March 2025. Sector snapshot

The technological and digital sector in Catalonia

The technological and digital sector in Catalonia: sector snapshot

ACCIÓ
Government of Catalonia

Carried out by
Strategy and Competitive Intelligence Unit of ACCIÓ

Barcelona, March 2025

Contents

1. Overview of the Technological and Digital sector

Definition of the Technological and Digital sector

The **Technological and Digital sector** group all economic activity carried out by producers, consumers, including governments, based on digital goods and services, technologies and digital infrastructure and data.

Although the sector is no longer strictly limited to information and communication technologies (ICT), this continues to be its essential *core* for digital innovation.

In this study, the Technological and Digital sector means the combination of the companies included in the ICT sector and the rest of the digital segments such as video games, the audiovisual industry, e-commerce, smart cities, ICT engineering, the suppliers of 4.0 technologies and startups.

A view of the technological and digital world

ICT and Electronics
- Software providers
- Telecommunications
- Hardware providers
- Manufacturers of equipment and components
- Services and consulting

Other technological sectors
- Audiovisual
- Video games
- *Smart Cities* and *GovTech*
- E-commerce
- ICT Engineering
- Digital Health
- *Digital Innovation hubs*

4.0 technology suppliers
- Additive manufacturing
- Robotics
- Cloud
- RA/RV
- Internet of things
- AI
- Big data
- Quantum/photonics
- DLT
- Cybersecurity
- Connectivity
- Simulation
- Deeptech
- Other technologies
- Startups

Source: ACCIÓ based on BCG, 2024; UK Government, 2024; OECD, 2024

China and the United States account for 52% of global turnover in the Technological and Digital sector

Worldwide distribution by turnover
Millions of euros.

United States | €6,419.3 B

Ireland
€531.7 B

United Kingdom
€1,304.8 B

France
€832.2 B

Germany
€1,208.3 B

China | €14,003.5 B

Japan | €2,665.3 B

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India
| €760.8 B

Singapore | €839.5 B

Australia | €482.9 B

Brazil
| €625.9 B
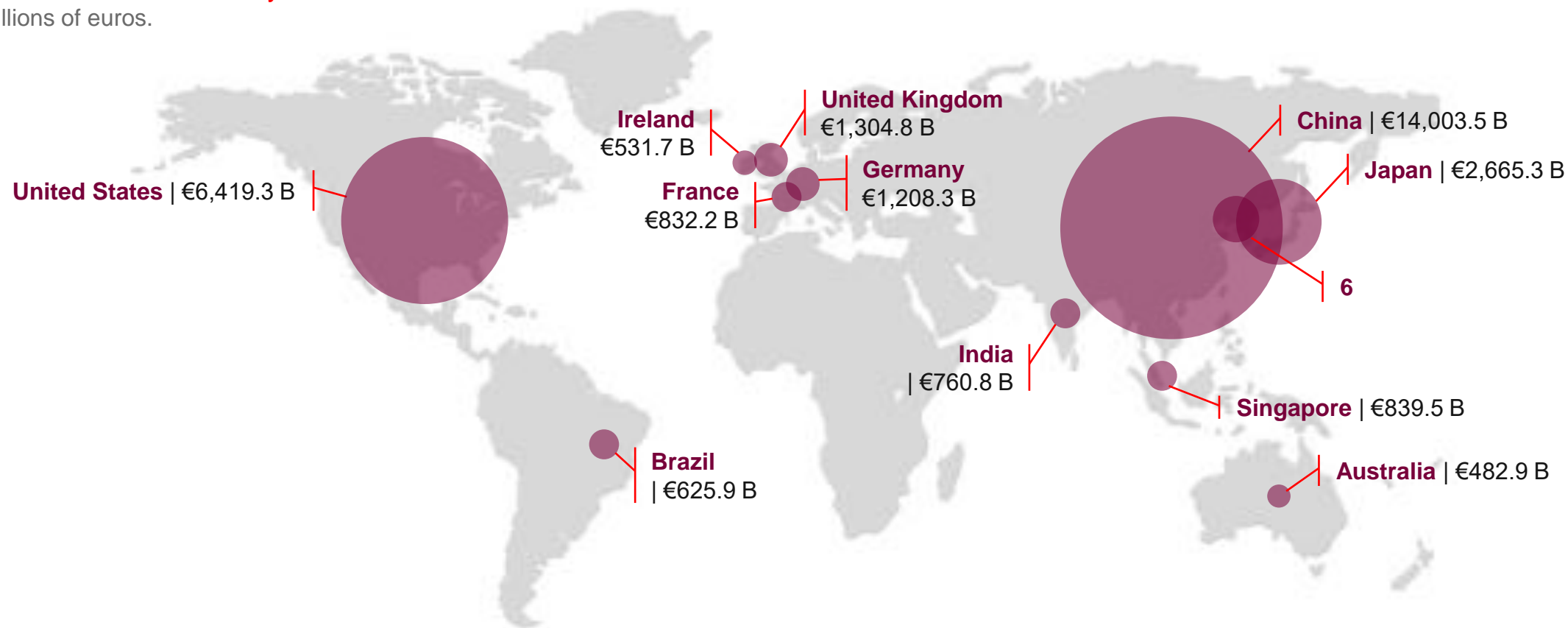
Note: *Selection of the countries with the highest turnover. Last years available.* *Note:* *CNAE Codes (2611, 2612, 2620, 2630, 2640, 2680, 4651, 4652, 4743, 4763, 5821, 5829, 5911, 5913, 5915, 5916, 5917, 5918, 5929, 6020, 6110, 6120, 6130, 6190, 6201, 6202, 6203, 6209, 6311, 6312, 7311, 7312, 9511, 9512)*

Source: *ACCIÓ, based on Orbis*

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Leading companies in the sector by turnover

🔴 With presence in Catalonia

Apple 🇺🇸 | Alphabet 🇺🇸 | 🔴 Microsoft 🇺🇸 | 鲸旗游戏 KINGCHEER 🇨🇳

SAMSUNG 🇰🇷 | FOXCONN 鸿海科技集團 🇨🇳 | 🔴 Google 🇺🇸 | 🔴 verizon 🇺🇸

中国移动 China Mobile 🇨🇳 | 🔴 T·Systems 🇩🇪 | CHINA MOBILENET, LTD 🇨🇳 | Meta 🇺🇸

AT&T 🇺🇸 | COMCAST 🇺🇸 | 🔴 GitHub 🇦🇺 | tsmc 🇨🇳

🔴 NTT 🇯🇵 | The Walt Disney Company 🇺🇸 | DELL Technologies 🇺🇸 | SHENZHEN XINWEIWEI TECHNOLOGY CO., LTD 🇨🇳

Note: Last years available. Note: CNAE codes (2611, 2612, 2620, 2630, 2640, 2680, 4651, 4652, 4743, 4763, 5821, 5829, 5911, 5913, 5915, 5916, 5917, 5918, 5929, 6020, 6110, 6120, 6130, 6190, 6201, 6202, 6203, 6209, 6311, 6312, 7311, 7312, 9511, 9512). Source: ACCIÓ, based on Orbis

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Global ICT spending to reach $5.115 billion by 2024

🔴 This year, expenditure stands at **5.115 billion dollars** in information technology worldwide, **4.4%** more than last year (4.898 billion dollars).

🔴 It is expected that next year, spending on IT will increase by **9.8%**, and will reach **5.618 billion** dollars.

🔴 In 2024, the IT segment with the highest spending was **IT services**, followed by devices and software, but the segment has experienced the most significant growth has been **Data Center Systems**, a trend that is expected to continue next year.

Global spending on information technology (ICT), 2015-2025*
(in billions of US dollars)

Legend: ■ Data Center Systems ■ Devices ■ Software ■ IT Services ■ Communication services
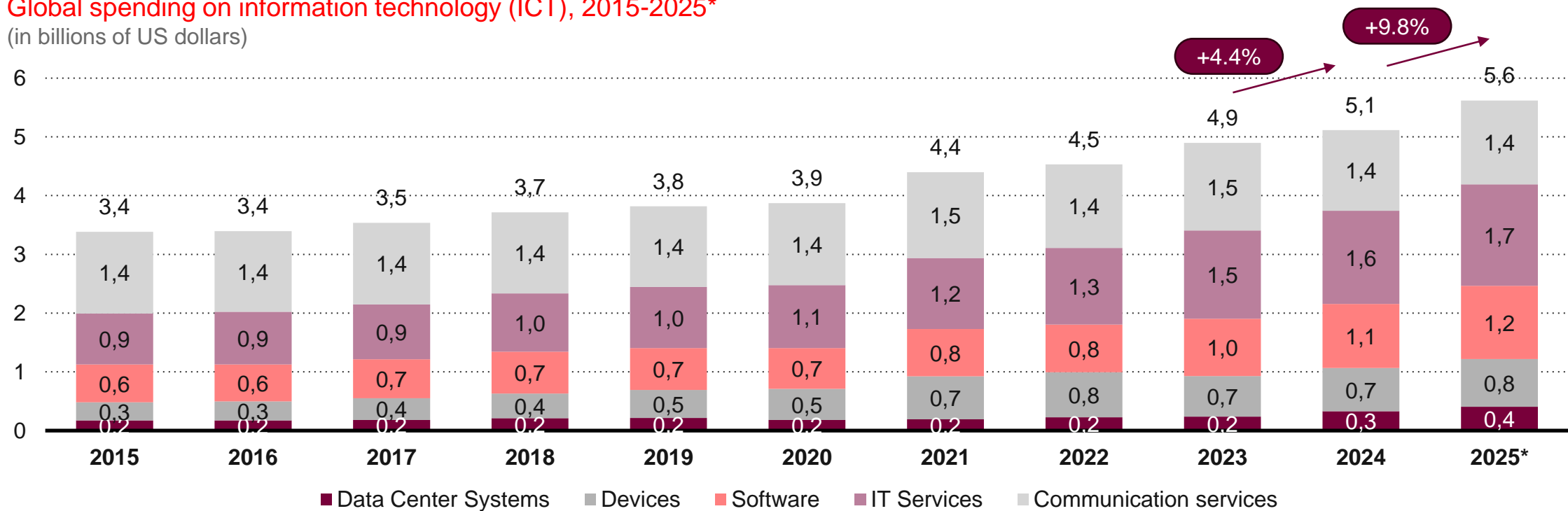
*Note: (*) Forecast. **Source:** ACCIÓ, based on Statista, 2025*

