Why Catalonia?





CATALONIA

Some Data

• Area: **32,108 sq km**

Population: **7.5 million** (2017)

GDP: € **234,651 million** (2017)

GDP per capita: € 30,078/year (2017)

Ompanies: **608,981** (2017)

Industrial companies: **36,374** (2017)

Industrial Production Index: **3.7** (variation 2017)

• 19.0 million foreign tourists/year (2017)

♦ 70,829 million exports (2017)

♦ 84,322 million imports (2017)

17,091 regular exporting companies (2017)

8,642 foreign companies (2018)

€ 3,171 million for eign investment (2017)

9,256 Catalan companies in 137 foreign

countries (2017)

• 9,282 innovative companies (2016)

• 1.46% of GDP dedicated to R&D (2016)

• 1.05% of world's scientific production (2015)

16%

POPULATION

ANISH OF

20%

OF SPANISH GDP

24%

OF SPANISH INDUSTR

25%

OF SPANISH BUSINES ENTERPRISE R&D EXPENDITURE 34%

OF SPANISH REGULAR EXPORTING COMPANIES

The Catalan competitive mix

Catalonia enjoys a dynamic, industrial, diverse and extremely business friendly economy

Competitive Economy



Adding more to your business model, with diversified industrial activities backed up by a solid network of suppliers and services.

Talent and Education



With top level universities and prestigious schools, companies can rely on a pool of talented and committed professionals.

International and Global



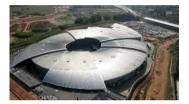
From Southern Europe, Catalonia and Barcelona connect you to the world through an open trading economy.

Creativity and Entrepreneurship



With the energy and assistance to turn great ideas into a reality, Barcelona is a dynamic start-up ecosystem where new initiatives can flourish.

Innovation Culture



Both the public and private sector have made innovation and technology a priority in Catalonia.

Business Mindset



Through the offices of Catalonia Trade & Investment, a pro-business government creates a supportive ecosystem for businesses.



Top companies in Catalonia

International Catalan companies











































Some of the world's most famous brands have chosen to Invest in Catalonia

































































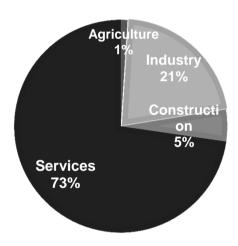
A diverse, dynamic & industrial economy



Industry represents 21.4% of Catalan GDP

However, business services, commerce, energy, transport and telecommunications are all industry related activities that, together with more traditional industry, represent **50%** of **the Catalan GDP.** Furthermore, the **tourism** sector accounts for 12% of the Catalan GDP.

Distribution of Catalan GVA 2017



Source: IDESCAT; Generalitat de Catalunya.



New investment opportunities in Catalonia can be found in emerging sectors such as:

Industry

4.0

Industry



Paints and coatings



Smart packaging

Sports



ICT Related

Big data and data analysis

Ecommerce



Smart mobility



(+ %)

Videogames

Services

Food service



Shared economy



Silver industry





Leading Scientific Facilities

Renown applied and basic research groups supporting technological transfer and a complete network of scientific and tech centres represent the base for Catalonia's research and innovation programme.



Scientific Park of Barcelona



Institute of Chemical Research of Catalonia The 1st world institution (*)



Biomedical Research Park Southern Europe leader in Biomedical investigation



Mare Nostrum 3rd Southern European Supercomputer



IDIADA Automotive testing facility



ALBA Synchrotron Most important Mediterranean area scientific facility



Barcelona Institute of Sciences and Technology



The Institute of Photonic Sciences One of the finest research institutions in the world (*)



TECNIO centres for technology transfer in different areas which give added value to business projects.

A wide range of hospitals, universities and research groups, all pioneers in oncology, life sciences, nanotechnology, photonics, etc.



Connect to ACCIÓ!





