





Barcelona & Catalonia Startup Hub

ACCIÓ

Government of Catalonia



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1. Barcelona and Catalonia in the global scenario of startups



Barcelona, southern Europe's leading startup hub

Barcelona lies 5th in the European league table of startup hubs,

behind cities such as London, Berlin, Paris and Amsterdam **(EU-Startups, 2017)**

POSITION	CITIES	
1	London	
2	Berlin	
3	Paris	
4	Amsterdam	
5	Barcelona	
6	Madrid	
7	Stockholm	
8	Dublin	
9	Copenhagen	
10	Milan	

Source: Ranking of Europe's biggest startup hubs in 2017 by EU-Startups according to the number of startups registered by each of these cities on CrunchBase (since 2015) and the number of startups registered with AngelList for each city.

Note: The hub is known internationally by the name Barcelona, although the geographical area covered is Catalonia.





Barcelona, 3rd favourite startup hub for founders

20% of founders Europe-wide would establish their startup in Barcelona

Barcelona lies 3rd in rankings of European hubs as the preferred site of founders Europe-wide for creating a startup. if they were establish one again. (Startup Heatmap Europe, 2018)

POSITION	HUBS	% OF FOUNDERS WHO WOULD CREATE A STARTUP
1	London	41%
2	Berlin	40%
3	Barcelona	20%
4	Paris	20%
5	Lisbon	12%
6	Amsterdam	12%
7	Munich	6%
8	Milan	6%
9	Zurich	6%
10	Copenhagen	6%

Note: Founders were asked to choose 3 hubs from 93. The percentages show the founders who would currently establish a startup in each city.

Barcelona founders have strong connections with others Paris. Amsterdam London. and Berlin (Startup Heatmap Europe, 2018)



Note: Founders' connections are defined as strong when there is mutual brand recognition and at least 5% of founders from each hub are asked to choose the other hub as favourite.

Source: The Rise of the Interconnected Startup, Startup Heatmap Europe, 2018.





Barcelona, 4th leading European city for capital investments in startups

Barcelona lies in fourth position for volume of investment received and in fifth for the number of transactions made (Atomico, 2017)

Ranking of European cities by volume of investment received

NO.	CITIES	VOLUME OF INVESTMENT RECEIVED (M\$)		
		2015	2016	2017
1	London	2.878	2.473	5.080
2	Berlin	2.400	1.011	2.054
3	Paris	999	1.812	1.550
4	Barcelona	347	295	722
5	Stockholm	815	971	547
6	Dublin	120	393	375
7	Amsterdam	217	133	293
8	Vienna	116	55	291
9	Madrid	105	249	230
10	Munich	229	185	218

Ranking of European cities by number of investment transactions

NO.	CITIES	NUM BE	R OF TRANS	ACTIONS
		2015	2016	2017
1	London	495	433	410
2	Berlin	200	203	151
3	Paris	167	312	277
4	Stockholm	91	197	195
5	Barcelona	78	80	79
6	Dublin	32	83	27
7	Amsterdam	95	90	55
8	Vienna	16	18	24
9	Madrid	58	46	38
10	Munich	46	44	38

Note: The currency that appears in the report for the received investments has been maintained. In this case it is dollars (\$).

Source: The State of European Tech 2017, Atomico





2. Main features of Catalan startups



Catalan startups in figures

3 out of 4 Catalan startups have obtained financing from investors

Barcelona, southern Europe's leading startup hub

Industry 4.0 technologies startups are the most numerous, followed by life science, and mobile & software startups

