



Tech Hubs Overview 2026



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ACCIÓ is the Catalan Government's public agency which drives the growth of Catalan companies by promoting innovation, international expansion and business strategy. The agency offers them support in carrying out R&D, green and technological transformation projects and in processes for internationalisation and opening subsidiaries abroad. With a team of 500 professionals and 40 offices around the world, ACCIÓ is also tasked with attracting foreign investment to Catalonia and helping companies generate a positive impact on the environment.



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Table of contents

	Executive summary	05
	Introduction and methodology	11
	Context	12
	Objectives of the study	12
	Scope of the report	13
	Research techniques	14
	Methodology	16
1	Change in the hub ecosystem in Catalonia	17
	Number of tech hubs	18
	Reasons for setting up in Catalonia	19
	The future challenges facing the hubs	21
	Main strengths of the tech hub ecosystem in Catalonia	22
	Competition between European cities to attract tech hubs	23
	Sector developments and trends	27
2	The hubs' impact on the region	29
	The impact and wealth generated by the hubs	30
	Jobs created and future expectations	31
	The sectors creating most jobs employment in 2025	33
3	Analysis of 2025: key figures for the new hubs	34
	Advent of new hubs in the region	35
	Description of the 2025 hubs	36
	Big numbers for the hubs set up in 2025	39
4	Profile of the tech hubs	41
	Territorial distribution of the hubs in Catalonia	42
	Country of origin of the hubs	46
	Territorial scope of the services delivered by the hubs	48
	Type of customers and penetration of the hubs	50
5	Description of talent	52
	The size of the hubs' workforces	53
	Size of hubs by economic sector	55
	Hubs' most sought after specialists in Catalonia	56
	Professionals the hubs have greatest difficulty in finding	57
	Female talent in the hubs' workforce	59
	Diversity of backgrounds among employees	60
	Attracting local talent	61



6	Cutting-edge technology	65
	The technologies developed by Catalonia's hubs	66
	The commitment to deep tech as a driver of technological innovation	68
	Artificial intelligence: leader of the deep tech ecosystem	69
	From emerging technology to operational mainstay: the role of AI	71
7	The hubs' commitment to sustainability	74
	The tech hub's environmental commitment	75
	Main social responsibility measures taken by the hubs	76
	Baking sustainability criteria into hub governance	77
	The hubs' input to territorial and social impact projects	78
8	A deeper look into the hubs	79
	Acknowledgements	98



Executive summary



In recent years, Catalonia has cemented its position as a strategic territory for international technological development. This positioning is bolstered by the growing presence of tech hubs that generate skilled employment, develop high added value solutions and build bridges between Catalonia and the world's leading technology regions. **The tech hubs established in Catalonia** operate in an environment which blends local and international talent, world-class universities and research centres, public policies designed to attract investment and highly diverse sectors. In this context, they perform critical roles for their parent companies such as **software development, advanced data analysis, industrial engineering, product design, applied research, technology operations and global innovation.**

Against this economic, technological and social backdrop, the fourth **Tech Hubs Overview** unpacks the changes in the international tech hubs set up in Catalonia up to 2025, assesses their impact on the region and furnishes comprehensive insight into their capabilities, challenges and opportunities.

203 tech hubs cement the growth of Catalonia's ecosystem

Catalonia now has **203 active tech hubs** following the establishment of **12 new ones in 2025**. This growth confirms the degree of readiness achieved by the ecosystem, its ability to attract skilled talent and Catalonia's position as an appealing destination for long-term international tech projects.

Reputation, business presence and infrastructure as key attraction factors

The **region's reputation and image** is one of the main grounds for choosing Catalonia to set up a hub. Next, the hubs surveyed pick out the **parent company's previous presence in the region** alongside the quality of its **tech infrastructure and connectivity** coupled with government incentives. **Barcelona is thus increasingly seen as a competitive alternative to other cities such as Berlin, London and Amsterdam** as it blends access to international talent, a mature technological ecosystem and lower real estate costs, all of which are key factors for project scalability.

Economic impact coming to €4.109 billion and more than 46,000 workers in tech hubs

The tech hubs generate an aggregate economic impact standing at **€4,109 billion**, an **average of €20 million per hub**. Looking ahead to 2026, the hubs' economic impact is expected to grow by 13% year-on-year. Likewise, **the number of employees comes to 46,080**, 10% more than in 2024, with forecasts pointing to 51,526 in 2026. In 2025 alone, **4,433 new jobs have been created** with the health sector (1,392), consulting and business services (1,200) and industrial systems (957) playing a prominent role.

New projects with strong impact and rapid consolidation: 12 hubs set up in Catalonia in 2025

The 12 hubs set up in 2025 have generated **609 skilled jobs** and an economic impact of over **€54 million**. Most of the new hubs are in Barcelona, albeit there are also new ones in towns in the metropolitan area and, occasionally, outside it. The projects come from **Germany, France, the United States, the United Kingdom, Switzerland, Japan and China**.

The United States, Germany and France are the main countries of origin of the tech hubs

The United States is the main source of companies setting up in Catalonia while Europe is growing stronger with **Germany** as the foremost player among the youngest hubs. The geographical scope of the services delivered by the tech hubs is mainly Europe. Furthermore, the tech hubs established in Catalonia perform high-value roles for their parent companies: the hubs primarily **generate knowledge and foster innovation** rather than operating as structures geared towards direct commercial use.



Larger, more mature hubs with highly specialised teams

The average size of the hubs has increased to **227 employees in 2025** with significant differences depending on their age. Hubs which have been operating for more than five years have an average workforce of 327 people, while newer ones are still in the early stages of scaling up at 178 employees. The largest hubs are in the **industrial systems** (494), **food** (425), **financial services** (355) and **health** (330) sectors.

AI, data, cloud and cybersecurity specialists are the most difficult roles to fill

The hubs are mostly looking for professionals in **software development, data and systems engineering** which make up their operational core. Meanwhile, the hubs surveyed were unanimous in noting that **highly specialised people**, such as artificial intelligence and machine learning experts, software developers and cloud architects, data analysts and scientists, and cybersecurity professionals, are currently the most difficult to find in the labour market.

The development technologies and software architecture segments spearhead the hubs' technology capabilities

API and back-end development, systems architecture and app development continue to lead the hubs' technological specialisation. There has also been a gradual increase in data-oriented technologies compared to the previous edition. Moreover, 82% of the hubs operate with technologies at advanced readiness stages (TRL 7-9). This clustering helps to cement Catalonia's position as a leading and stable environment for technology development, validation and uptake.

Artificial intelligence, from emerging technology to operational mainstay

The growth of deep tech technologies continues to play a significant role in Catalonia's technology hub ecosystem with **65% engaging in deep tech projects** and AI featuring in 88% of cases within this segment. In addition to the hubs' development of this technology, it is evident that the ecosystem is rapidly transitioning towards increasingly embracing

it on a structural basis: **41% already use AI across the board to optimise internal processes and improve operational efficiency.**

Growing commitment to environmental and social sustainability

The hubs are committed to sustainable practices, especially in areas such as waste reduction, energy efficiency and environmental awareness. At the same time, almost eight out of ten actively promote diversity and inclusion coupled with initiatives for attracting talent, corporate volunteering and partnership with the local community. More than a third of the hubs thus structurally build sustainability into their governance with formal strategies, responsible data management policies and ethical principles in decision-making. Furthermore, over 35% actively partner with universities, knowledge centres and the local community, thereby enhancing the hubs' positive impact on the region.



Tech Hubs

Overview 2026



The tech hub ecosystem
in Catalonia

203 tech hubs

 active in 2025



12 new hubs in Catalonia
in 2025



+12 hubs

€54M economic impact

609 jobs created



Economic impact
in the region

€4.109B



€20 million
per hub



Jobs created
in 2025

4,433 new jobs



46,080 people
employed in total



Sectors with
the most hubs

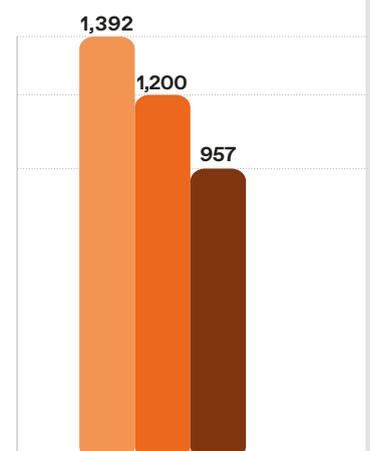


- Development of technological solutions or products
- Experience industries
- Business consulting and services
- Mobility
- Health

