovers, once again surpassing that of PCs, it will account for 30%. Conversely, the turnover of the mobile device segment has declined since the end of the pandemic, and it will continue to do so.

Global video game turnover, 2022-2027 (\$M)

The sector as a whole is expected to record a **compound annual growth rate totaling 3.1%** between 2022 and 2027 and a turnover of \$213,300 M in 2027.



Global turnover by segment, 2024



Mobile devices

\$92,600 M | ▲3.0% with respect to 2023

49%



Console

\$51,900 M | ▼1.0% with respect to 2023

28%



PC

\$43,200 M | ▲4.0% with respect to 2023

23%

Source: ACCIÓ, based on “Global Games Market Report”, Newzoo, 2024

The global video game industry (II)

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Mobile devices



Most popular games (by volume of turnover), March 2024

	1 MONOPOLY GO! Scopely	2 Royal Match Dream Games	3 Last War: Survival G. First Fun	4 Coin Master Moon Active	5 Candy Crush Saga King
iPhone	1 Honor of Kings Level Infinite	2 PUBG MOBILE Tencent Mobile Int.	3 MONOPOLY GO! Scopely	4 Honkai: Star Rail COGNOSPHERE	5 Royal Match Dream Games
iPad	1 Roblox Roblox Corporation	2 PUBG MOBILE Tencent Mobile Int.	3 Candy Crush Saga King	4 Royal Match Dream Games	5 Honkai: Star Rail COGNOSPHERE

Console



Most popular games (by monthly average users, MAU), 2023

	1 Fortnite Epic Games	2 Grand Theft Auto V Rockstar Games	3 Call of Duty Infinity Ward	4 EA Sports FC 24 Electronic Arts	5 Roblox Roblox Corporation
	1 Fortnite Epic Games	2 Call of Duty Infinity Ward	3 Grand Theft Auto V Rockstar Games	4 Minecraft Mojang Studios	5 Roblox Roblox Corporation
	1 Fortnite Epic Games	2 The Legend of Zelda Nintendo	3 Super Mario Bros Nintendo	4 Mario Kart 8 Nintendo	5 Minecraft Mojang Studios

PC



Most popular games (by monthly average users, MAU), 2023

1 Fortnite Epic Games	3 Minecraft Mojang Studios	5 The Sims 4 Electronic Arts	7 League of Legends Riot Games	9 Grand Theft Auto V Rockstar Games
2 Roblox Roblox Corporation	4 Counter-Strike 2/GO Valve	6 Call of Duty Infinity Ward	8 Valorant Riot Games	10 Rocket League Psyonix

Source: ACCIÓ, based on “The PC & Console Gaming Report”, Newzoo, 2024; Statista, 2024





















The global video game industry (III)

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Main markets by turnover*, 2022

Country	Turnover	Players
 United States	\$46,400 M	209.8 M
 China	\$44,000 M	696.5 M
 Japan	\$19,100 M	73.4 M
 South Korea	\$7,400 M	33.3 M
 Germany	\$6,500 M	49.5 M
 United Kingdom	\$5,500 M	38.5 M
 France	\$4,100 M	38.8 M
 Canada	\$3,300 M	22.0 M
 Italy	\$3,100 M	36.1 M
 Brazil	\$2,600 M	102.6 M

Main companies by turnover, Q4 2023

1	 Tencent 腾讯	 Tencent
2	 SONY	 Sony
3	 Microsoft	 Microsoft
4	 Apple	 Apple
5	 網易 NETEASE	 NetEase
6	 Google	 Google
7	 Electronic Arts	 Electronic Arts
8	 Nintendo	 Nintendo
9	 T2	 Take-Two Interactive
10	 NEXON	 Nexon



*Although **India** isn't in the global top ten in terms of turnover, it's the **second-largest market in the world by number of players** (373 M in 2022).

Source: ACCIÓ, based on Newzoo, 2024; "Insights into Indian Mobile Gamers and How to Reach Them", Newzoo, 2022

FDI in video games remains unstoppable, with more than double the investment and employment created than in the previous five years

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The **volume of FDI in the video game industry**, which registered a record high in the 2019-2023 period, reflects the reality of a market undergoing rapid expansion. Spain has capitalized on the opportunity, becoming the third-largest global destination for this FDI.

FDI in video games around the world, 2019-2023

525

projects

(▲65.1% vs. 2014-2018)

8,856

€M in investment

(▲131.8% vs. 2014-2018)

40,801

jobs created

(▲107.8% vs. 2014-2018)

Countries of origin by projects

-  1 USA | 121 projects
-  2 United Kingdom | 46 projects
-  3 China | 41 projects
-  4 France | 38 projects
-  5 Sweden | 37 projects

Destination countries by projects

-  1 Canada | 59 projects
-  2 United Kingdom | 50 projects
-  3 Spain | 39 projects
-  4 USA | 36 projects
-  5 Germany | 28 projects

The 25 main companies by invested capital in the 2019-2023 period



Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

Catalonia turns Spain into the country with the most FDI video game projects in 2023

In 2023, Spain occupied an excellent position in the global rankings of FDI in video games. Western Europe is the geographical area which has received the largest number of projects (31.3% of the total recorded), as is the case for the whole of the historical series (35.6%).

Top 17 destination countries in the world (by projects)

 1 Spain 9 projects	 9 Belgium 2 projects
 Catalonia 6 projects	 10 Brazil 2 projects
 2 UAE 8 projects	 11 Canada 2 projects
 3 United Kingdom 6 projects	 12 Germany 2 projects
 4 USA 6 projects	 13 Malaysia 2 projects
 5 Poland 4 projects	 14 Netherlands 2 projects
 6 India 3 projects	 15 Saudi Arabia 2 projects
 7 Japan 3 projects	 16 Singapore 2 projects
 8 Armenia 2 projects	 17 Vietnam 2 projects

17
countries
(44.7% of the total)
59
projects
(73.8% of the total)

The countries in Western Europe and Asia-Pacific account for 33 of the 59 projects (55.9%)

5 of the 17 main destination countries are in the EU, which accounts for 19 of the 59 projects (32.2%)

6 of the 9 projects undertaken in Spain in 2023 were completed in Catalonia (66.7%)

Note: Investments made in video games, applications and digital content activities have been taken into account

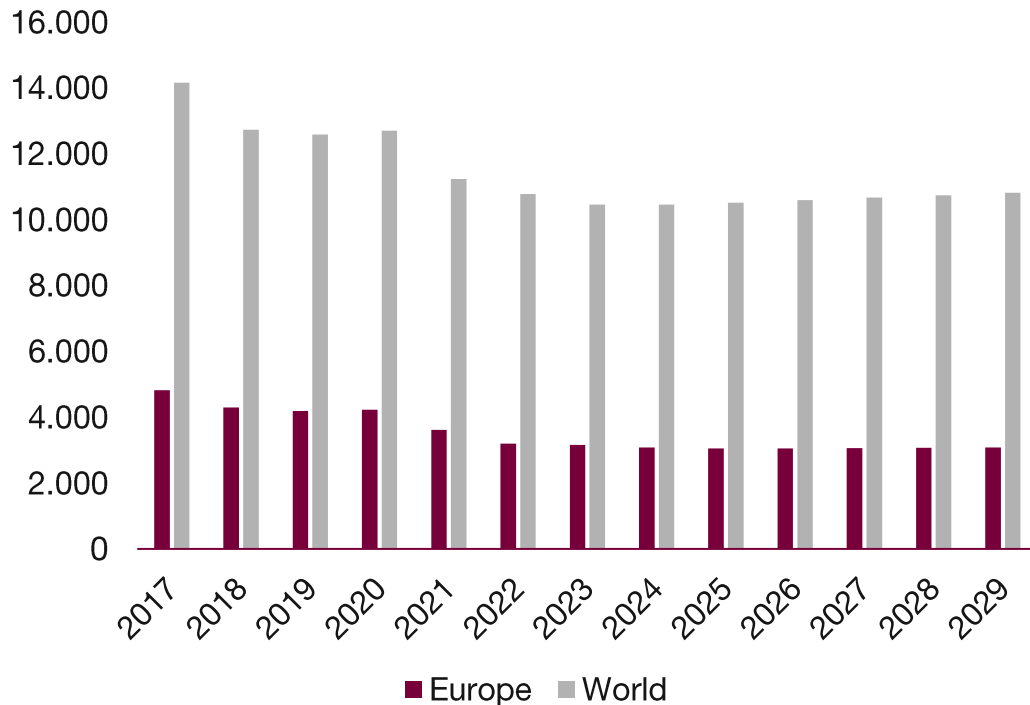
Source: ACCIÓ, based on fDi Markets, 2024

An eminently digital industry

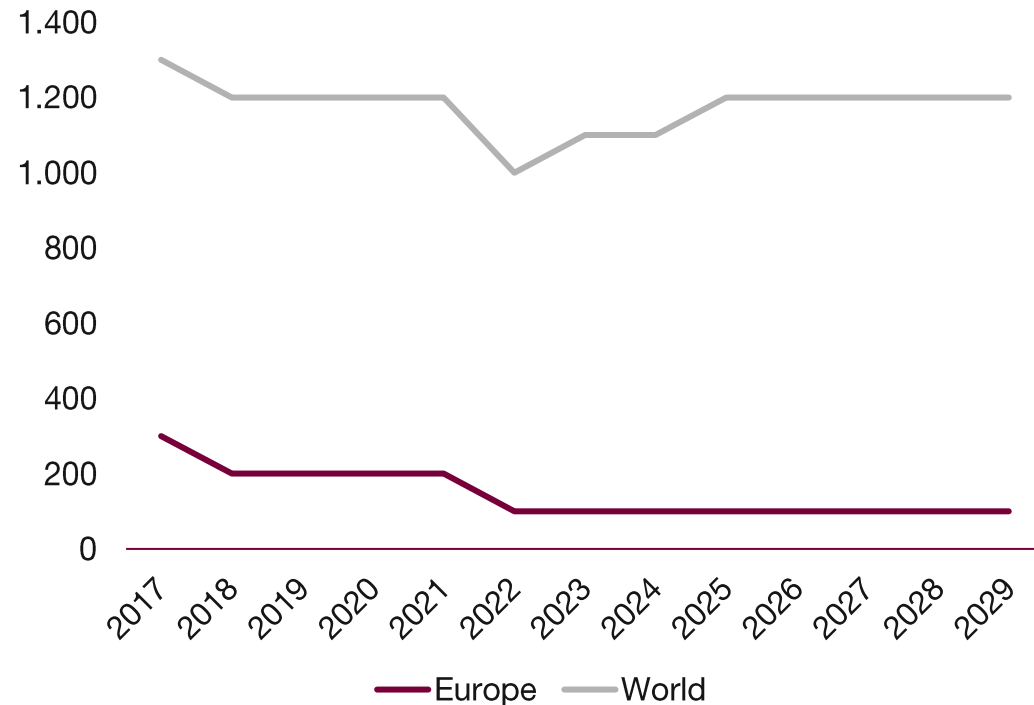
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The decline of the physical format in the video game industry is driving the transition to digital. Due to the global upturn in demand for digitally distributed video games, physical sales of video games are undergoing a gradual decline. It is estimated that the compound annual growth rate of the turnover will reach 0.68% in the 2024-2029 period, which will be reflected in revenues amounting to €10,820 M in 2029.