The global technology and digital sector has more than 27,000 RDI projects

The **volume of foreign investment in the audiovisual industry** totaled €1,456 B in the 2020-2024 five-year period, with a total of 27,416 projects employing 3,913,553 people. **Spain, with 1,112 projects received, ranks 6th in terms of world RDI destinations.**

Technological and digital RDI in the world, 2020-2024*

27,416	**1,456**	**3,913,553**
projects	€B in investment	jobs created
▲8.7% (15-19)	▲89.6% (15-19)	▲44.6% (15-19)

Countries of origin by projects

1 UAE | 7,436 projects
2 United Kingdom | 2,551 projects
3 Germany | 1,763 projects
4 France | 1,377 projects
5 India | 1,204 projects

Destination countries by projects

1 UAE | 3,101 projects
2 United Kingdom | 1,988 projects
3 India | 1,984 projects
4 Germany | 1,796 projects
5 UAE | 1,112 projects

25 leading investing countries by projects, 2019-2023
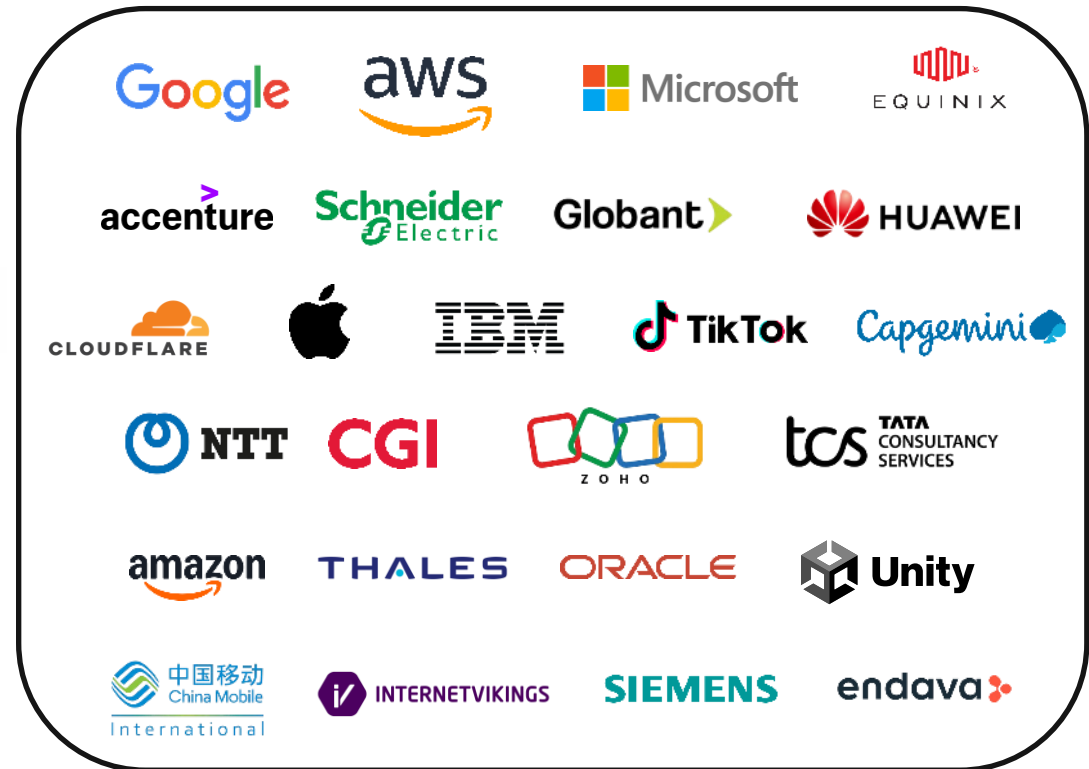
Google | aws | Microsoft | EQUINIX
accenture | Schneider Electric | Globant | HUAWEI
CLOUDFLARE | Apple | IBM | TikTok | Capgemini
NTT | CGI | ZOHO | tcs TATA CONSULTANCY SERVICES
amazon | THALES | ORACLE | Unity
China Mobile International | INTERNETVIKINGS | SIEMENS | endava

Notes: the following sectors were considered: "Business machines & equipment", "Communications", "Consumer electronics", "Electronic components", "Semiconductors" and "Software & IT services", the sub-sectors "Advertising, PR, & related" i "Semi-conductor machinery" and the activities "ICT & Internet infrastructure", "Research & Development" i "Technical Support Center"

Source: *ACCIÓ, based on fDi Markets, 2025*

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2. The technological and digital sector in Catalonia

The technological and digital sector is a key driver for innovation and dynamism in the Catalan economy

Growing economic pillar

◗ The sector has a total of **24,878 companies** (mainly ICT companies), with a total turnover of **€39.6 B**, which provide **198,462** jobs.
◗ **This accounts for 14% of Catalonia's GDP**
◗ The sector's turnover has grown by **14% compared with the previous year and by 34% in three years.**

On the global radar for technological and digital investment

◗ In the 2020-2024 five-year period, Catalonia received **over 386 FDI projects, attracting almost €7.6 billion and creating over 28,400 jobs**. The number of projects (41.1%), the capital invested (78.7%) and the number of jobs created from this RDI (166.6%) grew with respect to the previous five-year period (2015-2019).
◗ Catalonia is an attractive and leading location for technological and digital RDI in the world, and ranks as the **1st region in southern Europe, 4th in EU** and **11th in the world** in number of projects.
◗ The ecosystem of tech hubs in Barcelona and Catalonia continues to grow at a constant pace, reaching 160 by 2024, and companies such as Coovally, Dataxstream, Delfos Energy, Revolut, and Bespoke Pixel

A robust ecosystem that drives innovation

◗ Catalonia has a **robust technological and digital ecosystem**: various associations, clusters, training centers and public organizations support companies in the sector and promote their competitiveness.
◗ **Numerous initiatives to strengthen the Catalan ecosystem**, have been implemented, such as the Generalitat's Strategies to promote the Digital Economy, the Digital Catalonia Alliance (DCA), and the Digital Innovation Hub of Catalonia (DIH4CAT).
◗ Barcelona is the **venue of the Mobile World Congress**, the most important event in the world in the field of technology and communications. The Catalan capital also hosts other important congresses for the sector, such as the ISE, the Barcelona Cybersecurity Congress and the IoT Solutions World Congress.

A powerful educational environment that nurtures and attracts digital talent

◗ The Catalan **technological and digital sector** is one of the **strongest in Europe**, thanks to some of Catalonia's main assets: **talent**, **creativity and cutting-edge technology**.
◗ In Catalonia there is a significant demand for university qualifications in ICT, with **more than 4,000 graduates in bachelor's and master's degrees** in the 2022-2023 academic year.
◗ **Large international companies choose Catalonia for their digital talent**: "Catalonia is home to many research universities with consolidated AI programs and key technological and scientific organizations" (Michael Spranger, **Sony AI**).

Source: ACCIÓ

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Key facts and figures of the technological and digital industry in Catalonia (I)

24,878 companies

↑5.9% compared with 2023

€39.6 B Revenue 2023

↑14.0% compared with 2022

198,462 jobs created 2023

↑6.8% compared with 2022

24,878

3,538

4,938

18,541

Trends of key data 2021-2024

	2020	2021	2022	2023	2024
Turnover	29.520	30.243	34.783	39.646	
Companies		19.148	22.041	23.482	24.878
Jobs	175.949	182.820	185.851	198.462	

■ Companies ■ Turnover ●— Jobs

■ Technological services
■ Technology suppliers and providers
■ ICT
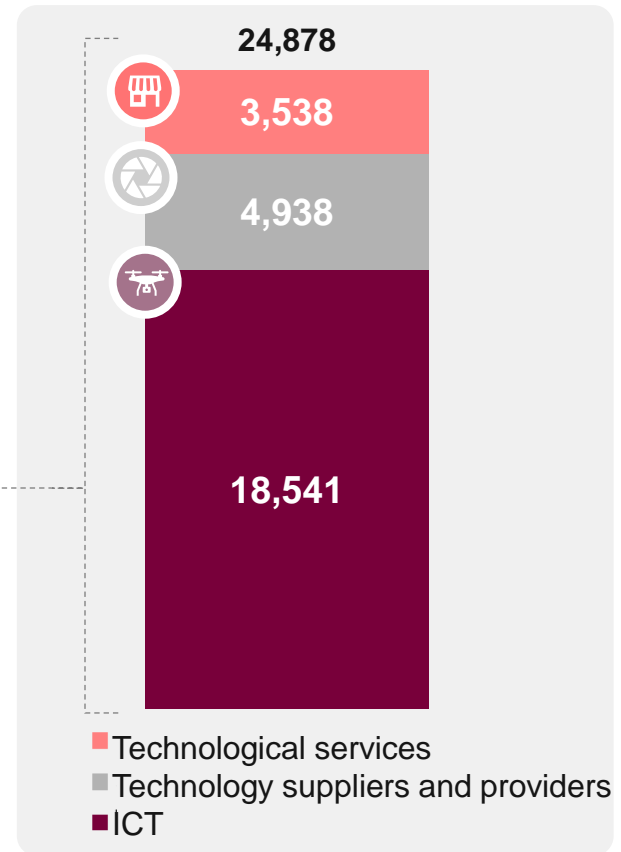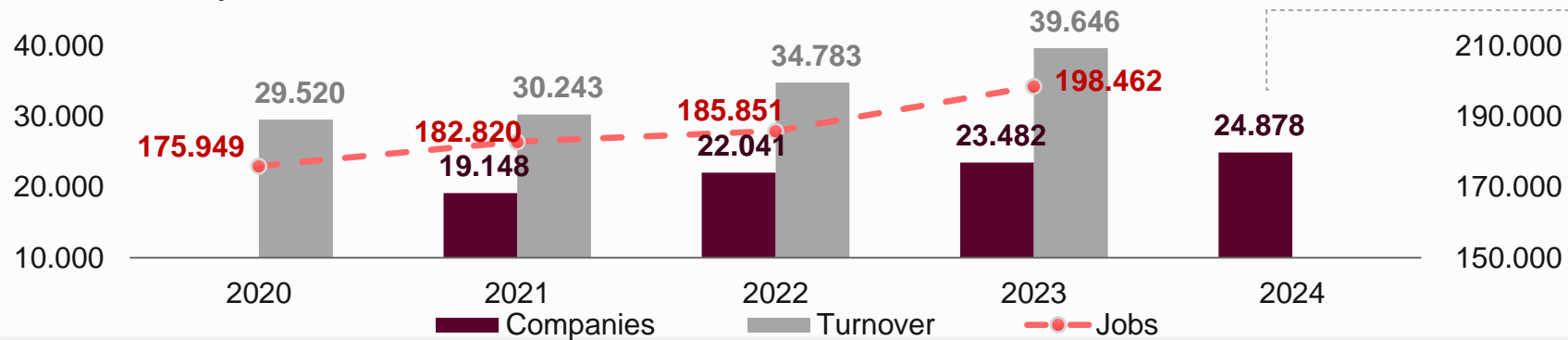
*Note: Economic data from the last year available, mostly 2023. **Source:** ACCIÓ*
***Note:** The mapping of the audiovisual sector was carried out from companies selected from the following CNAE groups; 2611, 2612, 2620, 2630, 2640, 2680, 4651, 4652, 5821, 5829, 6110, 6120, 6130, 6190, 6201, 6202, 6203, 6209, 6312, 9511, 9512, 2731, 2732, 2733 and 2790; companies from the following ACCIÓ reports are also included; audiovisual, e-commerce, engineering (ICT-related), industry 4.0, smart cities (ICT-related) and startups; companies that have more than one classification were counted only once*