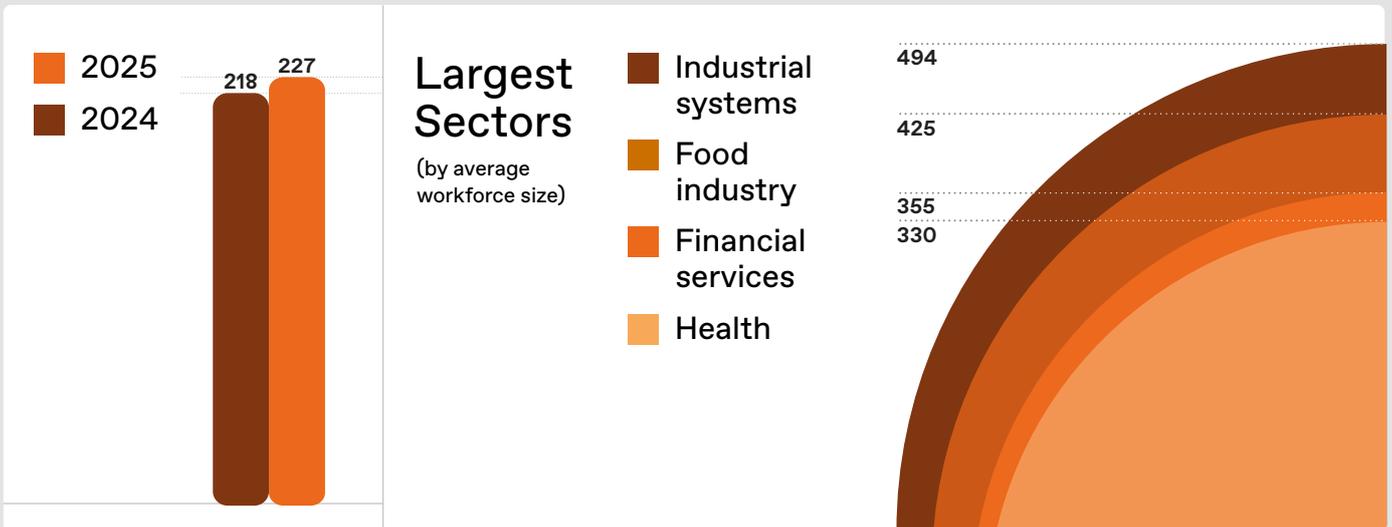


Sectors creating
the most jobs in 2025

- Health
- Business consulting and services
- Industrial systems



Average number of employees per hub



Top 10 ICT professions in hubs

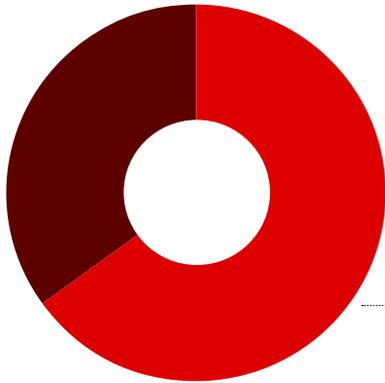


Most difficult professional profiles to find (according to hubs)





AI: From emerging technology to operational mainstay



65%
develop deep
tech projects

Of these...



Transversal tool



41% of all hubs already use AI to optimize internal processes and improve operational efficiency

Sustainability in tech hubs

Environmental



Social



Governance



Introduction and methodology



Context

In recent years, Catalonia has cemented its position as a strategic territory for **international technological development**. The combination of a robust industrial base, a vibrant digital ecosystem and an appealing business environment has put the region on the European innovation map. This positioning is bolstered by the growing presence of tech hubs which **generate skilled employment, develop high added-value solutions and build bridges between Catalonia and the world's leading technology regions**.

The European landscape in 2025 is shaped by fast-paced changes: the consolidation of generative artificial intelligence as a cross-cutting tool for production and knowledge generation, reindustrialisation powered by the circular economy, technological sovereignty strategies in areas such as data, cybersecurity and semiconductors, and growing challenges in attracting and retaining highly specialised talent. Added to this are international tensions in supply chains and the need for geographical diversification which are encouraging global businesses to put in place distributed innovation, engineering and development structures.

In **Catalonia**, these issues come together with an ecosystem which combines local and international talent, world-class universities and research centres, public policies designed to attract investment and a business environment featuring highly diverse sectors. In this context, the hubs established here are playing increasingly critical roles for their parent companies not only in software development and data analysis but also in arenas of greater technological complexity. Activities associated with deep tech, such as **advanced artificial intelligence, cybersecurity, robotics, semiconductors and high-performance computing**, are gaining ground as are advanced industrial engineering, product design, applied research, technology operations and global innovation units.

Against this economic, technological and social backdrop, the fourth edition of the **Tech Hubs Overview 2026** report unpacks the changes in the international tech hubs set up in the region up to 2025, assesses their impact on the territory and furnishes comprehensive insight into their capabilities, challenges and opportunities.

Compared to previous editions, the report takes a deeper dive into key areas in line with the trends which are shaping the way the ecosystem is changing. In

particular, it steps up its analysis of the **technological domain**, with a specific focus on the **impact and uptake of artificial intelligence in the hubs**. Likewise, the section on **sustainability** goes into more detail, drawing a clear distinction between social and environmental aspects to better capture the diversity of existing approaches and practices.

Objectives of the study

This report pursues the following main objectives:

1. Analyse changes in the international tech hub ecosystem in Catalonia, identifying growth trends, patterns and dynamics.
2. Measure the economic, employment and technological impact of the hubs in the region.
3. Outline the capabilities, activities, organisational models and technologies developed by the hubs.
4. Evaluate the tech labour market and the most critical skills, blending quantitative information and specialised analysis on the most sought-after professionals.
5. Highlight emerging areas of specialisation, success stories and significant contributions of the hubs to the Catalan ecosystem.



Scope of the report

The scope of the report is exclusively international tech hubs set up in Catalonia which comply with the criteria defined and agreed in previous editions. For the purposes of this study, tech hubs are considered to be global technology service centres set up by international companies which develop or lead knowledge-intensive activities across the digital value chain. More specifically, this study looks at those which meet the following conditions:

- 1. Type of investment or establishment in Catalonia:** the hub must come from direct international investment in Catalonia, either through setting up a new hub or the total or majority acquisition of a local company by a foreign parent company or corporate group.
- 2. Location and role of the lead team:** the team must be in Catalonia and have a technological, strategic or innovation role.
- 3. Tech-intensive value proposition:** the core business must be based on intensive use or development of technology in the broadest sense: digital, industrial or scientific. This includes activities such as software and systems development, engineering, data analytics, artificial intelligence, applied research, technological innovation and advanced tech support. Conversely, hubs whose operations are confined exclusively to marketing or sales tasks with no significant technology input are excluded from the scope of the report.

- 4. International reach:** the hub must have an impact going beyond the domestic market, contributing to European or global operations.

Based on the above considerations, this study's universe is made up of 203 tech hubs belonging to foreign companies or corporate groups. It should be noted that the universe of hubs is constantly changing and, for example, in this edition there has been a net increase of 43 hubs compared to its predecessor: 50 new hubs have been added while seven included in previous editions have been removed from the scope.

- Of the 50 hubs added, 12 have been set up in 2025 while the rest are from previous years.
- In relation to the seven hubs excluded from the scope, they do not meet some of the criteria laid down for classification as a hub in the context of this report, have been wound up during the last year or were found to be duplicates during the review process.

These are the 203 hubs that make up the universe of this report:

- Accenture
- Acuity Trading
- Adesso
- Adevinta (Schibsted)
- ADP (Automatic Data Processing, Inc.)
- AIRBUS GEO TECH (geo-information and defence solutions, Airbus Intelligence site in Barcelona)
- AkzoNobel
- Alkimia Interactive
- Allianz Technology
- Alstom
- Amazon
- Apple - AIML Hub
- ARCURE
- Arxada
- Asea Brown Boveri, S.A.
- AstraZeneca
- Avanade
- AXA Seguros
- B. Braun
- Bacardi
- Bandai Namco Mobile SL
- BASF: International Engineering Hub
- Bayer
- Bespoke Pixel LLC
- Bitpanda
- Bizerba Iberia España S.A.U.
- Boehringer Ingelheim
- Boston Consulting Group (BCG)
- Bumble
- Bunge Iberica SA
- Carburros metalicos
- Centiro Solutions S.L.
- Checkout.com
- Checkpoint Systems
- CI Games
- Cimpres
- Cisco
- Cofidis Spain
- Contentsquare
- Coovally
- CoreWeave
- Cortus
- Coty Beauty Spain SLU
- Danone
- DataXstream, L.L.C.
- Delfos Energy S.L.