Turnover of video games in physical format (€M)



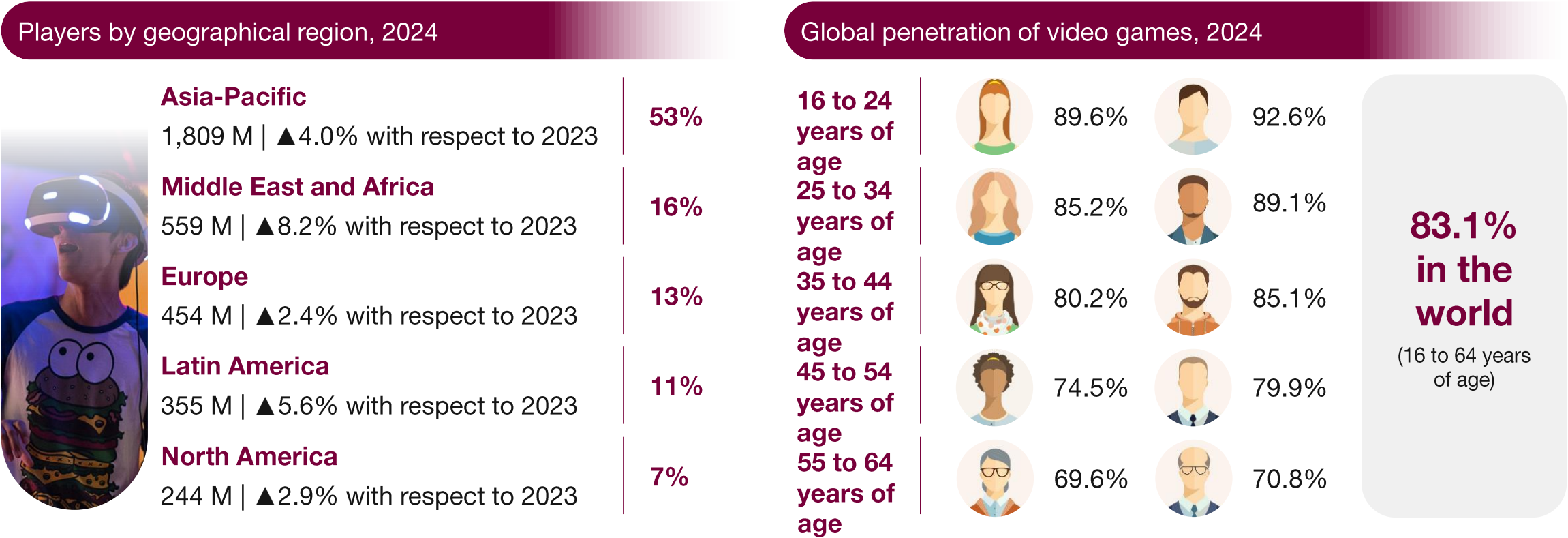
Users of video games in physical format (M)



Source: ACCIÓ, based on Statista, 2024

Video game users are a diverse and ever-growing group (I)

The number of players worldwide will reach 3,422 M by 2024, with a year-on-year increase of 4.5%, chiefly driven by the rise in the number of PC gamers. The figure will reach 3,759 M by 2027. Moreover, the global penetration of video games among users aged between 16 and 64 is slightly higher among men than among women, and it tends to fall in keeping with increasing age.








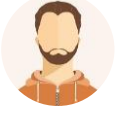

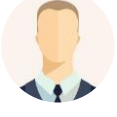


Note: Global video game penetration is measured as the percentage of internet users around the world who play video games on any device
Source: ACCIÓ, based on “Global Games Market Report”, Newzoo, 2024; “Digital 2024: Global Overview Report”, Meltwater and We Are Social

Video game users are a diverse and ever-growing group (II)

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Shooter and action and adventure video games are currently the most popular ones. The shooters are classified as the most popular genre by all the age groups analyzed, which range from 16 to 64 years of age. Although the percentage of internet users who play these kinds of video games falls in line with increasing age, it remains above 50% in 3 of the 5 age groups.

Most popular video game genres, 2024

16 to 24 years of age	 	1 Shooter 2 Action and adventure	3 Simulation 4 Sports	5 MOBA 6 <i>Battle royale</i>	7 Courses 8 Strategy	9 Puzzles 10 Action (platforms)
25 to 34 years of age	 	1 Shooter 2 Action and adventure	3 Sports 4 Courses	5 MOBA 6 Simulation	7 Puzzles 8 Strategy	9 Fighting 10 Action (platforms)
35 to 44 years of age	 	1 Shooter 2 Action and adventure	3 Sports 4 Puzzles	5 Courses 6 Strategy	7 Simulation 8 MOBA	9 Action (platforms) 10 Fighting
45 to 54 years of age	 	1 Shooter 2 Action and adventure	3 Puzzles 4 Sports	5 Courses 6 Strategy	7 Simulation 8 Action (platforms)	9 MOBA 10 Fighting
55 to 64 years of age	 	1 Shooter 2 Puzzles	3 Action and adventure 4 Sports	5 Strategy 6 Simulation	7 Courses 8 Board video games	9 Action (platforms) 10 MOBA

Note: MOBA stands for Multiplayer Online Battle Arena

Source: ACCIÓ, based on “Digital 2024: Global Overview Report”, Meltwater and We Are Social

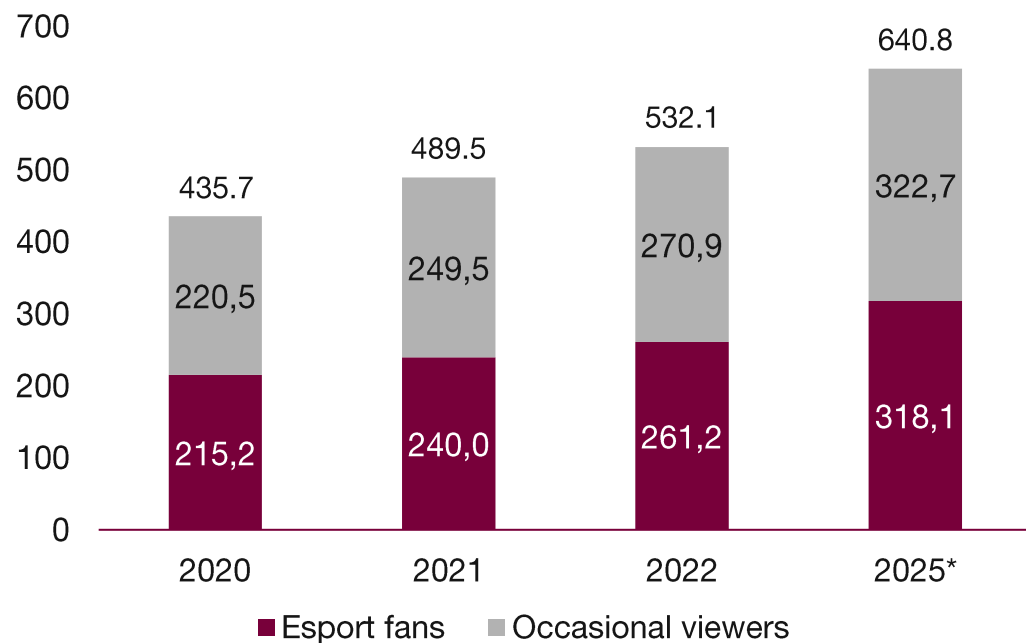
eSports have become a central component of the online video game culture (I)

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eSports are **organized multi-player video game competitions involving professional players, either as individuals or in teams**. The boom in the number of professional players and the increase in the popularity of live broadcasts of eSport events have led to the creation of tournaments and leagues.

Global eSport audience (in M)



The **number of eSports fans** worldwide will rise to 318 M at a compound annual growth rate of 8.1% between 2020 and 2025, at which time the total audience will exceed 640 M.

86% of Europeans claimed to understand the term eSports in 2022, an increase of more than 10% with respect to 2020

In 2022, the reach of eSports in Europe stood at 36%, a 6% increase with respect to the 2020 figure

The competition between streaming platforms remains intense in the second quarter of 2024, with a significant reduction in the gap between the **YouTube Gaming** audience and the **Twitch** gaming segment.

Hours of live video game broadcasts viewed



3,850 M
79.4% of the platform total



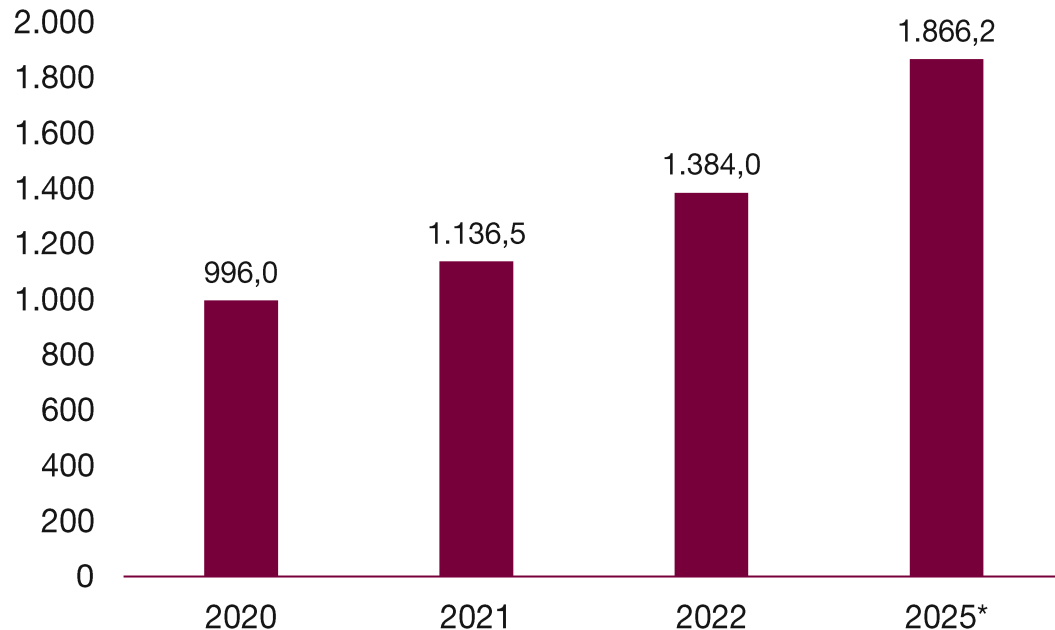
2,400 M
15.7% of the platform total

Source: ACCIÓ, based on Statista, 2024/2023; Streams Charts, 2024

eSports have become a central component of the online video game culture (II)

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Global eSport turnover (in €M)



The global eSports turnover will exceed \$1,860 M in 2025, with a healthy compound annual growth rate of 13.4%.