38% of founders have previously established other startups

+1,300 startups

13% of startups are Deep Tech

26% of startup employees and 15% of founders are foreigners

45% of startups have ecommerce & marketplace as a business model

Catalan startups employ 13.820 people

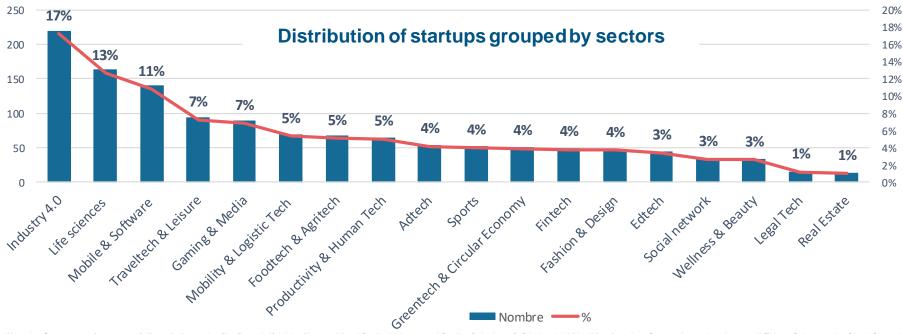
Source: Barcelona & Catalonia Startup Hub





Industry 4.0 technologies startups are the most numerous, followed by life sciences and by mobile & software startups

13% of startups are Deep Tech

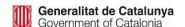


Note 1 - Sector groupings are as follows. Industry 4.0: Big Data; Artificial Intelligence; Virtual Reality & Augmented Reality, Robotics; 3D Printing & Additive Manufacturing; Systems Integration; Internet of Things; Cybersecurity, Cloud Computing; Hardware & Wearables / Life sciences: Healthtech; Biotech & Pharma; Mediech / Mobile & Software; Internet & other Software; Telecom / Gaming; Mediatech & Content; Film & Video & Photo; Music / Mobility, & Logistic Tech: Mobility, Logistic Tech; Smart Cities / Productivity & Human Tech: Productivity Tech; Human Tech & Jobs / Fintech: Fintech & Insurtech; Blockchain

Note 2 - Deep Tech groups together different categories of the directory. Mobility, Artificial Intelligence, VR/AR, Robotics, Blockchain, IoT, Cloud Computing, and Industry 4.0. The definition by Dealroom of the Deep Tech concept has been used.

Source: Barcelona & Catalonia Startup Hub. This graph has been drawn up using the data of 1.301 startups...





Examples of Catalan startups at the Barcelona & Catalonia Startup Hub

3D Printing & Additive Manufacturing



Artificial Intelligence



Big Data



Biotech & **Pharma**



Fashion & Design



Robotics

Healthtech

Industry 4.0

Internet of Things

Medtech











GlyCardial Diagnostics Vascular ALIBAVA **MDADmit** ΛNCD

NABLA

Sports



Systems Integration



Traveltech & Leisure



Virtual Reality / **Augmented Reality**



Wellness & Beauty



Source: Barcelona & Catalonia Startup Hub. There are currently 1,301 startups.

Note: The use of these brands is merely informative. The brands mentioned in this report belong to their respective owners and in no event are owned by ACCIO.

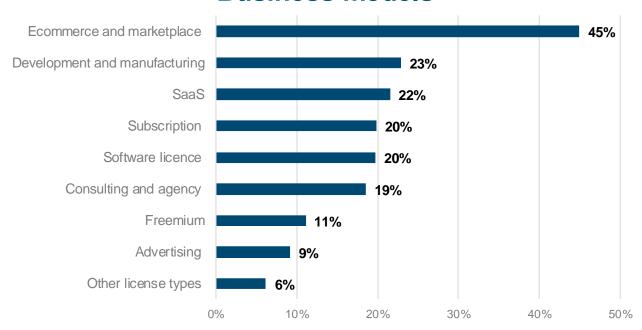




45% of startups have ecommerce & marketplace as a business model

The SaaS business model has increased by 5 percent with respect to 2017, and has risen from 17 to 22%

Business models



Source: Barcelona & Catalonia Startup Hub. This graph has been drawn up from the responses of 1,017 startups. Note: The companies chose the business models that they are applying (more than one if necessary). The graph's values therefore exceed 100%.