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Key facts and figures of the audiovisual industry in Catalonia (II)

Companies

50.2%	of the companies were founded more than 10 years ago
7.6%	of the companies are regular exporters
5.6%	of the companies are foreign subsidiaries
9.0%	of the companies are startups

Turnover

13.6%	**of Catalonia's GDP in 2023**
58.2%	of the turnover comes from large companies (1.2% of companies)
80.4%	of the turnover comes from companies in the province of Barcelona

Employees

76.9%	of employees work in companies with over 10 years in existence
38.0%	of employees work in micro-enterprises or small businesses

Source: ACCIÓ

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Half of the companies are located in the city of Barcelona

Territorial distribution

The province of **Barcelona** is the great digital hub of Catalonia, with half of the companies

El Barcelonès (53.9%), El Vallès Occidental (10.9%), El Baix Llobregat (7.5%) and El Maresme (4.7%) are the counties with the most companies related to the digital economy.

#	City	No. of companies 2025	No. of companies 2024	Diff. 2024-2025
1	Barcelona	12,378	11,699	↑679
2	Sant Cugat del Vallès	799	745	↑54
3	Sabadell	524	508	↑16
4	L'Hospitalet de Llobregat	467	444	↑23
5	Terrassa	460	437	↑23
6	Badalona	409	386	↑23
7	Girona	359	328	↑31
8	Mataró	358	338	↑20
9	Lleida	290	270	↑20
10	Tarragona	242	228	↑14
11	Castelldefels	236	219	↑17
12	Cornellà de Llobregat	230	221	↑9
13	Granollers	204	195	↑9
14	Cerdanyola del Vallès	198	195	↑3
15	Reus	195	172	↑23
	Other	7,530	7,097	↑433

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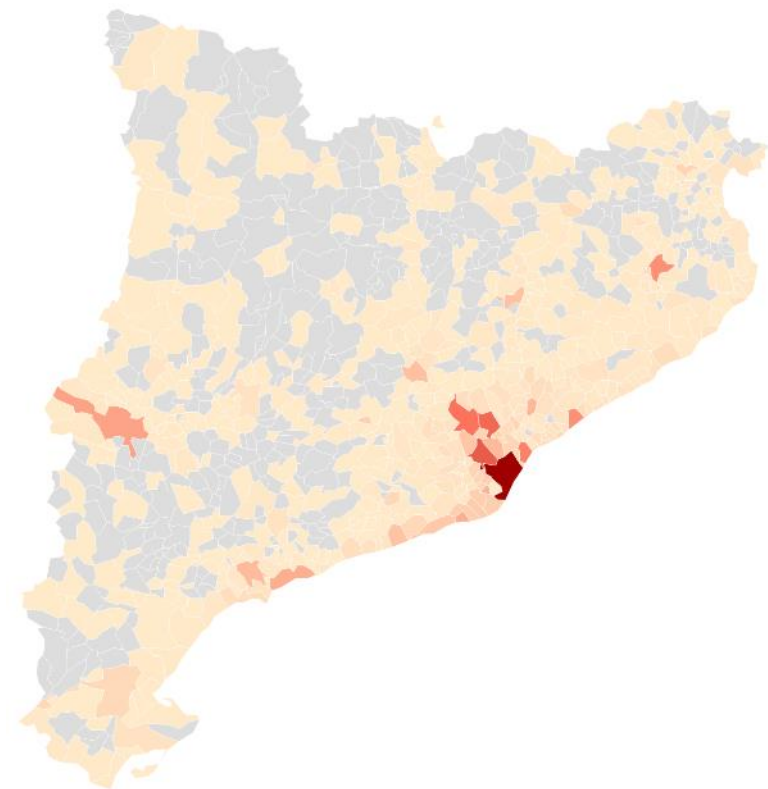
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Mapping of deeptech startups in Catalonia

Software suppliers

NTT DATA · GFT · SAP · Blackout Lab
Google · COSTAISA · Sabadell Digital · Adsmurai
amazon
COMITIA · AUTODESK · Microsoft
omega peripherals · Typeform · INGRAM MICRO · ORACLE

Telecommunications

parlem telecom · TELOCAN · overon
orange · Telefónica · cellnex
vodafone · Movistar · colt
ERICSSON · HUAWEI · adamo
SIEMENS · NTT Communications

Services and consulting

ALTRAN · Atos
SEIDOR opentrends · FIHOCA
Deloitte. · Concatel
nae, · indra
T·Systems · EY
Capgemini
LOGICALIS Architects of Change
CaixaBank TECH · IBM Cloud
inetum. positive digital flow · impala NETWORK
accenture · ZURICH

Hardware suppliers

MediaMarkt · IBM · Circutor
GARMIN. · seit · FUJITSU · CISCO
EPSON · ASUS · acer
RICOH · TICNOVA · BECKMAN COULTER
Hewlett Packard Enterprise · semic Effective IT Solutions · elektra catalunya · SICK Sensor Intelligence.

Manufacturers of equipment and components

ASCABLE-RECAEL ENERGIA Y CABLES ESPECIALES · E·G·O · MARELLI · TE connectivity
eurocir · Top Cable · elausa electronics
KOSTAL · simon · FICOSA
UNIDESA · LAB CIRCUITS · golmar
ecler · General Cable · ARES

Information and communication technologies (ICT)

Notes: The companies are a representative sample of each category
Source: ACCIÓ, based on Orbis

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Catalonia, one of the most relevant ICT hubs in Europe.

The number of companies in the ICT sector in Catalonia has increased by **3.9%** compared to last year, higher than the increase in Spain, which rose by **3.6%** from 2023. In terms of the five-year period, the number of ICT companies in Catalonia has grown by **7.9%, 3 percentage points more than Spain (4.8%).**

The Catalan ICT sector stands out in Spain, accounting for **22.8%** of all companies in the sector and **21.2%** of the total number of workers in Spain.

The ICT sector's revenue has increased by **10.3%** compared to last year and by **26.8%** in the last 5 years. Employment in the sector has risen by **19.7%** and **25.5%**, respectively.

18,027	€24,503 M	161,900
companies in 2024	**turnover in 2022**	**jobs in 2024**
↑3.9% compared with 2023	↑10.3% compared with 2023	↑19.7% compared with 2023

ICT companyies in Catalonia
(turnover in million euros)

- Turnover
- Companies
- Jobs
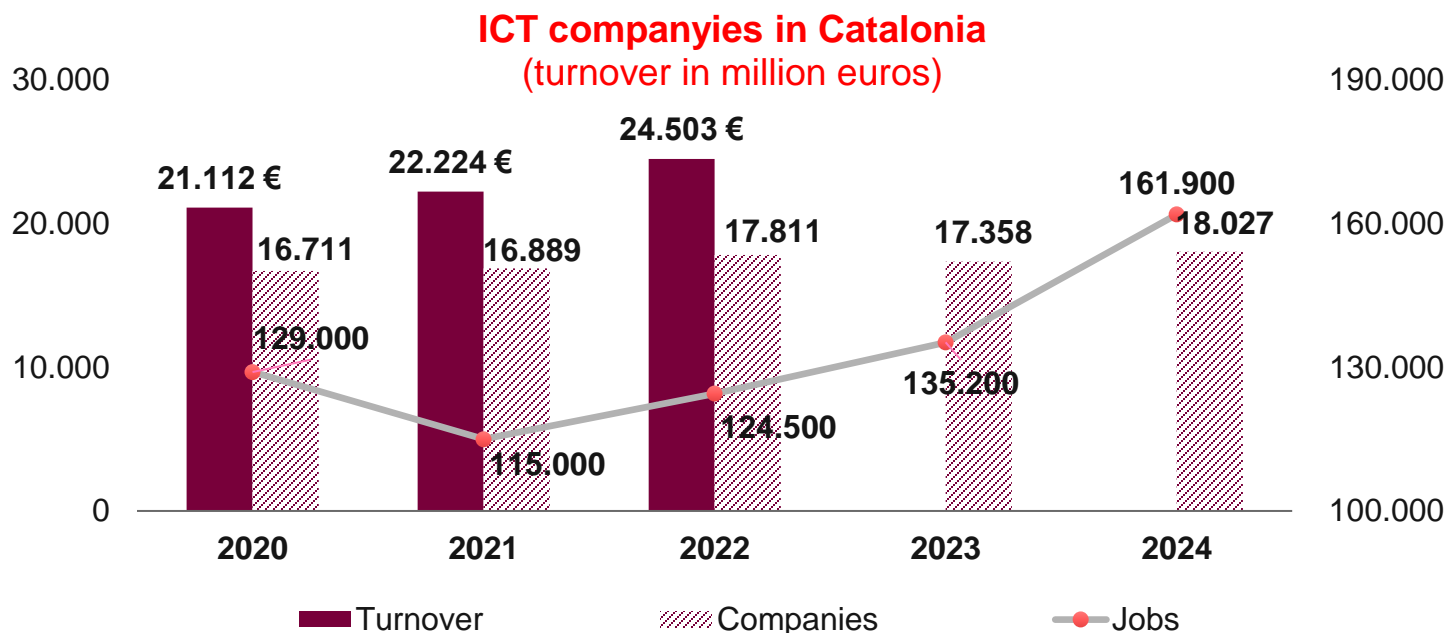
Source: Latest available data from the INE and IDESCAT

Digital areas expand the ICT sector in Catalonia

The **IT sector** is accompanied **by digital areas that allow us to undertake the digitalization of industry and make Catalonia a smarter and more connected place**.