- Deloitte
- DHL Express
- Dolby
- Domo Chemicals
- Dow Chemical
- Dow Jones (Factiva)
- dsm-firmenich
- DuPont Global Water Technology Center
- Dynatrace
- Elring Klinger
- Enel
- Entravision
- Erni Consulting
- Essity
- Fast track
- Festo
- Flight Centre Travel Group
- Foundever
- Freenow
- FunPlus
- GameHouse
- Gameloft
- Gartner
- Getronics
- GFT IT Consulting, S.L.U.
- Giesecke+Devrient
- HARTMANN Laboratories
- HCL Technologies
- HP
- Hundred.ai
- IAG
- IBM
- IFCO
- Inetum: Barcelona
- Inetum: Tarragona
- Infor Software Iberia SAU
- INGENIA
- Ingram Micro
- Intel and Barcelona Supercomputing Center
- International Telecommunication Union (ITU)
- IO Interactive
- IPTE
- IRP Systems Europe iSolutions
- Jabil Packaging Division
- Kage
- Keysight Technologies
- King
- Kion ITS
- KPMG Asesores SL
- Larian Studios Spain SL
- Leaf space
- LGT Private Banking
- Lufthansa
- ManoMano
- MediaMarkt (Media Markt Saturn TH Services Barcelona S.A.)
- MeetDeal
- Michael Page
- Microsoft
- MiR Robots (Teradyne Robotics)
- Mitek
- Modmacon Private Limited
- Mongo DB
- Monolithic Power Systems (MPS)
- Monzo
- Moodle
- N26
- Nestlé Barcelona IT Hub
- Netease
- Neuron IP
- Nimble Giant Entertainment
- Novartis
- NTT DATA
- Nutanix
- Nxp semiconductors
- Ocado
- Omron Europe BV
- OnRobot
- Oracle Health
- Oracle NetSuite
- Papernest
- Paradox Tinto SL
- PayFit
- PepsiCo
- Porsche Digital
- PromoFarma by DocMorris
- Prottime
- PTC
- Qiagen
- Qualcomm
- Revolut
- Ricoh
- RMIT Europe
- Roche Diabetes Care
- Rovio Barcelona S.L.U.
- Sage
- Saint-Gobain Sekurit: L'Arboç
- Salesforce
- Sanofi
- SantéVet
- SAP
- Satellogic
- Schneider Electric
- Schwarz Digits Spain
- Scopely
- SEAT CODE
- Shiji Information Technology Spain, S.A
- Shining 3D
- Siegfried - Barbera
- Siegfried - El Masnou
- Siemens Energy
- SITA
- Smith+Nephew
- Social Point
- Solium
- Sony AI
- Spendesk
- SQLI Spain SL
- Stada Laboratories
- Symrise
- Taylorleds
- TDCX
- Tech Data (TD Synnex)
- Technica Electronics
- Technology Delivery Center (Zurich Group)
- Teladoc Health
- Telavox
- TGW Group
- Thoughtworks
- Tilting Point Media, SL
- Tokio Marine HCC
- Towa Pharma International Holdings
- Trainline
- Trend Micro
- Tripledot Studios
- T-Systems
- T-Systems: Reus
- TÜV Rheinland
- Ubisoft Barcelona
- Universal Robots
- Unmanned Life
- Unnax*
- Veepee
- Veeva Systems
- Veriff
- Viaplay Group
- ViewNext (IBM): Reus
- Volkswagen Group Services
- Vueling
- Walldorf Consulting
- Wanhua Chemical Group Co.,Ltd.
- Worldline
- XRON/Lilith Games
- Ypsomed Software S.L.
- ZeptoLab
- ZF Services Spain
- Zoetis Manufacturing & Research Spain, SL



Research techniques

The report is based on a suite of research techniques which combine quantitative data, qualitative evidence and in-depth sector analysis.

The information gathering process was digitalised by means of a structured digital survey harnessing the Opinòmetre Institute's proprietary app, employed for both the main survey and the technical form. This system has made it possible to enhance data quality, process efficiency, response consistency and information traceability.

The NTT DATA team also conducted nine structured strategic interviews with the hubs' managers. These interviews furnish detailed insights into their strategic positioning, role within the global organisation, technologies developed, challenges and opportunities, and relationship with the local ecosystem.

Interviews conducted:

- **Dow Jones (Factiva)** - Ingrid Verschuren (EVP Data & AI, GM EMEA) / Silvia Bellmunt (Senior Technical Recruiter - Engineering, Data & Product)
- **dsm-firmenich** - Marco Jongen (SVP Business and Digital Engineering) / Ipek Ozsuer (Chief Digital and Information Officer) / Otilia López (Country leader and financial director)
- **HP** - Daniel Martinez (Division President of Large Format Printing. Director of the HP Barcelona International Centre)
- **Keysight Technologies** - Judith Contreras Rosell (Keysight Spain General Manager)
- **KION Hub** - Victor García (Digital Hub Director)
- **Qiagen** - Francesc Benítez (Head of QIAstat Technologies)
- **Schwarz Digits Spain** - Eduardo Sánchez-Colorado (CEO Schwarz Digits Spain) / Alexander Hess (Head of Schwarz IT Barcelona)
- **Smith & Nephew** - Antonio Gaznares (Country lead Spain & Portugal)
- **T- Systems Reus** - Manuel Gutiérrez (Vice President of Digital Solutions at T-Systems Iberia) / David Isern (Reus Site Manager, Area and Chapter Lead of T-Systems Iberia Global Production Centres)

Each hub interviewed then completed a specialised technical form to compile quantitative metrics and operational variables related to team structure and size, roles and competencies, key technologies, international business, growth forecasts and talent challenges.

This edition includes TalentUp's talent intelligence analysis which provides information on the most hard-to-fill posts and positions, demand trends in technological roles, labour market tensions and the territorial availability of specialists coupled with salary intelligence drawing on analysis of pay ranges, market levels and changes in remuneration by post and experience.

This analytical layer furnishes an accurate and integrated view of the competitiveness of the tech labour market in Catalonia both from the perspective of the availability of talent and also the wage levels shaping attraction and retention of key people by the tech hubs.

Finally, all the information collected has been analysed and consolidated, bringing together the surveys, interviews, technical forms, talent analysis and publicly available information.



Methodology

One of the report's key sections is the assessment of size and quantification of the impact of tech hubs in Catalonia. This information has been calculated by examining two aspects: firstly, job creation, and secondly, economic impact.

This study aims to cover the entire universe of tech hubs meeting the defined criteria. Since very high participation amounting to **70%**¹ was achieved, the remaining 30% was calculated by extrapolating the results using the following steps:

- Segmenting the tech hubs by economic sector with the aim of minimising margins of error and leveraging the patterns detected.
- Calculating the average number of employees by economic sector (excluding outliers in order not to skew the results). This calculation has been made using the data gleaned from the surveys, interviews and forms sent out.
- Using the above data to estimate the current and future situation of the hubs which have not taken part in the study but are nevertheless part of the universe. Specifically, the calculation was performed for each sector and then the aggregate data were compiled.
- Adding the estimated data (30%) to the remaining 70%.

Based on the estimated number of employees, the hubs' economic impact has been worked out using OPEX and an additional expenditure margin. Specifically, the following procedure was used:

- Considering wages and salaries as the main expense, accounting for around 80% of the total cost associated with the tech hubs' operations. For the purposes of this estimate, a weighted average annual salary, updated to 2025, of **€48,380** has been used as a reference.
- This average salary is taken from a weighted composition of professional roles, combining mid-level ICT posts, which make up 80% of the total, with mid-level² administration and human resources positions, which account for the remaining 20%, thus reflecting an occupational

structure aligned with the tech hubs' operational situation. The calculation is based on TalentUp's talent intelligence analysis which draws together market information from multiple wage and employment sources, allowing for a robust estimate segmented by professional role, experience and geographic location.

- The resulting figure has been increased by the company's social security contributions, considering the minimum and maximum contribution bases applicable in 2025 and the contribution percentage. Specifically, the **29.9%** rate (non-occupational illnesses and accidents, unemployment, FOGASA and VET) was applied to the contribution base while also including the Intergenerational Equity Mechanism (MEI) in force in 2025 in the part paid by the company.
- An additional 20% has been added to the result for other general expenses such as renting facilities, utilities, marketing and suppliers.
- Finally, the margin has been included. For hubs providing services to other units or subsidiaries of the parent company, a 3% margin has been added; for hubs providing services to third parties, a 15% margin; and finally, for hubs doing both things, an average 9% margin.
- The estimate of future economic impact has been made in the same way, increasing the average wage by 1.2% per year in line with historical inflation in the euro area and Spain over the last ten years. Likewise, the expected changes in social security contributions have been factored in, including the gradual increase in the Intergenerational Equity Mechanism (MEI) applicable in 2026, while maintaining the same methodological approach used to calculate current economic impact.

¹ The representativeness ratio is calculated by taking into account the 40% of hubs (82) which answered this edition's survey or were interviewed, plus the 30% (61) that did not answer the survey in this edition but did in previous ones.

² For the estimation of salaries for mid-level ICT profiles, the talent intelligence analysis prepared by TalentUp has been used, based on the same ten benchmark technological profiles employed in previous editions of the report, thereby ensuring the temporal comparability of the results. These profiles include: software engineer, consultant, cyber security analyst, data analyst, game developer, business analyst, data scientist, data engineer and DevOps engineer.