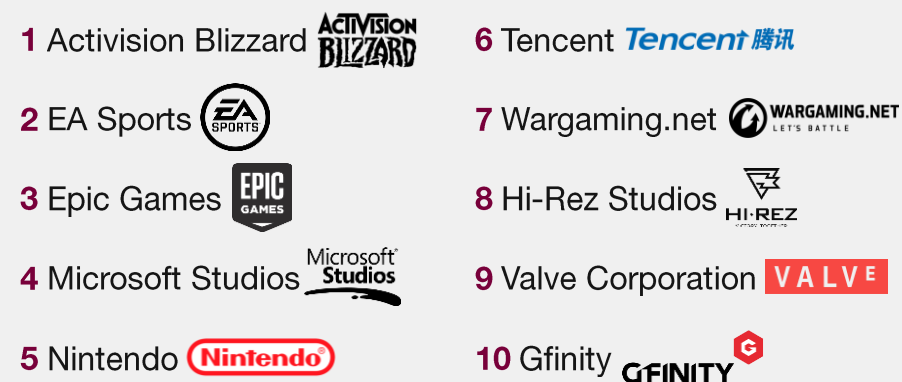
Sponsorship remains the chief source of revenue, generating \$837.3 M in 2022.



Main countries by turnover, 2023



Main companies in the world by turnover, 2021



Note: The ranking by turnover is based on a selection of countries made by Statista

Source: ACCIÓ, based on Statista, 2024/2023

2. The video game industry in Catalonia

The huge potential of Catalan video games is acknowledged both at home and abroad

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The Catalan ecosystem: competitive and innovative for video games

- Catalonia is the **engine of the Spanish video game ecosystem**, accounting for **52% of its turnover**.
- The **number of Catalan companies and studios** underwent **21.9% year-on-year growth** in 2022.
- Catalonia accounted for **half of the number of workers and turnover recorded in Spain** in 2022.
- In the 2018-2022 five-year period, the number of workers and the turnover grew by **40.7%** and **65.3%** respectively.



On the global radar for video game investment

- Catalonia is the **leading destination region in the European Union** in terms of the number of FDI projects in video games, the number of jobs generated by said FDI and the volume of invested capital.
- In the 2019-2023 five-year period, Catalonia was the **second-ranked FDI destination region in the world** in terms of the number of projects. It has more projects alone than entire countries such as France, the Netherlands, China, Japan and Australia.
- Renowned companies such as **Rovio**, **NetEase Games** and **Infinity Ward** set up operations in Catalonia in 2023.



A local and international talent hub in a highly creative environment

- Barcelona ranks **8th among the cities in the world attracting talent, tourism and investment** (*Resonance*, 2024).
- Barcelona is the **8th-ranked city in the world for foreigners seeking to move for work** (*BCG*, 2024).
- Barcelona is the **2nd-ranked non-capital city in the EU for attracting people, capital and companies** (*GPCI*, 2023).

Source: ACCIÓ

More than 200 companies and studios make up the video game industry in Catalonia

18



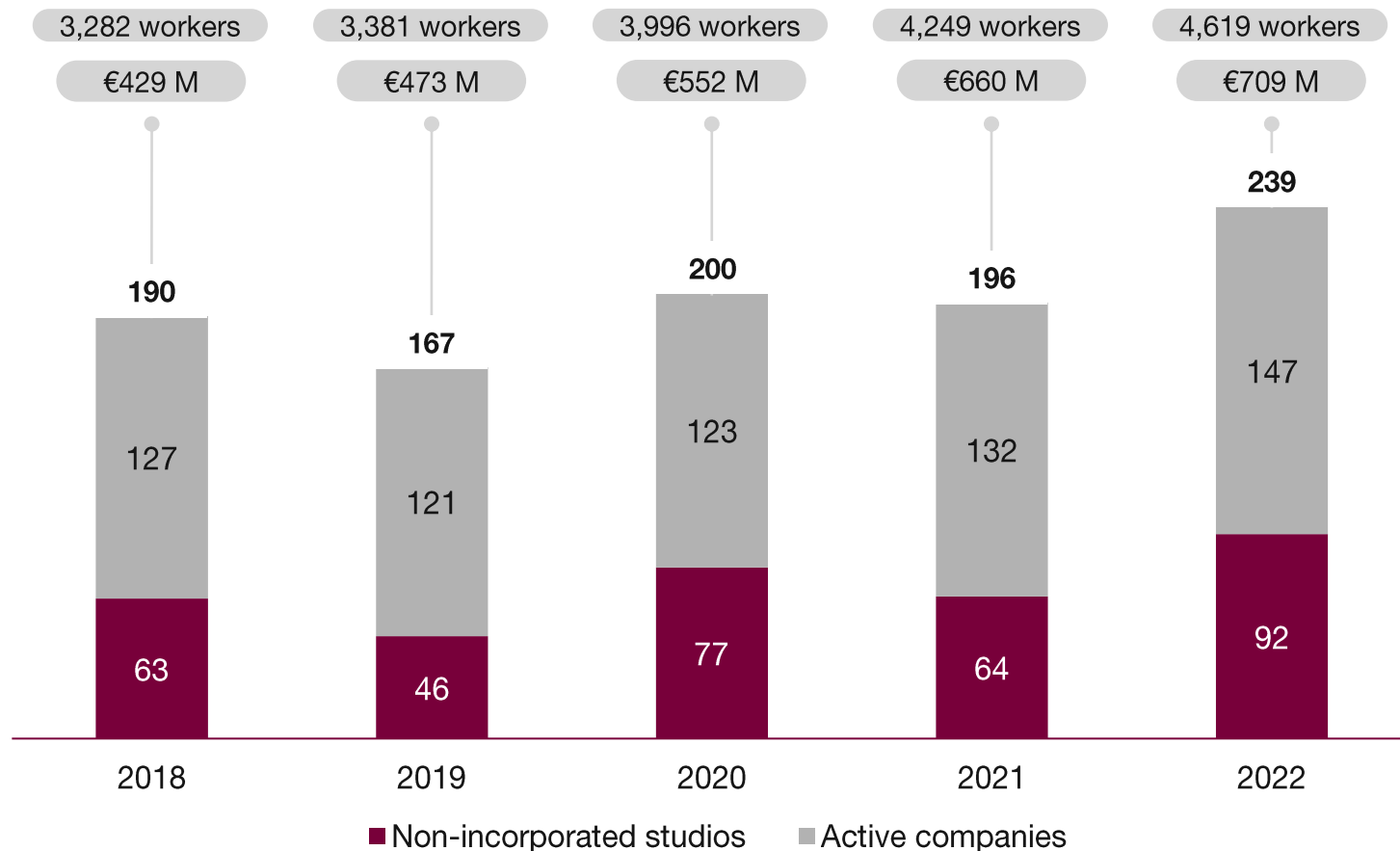
Note: The data correspond to 2022 and the increases shown are with respect to 2021

Source: ACCIÓ, based on “White paper. The Catalan video game industry”, Directorate General of Innovation and Digital Culture, 2023

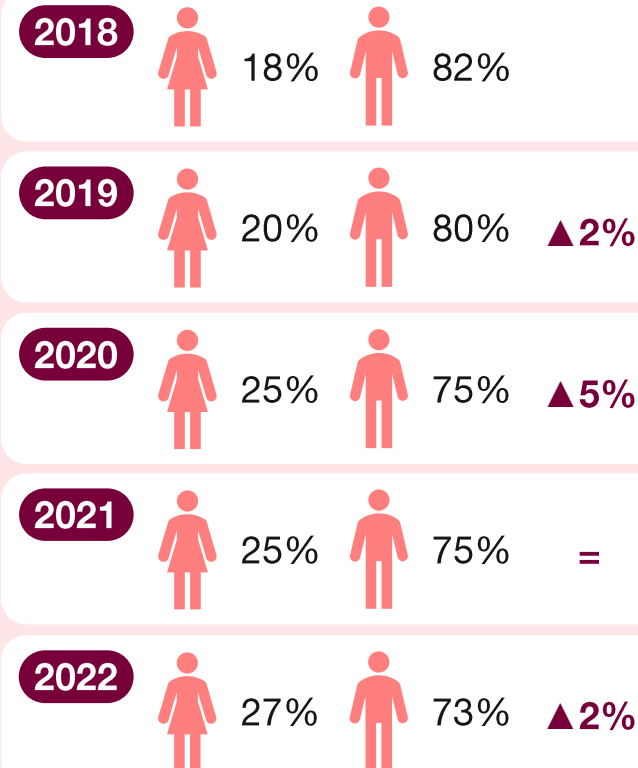
The turnover and employment generated by the video game industry are growing year by year

19

Evolution of the Catalan video game industry, 2018-2022



The **percentage of women in Catalan studios** is yet to represent equality, although the trend in recent years has been an upward one.



Source: ACCIÓ, based on “White paper. The Catalan video game industry”, Directorate General of Innovation and Digital Culture, 2023

Barcelona, a pole of attraction for companies and video game studios

20

Most of the companies devoted to the creation of video games are located in Barcelona, while the others are distributed almost uniformly across the other Catalan provinces. Their sales are particularly focused on Europe (54%) and North America (30%), the regions which have emerged as the main markets for Catalan video games.