Connect to 40 worldwide offices in over 110 markets

The 40 Catalan Government Trade & Investment Offices assess and support international companies interested in investing in Catalonia and Barcelona, as well as offering personalized assistance to Catalan companies wishing to open in new markets and to find global business opportunities



Why Catalonia for Startups?





Catalonia & Barcelona, a magnet for startups















"Barcelona International Hub is ahead with Consumer Platforms and eCommerce startups."

Startup Heatmap Europe 2018

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 <u>CrunchBase</u> (since 2015) and the number of startups registered with <u>AngelList</u> 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, were they to establish one again. (Startup Heatmap Europe, 2018)

POSITIO N	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%			
Note: Fbunders were as Red Rechbage hubs from 93. The per centages show the ounders who would currently establish a startup in each city.					

Barcelona founders have strong connections with others in London, Paris, Amsterdam 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	NUMBER OF TRANSACTIONS		
		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 (\$).

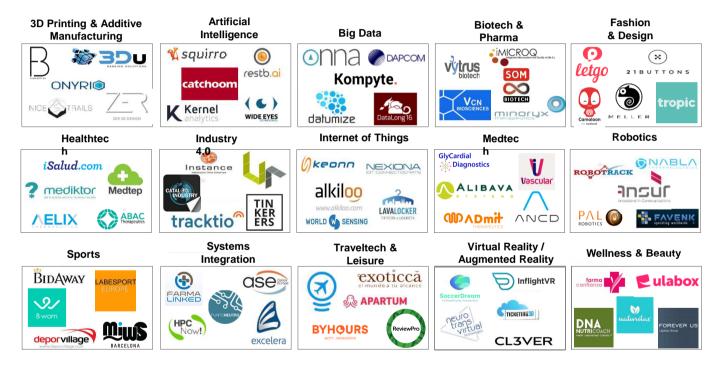
Source: The State of European Tech 2017, Atomico



"Catalonia has identified 1,300 startups that creating 13,800 jobs."

Barcelona & Catalonia Startup Hub 2018

Examples of Catalan startups at the Barcelona & Catalonia Startup Hub

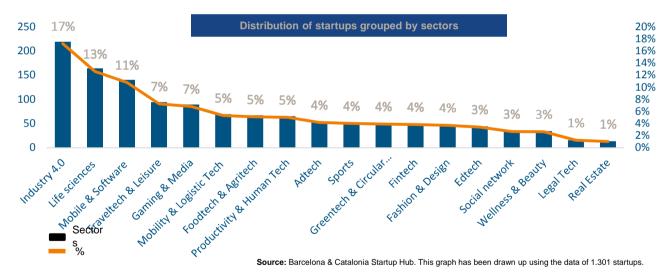


Source: Barcelona & Catalonia Startup Hub. There are currently 1,301 startups. Note: The use of these brands is merely informative. The brands mentioned in this report belong to their respective owners and in no event are owned by ACCIO.