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Audiovisual

Corporació Catalana de **Mitjans Audiovisuals**.SA
LAVINIA;
globomedia grupo
Rakuten TV
DeAPlaneta
RAC1
SONO
filmax.
NEP
onionlab
MEDIAPRO
DOLBY

Video games

GAMELOFT
King
IOI
LARIAN
BANDAI NAMCO
SCOPELY
Socialpoint
NetEase Games
UBISOFT
zeptolab
RIOT GAMES
abylight STUDIOS
DIGITAL LEGENDS

Digital health

MatchTrial
Vytrus biotech
TMC a Unilabs company
DyCare
MeetingDoctors
DOOLE
qgenomics
iSalud.com
AIS CHANNEL
crisalix VIRTUAL AESTHETICS
broomx

Digital Innovation hubs

accenture
CISCO
UNIVERSAL ROBOTS
SEAT:CODE
T··Systems·
intel
N26
Microsoft
BAYER
technica engineering

E-commerce

amazon
deporvillage
ebay
socialcar
Adevinta
privalia parte de Veepee
eDreams
wallapop
AliExpress
letgo

Smart cities and GovTech

infraplan
Scytl
bismart
OPEN EVIDENCE
social coin
civiciti
Securitas
vlex
M47 LABS

Other technological sectors

Source: ACCIÓ

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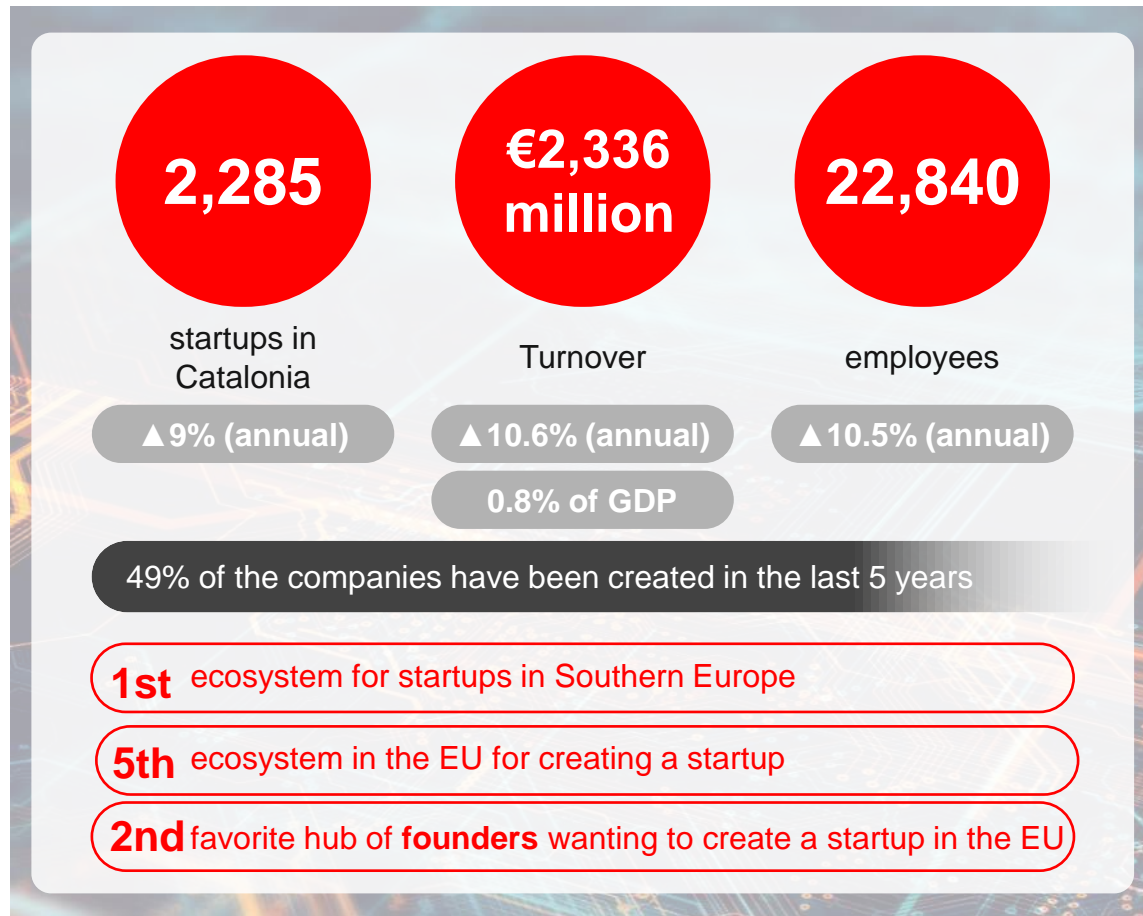Government of Catalonia

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Technology providers and suppliers in Catalonia

Technology providers converge and apply technologies, especially digital ones, to transform the design, manufacturing, operation and service of production systems.
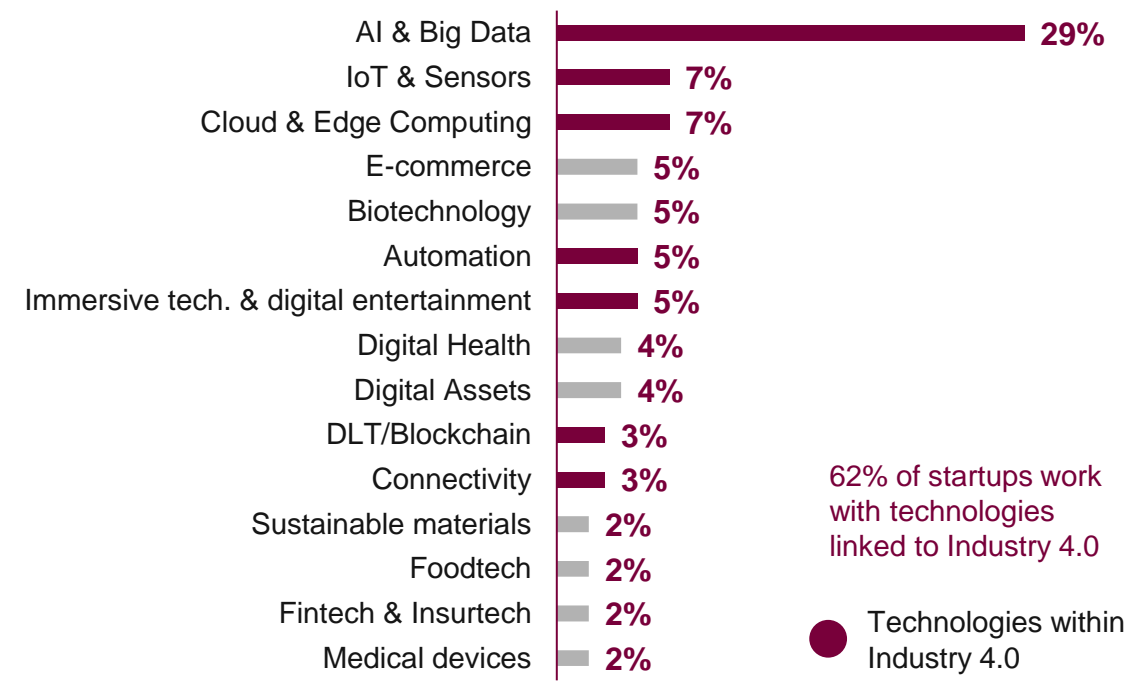
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Cybersecurity
inetum.
esprinet · GRUPO EULEN · INGRAM
DELL Technologies · ayesa · LOGICALIS Architects of Change
a2kcent · sopra steria · V-Valley

AI / Big Data
IBM
NTT DATA · Schneider Electric · MECALUX
SAP · MINSAIT · gmv
Microsoft · SEIDOR · DRIBIA

Internet of things
cellnex · TD SYNNEX · SCHAEFFLER
Circutor · BOSCH · idneo
Weidmüller · WORLDLINE · WORLD SENSING

Cloud
EQUINIX · it now
Microsoft · amazon · Google
ORACLE · Atos · T·Systems
evolutio · TEN TECHNIP ENERGIES · CGI

Chips and semiconductors
LEAR CORPORATION · ARROW · Johnson Controls
AVNET SILICA · JBC · E·G·O
eurocir · TEF · DigiProces

Technology suppliers

Robotics
FANUC
ABB · SIEMENS · TAVIL
SALTO · FESTO · KUKA
YASKAWA · PAL · THEKER

Connectivity
vodafone
Telefónica · orange · cellnex
MASMOVIL · HUAWEI · parlem telecom
ADTEL · ERICSSON · neutroon

Photonics
SICK · IRIS
RECAM LASER · SENSOFAR · monocrom
OPTRAL · IPG PHOTONICS · INOXLASER, S.L.
fablaser · BITMAKERS · LASER GODED

Additive manufacturing
hp · JABIL PACKAGING SOLUTIONS · EPSON
HYPERION Materials & Technologies · BCN3D · stratasys
AMES Sintered Metallic Components · CADE Projectes, S.L. · Ineo

Simulation
inprocess
S · CUPRA · HEXAGON · DASSAULT SYSTEMES
SEAT S.A.
ABGAM · AUTODESK · ARKANCE
HOLO-FACTORY · CONSTRUSOFT · AVANTEK CT SOLUTIONS

Immersive technologies
EPSON · PICO · invelon
PIXELDREAMS · Wideum · Yay
mentor-vr · AUMENTA SOLUTIONS · FUTURA VR STUDIO

DLT/blockchain
ENTORNO DIGITAL
SNGULAR · Signaturit Group · Validated ID
FlexVPC · finboot · BLUE ROOM INNOVATION
eersyst · BIGLE · ZERTIFIER

Quantum
LUXQUANTA
ayesa · QILIMANJARO · ARQUIMEA
Quside · infineon · Entanglement Partners_>
RADIANTIS · sener · FUJITSU

Supercomputing
IBM
HPC Now! · Microsoft · intel
neutroon · Qbeast · Mitiga
EAS · NEARBY COMPUTING · NVIDIA

Engineering/consultancy
TRIGO · AIRPLAN · TYLin
ePLAN electric8 · NGNY DEVICES · ITALDESIGN
EDAG · ACK LOGIC · DOMINION

