



Industrial capabilities for technologies linked to Industry 4.0 in Catalonia

June 14th 2021

Technology snapshot

1. About Catalonia Trade & Investment



Catalan government's agency for business competitiveness

Catalonia
Trade & Investment



Generalitat de Catalunya
Gobierno de Cataluña



Best European
FDI Strategy
*fDi Magazine Awards by
Financial Times*



The Catalan Government's agency for business competitiveness. Attached to the Ministry of Business and Knowledge, it specializes in promoting business innovation and internationalization and has a network of 40 offices worldwide.



INVESTMENT



TRADE



INNOVATION

Catalonia Trade & Investment's success lies in offering a **pro-business approach** and **tailor-made solutions**.

The institution offers services for international companies considering Catalonia and Barcelona as an investment location in Europe. It also offers services for expansion or for new projects for already established firms in Catalonia. Its multidisciplinary teams work in the fields of investment and **international commerce**, and **technological innovation and cooperation**.

Source: ACCIÓ



Catalonia has all the assets of a powerful innovation economy

A powerful industrial base



A world-class tech hub



An open trade logistics crossroads



International and local talent in a top spot to live and work



A pro-business environment



Spain's powerhouse



6.3%

OF SPANISH TERRITORY

16%

OF SPANISH POPULATION



18.4%

OF SPANISH COMPANIES

20%

OF SPANISH GDP

25%

OF SPANISH INDUSTRY



21.5%

OF SPANISH INNOVATIVE COMPANIES

28.3%

OF THE TOTAL STATE-LEVEL AID OF THE H2020

34.2%

OF EUROPEAN PATENTS IN SPAIN



1ST

REGION IN FOREIGN INVESTMENT ATTRACTION

25.5%

OF SPANISH EXPORTS

32.7%

OF SPANISH REGULAR EXPORTING COMPANIES

Source: ACCIÓ based on data from Idescat, INE, EPO, CDTI and MINCOTUR

A diversified industry, the backbone of the Catalan economy

- Industry represents **19.8%** of Catalan **GDP**
- **Manufacturing** and **industry related services** represent **50%** of the **GDP**.



**Food
and drinks**

Largest industrial sector in Catalonia with **16.28%** of Catalan **GDP**.



**Chemicals
and plastics**

Largest chemical hub in **Southern Europe**.
48.7% of **Spanish chemical exports** (2009-2018).



**Automotive
and moto**

19.6% vehicles in Spain are **produced in Catalonia**, an automotive industry hub.



Life sciences

World's top 7 life sciences companies have **presence in Catalonia** and **5 top pharma** companies in Spain are **Catalan**.



**ICT and digital
transformation**

The Catalan **ICT sector** is **growing continuously**. Catalonia has **16,339** ICT companies. (**22.2%** of **Spanish** ICT companies).



Source: ACCIÓ

EU's top startup hub

More than 1,700 startups are located in Catalonia

4 unicorns in Catalonia



Valuation:
1,400 M€



Valuation:
1,000 M€

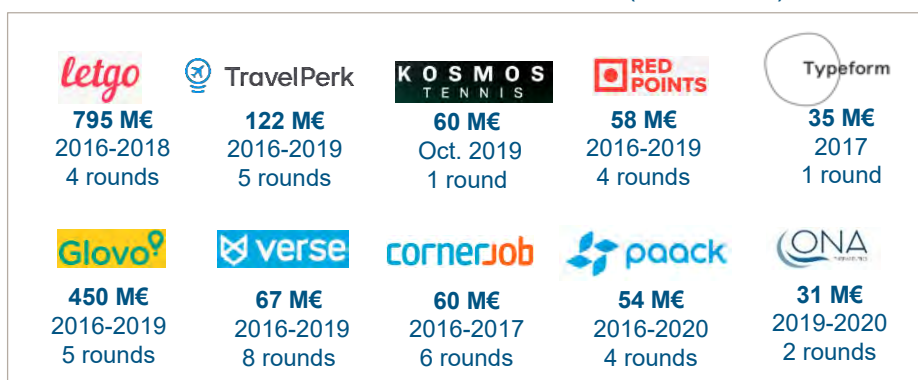


Valuation:
883 M€



Valuation:
5,600 M€

Main rounds of investment (2016-2020)



- More than 66.5% of start-ups work with technologies linked to Industry 4.0.
- 26% of workers and 20% of founders of the start-ups are foreign.
- **17,517 jobs** related to **Catalan startups**.
- In the last **5 years**, start-ups in the Catalan ecosystem have attracted **€ 2,800 million** in private investment.