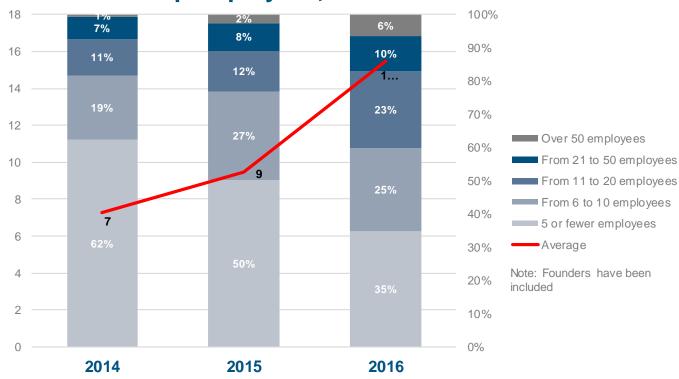




Catalan startups employ 13.820 people

The aggregate employment of this group has increased by 18% with respect to the previous year (11.715 people)

Startup employees, 2014-2016



Source: EIC (ACCIÓ) from the Barcelona & Catalonia Startup Hub directory and ORBIS. This graph has been drawn up using the data of the 324 startups that can provide information on the number of employees for all the years in the series (2014 to 2016). The total number of startup employees in 2016 was calculated by extrapolating the sample for that year.





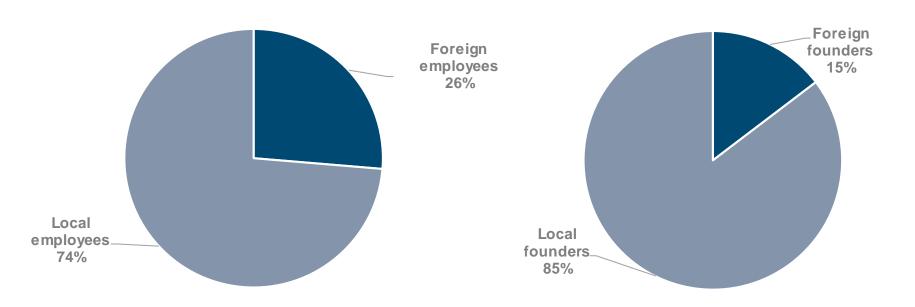
3. International talent: foreign founders and employees in **Catalan startups**



26% of startup employees and 15% of founders are foreigners

Origin of startup employees

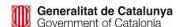
Origin of Catalan startup founders



Source: Barcelona & Catalonia Startup. This graph has been drawn up using the data of the 851 companies that have reported data on employees from 2016 or 2017.

Source: Barcelona & Catalonia Startup. This graph has been drawn up using the data of the 818 companies that have reported data on founders from 2016 or 2017.



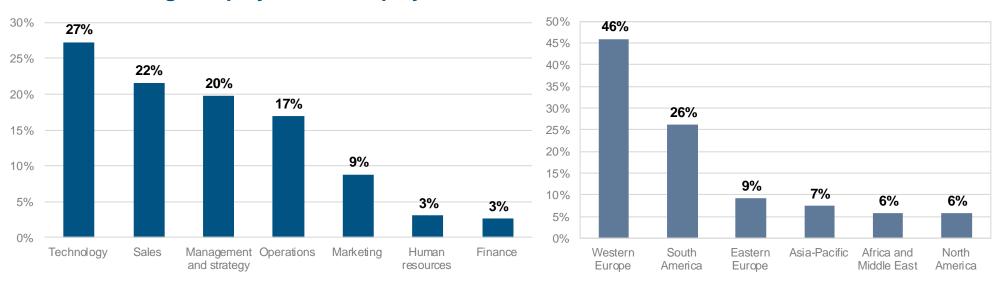


Technology attracts most foreign talent and accounts for 27% of foreign employees

Nearly half of the foreign employees of Catalan startups come from Western Europe (46%). There is also a significant number of employees from South America (26%)

Functional areas of the startups in which foreign employees are employed

Geographical origins of foreign employees



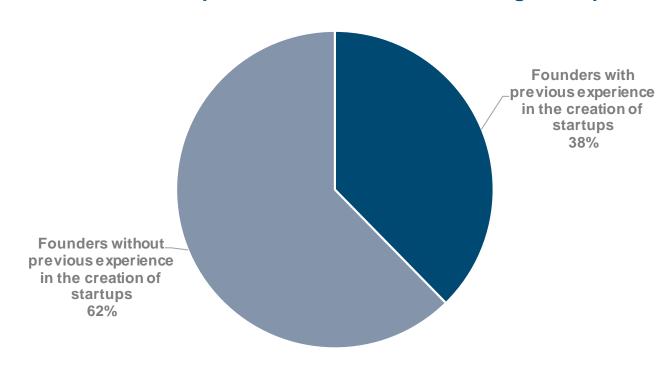
Source: Barcelona & Catalonia Startup. This graph has been drawn up using data from the 305 companies that have reported information from 2017 on the 1,695 foreign employees. The category of foreign employees also includes foreign founders, who are concentrated in the area of management and strategy.