Source: ACCIÓ

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With more than 2,200 startups, Catalonia is the No. 1 startup hub in southern Europe

2,285

startups in Catalonia

▲9% (annual)

€2,336 million

Turnover

▲10.6% (annual)

0.8% of GDP

22,840

employees

▲10.5% (annual)

49% of the companies have been created in the last 5 years

1st ecosystem for startups in Southern Europe

5th ecosystem in the EU for creating a startup

2nd favorite hub of **founders** wanting to create a startup in the EU

Top 15 technologies (percentage of startups)

Technology	Percentage
AI & Big Data	29%
IoT & Sensors	7%
Cloud & Edge Computing	7%
E-commerce	5%
Biotechnology	5%
Automation	5%
Immersive tech. & digital entertainment	5%
Digital Health	4%
Digital Assets	4%
DLT/Blockchain	3%
Connectivity	3%
Sustainable materials	2%
Foodtech	2%
Fintech & Insurtech	2%
Medical devices	2%

62% of startups work with technologies linked to Industry 4.0

● Technologies within Industry 4.0

Access the full report of the Barcelona & Catalonia Startup Hub 2024

Notes: *This chart has been compiled using the main technology data of each of the 2,285 startups of the Barcelona & Catalonia Startup Hub*
Source: *"Barcelona & Catalonia Startup Hub 2024", ACCIÓ*

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A robust ecosystem that supports the technological and digital sector of Catalonia

Associations and initiatives

22@NETWORK BARCELONA · Tech Barcelona · Mobile WorldCapital Barcelona · DCA Digital Catalonia Alliance · DIH4CAT Digital Innovation Hub de Catalunya

Salut/ TIC Salut Social · COMPUTER VISION CATALAN ALLIANCE · SINERGIA · Secartys · CERCLE TECNOLÒGIC

aseitec · ASCICAT · ASSCII · CATEi · ACECCAT · Catalunya Mobile

ticanoia · TIC bages · TIC · ticosona · TIC SUD CLÚSTER TIC CATALUNYA SUD · aenteg

aeti LLEIDA · Feceminte · telecos.cat · grausfic · bhh · guifi·net

APAC · PAC · PROA · DEV · AEVI · DeviCAT · GAME BCN · GAME GI

music tech hub BCN · BCN music LAB · elGremi

Clusters

CLÚSTER AUDIOVISUAL DE CATALUNYA · Clúster Digital · Ma¡v · SMARTECH CLUSTER · EduTechCluster · Tech Tourism Cluster · secpho

Public Administration

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Business organizations

Foment del Treball Nacional · pimec · cecot · Col·legi d'Economistes de Catalunya · Enginyers Industrials de Catalunya · Consell General de Cambres de Catalunya

Fairs and congresses, 2024-2025

integrated systems europe · MWC GSMA · 4YFN

BARCELONA CYBERSECURITY CONGRESS · IOT SOLUTIONS WORLD CONGRESS · SMARTCITY EXPO WORLD CONGRESS · ADVANCED FACTORIES

SPRING · DrupalCon · HiPEAC · UNVEX'24 Barcelona 4-5 June 2024 · AI & BIG DATA CONGRESS BARCELONA

E-SHOW BARCELONA · BIZBARCELONA · sónar 2025 +D · EUROPEAN BLOCKCHAIN CONVENTION · BARCELONA DEEPTECH SUMMIT

EXPLORE · security forum · Gartner IT SYMPOSIUM | Xpo. · TECH SPIRIT BARCELONA

INDIE DEV DAY · SAFA · INSUMMIT · DevBcn

Universities

UOC Universitat Oberta de Catalunya · UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH · UAB Universitat Autònoma de Barcelona · upf. Universitat Pompeu Fabra Barcelona

UNIVERSITAT RAMON LLULL · UNIVERSITAT DE BARCELONA · UNIVERSITAT ROVIRA i VIRGILI

Universitat de Girona · Universitat de Lleida · UVIC UNIVERSITAT DE VIC UNIVERSITAT CENTRAL DE CATALUNYA

MWC GSMA

Barcelona will be the venue of the Mobile World Congress, the most important event in the world in the field of technology and communications, until 2030. Barcelona will continue to be "the world's mobile capital" for another five years, at least.

integrated systems europe

Barcelona has hosted five editions of Integrated Systems Europe, the global flagship event in the audiovisual sector and integrated systems. The 2025 edition brought together more than 85,000 attendees from 168 different countries.

Notes: partial non-exhaustive representation of some of the main actors for each of the categories of the Catalan digital ecosystem

Source: ACCIÓ

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MWC and 4YFN, events that have forged a successful alliance with Barcelona

MWC
GSMA

in Barcelona, since 2006

Mobile World Congress (MWC) Barcelona is the world's largest and most influential event in the connectivity and mobile technology industry

"MWC Barcelona [2024] has once again offered four exceptional days of debate, thought leadership, inspiration and deal-making. Barcelona has delivered again!"

John Hoffman
Managing Director, GSMA Ltd.

2024, in key figures

101,000+ attendees	**2,700+** exhibitors, sponsors and partners
205 countries and territories	**59%** of attendees from adjacent sectors

MWC 2024 was a record-breaking edition, with a significant impact on the local economy:

- More than 101,000 attendees from 205 countries and territories
- Over 2,700 exhibitors, sponsors and partners
- More than 59% of attendees represent sectors adjacent to the core mobile ecosystem
- More than 1,100 speakers and opinion leaders, of whom more than 40% are women
- 51% of attendees are at management level or higher, of whom 21% are at a high level (*C-suite*)

- **€502 million in economic impact, surpassing the €500 million barrier for the first time**
- **More than 9,200 part-time jobs created, 100 more than in the 2023 edition**
- **€6.3 billion contributed to the Barcelona economy and more than 160,000 part-time jobs created throughout Catalonia since 2006**

4Y FN The 4YFN has hosted 930 exhibitors, 450 speakers and more than 250 pitching sessions.**1,000+ investors with collective funds totaling €50 billion**

Source: ACCIÓ, starting with MWC Barcelona, 2025/2024; Catalonia Trade & Investment, 2024

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R&D and innovation, hallmarks of the Catalan business culture
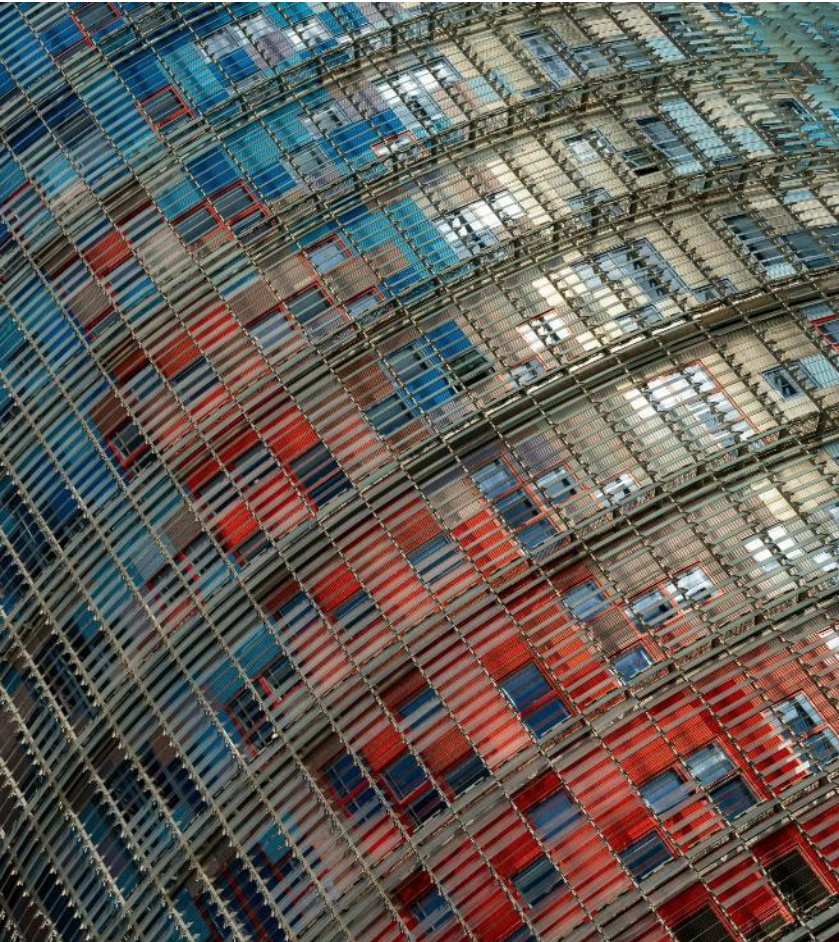
Scientific output, 2023

With 0.1% of the world's population, it accounts for

0.69%

of the global scientific production

R&D, 2023

10th in the EU in **R&D expenditure over GDP**

1.9% Catalan R&D/GDP

1.5% Spanish ratio

Above…

🇮🇹 Italy **1.3%**

🇵🇹 Portugal **1.7%**

Catalonia, an innovative region in both Spain and Europe

- Catalonia holds both the **"strong innovator"** and the **"Regional Innovation Valley" labels (2023/2024)**
- Catalonia has the largest number of **innovative companies** in Spain, accounting for 22.5% of the total **(2022)**
- Catalonia leads **European patent applications** in Spain, accounting for 34.6% of the total **(2023)**
- Catalonia has received more than 1,400 million euros in aid from the current **Horizon Europe program** – 3.28% of the European total, doubling what it should receive based on its population.

Source: ACCIÓ, based on European Commission, Eurostat, Fundación Española para la Ciencia y la Tecnología (FECYT) (based on data from SciVal-SCOPUS), Horizon Dashboard, INE, The Vanguard Initiative

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A powerful ecosystem of cutting-edge scientific and technological infrastructures

An extensive network of scientific and technological centers constitute the basis of the Catalan research and innovation program
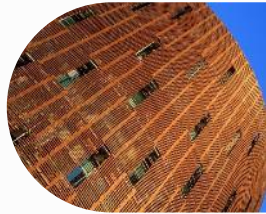
Barcelona Biomedical Research Park (PRBB)

The PRBB is one of the major centers of biomedical research in southern Europe

Catalan Institute for Chemical Research (ICIQ)

ICIQ is an internationally recognized leading institution in the field of chemistry

ALBA synchrotron

Inaugurated in 2010, ALBA is a pioneering 3rd generation scientific facility and the most important of its kind in the Mediterranean

ALBA II, based on the upgrade of the current ALBA, will be a 4th generation synchrotron facility

Applus+ IDIADA

Opened in 1994, the Applus IDIADA test track is considered by many to be the best of its kind in Europe

Institute of Photonic Sciences (ICFO)

ICFO is an institution that aims to push the boundaries of photonics knowledge

MareNostrum 5 at BSC-CNS

MareNostrum 5 is a pre-exascale EuroHPC supercomputer designed to strengthen European medical research.