1. Change in the hub ecosystem in Catalonia



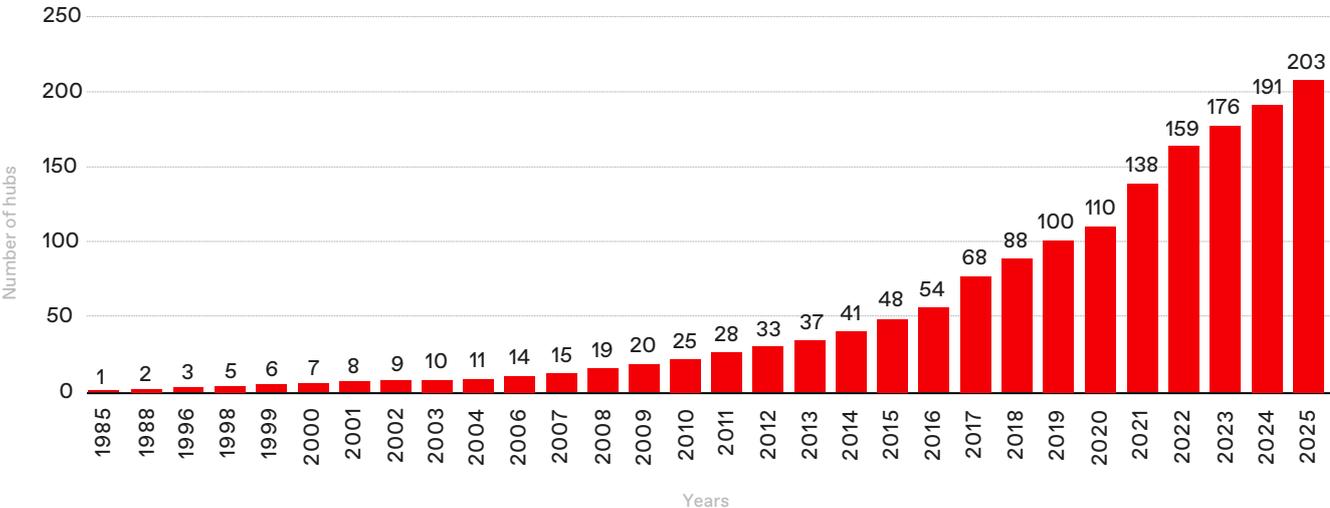
Number of tech hubs

The tech hub ecosystem in Catalonia continues to grow steadily: 12 new ones have been set up in 2025.

In 2025, there were 203 active tech hubs. The advent of hubs in Catalonia has increased steadily throughout the series analysed, with a gradual acceleration since the 2010s which has been particularly strong since 2017. In recent years, the pace of creation has consistently ranged between around 10 and 20 new hubs per year.

More than half of the active hubs have been set up or consolidated in the last seven years. Indeed, the highest growth is in the period 2021-2025, which reflects the degree of maturity achieved by the ecosystem, its ability to attract skilled talent and Catalonia's consolidation as a prime destination for international technology projects.

Change in the number of tech hubs in Catalonia³



³ The number of hubs in the period prior to 2025 may differ from the figure published in the previous edition of the *Tech Hubs Overview* report. This adjustment is due to the fact that new hubs have been identified which had not been recorded in previous editions and have been added to the total population analysed. In addition, seven hubs included in previous editions have been excluded from the scope of the study or have been wound up as noted in the methodology chapter above.



Reasons for setting up in Catalonia

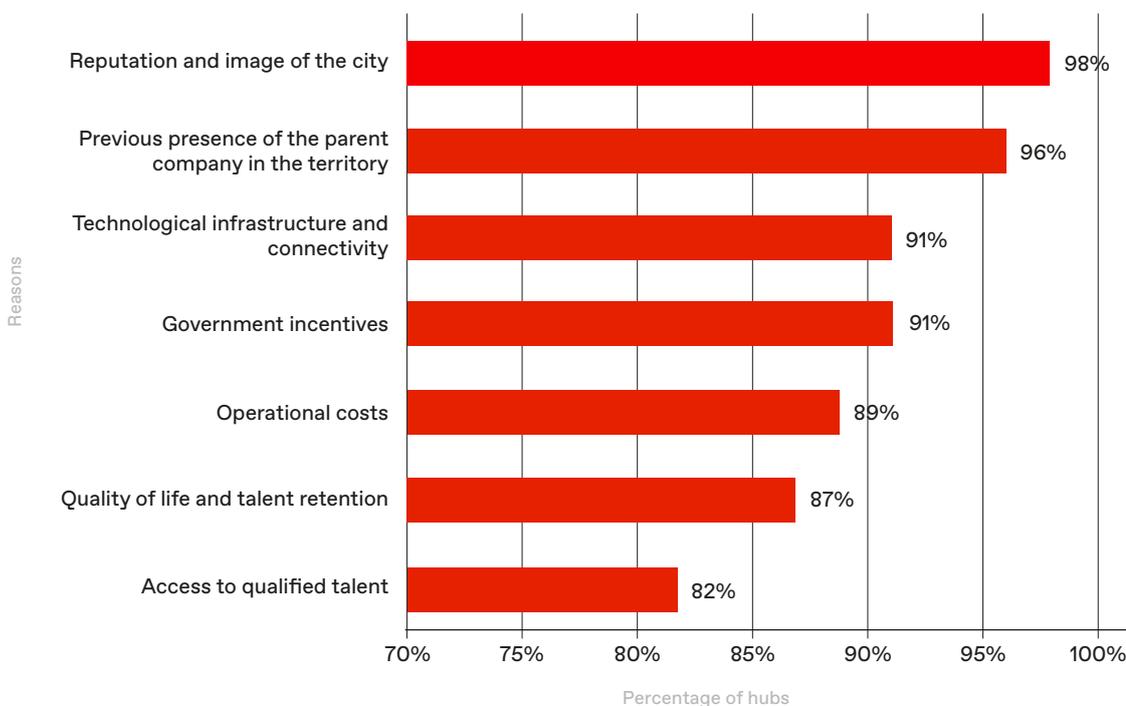
Catalonia stands out as a leading destination for setting up tech hubs owing to a mix of reputation, business and structural factors.

The city's reputation and image is one of the main grounds for choosing Catalonia as a hub location. It is the reason cited by **98%** of the hubs analysed. Next, **the parent company's previous presence in the region** is a key factor in **96%** of cases, underlining the significance of prior business experience and the gradual consolidation of operations in the area.

Technological infrastructure and connectivity are another mainstay of Catalonia's appeal (91%) together with **government incentives** (91%), which play an important role in attracting and locating international tech projects.

Operating costs (89%) and **quality of life** (87%) further bolster the region's competitive positioning. Meanwhile, **access to skilled talent**, although still a determining factor (82%), ranks last in a list in which all reasons are rated very highly.

Initial reasons for locating the hubs in Catalonia⁴



⁴ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



“Barcelona stands out for the maturity of its technological ecosystem, with a high concentration of talent, institutions and enterprises which generates a competitive and demanding environment. Although this poses more challenges for emerging hubs, it also fosters stronger and more business-aligned innovation. In this context, Nestlé Global IT Hub Barcelona’s partnership with local start-ups, universities and institutions is pivotal in driving areas such as Data & Analytics, artificial intelligence and digital transformation.”

Ana Ochoa

Global IT Barcelona Hub Manager - Nestlé



The future challenges facing the hubs

Structural and regulatory challenges are the primary concerns of tech hubs in Catalonia.

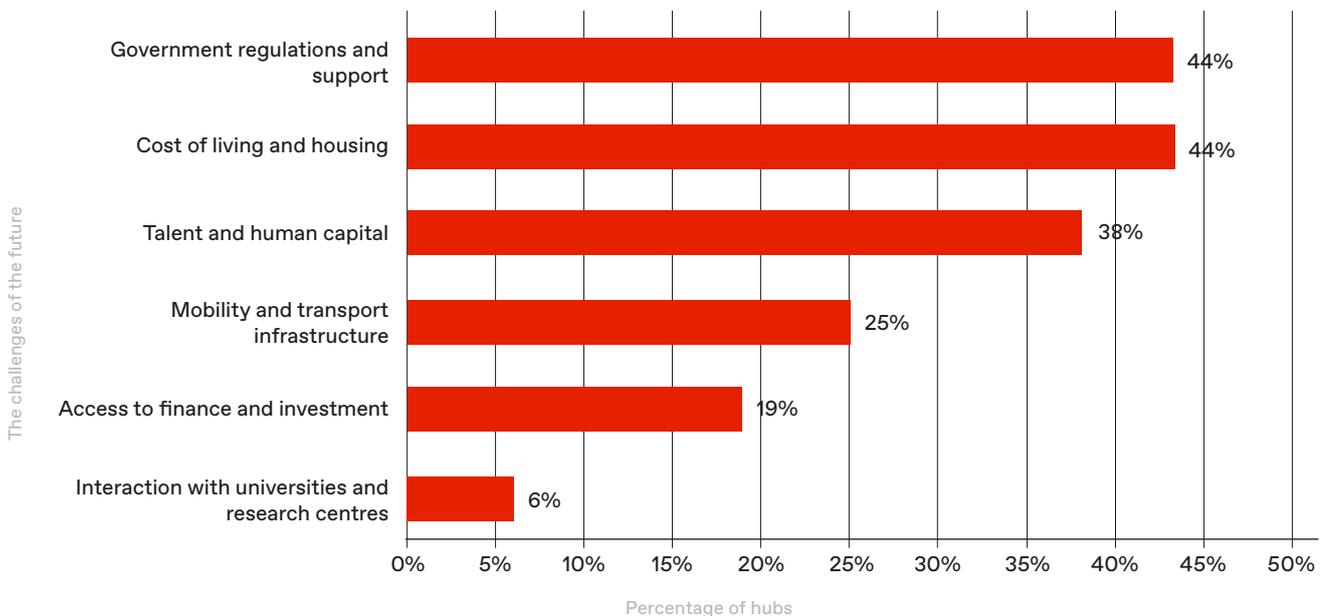
The regulatory framework and governmental support is the main challenge, pointed out by **44%** of the hubs. This result underscores the importance of having a stable, flexible regulatory environment which is aligned with the needs of international tech projects.