38% of founders have previously established other startups

Previous experience of founders in creating startups

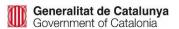


Source: Barcelona & Catalonia Startup. This graph has been drawn up using the data of 818 companies that have reported data from 2016 or 2017 on founders.



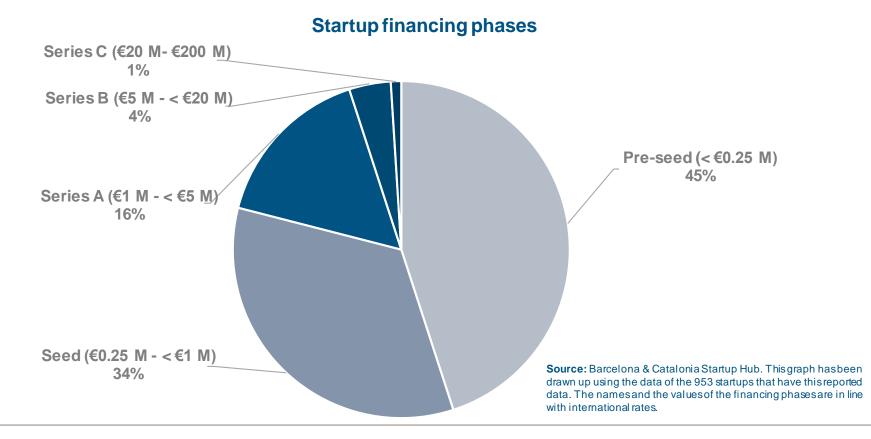


4. Financing of Catalan startups



3 out of 4 Catalan startups have obtained financing from investors

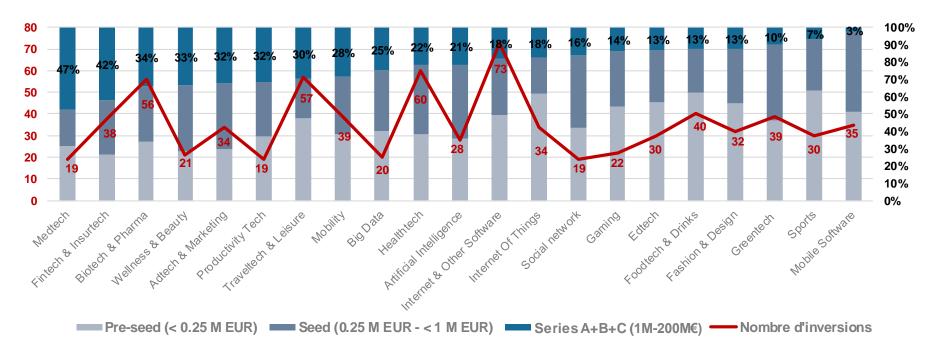
21% of startups have obtained rounds of investment worth over one million





Medtech, Fintech & Insurtech and Biotech & Pharma startups attract higher investments (Series A+B+C) than the rest

Phases of financing by sectors



Source: Barcelona & Catalonia Startup Hub. This graph has been drawn up using the data of the 953 startups that have reported information on financing status. Only the sectors with over 19 startups financed are shown.