Catalan companies by demarcations, 2022



Barcelona
90%



Girona
5%



Tarragona
3%



Lleida
2%

Catalan video game turnover by regions, 2022

1 Europe (54%)

Spain (25%) + Rest of Europe (29%)

2 North America (30%)

3 Asia-Pacific (7%)

4 Latin America (5%)

5 Middle East and Africa (4%)

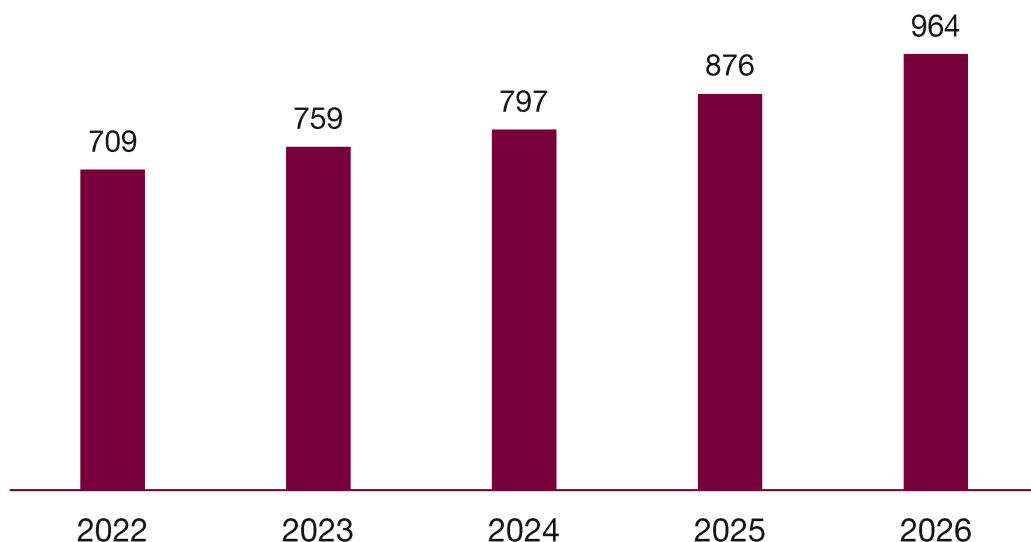


Source: ACCIÓ, based on “White paper. The Catalan video game industry”, Directorate General of Innovation and Digital Culture, 2023

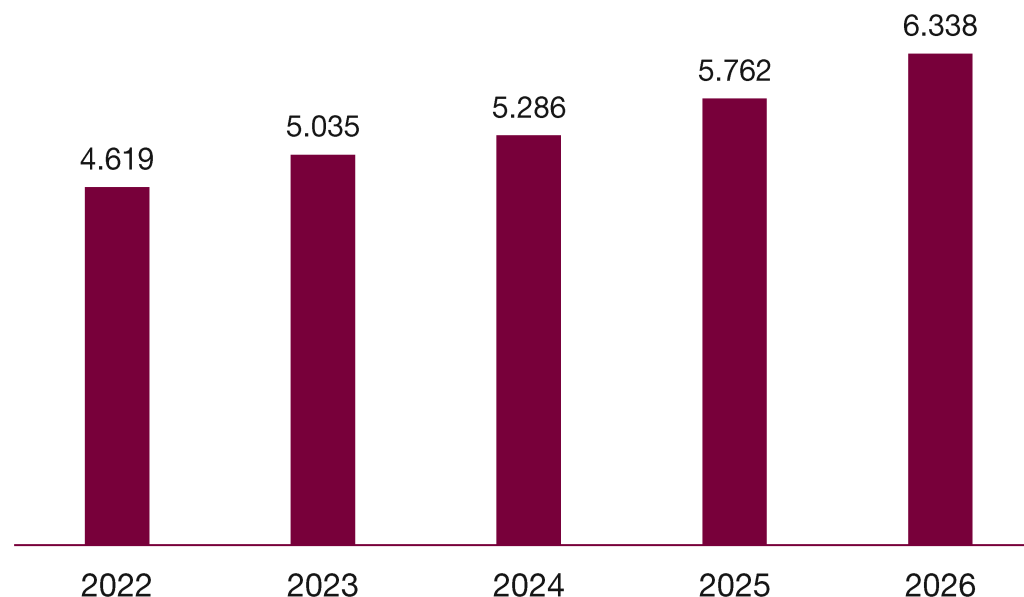
The forecasts indicate that Catalan video games will undergo a highly favorable evolution

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Estimate of turnover in Catalonia (in €M)



Evolution of the number of workers in Catalonia



The growth estimates for the 2022-2026 period are **excellent**. A compound aggregate growth rate totaling 8% is expected, with the turnover reaching €964 M by 2026. It will therefore approach the €1,000 M barrier.

The forecasts regarding the number of workers are also **excellent**. A compound aggregate growth rate totaling 8.3% is expected in the 2022-2026 period. The video game industry will therefore employ 6,338 people in 2026.

Source: ACCIÓ, based on “White paper. The Catalan video game industry”, Directorate General of Innovation and Digital Culture, 2023

Profile of the video game companies and studios in Catalonia (I)

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Video game development studios and companies

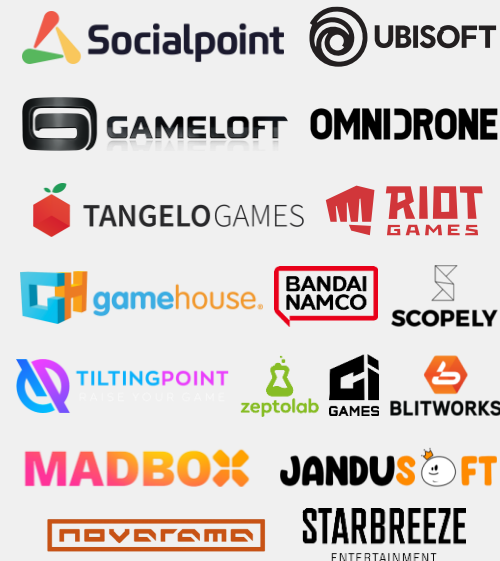


95% of the total number of companies in Catalonia are video game developers

Of the total number of developers:

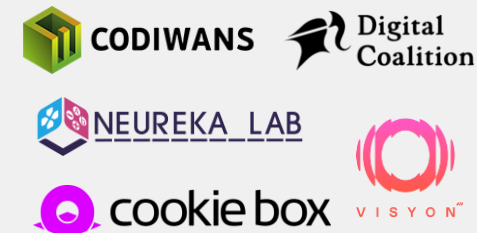
- 66%** have been incorporated as companies and remain active
- 34%** are non-incorporated studios

Publishers of video games



20% of the total number of companies in Catalonia are publishers of video games

Other video game companies



Includes companies that create **art** for video games, **immersive experiences** and **gamified solutions**.

3% of the total number of companies in Catalonia are in this category

Note: Partial non-exhaustive profile. The companies may be both developers and publishers of video games

Source: ACCIÓ

Profile of the video game companies and studios in Catalonia (II)

23



14% of the total number of companies and studios in Catalonia are **startups**



13% of the total number of companies and studios in Catalonia are **subsidiaries of foreign companies**



12% of the total number of companies and studios in Catalonia are **regular exporters**



By counties

The main counties by number of video game companies and studios are **El Barcelonès** (64%), **El Vallès Occidental** (9%) and **El Baix Llobregat** (8%). The remaining counties display percentages below 5%.

By volume of turnover and workers

The trend is towards a **concentration of the turnover and workers in the largest companies**; the studios that bill over €50 M per year (only 1%) account for 49% of the total billed for video games in Catalonia, while the studios with over 50 workers (6%) employ 53% of the sector.

By age

A significant number of the studios based in Catalonia have a **solid track record of 5 or more years' experience** (between 5 and 10 years, 33%; more than 10 years, 21%). There is also a large **entrepreneurial and creative component**, given that 19% of the studios are less than two years old.











Note: Partial non-exhaustive profile

Source: ACCIÓ; "White paper. The Catalan video game industry", Directorate General of Innovation and Digital Culture, 2023











Profile of the video game companies and studios in Catalonia (III)

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Main companies and studios in Catalonia by volume of turnover

Position	Companies
1 	King
2  SCOPELY	Scopely
3  Socialpoint	Socialpoint
4  BLACKOUT LAB	Blackout Lab
5  ZITRO	Zitro
6  GAMELOFT	Gameloft
7  UBISOFT	Ubisoft
8  BANDAI NAMCO	Bandai Namco Mobile
9  STARLOOP <small>A MAGIC MEDIA COMPANY</small>	Starloop Studios
10  zeptolab	ZeptoLab

Main companies and studios in Catalonia by number of employees

Position	Companies
1  SCOPELY	Scopely
2 	King
3  Socialpoint	Socialpoint
4  ZITRO	Zitro
5  GAMELOFT	Gameloft
6  UBISOFT	Ubisoft
7 	2K Games
8 	Ubisoft Barcelona Mobile
9  DIGITAL LEGENDS	Digital Legends Entertainment
10  zeptolab	ZeptoLab



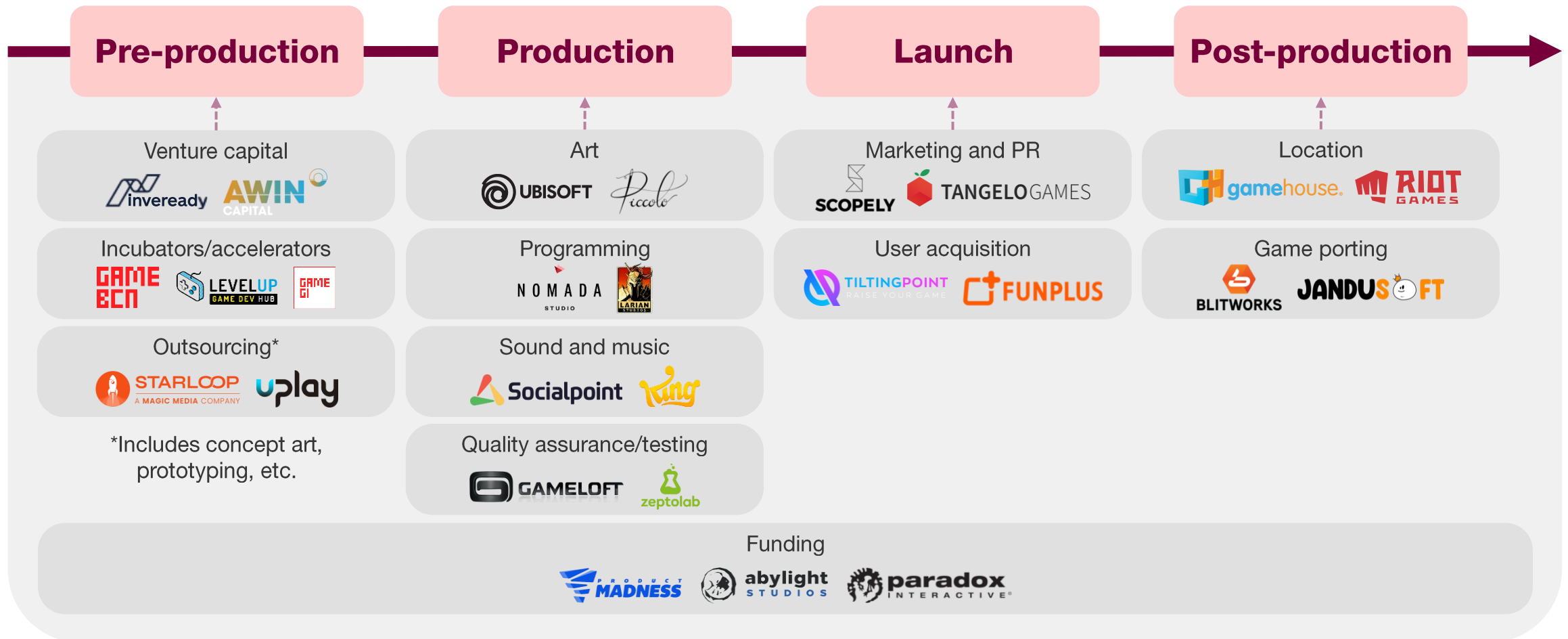
Note: According to the latest data published by companies in the video game industry

Source: ACCIÓ

Fem avui l'**empresa** del demà

Companies and studios in Catalonia according to the phase of the video game creation process

25



Note: Partial non-exhaustive profile. Companies are included in each phase of the process for purely illustrative purposes

Source: ACCIÓ

Main video game companies and studios in Catalonia (I)

26

Sample of local companies and non-incorporated studios



Sample of international companies in Catalonia



Note: Partial non-exhaustive profile

Source: ACCIÓ

Fem avui l'**empresa** del demà

Main video game companies and studios in Catalonia (II)

27



2019

45 startups

in the video game industry

▲ 17.8%

2023

53 startups

in the video game industry

Catalonia currently hosts **53 startups related to the video game industry**, a figure representing a 2.5% increase in the total for this type of company.