At the same time, the cost of living and access to housing are also seen as a priority challenge by **44%** of the hubs. This is evidence of the growing impact of urban factors on the ability to attract and retain talent, especially in highly qualified and internationally mobile roles.

Finally, talent and human capital are still one of the main challenges (**38%**), confirming that although Catalonia continues to be an attractive region in terms of availability of technology specialists, global competition and the growth of the ecosystem are putting pressure on the existing supply.

Overall, these results show that the future growth of tech hubs in Catalonia will hinge not only on their ability to attract talent but also on change in the regulatory, economic and urban setting which supports their development in the medium and long term.

Future challenges to be addressed according to the hubs⁵



⁵ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



Main strengths of the tech hub ecosystem in Catalonia

Talent, knowledge and territorial coordination are the main strengths of the tech hub ecosystem in Catalonia.

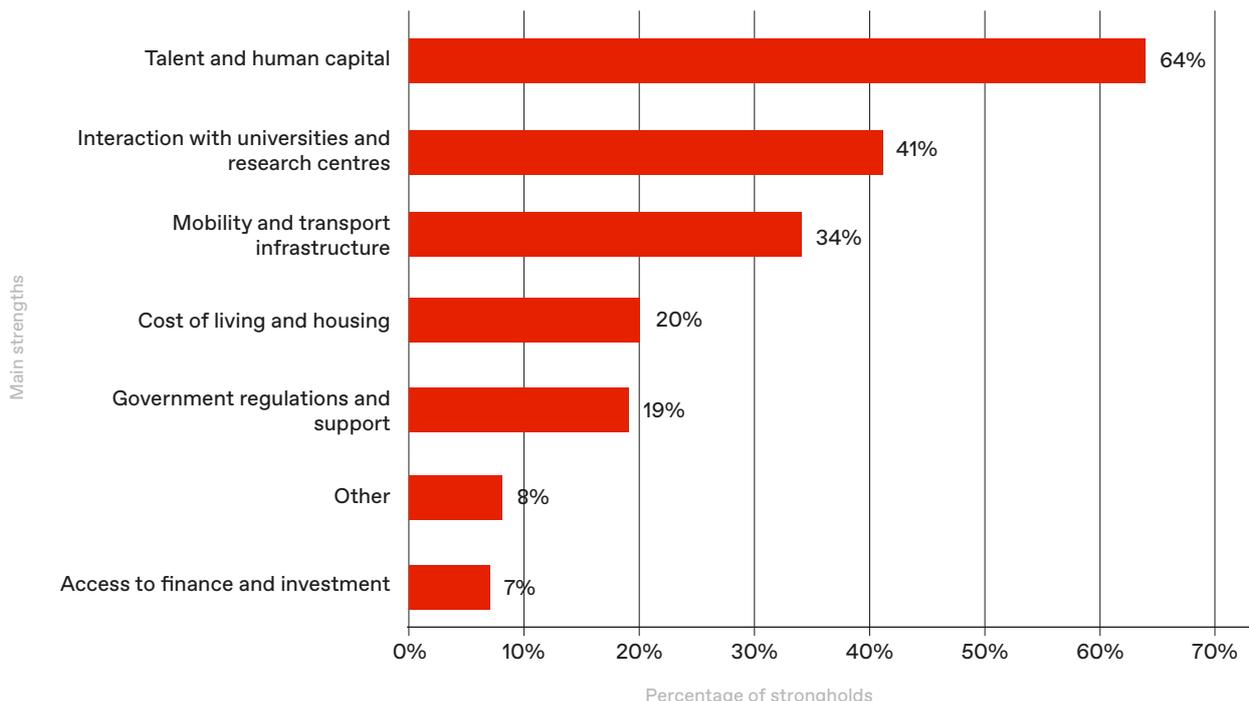
Talent and human capital are confirmed as the ecosystem's main strength. Indeed, this is mentioned by **64%** of hubs. This figure bolsters Catalonia's position as a region with a large pool of skilled tech professionals and international appeal. At the same time, the fact that it is also one of the ecosystem's main challenges points to the rising pressure from global competition and the hubs' own growth.

Relationships with universities and research centres are identified as a positive feature by **41%** of hubs. This result suggests the existence of diverse experiences in terms of collaboration, knowledge transfer and matching training provision with business needs, which would explain why this area has not become a distinctive strength of the ecosystem as a whole.

As for **mobility and transport infrastructure**, **34%** of hubs identify them as an advantageous factor, especially in relation to urban and metropolitan mobility which is crucial for daily commutes and the functional integration of hubs into the region.

Further down the list are factors such as the cost of living and access to housing (**20%**) plus regulations and government support (**19%**) which, albeit not standing out as distinctive strengths, are significant from the standpoint of the structural challenges shaping the ecosystem's development over the medium and long term.

Catalonia's main strengths according to the hubs⁶



⁶ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



Competition between European cities to attract tech hubs

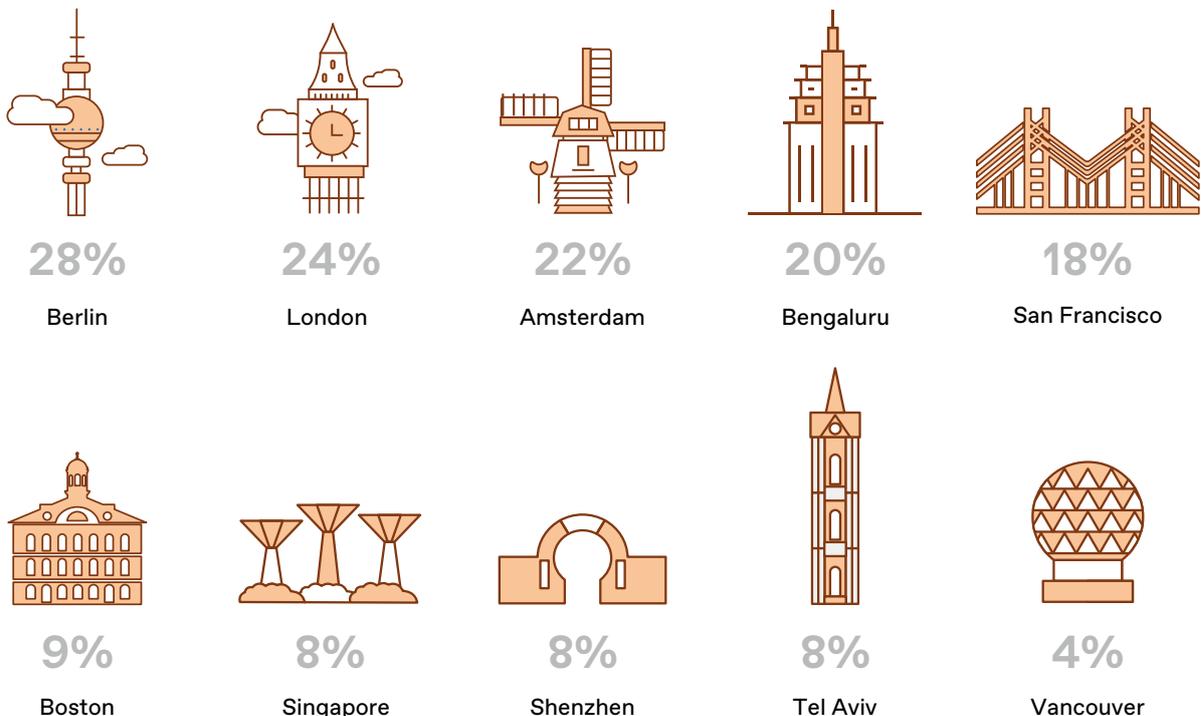
Attracting tech hubs pits Catalonia against leading cities and tech centres in the international arena.

The main competing cities for hubs which have been operating for over five years are still European ones with established technology ecosystems including **Berlin (30%)**, **London (25%)** and **Amsterdam (23%)**.