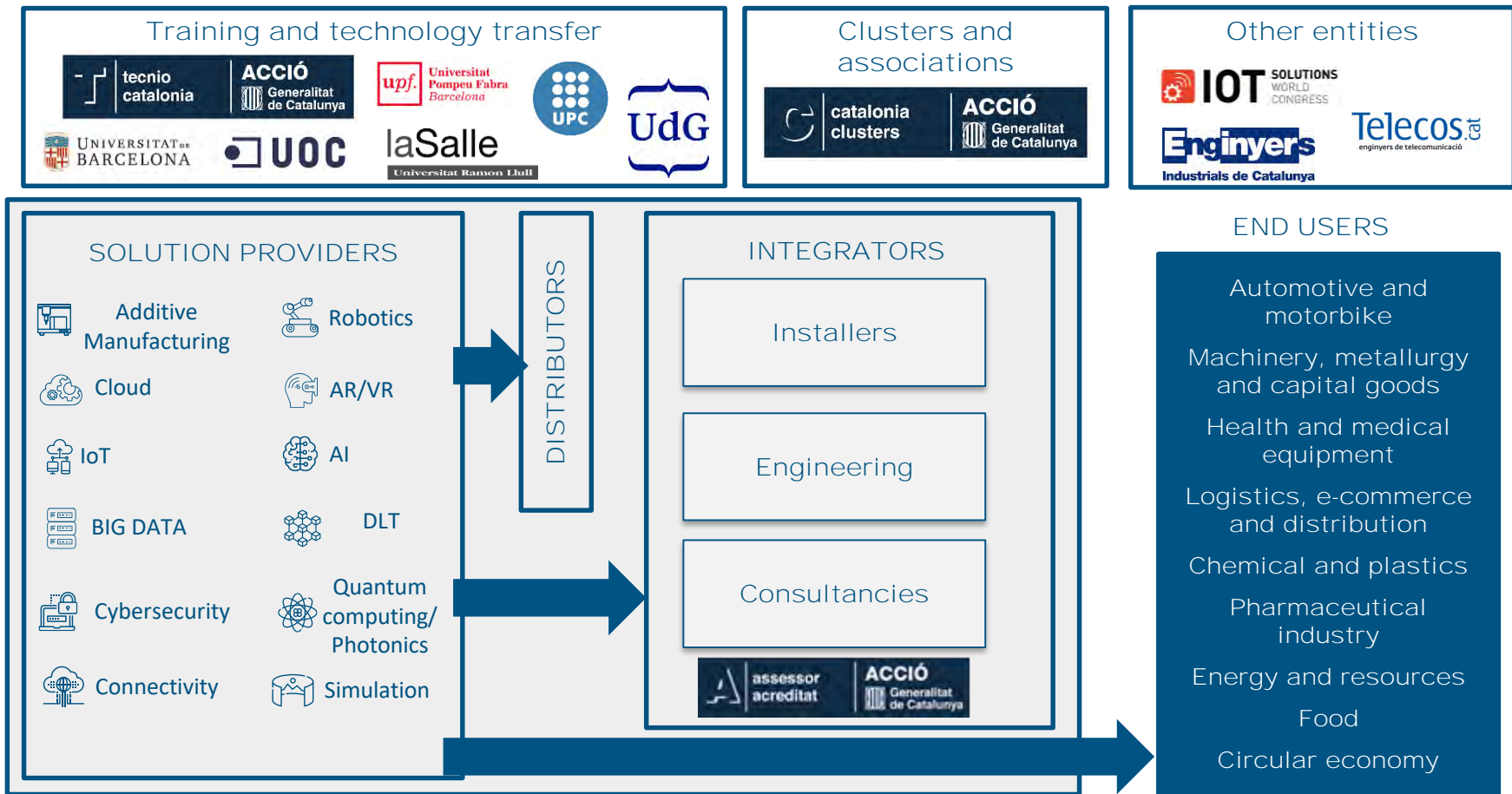
Source: ACCIÓ based on Barcelona & Catalonia Startup Hub 2020 and Dealroom.