Industry 4.0 technologies startups are the most numerous

Followed by Life sciences and by Mobile & Software startups

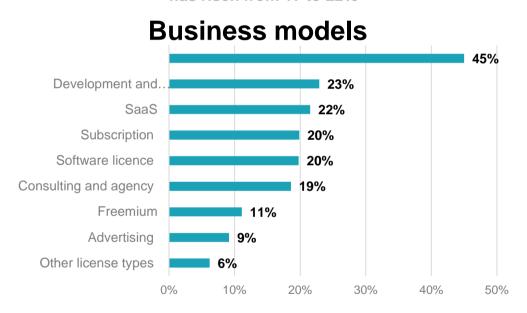
13% of startups are Deep Tech



Note 1 - Sector groupings are as follows. Industry 4.0: Big Date; Artificial Intelligence; Virtual Reality & Augmented Reality; Robotics; 3D Prinning & Additive Manufacturing; Systems Integration; Internet of Things; Cybersecurity; Cloud Computing, Hardware & Wearables / Life sciences: Healthtech; Biotech & Pharma; Medictor / Mobile & Software; Intelligence / Gotware; Telecon / Gaming & Media: Carning; Mediatech & Content; Film & Video & Photo; Music / Mobility & Logistic Tech: Mobility; Logistic Tech: Mobility; Logistic Tech: Mobility; Logistic Tech: Mobility Conductivity & Human Tech: Productivity Tech; Human Tech & Jobs / Fintech: Fintech & Insurtech; Blockshar, India Note 2 – Deep Tech groups together different categories of the directory; Mobility, Artificial Intelligence, VR/AR, Robotics, Blockshain, IoT, Cloud Computing, and Industry 4.0. The definition by Dealtom of the Deep Tech concept has been used.

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%



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%.

Testimonials

Glovo

Oscar Pierre

CEO at Glovo

"Talent is our biggest asset. We are hiring a lot of senior talent in Barcelona and I couldn't be more proud of how the tech ecosystem is evolving here. It is a great city not only to live, but to work and to start up your business."

PAYMENT INNOVATION HUB

"Barcelona has many factors that are making it increasingly attractive for big corporations: quality of life, pool of talent, startup ecosystem, etc... And all of them are quickly positioning Barcelona as an European startup & innovation city.'

Silvana Churruca CEO of the Payment Innovation Hub

"We don't have to work hard at persuading people to come and work for us in Barcelona. The city sells itself."



Avi Meir Co-founder of Travelperk

"Barcelona has an established ecosystem, large companies and technological events, the entrepreneurial initiative has a strong public support, an increasing access to capital and a very relevant aspect, local and international talent, which has allowed the city

global companies have beenzalo López created"

Director of The Valley Barcelona

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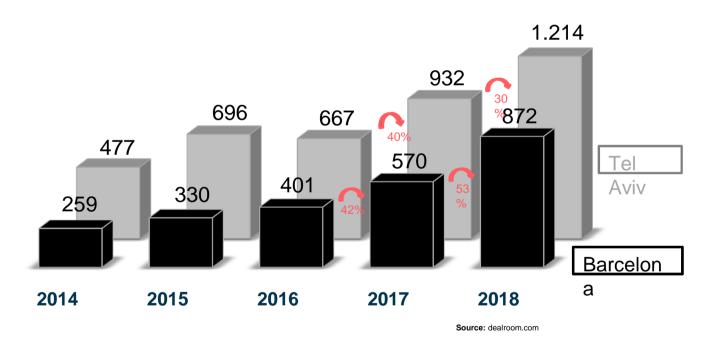


"Catalonia is the best Southern European region for investment in 2018 and 2019."

Financial Times Group 2018

Venture Capital Investment in Catalan Startups

Evolution of the total investment to startups in the Barcelona ecosystem



Main rounds of investment, 2017-2018

Main rounds of investment, 2018



Letgo Fashion & Design

€431 M

August 2018

Glovo⁹

Glovo App Logistic Tech

> €115 M August 2018



Travelperk Traveltech & Leisure

€55 M April & October 2018



Minoryx Biotech & Pharma

€21,3 M September 2018



ABAC Healthtech

February 2018

€16 M



Herta Security & Cybersecurity

€15 M September 2018 21 Buttons

2 1 B U T T O N S

Social network

€14,6 M July 2018

Main rounds of investment, 2017



Letgo Fashion & Design €163 M

January 2017



IdFinance Fintech & Insurtech

€42 M February 2017

Nice Fruit Foodtech & Drinks

€35 M June 2017



Glovo App

Logistic Tech

€30 M July 2017



Typeform

Productivity Tech

€29.2 M

September 2017



Verse Fintech & Insurtech

€18.5 M

May 2017



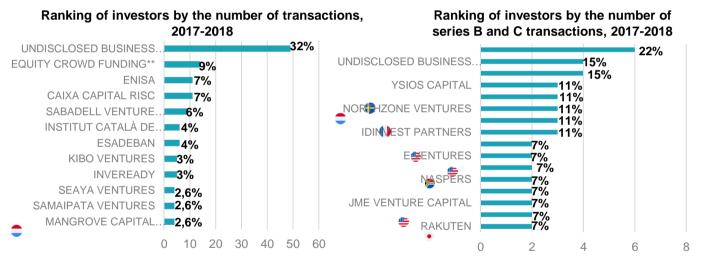
Cornerjob Human Tech & Jobs

> €17 M 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 (Several business angels + ESADEBAN)

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



* Names undisclosed.