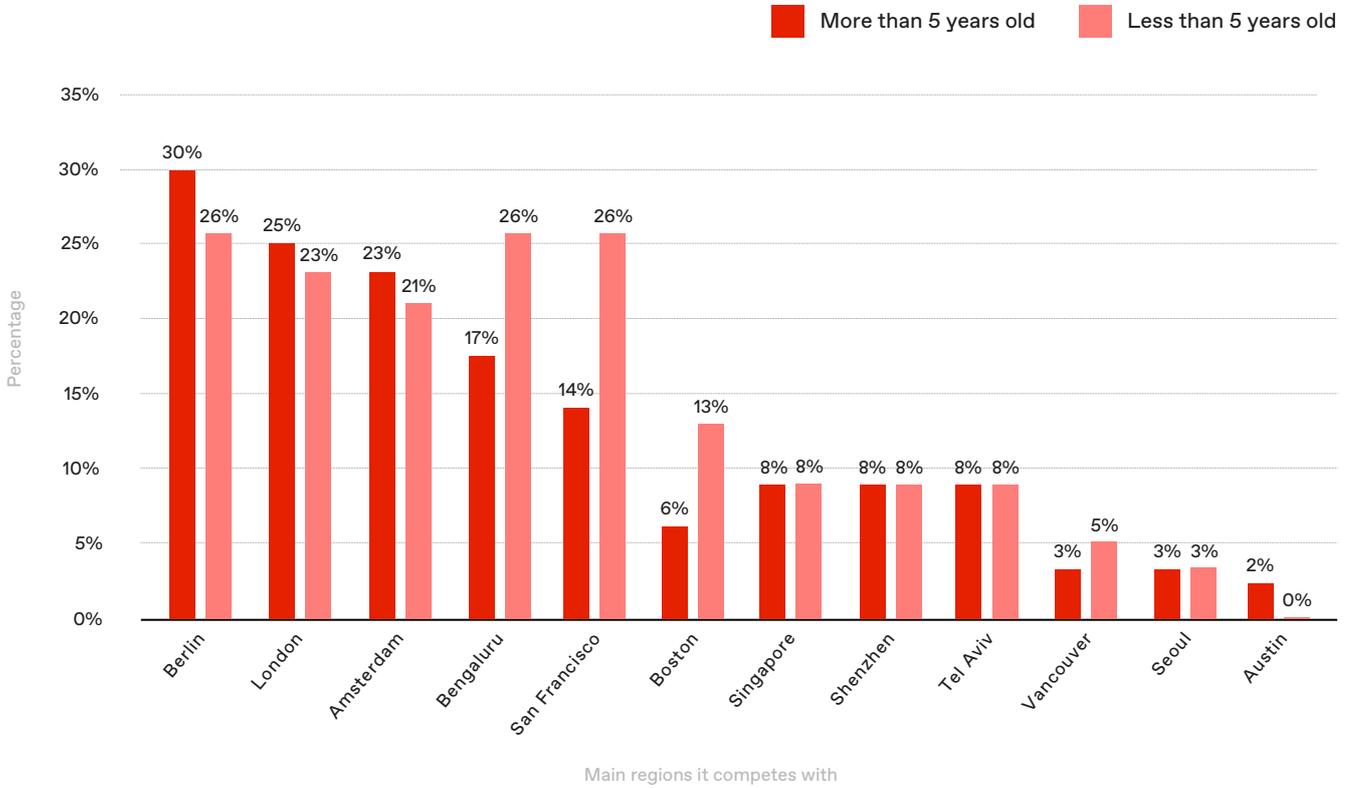
Nonetheless, there is a significant new development among the more recently created hubs: competition with non-European tech centres with global reach such as **Bengaluru (26%)** and **San Francisco (26%)** is on the up. This change among the newest hubs reflects an open approach to international options in recent decision-making processes and puts Barcelona on the radar for comparison with some of the world's leading innovation and technology players.

This swing towards highly specialised global cities rather than destinations associated with lower labour costs is a significant shift for the ecosystem. This is because it shows that Barcelona is viewed as a location featuring strategic value, technological capabilities and the potential for knowledge-intensive activities at a time when traditional models solely based on development and lower-cost talent are losing ground with the emergence of technologies such as artificial intelligence.

Cities competing with Barcelona-Catalonia



Main regions competing with Catalonia to attract hubs by age of the hubs⁷



⁷ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



Barcelona hosts office space at less than half the cost of some major northern European cities.

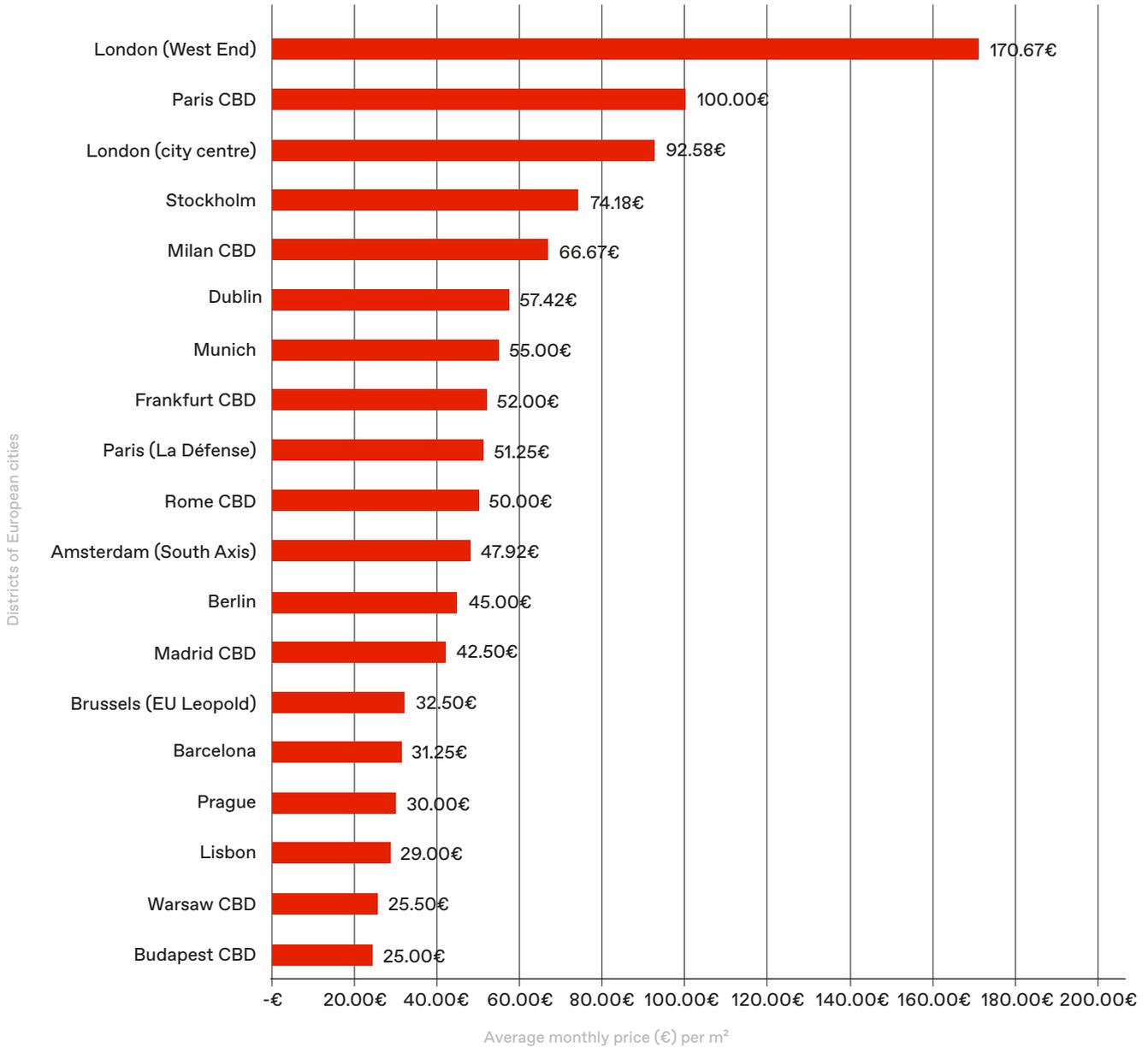
In terms of the European office market, European cities such as Budapest, Warsaw, Lisbon and Prague have the lowest price levels ranging between **€25 and €30/m²/month**. In the second tier are cities including Barcelona, Brussels and Madrid which make up an intermediate group featuring prices around **€30-40 /m²/month** and striking a balance between urban centrality, market maturity and operating costs.

Above this group are the main consolidated European markets - Berlin, Amsterdam, Rome, Paris (La Défense), Frankfurt and Munich - where prices vary between **€45 and €55/m²/month**. Meanwhile, the most stressed markets are obviously London and the central business district (CBD) in Paris where prices are well north of **€90/m²/month**, peaking in London's West End.

In this context, **Barcelona is positioned as a competitive alternative to the major European hubs**: it offers access to a consolidated tech ecosystem and international talent with a real estate cost structure considerably lower than in the continent's main financial centres and thus conducive to the medium- and long-term scalability and sustainability of tech projects.



Average monthly price (€) per m² of office space in European city districts (Q3 2025)⁸



⁸ Source: *European Office Update Report H1 2025*, prepared by Cushman & Wakefield.