Main rounds of investment, 2017-2018

Main rounds of investment, 2018













Herta

Security &



21 Buttons

Letgo

Fashion & Design

431 M€

Glovo App Logistic Tech **Travelperk** Traveltech &

Leisure

Minoryx Biotech & Pharma

21,3 M€

ABAC

Healthtech

16 M€

15 M€

Social network

Cybersecurity

14,6 M€

August 2018

August 2018

115 M€

55 M€ April & October 2018

September 2018

February 2018

September 2018

July 2018

Main rounds of investment, 2017











Typeform



Verse

Fintech &



Letgo

Fashion & Design

IdFinance

Fintech & Insurtech

Foodtech & Drinks

Nice Fruit

Glovo App Logistic Tech

Productivity Tech

Insurtech €29.2 M

€18.5 M

Corneriob Human Tech &

€17 M

Jobs

€163 M January 2017

€42 M February 2017

€35 M June 2017 €30 M July 2017

September 2017

May 2017

May 2017

Source: Barcelona & Catalonia Startup Hub.

Note: The use of these brands is merely informative. The brands mentioned in this report belong to their respective owners and in no event are owned by ACCIÓ.



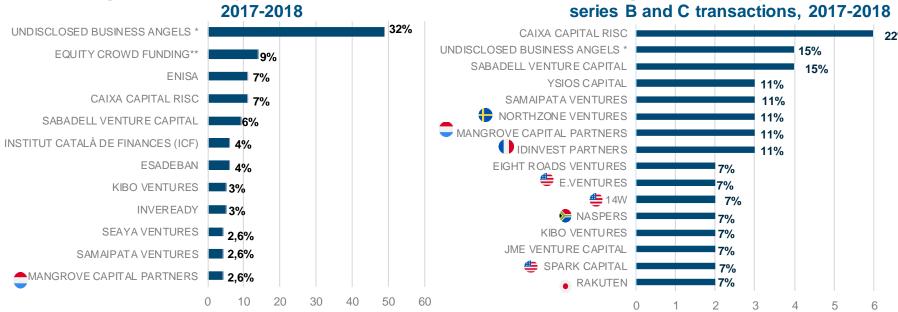


Business angels account for 36% of investments in startups

(different business angels + ESADEBAN)

Foreign investors are involved in 74% of the highest rounds (series B and C)

Ranking of investors by the number of transactions,



Number of rounds they have taken part in

* Names undisclosed ** Different groupings of crowdfunding platforms

Source: Barcelona & Catalonia Startup Hub based on Zephyr (Moddy's) and specialised press. 154 investments calculated (2017-2018) and made by 202 different investors. In virtually all the rounds more than one investor at a time tookpart (co-investment) and therefore the graph total exceeds 100%

Number of rounds they have taken part in

* Names undisclosed.

Source: Barcelona & Catalonia Startup Hub based on Zephyr (Moody's) and specialised press. The graph has been drawn up according to the highest rounds of investment (the 27 rounds of over €5,000,000). 63 different investors took part (converted).

Ranking of investors by the number of



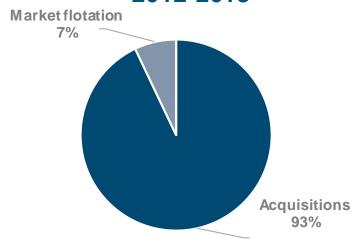


Traveltech & Leisure startups account for 20% of exits

Exits by sector, 2012-2018

Sectors	Total exits	% of exits over total
Traveltech & Leisure	17	20%
Adtech & Marketing	8	9%
Wellness & Beauty	5	6%
Biotech & Pharma	4	5%
Big Data	4	5%
Logistic Tech	4	5%
Productivity Tech	4	5%
Internet & Other Software	4	5%
Film & Video & Photo	4	5%
Fashion & Design	3	4%
Cloud Computing	3	4%
Gaming	3	4%
Foodtech & Drinks	3	4%
Mediatech & Content	3	4%
Healthtech	3	4%
Resta de sectors	13	11%
TOTAL	85	100%