Number of rounds they have taken part in

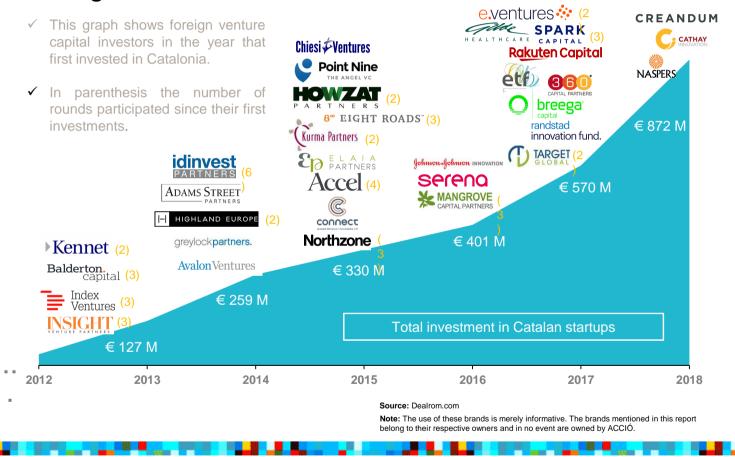
Number of rounds they have taken part in

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 (coinvested).

^{*} 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 took part (co-investment) and therefore the graph total exceeds

Foreign-based investors in Catalonia



Local-based investors



Source: Dealrom.com

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.

Main startups exits

More exits in: http://startupshub.catalonia.com/exits-in-catalan-startups



Source: EIC (DGI-ACCIÓ) based on Zephyr and the press. **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.



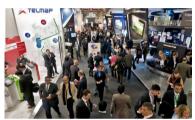
"Barcelona has held the MWC every year since 2006 and will continue until at least 2023."

Mobile World Congress

ICT-mobile renowned fairs turn Barcelona into the meeting point for the global digital revolution



The MWC turns Barcelona into the permanent global center for mobile technologies









4 Years From Now is the leading event for startups of the MWC and is home to the growing global tech startup community.







Note: The use of these trademarks is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the companies to which they belong and are not owned by ACCIÓ.

Source: EIC (DGI - ACCIÓ)

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.

Fairs and congresses enhance Barcelona as an international meeting point for the global digital

revolution

Barcelona, the world's 1st city in hosting international conferences and congresses in 2017 (ICCA, 2018)



Note: The use of these trademarks is for informative purposes only. Trademarks mentioned in this document are the registered trademarks of the organizations to which they belong and are not owned by ACCIÓ. This is a partial and illustrative representation of organizations that form part of the ecosystem in Catalonia; however, there may exist other organizations that have not been included in this study.

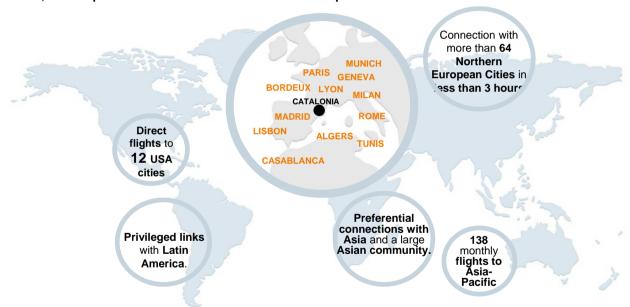
Source: EIC (DGI - ACCIÓ)





Interconnective technological hub with the world

Barcelona is one of Southern Europe's few cities with full modal transport close to the city centre, each with globla connectivity. Handling more than 40 million passangers, Barcelona Airport is one of the best airports for connecting to the rest of Europe with efficient intercontinental connections to Asia, America, and North Africa. From Barcelona startups can easily connect to other thriving hubs and entrepreneurial cities, access international congresses and events, and keep in touch with new investors around Europe and around the world.