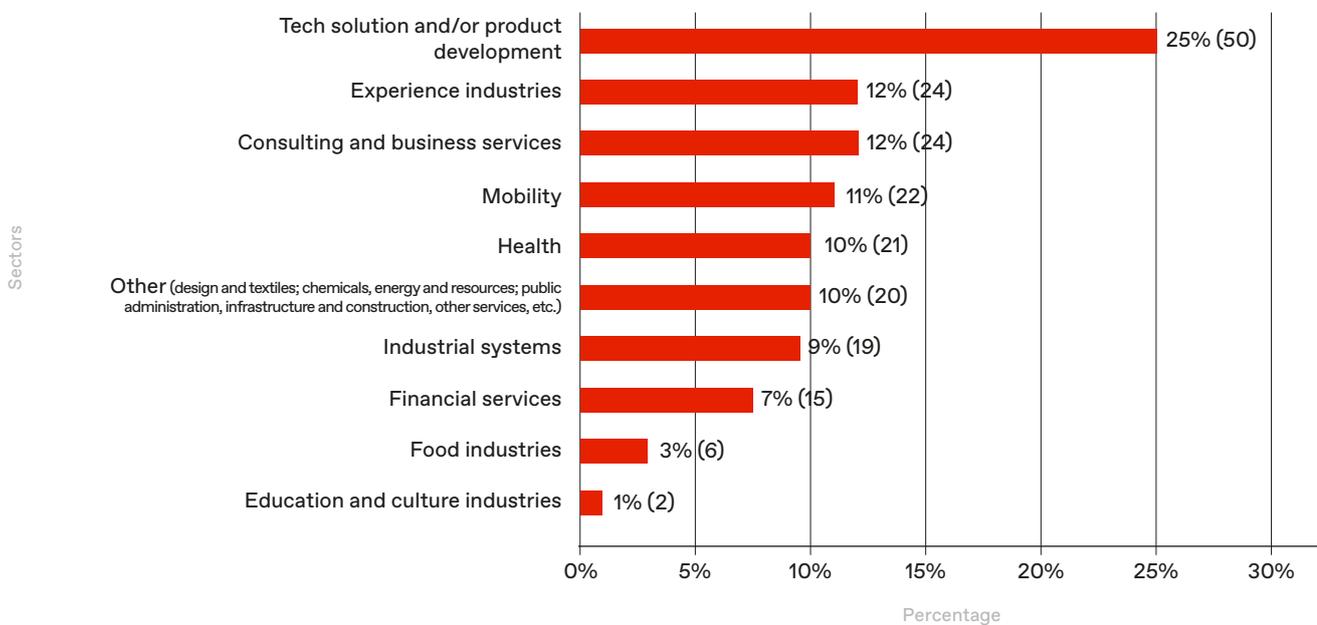
Sector developments and trends

The main sectors in which tech hubs are clustered in Catalonia are tech solution and product development, the experience industries and consulting and business services.

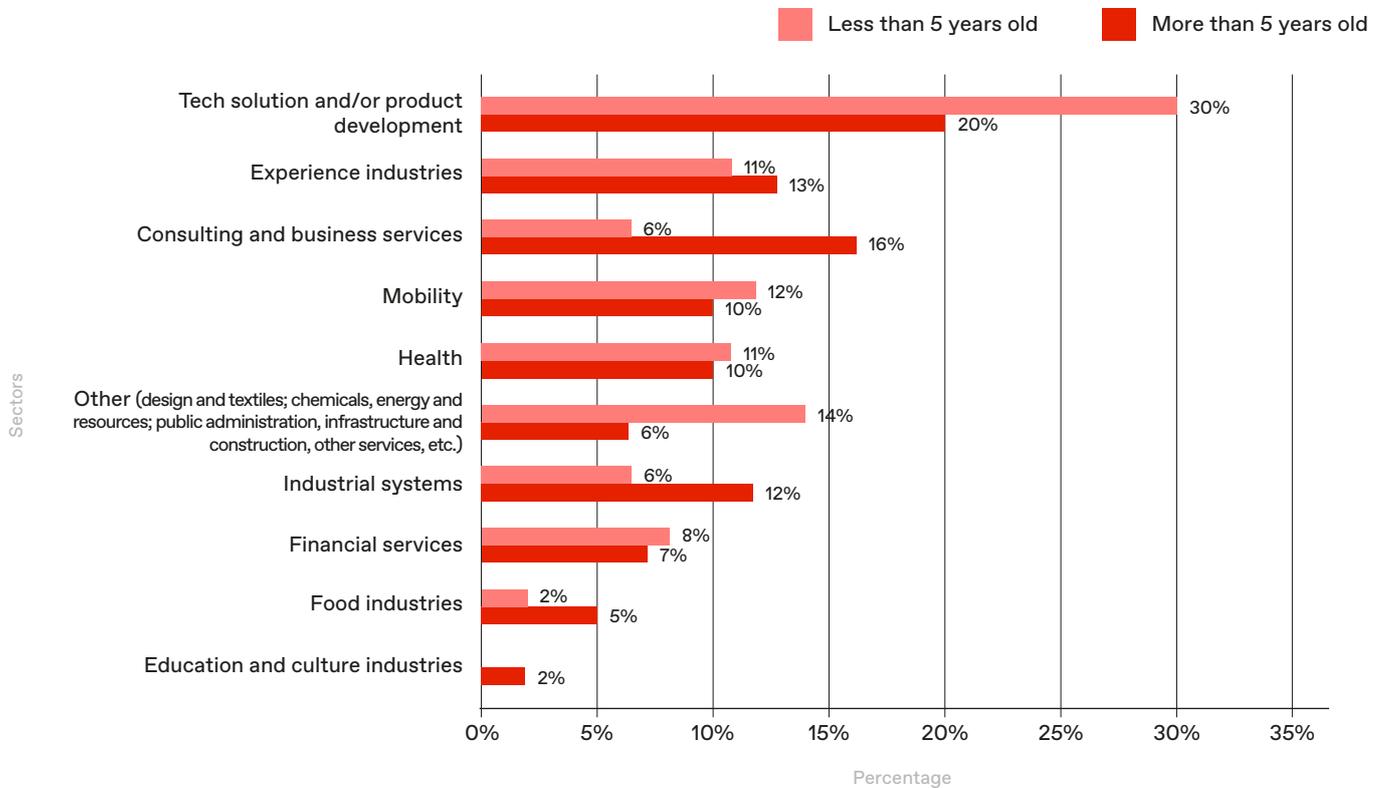
The sector distribution of tech hubs in Catalonia reflects an increasingly diversified and mature ecosystem in which recent specialisation developments sit alongside consolidated sectors accounting for a significant part of the existing network.

Looking at the sector distribution of the tech hubs by age, it is striking that the new ones are clustered in **tech development**. In contrast, sectors such as **consulting and business services** and **industrial systems** have a less prominent presence among the most recently founded hubs yet account for a higher proportion of the ones which have been operating for more than five years (**16%** and **12%** respectively). This reflects their structural role in the ecosystem as these are areas which were established earlier, have achieved significant levels of consolidation and furnish a stable foundation on which the recent growth of new, more specialised hubs has been built.

Sectors of tech hubs in Catalonia



Distribution of the hubs by sector by age



“Lufthansa’s Digital Hangar is driving innovation in digital aviation in Barcelona with the goal of transforming the traveller experience through an end-to-end approach and harnessing artificial intelligence as a lever for change. The combination of aeronautical knowhow and technological capabilities sets new standards of efficiency and transformation in the industry while enhancing the local ecosystem and positioning Barcelona as an international technological powerhouse”

Bea Domenech
COO – Lufthansa Group Digital Hangar BCN



2. The hubs' impact on the region

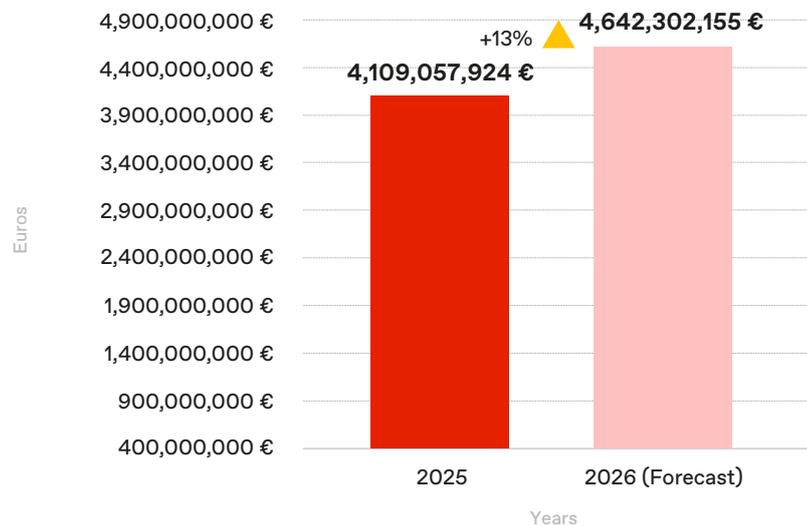


The impact and wealth generated by the hubs

Tech hubs are cementing their position as generators of wealth with an aggregate economic value of €4,109 B in 2025, €20 M on average per hub.

The financial balance sheet shows sustained growth. Forecasts for 2026 put the economic impact of hubs at €4,642 billion, an expected year-on-year increase coming to 13%. This development ramps up the region's ability to attract high value-added technological investment and cements its position as an international innovation leader.

The hubs' economic impact



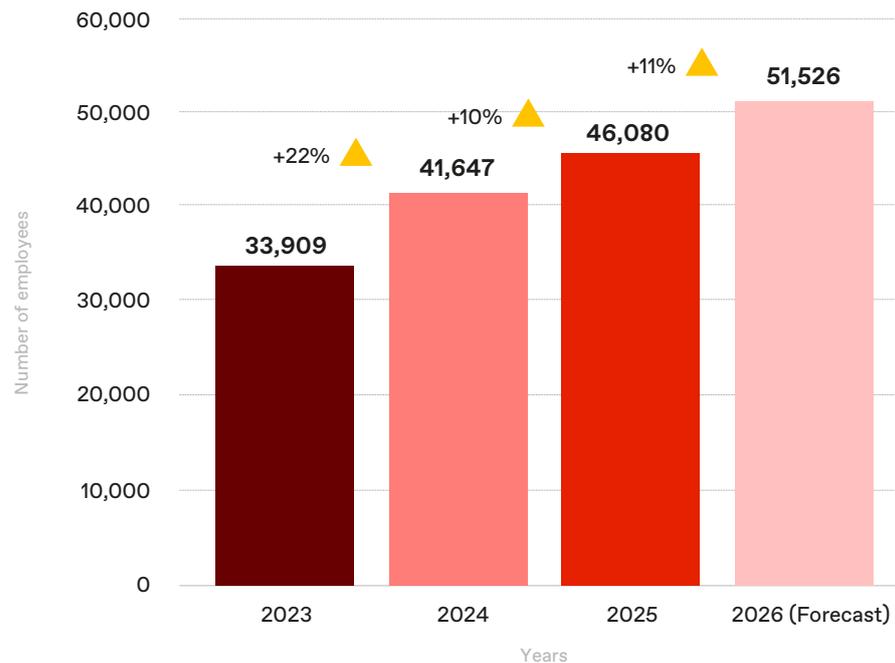
Jobs created and future expectations

In 2025, tech hubs in Catalonia have created 4,433 new jobs with a total of 46,080 workers.