Note: Future unicorns are tech companies valued between 200,000€ and 800,000€. Unicorns are tech companies valued at more than 800,000€.

2. Industry 4.0 in Catalonia



Value chain, ecosystem and map of Industry 4.0 agents in Catalonia



Industry 4.0 in Catalonia: main mapping conclusions



1,111 companies



€5.5 billion

The
1,111
companies
represent a

x3
growth

compared
to 2017

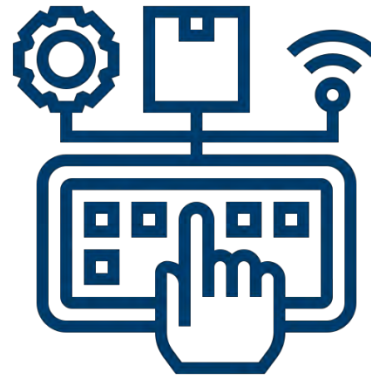


26,394 jobs

90.1% of the
total are
SMEs



42.6% of the companies have a turnover
of **more than one million euros** and
15.6% have a turnover of **more than ten
million euros**



45.5% of the companies
are less than ten years old



28.5% of companies are
startups

Degree of internationalisation:



31.3% of the companies are
exporters

Location















55.1% of companies are
located in Barcelona

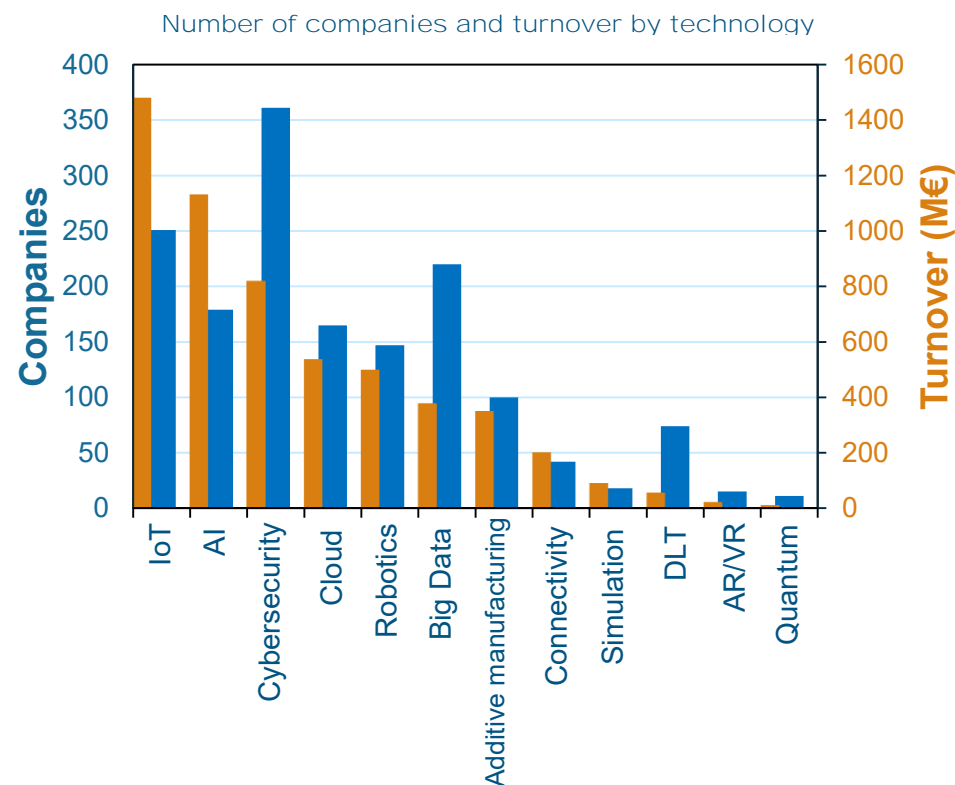
The technology with most companies detected is **cybersecurity**, but the companies with the highest turnover are those focused on **artificial intelligence** and the **Internet of Things (IoT)**