*By all modes of transport: plane, train, vessel, truck. **Source**: Port de Barcelona (2016), Aena (2017), Flight Airline Business (2017)

'25% of the accelerators identified in 2018 are innovation and acceleration initiatives linked to corporations."

El Referente 2018

Incubators, Accelerators and Venture Builders



Corporate Programmes and Accelerators (I)



Telefónica

Startup accelerator of digital businesses.



Zobele Group

Acceleration program for startups mainly for the home, health and personal care sectors.



Celsa Group

Programme created to revolutionize the model of the steel sector and assume the transformation that the



Ficosa and Idneo

The objective of this program is diversification, in areas such as IoT or Industry 4.0.



Hotusa

This corporate programme help technological companies which are focused in tourist industry.



Sanofi

A programme aimed at startups that provide innovative solutions in the health field.



Cuatrecasas

with the support of Telefónica and Step One.

Startup accelerator in the field of legaltech.



Proteum and Inlea

ProteumX is accelerating the development and deployment of blockchain technology

Corporate Programmes and Accelerators (II)



Fluidra

Startup accelerator for projects related to water and to high growth technologies.





SEAT

Program focused on tech startups related to the automobile, mobility or logistic industry.



Fundación Repsol

Startup accelerator for projects in the fields of energy and energy efficiency, mobility, energy



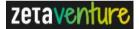
Nestlé

Programme created for startups which contributes to a healthier future.

BStartup

Banc Sabadell

Programm that speeds up the pace of digital innovation by opening up to and partnering with entrepreneurs.



Group Zeta

Zeta Ventures help Startups to boost their brands and activities through powerful marketing campaigns.



Ogilvy & Mather Barcelona

Accelerator in sectors: Communication, Adtech, Big Data, lot, Smart



few.

Canòdrom

Corporate incubator based in the creation of videogames

Fabs, labs and hubs in Catalonia



3D FACTORY INCUBATOR

Consorci de la Zona Franca and Leitat have created an incubator with the goal to promote the adaptation of 3D Printing technologies.



BARCELONA FAB CITY

Barcelona is a key player in the development of the **Maker movement** and **Fab Lab Network** worldwide.



PAYMENT INNOVATION HUB

This hub is born thanks to the union of CaixaBank, Global Payments Inc., Samsung, VISA and Arval with the purpose of jointly promoting R&D&I projects that bring the best and most innovative experiences in payment solutions to society.



• New

BARCELONA HEALTH HUB

The mission of the Barcelona Health Hub is to promote innovation in digital health and its transfer to the sector, joining startups, health organizations, companies and investors.



5G Barcelona

THE THINX 5GBARCELONA

Telefónica and 5GBarcelona have promoted this space so that startups and other companies can work in an environment equipped with 5G technology.



USER EXPERIENCE LAB (UXLAB)

Barcelona Activa opens a laboratory where **startups can test products and services**, both physical and digital products.

"In Catalonia the number of 'coworking' spaces has doubled in the last four years, and in Barcelona there are already more than a hundred, so they have become one of the most extensive business communities, with about 7,200 members between autonomous, startups, microenterprises and companies."

La Vanguardia 2017

Pier 01 Building

Pier 01 is a meeting point for the Barcelona startup & entrepreneurial community and the largest of its kind in Europe which is managed by Barcelona Tech City*.

It hosts:

- √ + 100 startups and companies
- √ + 1,000 workers
- ✓ Incubators and accelerators
- √ Showrooms
- ✓ Co-working area
- ✓ Common areas devoted to innovation and collaboration

Barcelona Tech City has announced the creation of more Piers, which will be dedicated to blockchain, health and sustainability mobility.