MareNostrum 5 is the 4th most powerful supercomputer in the EU and the 11th in the world

Catalonia has been recognized with the seal of Regional Innovation Valley (RIV)

New European Innovation Agenda (NEIA)

European Commission 2024

Comisión Europea

Catalonia has achieved the 'trong innovator' category in the European innovation ranking

European Innovation Scoreboard (EIS)

European Commission 2023

Comisión Europea

Source: ACCIÓ, based on TOP500, 2024; EuroHPC JU, 2023,Digital Economy and Society of Catalonia, 2022

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The company: more technological and competitive thanks to developers and facilitators

ACCIÓ has identified, under the TECNIO label, the developers of the most innovative technologies in the RDI system of Catalonia with differential technological capabilities and the ability to transfer them to companies.

Technology centers with TECNIO accreditation related to ICT

Other technological centers or entities related to the ICT sector in Catalonia

Numerous initiatives have been implemented to strengthen the Catalan digital ecosystem

Strategies of the Generalitat de Catalunya to boost the digital economy

NewSpace strategy

AI strategy

Blockchain Strategy

5G strategy

Cyber security policy

Quantum T. Strategy

Digital Catalonia Alliance (DCA)

Alliance that brings together, provides knowledge to and guides emerging digital economic sectors to help consolidate them.

It focuses on 6 technological communities: Internet of Things (IoT), Drones, AI, NewSpace, Cybersecurity and Blockchain.

Digital Innovation Hub of Catalonia (DIH4CAT)

Regional non-profit innovation ecosystem formed by the main agents supporting the digitalization of Catalonia.

It aims to promote the technological transformation of small and medium-sized companies, technological startups and public entities.

The Digital Decade of the European Union Digital milestones for 2030

Measures that seek to promote a human-centered, safe and environmentally sustainable digital environment, as well as bridging the digital divide and guaranteeing the EU's digital sovereignty. The program is structured under 4 cardinal points:

Digital skills

Secure and sustainable digital infrastructures

Digital transformation of companies

Digitalization of public services

SKILLS

GOVERNMENT — INFRASTRUCTURES

BUSINESS

Notes: The Quantum Technologies Strategy of Catalonia is currently in the drafting phase
Source: ACCIÓ based on the Cybersecurity Agency of Catalonia, 2025; Digital Policies, 2025; Digital Administration, 2023

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2020-2024

Projects

386

▲41.4%
(2015-2019)

2020-2024

Invested capital

€7.7 billion

▲78.7%
(2015-2019)

2020-2024

Jobs

28,409

▲166.6%
(2015-2019)

Main investing countries by invested capital, 2020-2024

1 USA | €2.1 billion

2 United Kingdom | €1.9 B

3 Germany | €1.5 billion

4 France | €577 M

5 Japan | €353 M

6 Switzerland | €151 M

7 China | €150 M

8 Sweden | €110 M
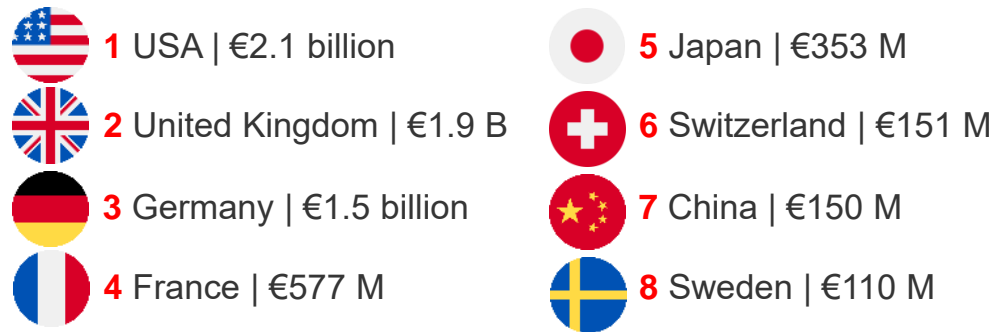
Reasons for investment, 2020-2024
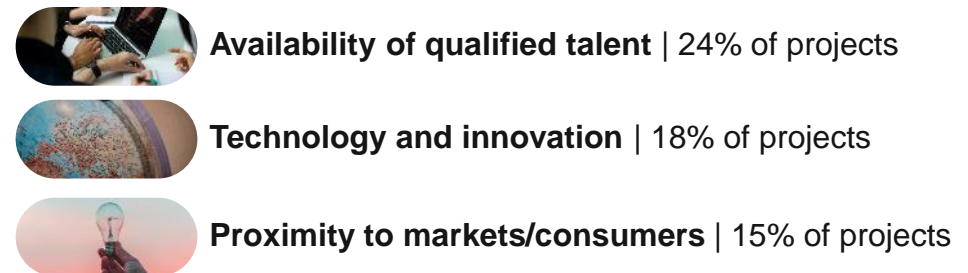
Availability of qualified talent | 24% of projects

Technology and innovation | 18% of projects

Proximity to markets/consumers | 15% of projects

Notes: the following sectors were considered: "Business machines & equipment", "Communications", "Consumer electronics", "Electronic components", "Semiconductors" and "Software & IT services", the sub-sectors "Advertising, PR, & related" i "Semi-conductor machinery" and the activities "ICT & Internet infrastructure", "Research & Development" i "Technical Support Center"
***Source:** ACCIÓ, based on fDi Markets, 2025*

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Catalonia, on the European podium in receiving technological FDI in 2024

2020-2024	2020-2024	2020-2024
Projects	**Invested capital**	**Jobs**
4th region	**10th region**	**3rd region**
5.0% of the total	2.5% of the total	5.0% of the total

Catalonia is the 1st region in Spain, 1st in southern Europe, 4th in the European Union and 11th in the world in terms of the number of projects received between 2020 and 2024.

Investing companies

intel. NTT DaTa interxion
PayFit netskope veeva
INGRAM T Systems Microsoft
Google amazon Meta cisco
hp ORACLE SAP GFT
GTR AtlasEdge edgeconnex

Technological FDI in the EU by number of jobs, 2020-2024
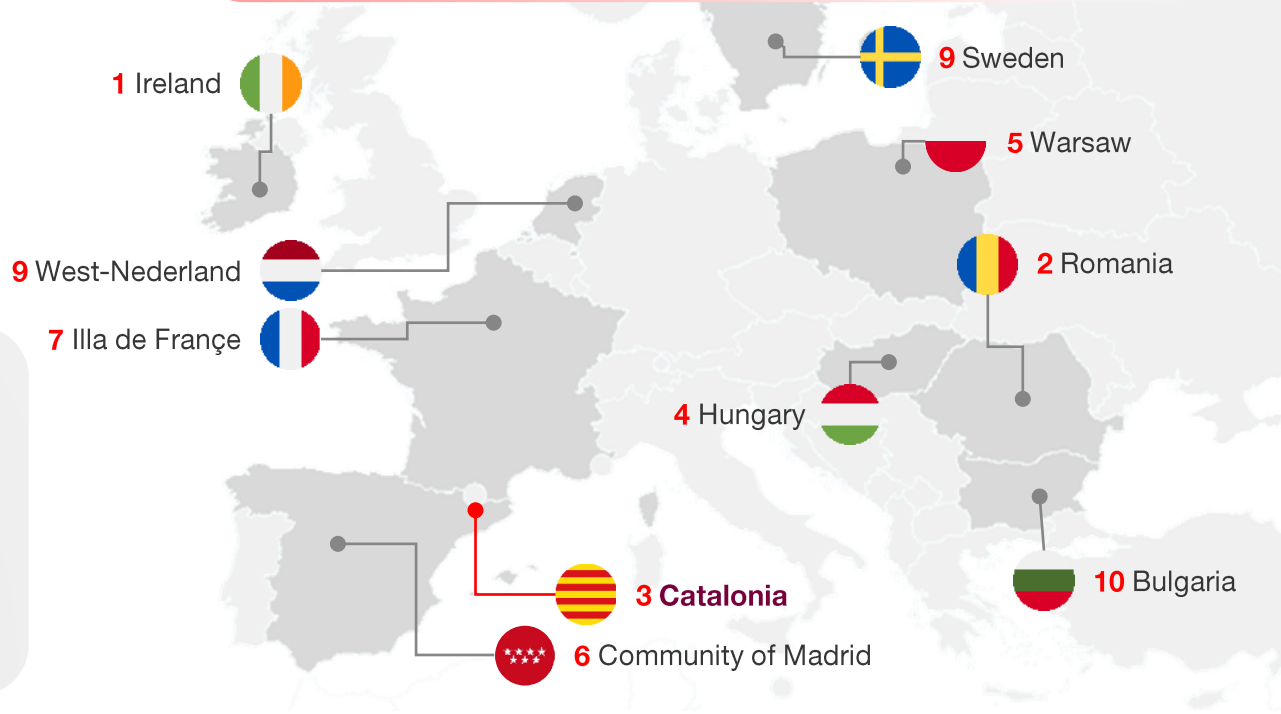
- 1 Ireland
- 9 Sweden
- 5 Warsaw
- 9 West-Nederland
- 2 Romania
- 7 Illa de France
- 4 Hungary
- 3 Catalonia
- 10 Bulgaria
- 6 Community of Madrid

Notes: the following sectors were considered: "Business machines & equipment", "Communications", "Consumer electronics", "Electronic components", "Semiconductors" and "Software & IT services", the sub-sectors "Advertising, PR, & related" i "Semi-conductor machinery" and the activities "ICT & Internet infrastructure", "Research & Development" i "Technical Support Center"

Source: *ACCIÓ, based on fDi Markets, 2025*

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Digital Innovation Hubs if Catalonia

The installation of 13 new Digital Innovation Hubs was announced in 2024, adding to the 147 that were already operating in the territory in 2023.

This data is part of a growing trend in innovative and technological business investments in Catalonia, which in the case of Digital Hubs has accelerated in recent years.

A total of 65 Digital Innovation Hubs were set up in Catalonia between 2020 and 2024, which brings the total number of digital hubs of foreign companies to 160.