Impact of Industry 4.0 technologies in Catalonia

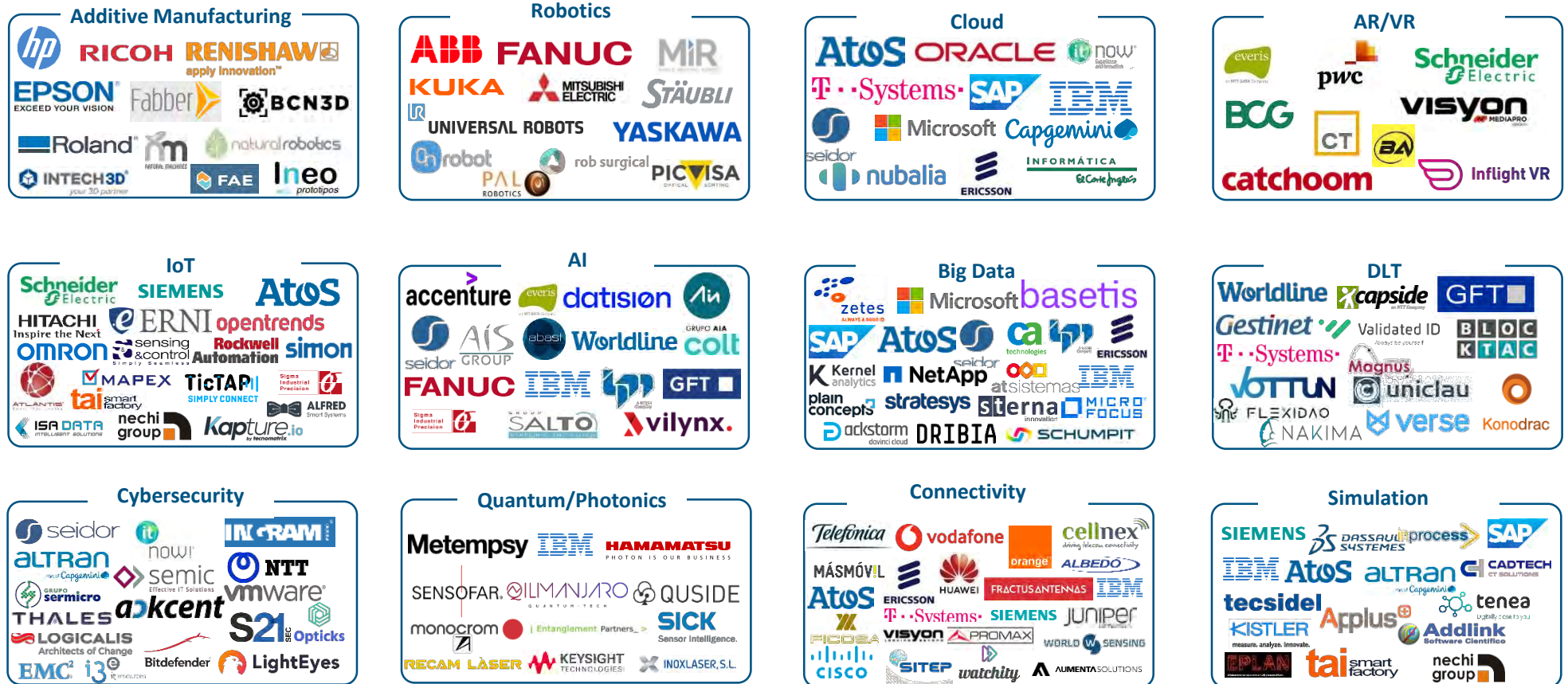
Number of companies, workers and turnover of I4.0 by technology

Cybersecurity is the technology that provides the largest number of companies, but those focused on the Internet of Things (IoT) and artificial intelligence have the highest turnover.