IBM has signed an agreement with Barcelona Tech City so that startups can test with Artificial Intelligence tools not offered to the general public yet.





*Barcelona Tech City is a private association which represents over 300 companies (https://barcelonatechcity.com/en/)

Source: Barcelona Tech City

New

New

Note: The use of these brands is merely informative. The brands mentioned in this report

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Main coworking facilities





























































"Barcelona is the
4th preferred city to work for
foreigners in the world, only after
London, New York and Berlin."

Boston Consulting Group 2018

The Catalan university system stands out for its ability to attract talent from all over the world



A leading university in the ICT field: Universitat Politècnica de Catalunya – BarcelonaTech (UPC)



A glance at some of the ICT and mobile studies offered by Catalan Universities



UPC ICT expertise in...











Big data and Cybersecurit analytics







Wide offer in ICT studies and coding bootcamps to get job-ready professionals:



Bachelor's Degrees in...

Computer Engineering

Computing Management Engineering

Computing Systems Engineering

ICT Systems Engineering

Multimedia

Telecommunication Electronic Engineering

Telecommunication Sciences and Technologies

Telecommunication Systems Engineering

Telematics Engineering

Videogames Design and Development

Master's Degrees in...

Artificial Intelligence

Computer Vision

Computer, Network and Systems Architecture

Computing and Distributed Computing

Cybersecurity and Intelligent Systems

Information and Communication Technologies

Innovation and Research in Informatics

Mobile Applications and Games

Multimedia Creation

Smart Cities



Data Science Dojo is a paradigm shift in data science bootcamps. They offer short-term, in-person, hands-on data science training.



Skylab offers coding courses for learning web and mobile applications development. In its courses they teach programming with



World Tech Makers is a academy that learns the "Bootcamps Blended™" method with experienced programming teachers across the world.



Harbour.Space offers studies in computer science, data science, cybersecurity, digital marketing, interaction design, etc.



Epitech is a high school of computer science that forms experts in the computing sector by a "Learning by projects" method.



Code Works have a full-time courses addressed to software engineers that want to build complex apps with an advanced understanding of JavaScript.



Ubiqum offers studies in Java Web & Mobile, Developer Data Analytics & Big or Native Android Developer by adapting an innovative learning process.



IT Academy is a highly specialized ICT program that forms the most requested professional profiles by companies.



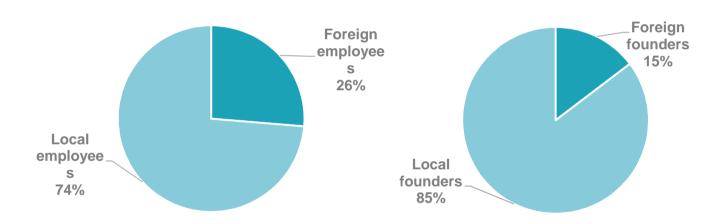
Le Wagon Barcelona manages courses for Big Data, Data Science and Web Development that enable to code new tech products.

Source: Secretaria d'Universitats - Catalan University

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

Origin of startup employees

Origin of startup founders

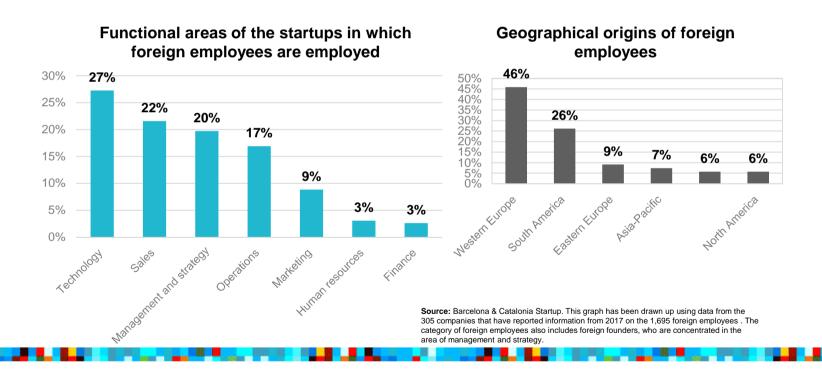


Source: Barcelona & Catalonia Startup. This graph has been drawn up using the data of the 851 companies that have reported data on employees from 2016 or 2017.