Petoons Studio is an incubator of transmedia projects founded in 2016. The artists, video game developers and educators who comprise it are pioneers in story playing, an art that merges video games, cartoon series and education.



Rubiko is an expert in the field of customer service and payment services tailored to the iGaming industry.



Remotto is a leading company in the design and production of video game accessories and it focuses on improving the gaming experience of users around the world.

Main Catalan video game startups (by volume of turnover)



Barcelona is the 5th-largest startup ecosystem in the EU

Startup Ecosystem Report, StartupBlink, 2024

Barcelona is the 2nd most popular hub for setting up a startup in the EU

Startup Heatmap Europe, DEEP Ecosystems, 2023

Source: ACCIÓ, based on the Barcelona & Catalonia Startup Hub

The video game industry ecosystem in Catalonia

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Associations and bodies related to the video game industry



Clusters



Public institutions that support the video game industry



Fairs and congresses related to the video game industry in Catalonia



Technological centers that support the video game industry



Catalan universities with training in the video game industry



Centers with training related to video games



ICT coding bootcamps in Catalonia



Note: Sample of the main representatives in each category

Source: ACCIÓ

Catalonia, a technological hub with international renown

29



Catalonia-Barcelona in the international rankings



3rd-largest science and technology cluster in southern Europe

“Global Innovation Index”, World Organization of Intellectual Property, 2023



7th most popular city in the world for tech talent

“Executive Nomad Index”, Savills, 2023



Strong innovator category in the European innovation ranking

“European Innovation Scoreboard”, European Commission, 2023



2nd best strategy in southern Europe for attracting technological FDI

“fDi x TNW Tech Cities of the Future”, fDi Intelligence & TNW, 2021



7th-largest technological hub in Europe (measured by total invested capital)

“State of European Tech”, Atomico, 2021

Source: ACCIÓ

Catalonia attracts almost 67% of Spain's video game FDI projects

30

In the 2019-2023 five-year period Catalonia remained an important pole of attraction for FDI in video games in Spain. It's becoming established as the **primary destination in the State in terms of the number of projects, volume of invested capital and jobs created** through FDI.



26 projects

▲ 225.0 % vs. 2014-2018



66.7%

of the total in Spain



€176.2 M in investment

▲ 150.6 % vs. 2014-2018



54.1%

of the total in Spain



1,552 jobs created

▲ 173.7 % vs. 2014-2018



53.2%

of the total in Spain

Main countries of origin, 2019-2023 (by invested capital)



1 Sweden | €22.1 M



2 Denmark | €22.5 M



3 USA | €19.2 M



4 Saudi Arabia | €18.7 M



5 France | €14.6 M



6 United Kingdom | €14.6 M



7 Switzerland | €12.9 M



8 Belgium | €11.0 M



9 Australia | €7.3 M



10 China | €7.3 M



11 Finland | €7.3 M



12 Japan | €7.3 M

Companies investing in Catalonia, 2019-2023 (in order of invested capital)



Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

Catalan talent, a major factor in attracting FDI in video games

31

According to the companies that have invested in the 2019-2023 five-year period, **there are several incentives consolidating Catalonia as a top-level international destination** for FDI in video games.



Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

Catalonia is the 2nd-ranked destination region for FDI in video games in the world in the 2019-2023 five-year period

32

Main destination regions in the world

2019-2023 (by projects)

-  1 Quebec | 37 projects
-  2 **Catalonia** | **26 projects**
-  3 South-east | 24 projects
-  4 Berlin | 16 projects
-  5 Singapore | 16 projects
-  6 Dubai | 15 projects
-  7 California | 14 projects
-  8 Kanto | 14 projects
-  9 British Columbia | 10 projects
-  10 Romania | 10 projects



2014-2018

Catalonia | Position 8

8 projects

▲ 6 positions

2019-2023

Catalonia | Position 2

26 projects



Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

Catalonia leads FDI in video games in the European Union in the 2019-2023 five-year period

33



1st-ranked region
as regards number of
projects

14.3% of the EU total



1st-ranked region
as regards invested
capital

12.7% of the EU total



1st-ranked region
as regards jobs
generated

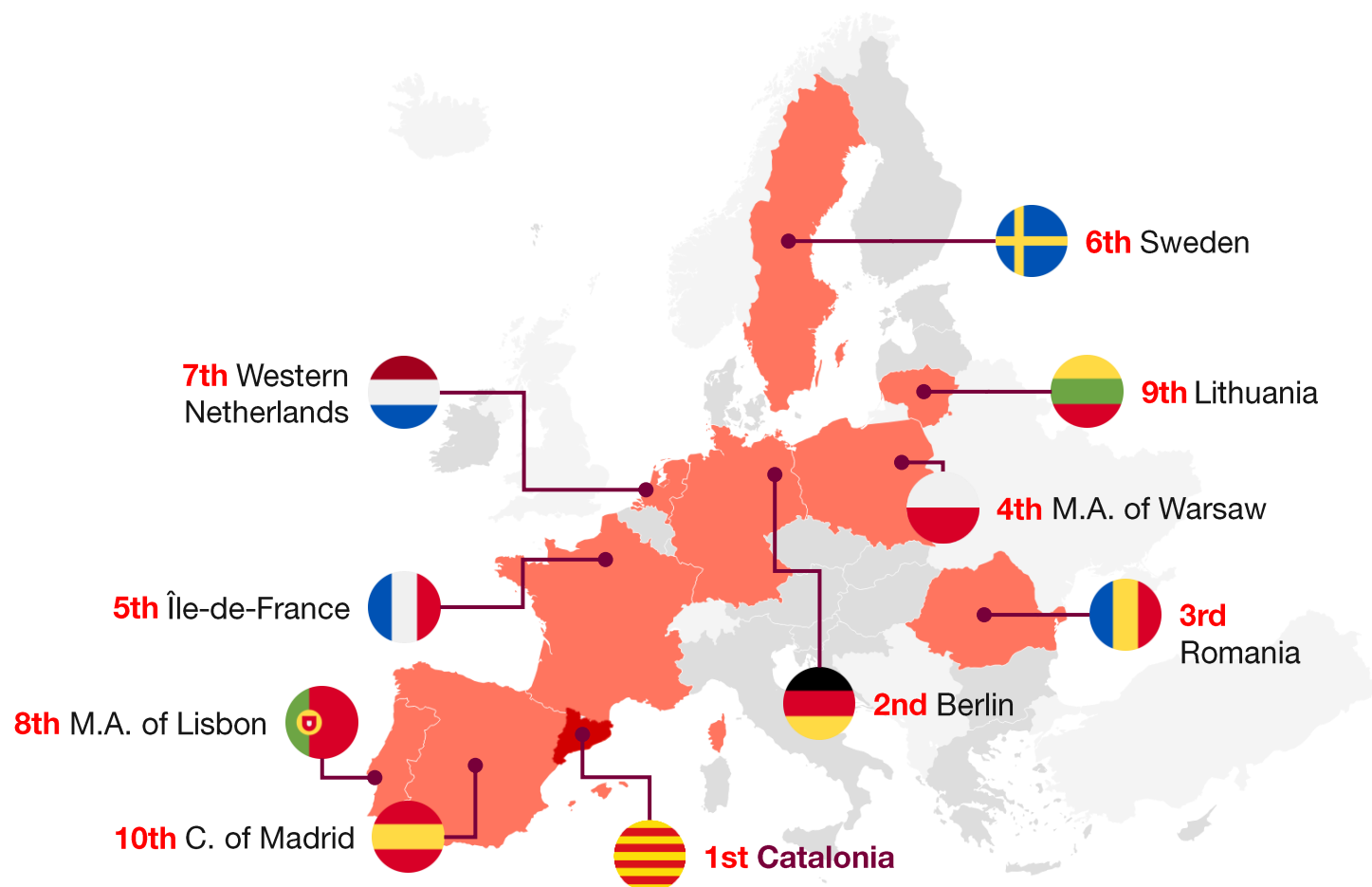
14.4% of the EU total



Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

FDI in video games in the EU (by projects), 2019-2023



The large international companies are choosing Barcelona

34



Infinity Ward, the creator of Call of Duty, chooses Barcelona as a hub for its European expansion

Infinity Ward, the American video game developer, will be based at the headquarters of Digital Legends in Barcelona, and the two companies will work together on the development of Call of Duty projects.

[Further information](#)



Saudi video game company Sandsoft to create 60 jobs in Barcelona with the opening of its European headquarters

Sandsoft, a developer of video games for mobile devices, has made the decision to locate its studio in the Catalan capital as part of its global growth plan.

[Further information](#)



NetEase Games, the Chinese video game company, opens a new studio in Barcelona

NetEase Games, a leading provider of Internet services and games, has announced the creation of a new video game studio known as Anchor Point Studios. It will be devoted to developing action and adventure games for consoles and PCs.

[Further information](#)



FunPlus, the Swiss video game company, is set to create 120 new jobs at its studio in Barcelona

FunPlus, one of the global leaders in strategy video games, including State of Survival, Guns of Glory and King of Avalon, will create 120 new jobs at its Barcelona studio as part of its expansion plans.

[Further information](#)



The developer of the Angry Birds video game chooses Barcelona to open its first studio in southern Europe

Finnish company Rovio will create around 30 jobs with the opening of a new studio in Barcelona, which will become the company's first premises in southern Europe.

[Further information](#)



Video game company IO Interactive creates 150 new jobs in Barcelona

IO Interactive, the Danish video game company, has announced the expansion of its studio in Barcelona. It currently has 30 employees and it plans to create 150 new jobs over the next four years.