Digital Innovation Hubs in Catalonia

Year	Value
2020	95
2021	117
2022	133
2023	147
2024	160

2024:
13 new Digital Innovation Hubs
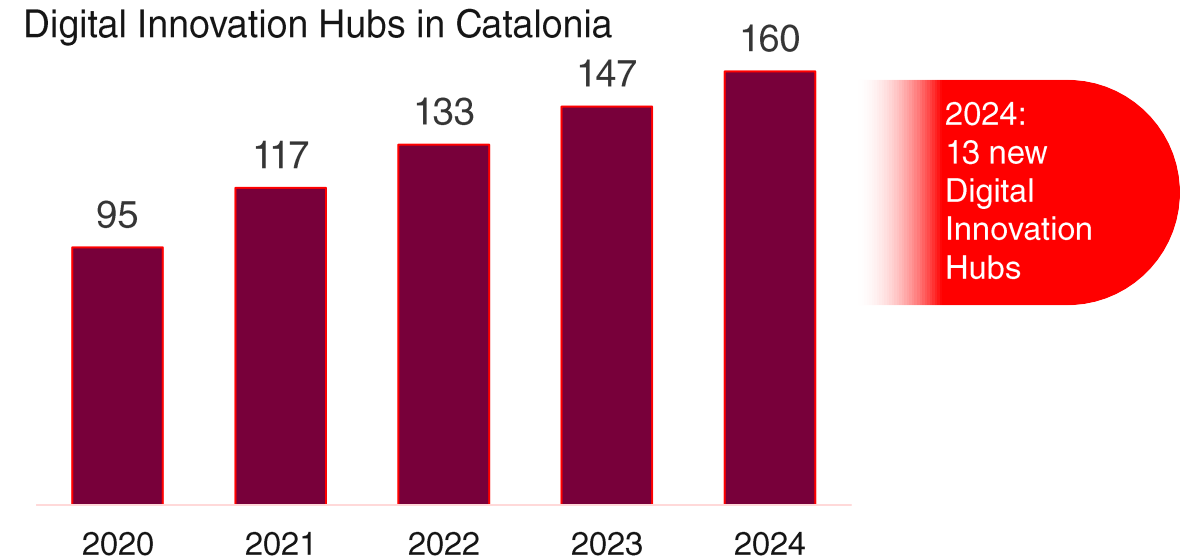
The 13 new digital hubs created **299 jobs** in 2024 and it is expected that by 2028 they will create more than 894 positions.

The economic impact of the new hubs by 2024 it is estimated at **€2.9 billion** per annum. The forecast for 2028 is that turnover will exceed €4 billion.

Notes: Digital Innovation Hubs are considered investments by foreign companies (whether greenfields or acquisitions, licenses, etc.) aimed at developing digital products, R&D, innovation or prototyping, which have their own team and offer global services to the entire business group or have an international scope. Those that only operate in commercial or sales value chains are excluded

Source: *Tech Hubs Overview 2025, MWC-ACCIÓ-Barcelona City Council and compilation of investments made public (announced) in ACCIÓ's press releases*

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Features of the 160 Digital Innovation Hubs in Catalonia

Geographic origin

United States of America 24%

Germany 16%

France 12%

United Kingdom 9%

Switzerland 4%

Sweden 4%
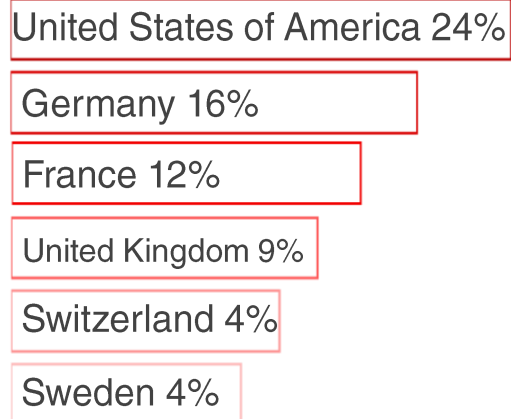
The United States accounts for just under a quarter (24%) of the total Digital Hubs.

Sectoral distribution

ICT and electronics (36.3%)

Video games (13.1%)

Consulting and business services (9.4%)

Finance and insurance (7.5%)

Pharmaceutical industry (6.9%)
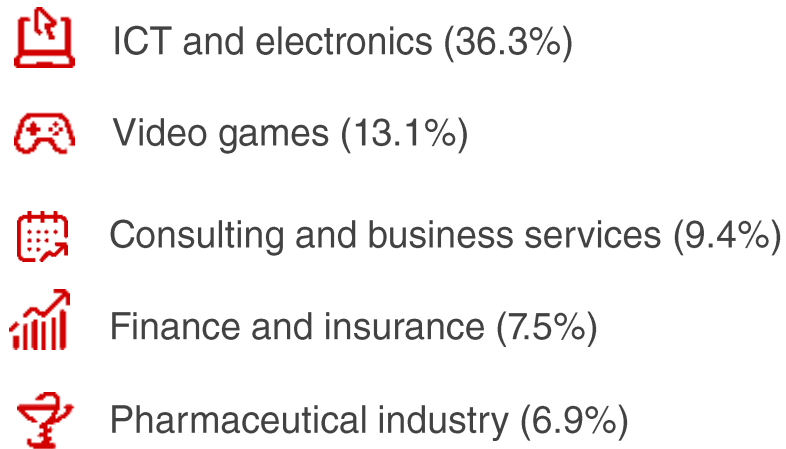
The ICT and electronics sector is the most important. The number of Digital Innovation Hubs stands at 58.

Location in Catalonia

76% of Digital Innovation Hubs are located in Barcelona. The rest of the municipalities in the metropolitan area account for another 24%.

Source: Tech Hubs Overview 2025, MWC-ACCIÓ-Barcelona City Council and compilation of investments made public (announced) in ACCIÓ's press releases

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160 companies have set up Digital Innovation Hubs in Catalonia

Digital economy and industrial systems

moodle · SATELLOGIC · veriff · PayFit · adesso · SOLIUM lega & finance
UL UNMANNED LIFE · infor · Microsoft
Giesecke+Devrient Creating Confidence · TechData · cisco · ocado · technica engineering · Apple · FESTO
Cien · Checkpoint · NTT DATA · facebook · Meet Deal · CCC COMPETENCE CALL CENTER
SEAT:CODE · FUJITSU · HCL · dynatrace
INGRAM MICRO · SQLI DIGITAL EXPERIENCE · ORACLE · TDCX · salesforce
T··Systems· · NUTANIX · DE CIX · bumble · Schneider Electric
BCG · UNIVERSAL ROBOTS · Hewlett Packard Enterprise · SITA · IBM · GFT · centiro · CONTENTSQUARE · ABB
SIEMENS · Sage · SAP · MiR · PARAGON Service Point · BIZERBA · enterprise · Deloitte.
accenture
MPS · TELAVOX · papernest · OMRON · Revolut · intel · Adevinta · Acuity · COOVALLY
DATAXSTREAM · thoughtworks · avanade · Media Markt · KPMG · Getronics · Delfos

Health

Dedalus HEALTHCARE SYSTEMS GROUP · HARTMANN · YPSOMED SELFCARE SOLUTIONS · iVascular · AstraZeneca · NOVARTIS
Pfizer zoetis · TOWA · BAYER · Roche · Alliance Healthcare Bringing healthcare closer · Teladoc HEALTH
VERISTAT · Diagnostics · B BRAUN · SANOFI · Boehringer Ingelheim

Mobility and logistics

Costa · Porsche Digital · SWVL · technica engineering · MYTHERESA
FLIGHT CENTRE TRAVEL GROUP · ALSTOM · IAG · amazon · FREENOW · KION GROUP
elringklinger · VOLKSWAGEN D:H · IRP systems · DHL · ManoMano · vueling · ZF

Audiovisual and Video Games

nicecactus · cimpress · IGG I GOT GAMES · tkww THE KNOT WORLDWIDE · FUNPLUS
UBISOFT · Outfit7 · Chartboost · SCOPELY · BANDAI NAMCO · THQNORDIC · paradox
ROVIO · LARIAN STUDIOS · AIKIMJA · GAMES · iOi · Smilegate · entravision · TILTINGPOINT RAISE YOUR GAME
SHAPE GAMES · zeptolab · POPCORE · bespoke pixel
NetEase Games · RIOT GAMES · GAMELOFT · DOLBY DIGITAL · Socialpoint
gameloudos · SANDSOFT GAMES · BANDAI NAMCO · VODOO STUDIO · viaplay · tripledot · King · NIMBLE GIANT ENTERTAINMENT

Food and drinks

LIDL · PEPSICO · BACARDÍ · Nestlé
DANONE · rohlik group · IFCO · SCRIM HIERNADIO · AI.HUB

Chemicals, packaging and textiles

AkzoNobel · enel · arxada · CRODA
DOMO caring is our formula · WANHUA · essity · Veepee

Finance and insurance

Allianz · Cofidis · unnax · N26
hastee. · Acuity · bitpanda · LGT Private Banking · checkout.com · SantéVet · TOKIO MARINE · ZURICH · STERN

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The UPC leads in the number of graduates in ICT degrees, while the UOC leads in master's degrees

Trend of ICT degree graduates

The demand for ICT degrees shows a positive trend, with the number of graduates reaching over 2,000 students in the last two academic years.