	Number of companies offering technology-related products/services
 Cybersecurity	361
 IoT	251
 Big Data	220
 AI	179
 Cloud	165
 Robotics	147
 Additive Manufacturing	100
 DLT	74
 Connectivity	42
 Simulation	18
 AR/VR	15
 Quantum computing	11



Companies providing Industry 4.0 solutions in Catalonia



Note: Partial illustrative image

Industry 4.0 support ecosystem in Catalonia

CLUSTERS OF THE CATALONIA CLUSTER PROGRAMME



BUSINESS ASSOCIATIONS



PROFESSIONAL ASSOCIATIONS



TRADE FAIRS AND EVENTS

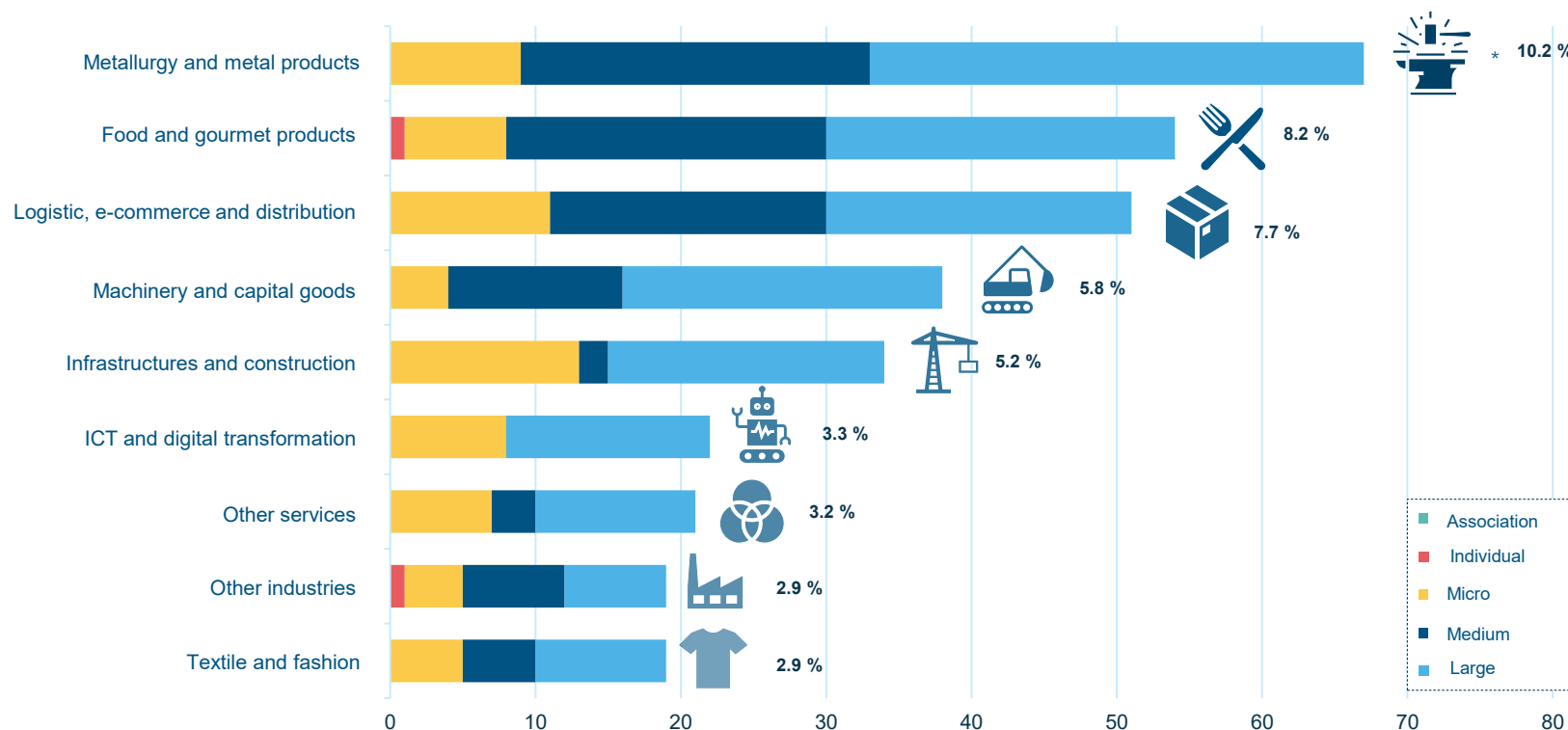


Note: Partial illustrative image

TECNIO centres specialising in Industry 4.0 in Catalonia



Sectors mostly demanding Industry 4.0 solutions in Catalonia



The **metallurgy and metal products** sector is the most demanding in the Business Competitiveness Coupons aid programme (Industry 4.0 Coupons), followed by the **food and gourmet products** and the **logistics, e-commerce and distribution** sectors.



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