[Further information](#)

Source: ACCIÓ, based on Catalonia Trade & Investment

FDI in video games in Catalonia remains unbeatable, setting record highs in 2023

35



FDI in video games in Catalonia, 2023

Larger FDI projects

Highest average of **invested capital** in the 2019-2023 five-year period



FDI in video games in Catalonia, 2023

FDI projects with the greatest impact

Highest average number of **jobs created** in the 2019-2023 five-year period

Note: Investments made in video games, applications and digital content activities have been taken into account

Source: ACCIÓ, based on fDi Markets, 2024

Catalonia, a pole of attraction for video game development talent

36

“The talent concentration in Barcelona is incredible, and future access to talent is also assured through a wide range of university training”

David Polfeldt, founder of Bespoke Pixel

“Barcelona is home to a thriving community of video game creators and is the perfect location for talented developers from all over Europe”

David Fernández, CEO of Sandsoft

“Barcelona is situated geographically in such a way that it’s easy to get to all over Europe and to the USA. Local infrastructures are first-class, and the quality of life can’t be better”

Jordi Pullés, General Manager of Tripledot Studios Barcelona






“Barcelona has a robust mobile industry. AAA, PC, and console studios are increasingly settling in the city, making it even more exciting for everyone”

Javier Capel, Studio Manager of Ubisoft Barcelona

Cost of living

- Barcelona enjoys a **relatively low cost of living** compared to other large European cities.
 - “Cost of Living Index by City (Mid-Year)”, Numbeo, 2024
- Barcelona has **more competitive operating costs** than other European cities.
 - fDi Benchmark, 2024
- The **top-class office rental prices** in Barcelona are much more attractive than those in metropolises such as Brussels, Amsterdam and Paris.
 - Statista, 2024

Cost of living

	Barcelona - 54.0
	Rome - 54.4
	Berlin - 64.7
	Paris - 73.6
	London - 78.7

Quality of life

- **Barcelona is the 7th most lovable city in the world.**
 - “World’s Best Cities Report (Lovability)”, Resonance, 2024
- **Barcelona is the 4th most livable city in the world.**
 - “Global Power City Index (Livability)”, The Mori Memorial Foundation, 2023
- **Barcelona is the 9th most sustainable city in the EU.**
 - “European Sustainable Cities Index”, Schrodgers, 2021
- **Barcelona is the 9th-ranked city in the world for health safety.**
 - “Safe Cities Index”, The Economist, 2021

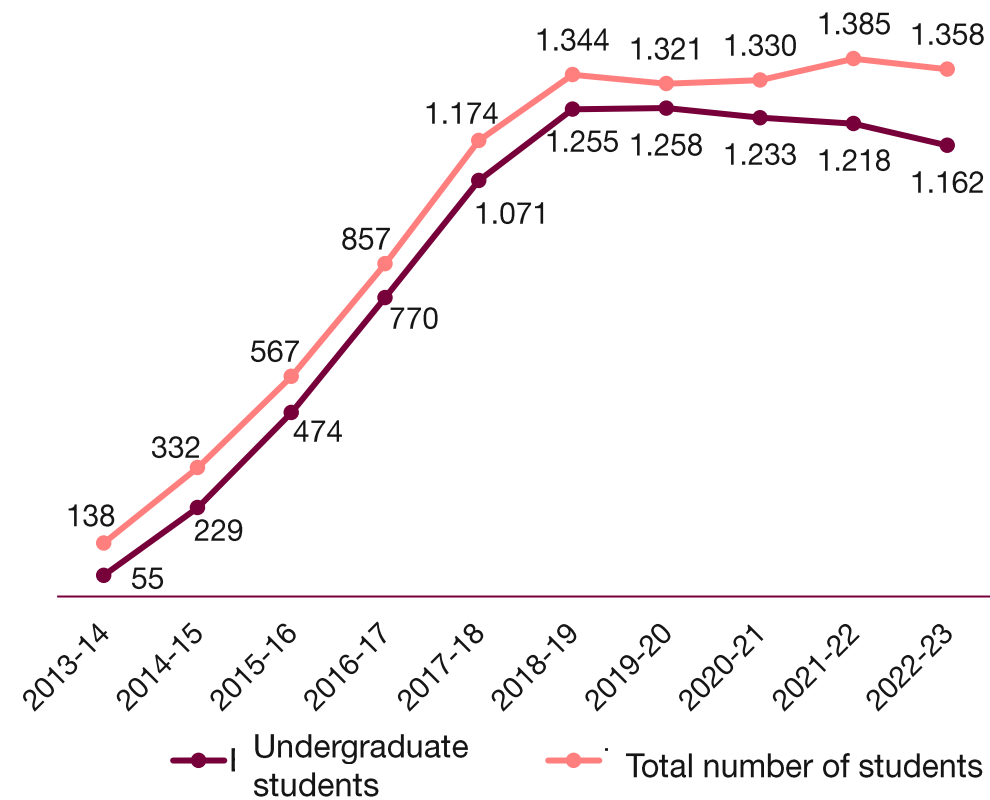
Source: ACCIÓ

Catalonia has more than a thousand students in the area of video games (I)

1,162 undergraduate students (2022-2023)

Women: 15.3%

Foreigners: 6.4%



Despite a slight decrease since the 2020-2021 academic year, the number of **undergraduate students with degrees related to video games** has stabilized in recent years, reaching beyond the barrier of 1,100 students.

University	Undergraduate degrees
ENTI-UB	Design and Development of Video Games and Applied Games
ENTI-UB	Design, Animation and Digital Art for Video Games and Applied Games
CITM-UPC	Video Game Design and Development
CITM-UPC	Design and Development of Video Games (in English)
Tecnocampus-UPF	Video Game Design and Production
Tecnocampus-UPF	Computer Engineering in Information Management and Systems and Video Game Design and Production
UdG	Video Game Design and Development
UVic-UCC	Multimedia. Applications and Video Games
La Salle-URL	Multimedia Engineering (Mention in Video Games)

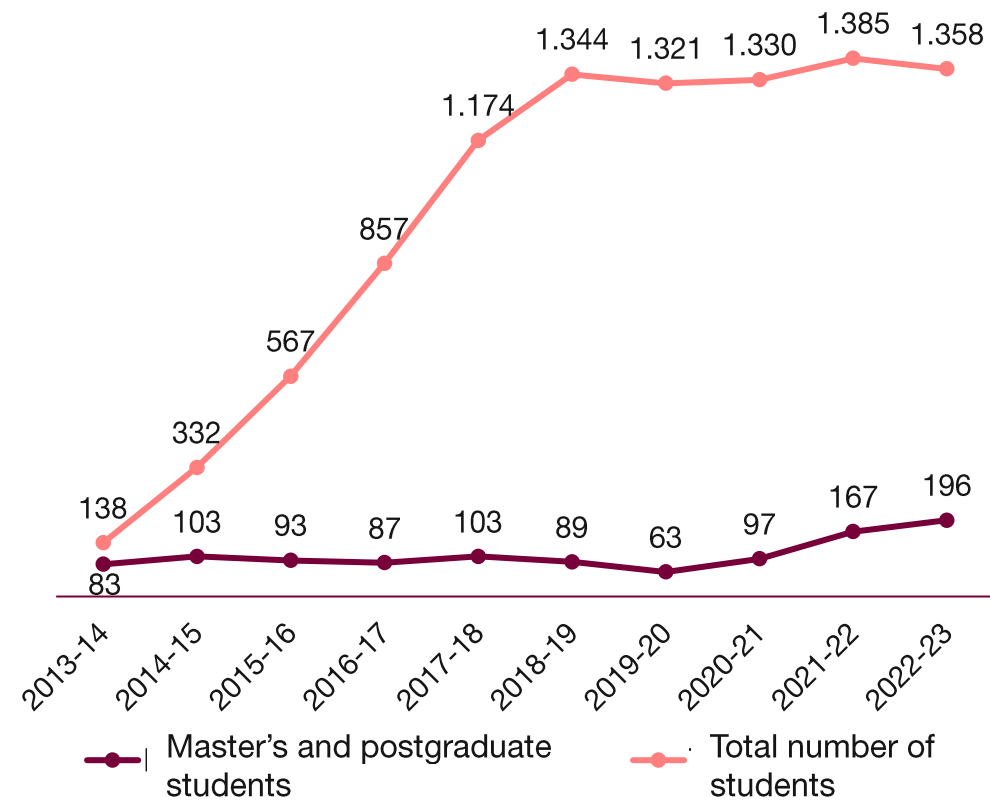
Source: ACCIÓ, based on the Directorate General of Innovation and Digital Culture

Catalonia has more than a thousand students in the area of video games (II)

196 master's and postgraduate students (2022-2023)

Women: 12.8%

Foreigners: 11.2%



The trend towards a greater number of **master's and postgraduate students with degrees related to video games** has continued since the 2020-2021 academic year, reaching the barrier of 200 students.

In the 2022-2023 academic year the **greatest number of students in the historical series** was recorded, with year-on-year growth totaling 17.4% and a total of 196 students.

University	Postgraduate degrees
UOC	Video game development

University	Master's degrees
UOC	Video Game Design and Programming
UPC	Advanced Programming for AAA Video Games
UPC	Animation & Digital Arts for AAA Video Games
BSM-UPF	Video Game Creation
UAB	Narrative Design of Video Games

Source: ACCIÓ, based on the Directorate General of Innovation and Digital Culture

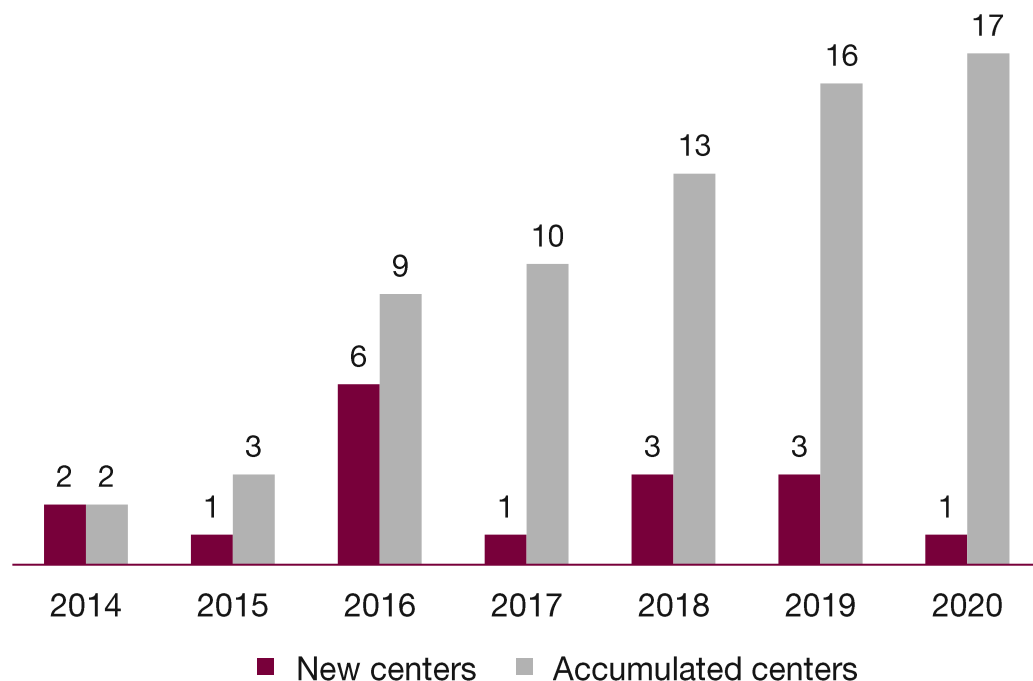
Barcelona, a bootcamp training hub in Spain

39



Bootcamps are **short non-regulated educational itineraries** (generally lasting between 3 and 12 months) that apply the military concept of intensive training to technological disciplines and pursue rapid employability.