Year	Graduates
2017/2018	1,688
2018/2019	1,650
2019/2020	1,734
2020/2021	1,869
2021/2022	2,350
2022/2023	2,300
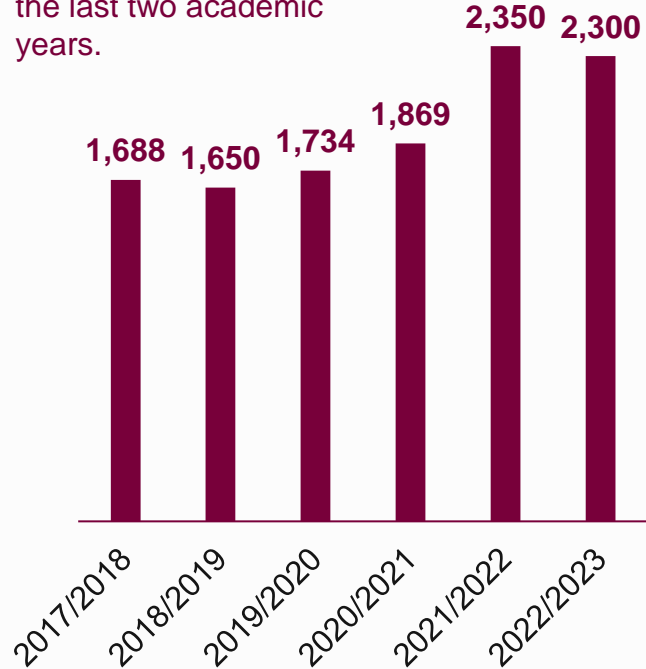
ICT degree graduates from Catalan universities

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH (UPC)
704 (2022-23)
768 (2021-22)

Universitat Oberta de Catalunya (UOC)
560 (2022-23)
465 (2021-22)

UAB Universitat Autònoma de Barcelona
312 (2022-23)
296 (2021-22)

Universitat Pompeu Fabra Barcelona (upf)
248 (2022-23)
296 (2021-22)

UNIVERSITAT DE BARCELONA
112 (2022-23)
120 (2021-22)

UNIVERSITAT RAMON LLULL
109 (2022-23)
131 (2021-22)

Universitat de Lleida
87 (2022-23)
101 (2021-22)

Universitat de Girona
86 (2022-23)
83 (2021-22)

UNIVERSITAT ROVIRA i VIRGILI
68 (2022-23)
65 (2021-22)

UNIVERSITAT DE VIC UNIVERSITAT CENTRAL DE CATALUNYA
14 (2022-23)
25 (2021-22)

ICT master's degree holders from Catalan universities

Universitat Oberta de Catalunya (UOC)
1,128 (2022-23)
1,079 (2021-22)

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH (UPC)
242 (2022-23)
234 (2021-22)

Universitat Pompeu Fabra Barcelona (upf)
141 (2022-23)
137 (2021-22)

UAB Universitat Autònoma de Barcelona
104 (2022-23)
123 (2021-22)

UNIVERSITAT RAMON LLULL
95 (2022-23)
107 (2021-22)

UNIVERSITAT ROVIRA i VIRGILI
70 (2022-23)
49 (2021-22)

Universitat de Girona
68 (2022-23)
35 (2021-22)

UNIVERSITAT DE BARCELONA
20 (2022-23)
25 (2021-22)

Universitat de Lleida
13 (2022-23)
11 (2021-22)

1,800 Total graduates 2021-22

1,881 Total graduates 2022-23

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The number of Catalan graduates in Vocational Education and Training* in the ICT field grew by[32] 42.4% in 2023

Barcelona continues to expand the education and training capacity of FP in the field of ICT. During the 2022-23 academic year, the places offered increased by 12.9% and reached a figure of more than 17,000 enrolled students.

Women

Although there is still a gender gap (12.2% women), during the 2022-23 academic year, the number of women enrolled grew by 26.4% compared with the previous academic year.

Specializations

The vocational education and training programs with the largest number of students enrolled are those in microcomputer systems and networks, software development, and cross-platform applications, and web application development.

Trend of VET graduates in the ICT field

2,700 (2020)
2,285 (2021)
2,880 (2022)
4,100 (2023)
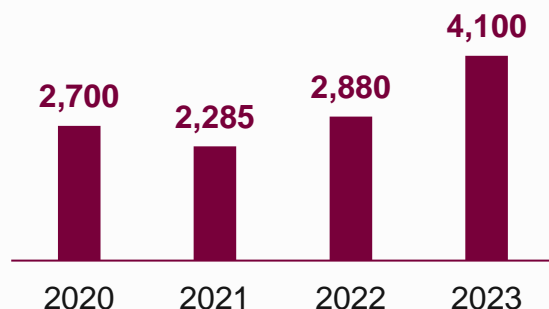
Specialized professional training in ICT generated 4,100 graduates during the 2022-23 academic year, of whom **almost 50% specialized in microcomputer systems and networks**.

Trend of enrollments in VET in the ICT field by gender

Legend: Dones — Homes — % de dones

Years: 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23

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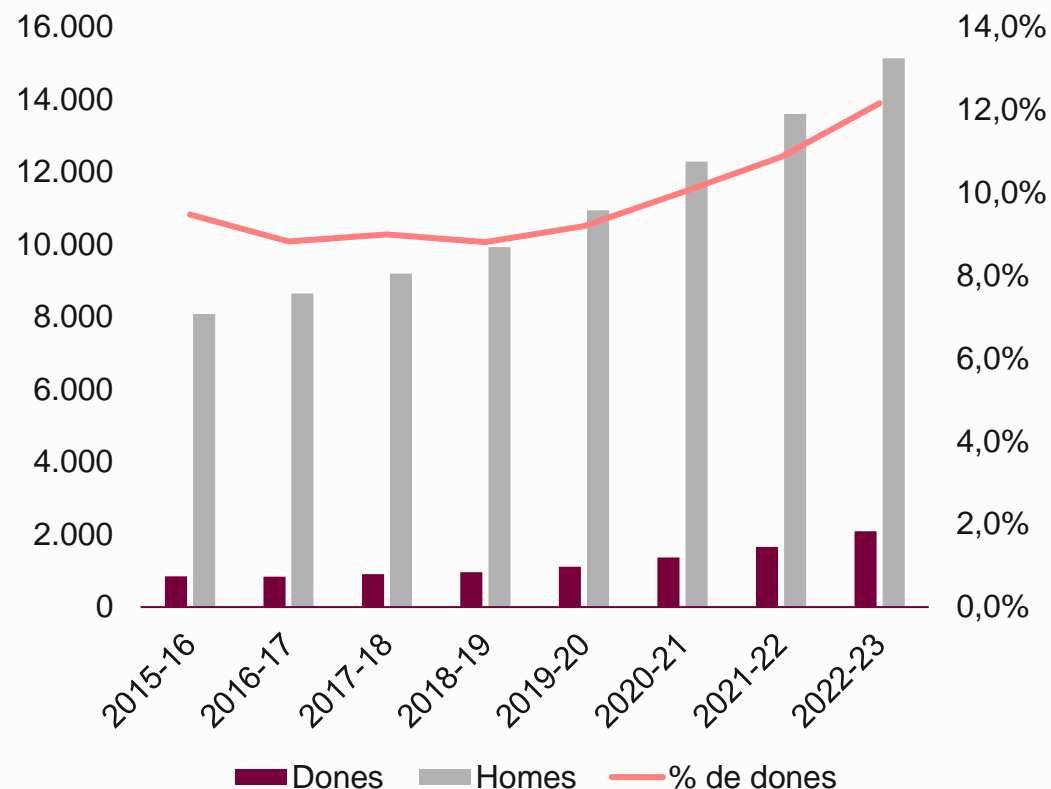
Large international companies choose Barcelona for its availability of digital talent

Sony AI 🇯🇵

"Catalonia is home to many research universities with consolidated AI programs and key technological and scientific organizations."

Michael Spranger
Chairman of Sony AI

COOVALLY 🇨🇳

"We settled in Barcelona because of the connectivity, the ecosystem of startups and large companies, and the ability to attract the best talents."

Guodong Wang
CTO, Coovally

DATAXSTREAM 🇺🇸

"The city and the region have a lot to offer, the technological ecosystem is strong, the universities enjoy international prestige, and we are impressed by the diversity of profiles and the level of local talent."

Jean-Jérôme Peytavi
Chairman, Dataxtream's EMEA

YPSOMED 🇨🇭

"In Barcelona there is a large pool of qualified people."

Simon Michel
CEO, Ypsomed

KION GROUP 🇩🇪

"Barcelona's rich technological, research, innovation and training ecosystem has been a key factor for KION Group's investment in Catalonia."

Blanca Sorigué
Managing Director, CZFB

Allianz Technology 🇩🇪

"Barcelona and Catalonia offer sustained growth, brilliant talent and competitive advantages at low risk."

Gerard Esparducer
Head of Spain Hub at Allianz Technology
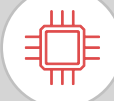
Source: ACCIÓ, based on Catalonia in Business

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3. Global trends in the Technological and Digital sector

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Global trends in the technological and digital sector: a field with impact across the board

Economic sphere	Industrial sphere	Social sphere	Healthcare sphere	Sustainability sphere
Business models and processes will be rethought to explore new ways to create value • • The development of digital skills will be a key factor for economic growth • • Digital technologies will serve the needs of the sectors and offer operational improvements • • Cybersecurity will be a key element to guarantee a more resilient technological and digital sector	The concept of **Industry 4.0** is a new approach that makes it possible to control production processes by providing integration and synchronization of entities and workflows within the value chain in real time, automating and valorizing the importance of data, increasing flexibility, allowing holistic and personalized manufacturing of products, and optimizing production times and resources.	The democratizing power of the technological and digital sector will offer opportunities to disadvantaged communities • • Hyper-personalization paves the way for more individualized digital experiences • • AI-based technologies will generate unprecedented connection opportunities • • Unleashing the potential of data will mean a significant leap forward in people's well-being	**Digital health**, understood as the development and use of digital technologies to improve health, will offer advances in the prevention, diagnosis, treatment, monitoring and management of diseases and health conditions, as well as in the monitoring and management of lifestyle habits that impact people's health. It will provide a wide range of benefits to the various actors in the ecosystem: health systems, healthcare personnel and patients.	AI is key to driving the development of a sustainable technological and digital sector • • AI's huge appetite for data has the potential to have a positive impact on the environment • • Digital technologies will accelerate scientific discoveries and action against climate change • • Digitalization is essential for safe, efficient, accessible and sustainable mobility

Source: ACCIÓ,, from own and Forbes reports, 2025; UNEP, 2025; EC, 2024; Digital Cooperation Organization, 2024; EY, 2024; OECD, 2024

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10 technologies that will be trending in 2025

Artificial intelligence

Productivity and automation at the service of companies and users

Cybersecurity

A constant challenge in an increasingly connected world

Quantum

The new frontier of technology

New space

The democratization of outdoor space

Hydrogen

Energy vector for the decarbonization of the economy

Decarbonization

A global challenge with great opportunities

Advanced manufacturing

Innovations that drive the industry of the future

Semiconductors

Without semiconductors there is no innovation

Health technologies

Innovation that saves lives and transforms medical care

Blockchain

Security and immutability of data at the service of all

Source: ACCIÓ

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Thank you!

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catalonia.com

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@Catalonia_TI

in linkedin.com/company/acciocat/
linkedin.com/company/invest-in-catalonia/

More information about the sector and related news:
https://catalonia.com/key-industries-technologies/industrial-systems-digitalization

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