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



Barcelona Digital Talent

https://barcelonadigitaltalent.com/



The Catalan Government, Barcelona City Council, Mobile World Capital and other agents have joined forces to launch Barcelona Digital Talent to encourage the creation and capture of digital talent.

Barcelona Digital Talent will be aimed at four areas: developing digital skills, attracting international talent, adapting the training programs to the demand of the companies and boosting the interest and training of the new generations.



This initiative have published a report, **Digital Talent Overview 2019**, which interesting conclusions about technological talent in Barcelona:

- ✓ Artificial Intelligence is the emerging technology most demanded, followed by the Internet of Things. 3D printing, Blockchain and computer vision are being introduced in the market and the first products developed with these technologies are appearing in Barcelona.
- ✓ Companies are increasingly demanding professionals with Agile and Scrum domains as methodologies for the development and rapid management of digital projects.
- ✓ Big Data is the technology that imports more talent, proportionally, with more than 50% of employees coming out of Barcelona.



"Catalonia Trade & Investment is the growth partner for Catalan startups, specializing in accelerating and connecting them with other leading ecosystems around the globe."

Catalonia Trade & Investment (ACCIÓ)

Government of Catalonia

Services for both foreign and Catalan startups (I)

http://startups.catalonia.com/

STARTUPS BORN ABROAD WISHING TO MOVE TO CATALONIA

Outreaching to the Catalan Startup Ecosystem

- Contacts with incubators, accelerators and other strategic players.
- Advise on funding, fundraising, startup events, workforce...

One-to-One Meeting

 Understanding the full scope and potential of your Project to customize our services.

Follow Up

• Support and assistance in your country of origin or from Barcelona.

STARTUPS BORN IN CATALONIA GETTING FULLY INTERNATIONALIZED

Connecting and strengthening startups

- Connecting startups to other leading ecosystems such as Silicon Valley, Boston, London, Singapore and Hong Kong.
- We foster the Barcelona & Catalonia Startup Hub.

Promoting the internationalisation of startups

 Programmes of design and execution of the internationalisation strategy.

Participating in international trade missions and trade fairs

- •December 2018, Helsinki: <u>SLUSH 2018</u>
- •October 2018, London: Noah Conference 2018
- •July 2018, Hong Kong: at RISE Hong Kong
- May 2018, Amsterdam: <u>The Next Web</u> Conference 2018

Source: EIC (DGI-ACCIÓ)

Services for both foreign and Catalan startups (II)

http://startups.catalonia.com/

New

Startup Capital

•This service is a direct grant of up to 75,000 euros for recently created startups. This help is aimed at startups between three months and three years of life, which have the technology as a differential factor.

Corporates & Startups Open Innovation Challenge

- •Corporates offer startups all their capabilities to test new technologies, their infrastructures and access to the market.
- •The Corporates & Startups Open Innovation Challenge is a new initiative organized by ACCIÓ, within the framework of the 4YFN, which will take place in Barcelona during the Mobile World Congress 2019.

Programs for startups with business schools

•They are aimed at less than three years old projects which in choose the program of business schools that best suits their needs and fuse the technology with the knowledge of the business schools.

Innovation through startups

•With the support of ACCIÓ and for free, consolidated companies can identify the startups that best suit their needs and define the best collaboration strategy. Startups that participate can opt for a line of participative loans of co-investment between 50,000 and 200,000 euros

Source: EIC (DGI-ACCIÓ)

Thank you!

Questions welcome



@StartEasyEU
#StartEasyEU