Centers that offer bootcamps in Barcelona



40.5%

of the Spanish centers that offer bootcamps are located in Barcelona, the **city with the largest offer** in the State.



82.4%

of the bootcamps have been set up in Barcelona in the last 5 years, so most of them are **newly-created**.



10.8%

of global developers declare that they have trained at a **programming bootcamp**.

Source: ACCIÓ, based on "Talent i bootcamps", BDT, 2021; "Digital Talent Overview", BDT, 2021; "Digital Talent Overview", BDT, 2023

Barcelona supports talented people in vulnerable situations

40

The **BCN Inclusive Coding** project is a public-private partnership that supports talented people in vulnerable situations throughout all of the stages of the process until they are trained as digital professionals. 4 lines of action have therefore been identified to allow future digital talent to gain access to all the resources and tools enabling them to join the labor market.

Objectives

- Incorporate 10,000 digital professionals over the next 10 years to combat the digital gap.
- Reduce social exclusion
- Drive digital training
- Promote social responsibility
- Generate a vocation for digital professions

Lines of action

Capture

Connection with the network and community of the Red Cross in Catalonia to identify people likely to be trained in the digital field.

Training advice

Promotion of an external mentoring program made up of different social entities to advise people on the technical and cross-disciplinary skills they need to develop.

Digital training

Training centers and social organizations in Catalonia, such as **MigraCode Barcelona** (migrants and refugees), **Factoria F5** (women and the long-term unemployed), **Fundació Esplai** (young people, migrants and people in a vulnerable situation) and **Barcelona Activa**.

Access to the market

Organization of a recruitment day for companies and talent, with the aim of connecting digital profiles with technological companies and facilitating their inclusion in the labor market. Once the profile is recruited, he/she will have an internal mentor to guarantee the success of the insertion process.

Companies committed to the project



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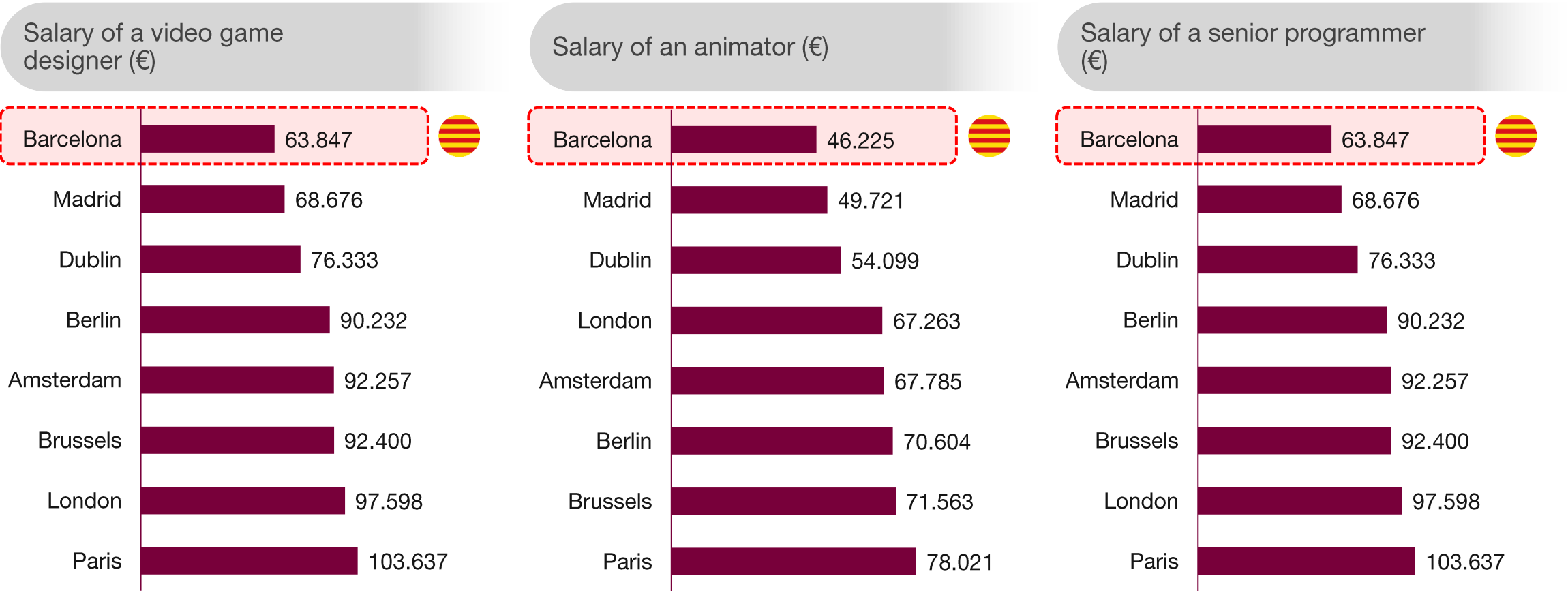


Source: ACCIÓ, based on the 2022 Barcelona Inclusive Coding report by Barcelona Digital Talent

Fem avui l'**empresa** del demà

Barcelona offers extremely competitive operating costs in Europe

Barcelona has the most competitive labor costs among 8 cities similar in comparison. Operating a video game design center with 16 workers and 800 m² costs €1,351,943, the most attractive figure of all the European cities with which it has been compared.



3. Trends and opportunities in the video game industry

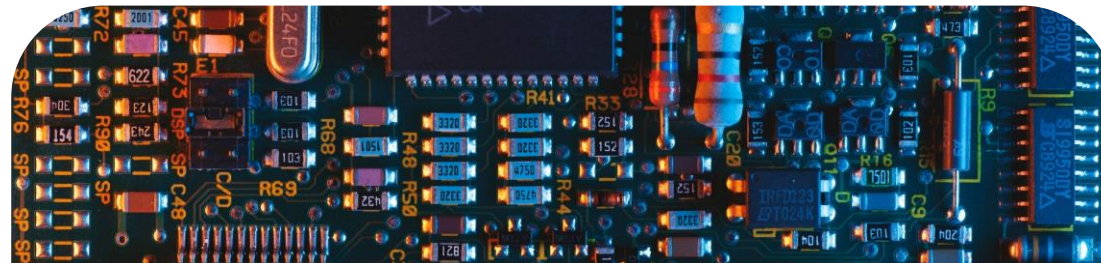
Level up: major trends and technologies that will transform the video game industry

43



The future of the video game industry

- 1 Live-service games for PCs and consoles
- 2 Transformation of the competitive landscape
- 3 User-generated content (UGC)
- 4 Complementary gaming devices
- 5 Play-to-earn approach
- 6 Importance of diversity, equity and inclusion
- 7 Impact of new privacy policies
- 8 In-game advertising
- 9 New actors on the world stage
- 10 Video game studios run by influencers
- 11 Serious games as a training method
- 12 Gamification for other economic activities



Technologies set to revolutionize the industry

- 1 Generative artificial intelligence (AI)
- 2 Virtual reality (VR) and augmented reality (AR)
- 3 Metaverse
- 4 Cloud gaming
- 5 Web3 and blockchain technology
- 6 Olfactory technology

Source: “Global Games Market Report”, Newzoo, 2022/2023; “Libro blanco del desarrollo español de videojuegos”, DEV, 2022; “Video Games in Spain”, Euromonitor, 2023; “Two Technology Trends Shaping The Future Of Gaming”, Forbes, 2023; “The Gaming Playbook”, GWI, 2021; ISE/MWC Open Innovation Challenge, 2024



1 | The unquestionable rise of live-service games for PCs and consoles

Console and PC developers are focusing more and more on live-service games: games that the developers maintain over an extended period with new contents for players to enjoy and purchase over time.

League of Legends is a successful MOBA video game released in 2009, developed and published by **Riot Games**, which has an office in Barcelona. It's been on the market for over a decade but it shows no signs of slowing down; the team aims to keep the game fresh with the regular introduction of patches that include fixes, improvements and new contents.



2 | The ecosystems are intermingling and the competitive landscape is being transformed

Cross-platform games, coupled with the subsequent increase in the range of live-services and game subscriptions, have blurred the boundaries between gaming communities on the different platforms.

Gameloft Barcelona is the studio tasked with developing Disney Speedstorm, a video game in which Disney characters embark on hectic kart races on tracks based on the worlds in their films. It allows for cross-platform play, in such a way that the players can gather together for the same game, no matter what device they're playing on.



3 | User Generated Content (UGC): a strategy to boost interaction, retention and content

User-generated content has been a constant in the video game industry for decades, but the popularization of the free-to-play format, social games and the metaverse has taken this phenomenon to new heights.

The Unreal Editor for Fortnite (UEFN) application is the foundation of the UGC strategy of **Epic Games**, the company that's developed one of the most popular video games in history: Fortnite. It's a publisher that seeks to empower creators by allowing them to directly design, develop and publish games and experiences in Fortnite.

Source: "Global Games Market Report", Newzoo, 2022/2023; "Libro blanco del desarrollo español de videojuegos", DEV, 2022; "Video Games in Spain", Euromonitor, 2023; "Two Technology Trends Shaping The Future Of Gaming", Forbes, 2023; "The Gaming Playbook", GWI, 2021; ISE/MWC OIC, 2024



4 | A new rising star: complementary gaming devices are gaining ground

Different manufacturers and platform owners are working on enabling gamers to take their console and PC games wherever they like. These products are intended to be secondary to consumers' primary gaming devices.

In 2017, **Nintendo** brought an innovative hybrid approach to the console market with the launch of the Switch. This console enables users to play in three different modes that adapt to all kinds of situations: TV, desktop and laptop. The new feature proved to be a great success with consumers and changed the way many people interacted with video games.



5 | The innovative play-to-earn approach is revolutionizing traditional video game business models

There's currently a boom in play-to-earn models through which players can monetize their in-game activities and achievements. This concept encourages player participation and democratizes the game by providing opportunities to earn money.

Games for a Living (GFAL) is a platform that develops video games with blockchain technology with its offices in Barcelona. In 2022 it released Elemental Raiders, a play-to-earn action and strategy role-playing video game based on turn-based combat in which the users earn rewards by winning combats and trading their in-game goods with other players.



6 | Diversity, equity and inclusion are aspects that are gaining importance in video games

Companies are starting to include under-represented groups such as women, ethnic minorities, the LGBTQIA+ community and people with disabilities in their contents, policies and workforces.

Diversity stimulates innovation, which is why **Activision Blizzard** is creating an environment in which differences are accepted, valued, celebrated and always welcome. Activision's Inclusive Game Design team is on a mission to integrate best practices and innovations into all of its games to ensure they're the most diverse, welcoming and inclusive.