Breakdown of exits: acquisitions and market flotations, 2012-2018



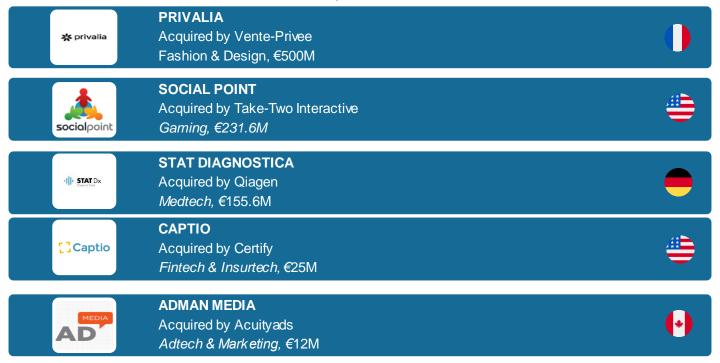
Source: EIC (ACCIÓ) based on the records of startup exits of Barcelona & Catalonia Startup Hub, specialised press and Zephyr (Moody's). Graph drawn up using the data of 85 companies. Further exists may have occurred in Catalonia. Only those of startups recorded in Barcelona & Catalonia Startup Hub are included here.





Foreign companies are the main buyers of **Catalan startups**

Main exits, 2016-2018



Source: EIC (ACCIÓ) using the exit record of companies that were previously startups, based on data published in the specialised press and in Zephyr (Moody's). Note 1: The complete list of exits may be consulted at: http://startupshub.catalonia.com/exits-in-catalon-startups, Note 2: The use of these brands is merely informative. The brands mentioned in this report belong to their respective owners and in no event are owned by ACCIÓ.



5. Objectives and methodology of the Barcelona & Catalonia Startup Hub



Strategic objectives

What do we intend to achieve with this web directory?

- 1. To have a register of all Catalan startups that meet the requisites to be considered as startups and for inclusion in the web directory: http://catalonia.com/startups-in-catalonia/catalanstartup-directory/add-your-startup.jsp
- 1. To position the Catalan ecosystem of startups internationally. We wish Catalonia to be perceived as a first-rate technological hub for business and for investment.
- 2. To display investment opportunities to investors.
- 3. To promote corporate venturing operations among major companies and startups (as a source of cutting-edge technology).

- 4. To encourage collaboration and synergies among startups.
- 5. To obtain greater overall knowledge of these startups in order to design and execute the most suitable public policy for startups as a whole.
- 7. To position Catalonia Trade & Investment, the international brand of ACCIO, as the major agent for promoting technological entrepreneurship, innovation and the internationalisation of Catalan companies, and to attract foreign investment.



Methodology

Requisites for inclusion in the online directory of startups

A startup is a company that...

- was recently created (fewer than 10 years since its incorporation) and with a finished product for sale (except Biotech).
- is scalable and has high growth potential. A scalable company is one capable of growing quickly without being hindered by its structure or its available resources (time and money).
- was created by entrepreneurs with the intention of growing it (ambition!).
- is highly innovative or technological.
- is addressed to the global market.
- has a corporate (and not self-employed) Tax ID No.

— does not provide consulting or software/apps development services simply upon customer request, but also has its own product. Neither should it be a website/webpage with no activity.

It is not a startup when...

- it has been acquired by a corporation (EXIT!).
- it has been floated in the stock market (EXIT!).
- It has licensed its product, if a biotechnology company.
- the founders no longer exercise management functions and have become mere shareholders.
- it has been inactive for over 1 year.



Methodology II

Periodic updates of the online startup directory

ONGOING UPDATES

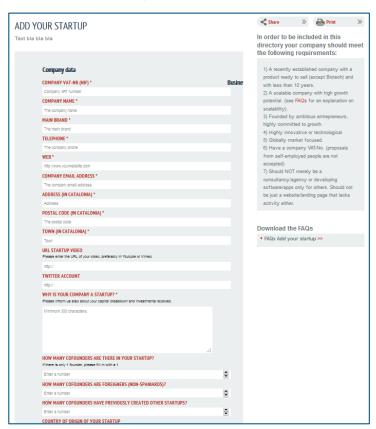
The directory of Catalan startups, Barcelona & Catalonia Startup Hub, was created in 2016. It is updated periodically as new startups apply to join it using the Add your startup form, after validation by an ACCIO internal committee.

Companies invited to join it must follow the same process as those that apply independently.

YEARLYSURVEY

A yearly survey is run to update information on the startups. 49 % of startups responded to the survey in 2018.

The startup database currently contains 1,301 active companies.



Note: The web application form can be found at http://catalonia.com/startups-incatalonia/catalan-startup-directory/add-your-startup.jsp