Source: "Global Games Market Report", Newzoo, 2022/2023; "Libro blanco del desarrollo español de videojuegos", DEV, 2022; "Video Games in Spain", Euromonitor, 2023; "Two Technology Trends Shaping The Future Of Gaming", Forbes, 2023; "The Gaming Playbook", GWI, 2021; ISE/MWC OIC, 2024



7 | New privacy policies are setting the course for mobile game studios

Measures to protect user privacy have left studios with fewer tools to measure metrics and check the performance of their user acquisition campaigns and forced them to look for new ways to monetize and engage players.

Apple upended the entire mobile ecosystem in April 2021 when it deployed the App Tracking Transparency (ATT) and SKAdNetwork 2.0 tools. Google followed suit with similar measures. The new framework makes it much harder to track users, and various mobile game companies such as **Zynga** have made public issues related to user acquisition and monetization.



8 | In-game advertising, a new source of income for PC and AAA console games

The popularization of free-to-play games has forced the major publishers to look for new forms of financing for their games. In-game advertising also benefits brands, which gain access to an unlimited demographic and hard-to-reach audience.

SuperIndie.Games is the leading marketing, PR and licensing agency for indie games in southern Europe, having promoted more than 1,000 titles for PCs, consoles, virtual reality and mobile devices. Based in Barcelona, it has conducted several in-game advertising campaigns for companies such as Universal, Domino's Pizza, Harley Davidson and Volkswagen Polo.



9 | Notable events in the video game industry due to the appearance of new players on the world stage

With Savvy Games Group at the helm of massive investments, Saudi Arabia is implementing a hugely ambitious gaming investment drive designed to diversify its economy and move away from relying so much on oil revenue.

Saudi Arabia wants to become a major player in the entertainment industry, with video games as one of its pillars. Therefore, Savvy Games Group has a significant 38,000 million dollar fund and it has already completed several high-level operations. One example is the acquisition of **Scopely**, a mobile video game developer operating in Catalonia.

Source: "Global Games Market Report", Newzoo, 2022/2023; "Libro blanco del desarrollo español de videojuegos", DEV, 2022; "Video Games in Spain", Euromonitor, 2023; "Two Technology Trends Shaping The Future Of Gaming", Forbes, 2023; "The Gaming Playbook", GWI, 2021; ISE/MWC OIC, 2024



10 | The emergence of video game studios led by influencers: a trigger for innovation?

Influencers form a fundamental part of the industry, and, for many consumers, their recommendations have replaced traditional journalism. They are now diversifying their sources of income so as to be less dependent on video platforms and social media.

Guinxu is an influencer from Barcelona with more than 800,000 followers on YouTube which has conducted advertising campaigns for brands such as Gameloft, Sega and Super Mario. It's also an independent video game developer for PC and Android and its most recent projects include Flatworld and 1 Cat a Day.



Jellyworld

11 | Serious games, an innovative training method

Serious games constitute a new form of learning and training applied to simulating situations in companies and public institutions. We should highlight their cross-cutting nature and application (financial services, marketing, education and construction).

The Catalan **Jellyworld** company develops, edits and publishes video games and serious games that promote women and make them more visible. Women's Quiz, its latest video game, is a serious game about the life and work of famous women who have been invisible throughout history. It features over 200 questions about 50 important women: Marie Curie, Amelia Earhart, Virginia Woolf, etc.



12 | Video games within the context of other economic activities: gamification

Gamification is the application of the dynamics, mechanics and aesthetics that characterize gaming in contexts unrelated to this sector in order to implement the latest methodologies, tools and solutions in the business world.

KidneyApp is a project linked to the **ViOD Games Studio** based in Barcelona. Its aim is to influence the change in habits of patients with chronic renal failure to improve their quality of life and delay the degenerative process of the disease. To achieve the above, they've introduced gamification techniques such as game levels, challenges, rewards, user rankings and so on.

Source: "Global Games Market Report", Newzoo, 2022/2023; "Libro blanco del desarrollo español de videojuegos", DEV, 2022; "Video Games in Spain", Euromonitor, 2023; "Two Technology Trends Shaping The Future Of Gaming", Forbes, 2023; "The Gaming Playbook", GWI, 2021; ISE/MWC OIC, 2024



1 | The debate about the use of generative artificial intelligence (AI)

The studios are divided on the impact of generative AI on video game creation; it can boost creativity, reduce costs and streamline the development process, but at the same time it can lead to mass layoffs and copyright infringements.

In 2022, **King** acquired Peltarion (a Swedish company specializing in artificial intelligence) and acknowledged this technology as a key area in the company's current strategic direction. This move demonstrates its anticipation in the adoption of AI solutions and positions King, which operates in Barcelona, at the forefront of the development of AI-driven games.



2 | Virtual reality (VR) and augmented reality (AR) are looking more promising than ever before

Sales of VR/AR glasses will continue to grow, driven by an ever-increasing number of actors targeting different audiences. Work is underway on affordable versions of these devices to help increase market penetration.

Ivanovich Games, a video game development and publishing company based in Catalonia, focuses in particular on virtual reality games. Its most successful VR game to date is Operation Warcade, a shooter inspired by the arcade classics of the 1980s that takes advantage of the new technologies to offer a unique experience.



3 | The metaverse, a virtual world full of opportunities

Interconnection lies at the heart of the metaverse: players will be able to move from one game to another while maintaining their digital identities, possessions and milestones. The studios will have to collaborate to create shared universes and multi-platform experiences.

Champion Games, the Catalan video game studio, lies behind the creation of MetaSoccer, the first blockchain technology-based soccer metaverse with which users can manage their own club and generate income while playing. This pioneering video game skillfully combines blockchain technology, decentralized finance, sports betting and football.

Source: "Global Games Market Report", Newzoo, 2022/2023; "Libro blanco del desarrollo español de videojuegos", DEV, 2022; "Video Games in Spain", Euromonitor, 2023; "Two Technology Trends Shaping The Future Of Gaming", Forbes, 2023; "The Gaming Playbook", GWI, 2021; ISE/MWC OIC, 2024



4 | Is cloud gaming the future of video games?

Internet access is constantly improving and the connection requirements of cloud games are less strict thanks to technological advances. For this reason, the target audience for cloud gaming will almost triple between 2021 and 2025.

The pioneers in leveraging cloud technologies for innovative streaming solutions for video games include **Ubisoft**, a leading studio operating in Barcelona. Its teams are actively working on the development of this technological base, which will allow it to radically transform its production processes and IT infrastructure.



5 | Web3 technology and blockchain: in-game asset ownership remains a driving force

Web3 technology, powered by blockchain and decentralized protocols, is destined to revolutionize the video game industry. Players will be able to trade, sell and transfer their digital objects across different platforms in the form of non-fungible tokens (NFTs), which will open up new sources of income and foster a thriving digital economy.

Starloop Studios, a company operating in Catalonia, has major expertise in the industry related to the tokenization of fungible and non-fungible assets. It helps design and mint NFT assets that bring high value propositions to people.



6 | What do video games smell like? Olfactory technology will enrich the players' experience

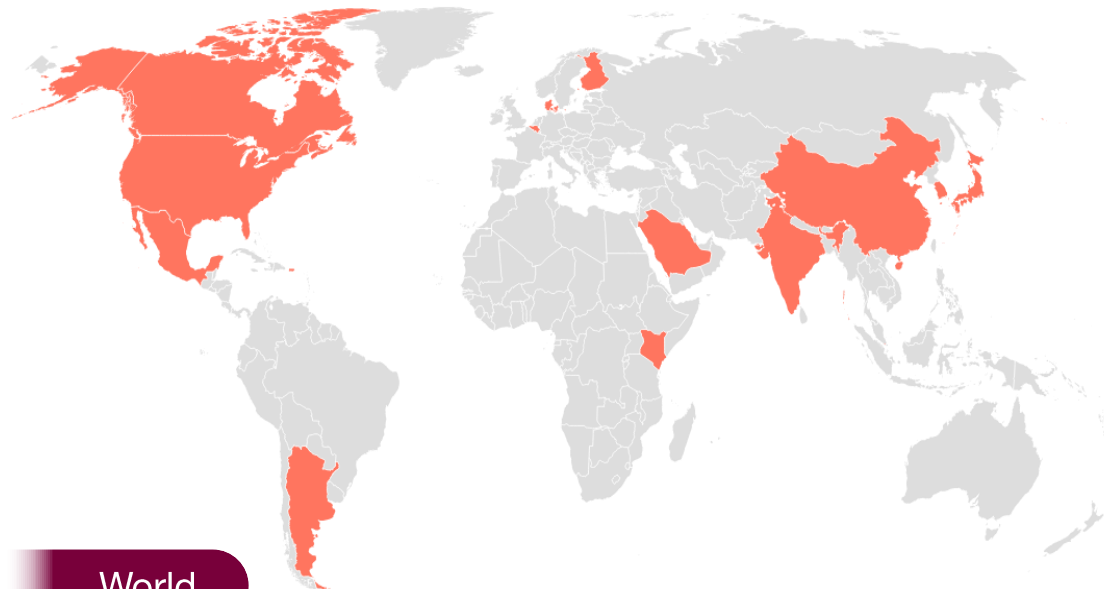
Olfactory technology aims to fully immerse the player in a video game, up to the point of smelling the things that appear on the screen: the smell of the rain during a storm, the gunshots in a shooter in first person, etc.

AirParfum, which has pioneering and unique olfactory technology, is actively seeking partners for the development of video games that incorporate or appeal to the sense of smell. Its aim is to expand the horizons of this industry and provide it with its utmost sensory experience.





Source: “Global Games Market Report”, Newzoo, 2022/2023; “Libro blanco del desarrollo español de videojuegos”, DEV, 2022; “Video Games in Spain”, Euromonitor, 2023; “Two Technology Trends Shaping The Future Of Gaming”, Forbes, 2023; “The Gaming Playbook”, GWI, 2021; ISE/MWC OIC, 2024


International business opportunities for video games

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World


	Belgium Digital Europe Strategy: a pillar in the EU and Belgium		Denmark Denmark and video games: the perfect match for Catalonia
	Finland Finland, at the forefront of the global video game industry		Kenya Kenya and ICT: the Silicon Savannah
	Saudi Arabia Look out, gamers: video games are on the rise!		India India, an upward trend in the video game industry
	Singapore Singapore, the regional eSport center		Japan Trends in Japan: video game market
	China Conquering the virtual world. China, a key destination for video games		South Korea Video games in South Korea, one of the most important global markets




USA
California: the global hub of the audiovisual industry



Mexico
Shall we play together? Collaboration with Mexican creators



Canada
World leader in the field of immersive experiences



Argentina
A growing industry

Note: The opportunities of other sectors related to the video game industry have also been taken into account

Source: Global Map of International Business Opportunities 2023

Thank you!

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The report is available on:

<https://www.accio.gencat.cat/ca/serveis/banc-coneixement/cercador/BancConeixement/eic-els-videojocs-a-catalunya>



More information about the sector, news and opportunities:

<https://www.accio.gencat.cat/ca/sectors/videojocs/>