In 2023, the ecosystem employed 33,909 people, a figure that jumped significantly in 2024 to 41,647 workers representing **22% year-on-year growth**.

In 2025, the number of employees continued to grow and reached **46,080**, an **increase of 10% compared to 2024** at a more restrained and stable pace following the sharp rise in the previous year. Forecasts for 2026⁹ point to a further surge to **51,526 employees**, up **11% compared to 2025**.

Expected change in the number of employees in the hubs



⁹ Forecasts for 2026 are calculated using assumptions about the percentage growth in workers per sector in which the hub operates. Furthermore, this figure is limited to the growth forecast for existing hubs and therefore does not include any new hubs which may be set up in the coming year.



“Allianz Technology’s Tech Hub has established itself as a strategic centre for technology development, innovation and decision-making for the Allianz Group. It has a diverse and highly qualified team of nearly 1,000 professionals from 70 countries The hub excels in technology areas such as *enterprise architecture, DevOps, full-stack, data, AI and cybersecurity and also in key non-IT areas*. Its ability to attract and develop talent unlocks sustained medium- and long-term growth projections.”

Gerard Esparducer

Head of the Spain Hub – Allianz Technology



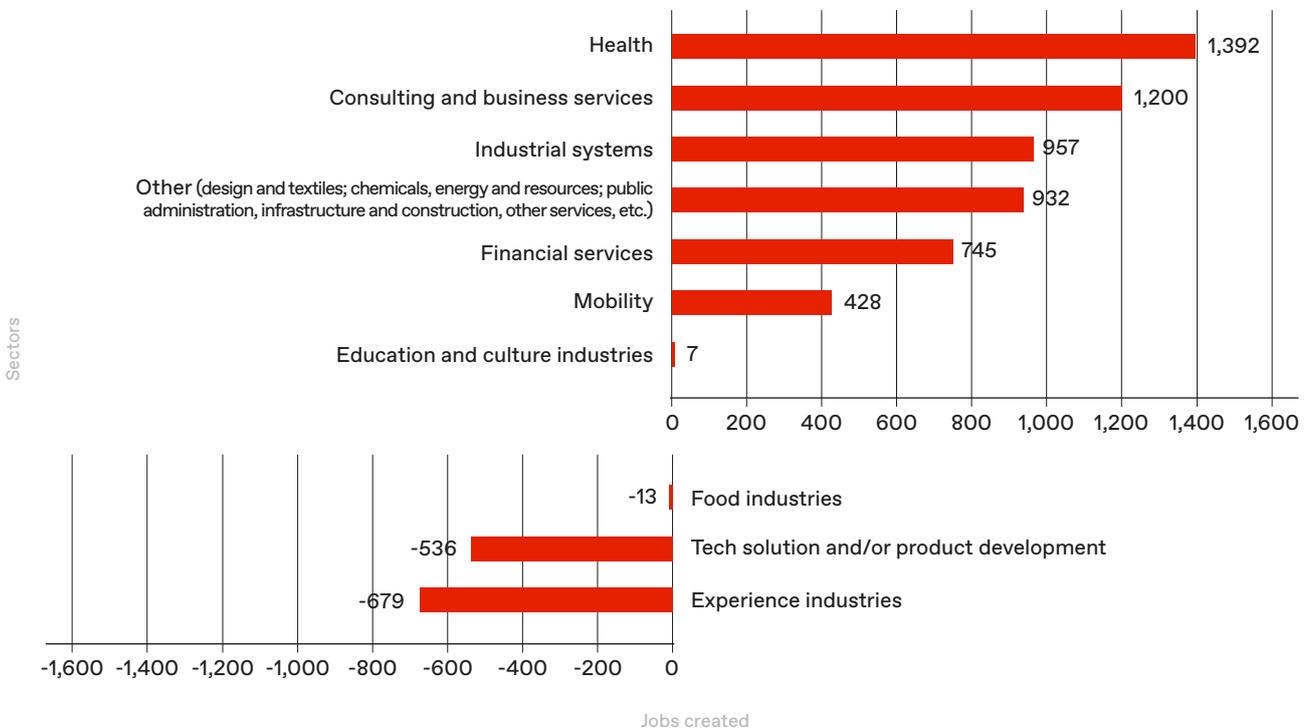
The sectors creating most jobs employment in 2025

Health, consulting and business services, and industrial systems lead job creation in 2025.

In 2025, job creation in Catalonia's tech hubs has been significantly clustered in the health sector, which tops the list at **1,392** new jobs, followed by **consulting and business services (1,200)** and **industrial systems (957)**. These three sectors account for most of the net employment growth during the year and showcase the growing importance of advanced services, healthcare digitalisation and advanced industrial systems.

Equally, there have been cutbacks in other areas, especially in the experience industries (gaming) and in tech solution or product development, down by 679 and 536 jobs respectively. The food industry has also shrunk slightly with the loss of 13 jobs. These changes are taking place against a backdrop of talent reconfiguration spurred by the emergence of artificial intelligence, which is changing the types of skills in demand, automating some roles and shifting some jobs to other activities.

Jobs created in 2025 by sector



3. Analysis of 2025: key figures for the new hubs

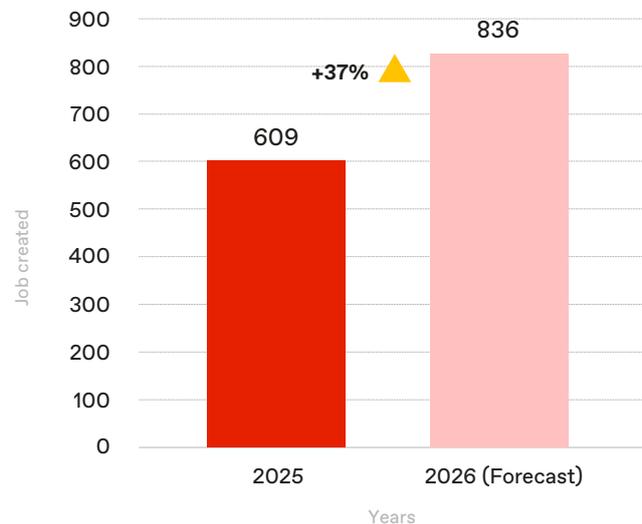


Advent of new hubs in the region

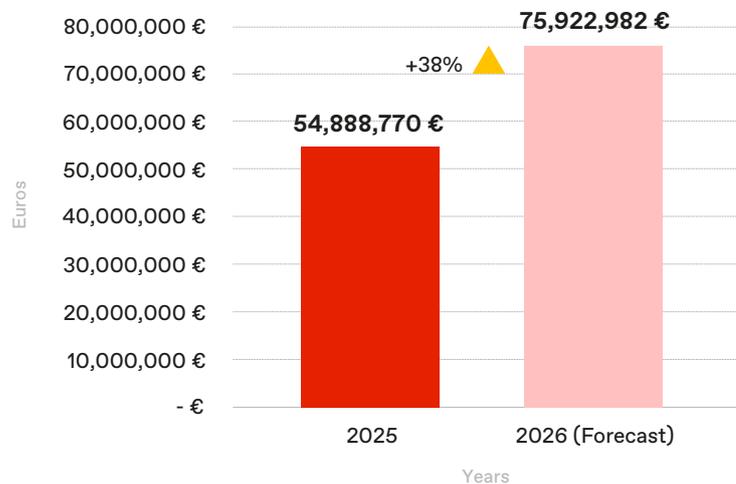
The 12 hubs kicked off in 2025 have generated 609 skilled jobs with an aggregate economic impact coming to €54 M.

The future prospects for these 12 hubs recently set up in Catalonia are overwhelmingly positive: in 2026, they are expected to generate **836 skilled jobs** and raise economic impact by **over €75 M**. These figures represent a **37% surge** in employment and **38%** in economic impact over the period 2025-2026, illustrating the swift consolidation and strong growth potential of the region's new tech hubs.

Jobs created in 2025 and forecasts for the new hubs



Economic impact in 2025 and forecasts for the new hubs



Description of the 2025 hubs

The country of origin and sectors of the 12 companies that have invested in hubs in Catalonia in 2025 are:

Hub name	Country of origin	Sector
CoreWeave	United States	Tech solution and/or product development (software, hardware, applications, platforms)
DHL Express	Germany	Mobility (automotive, freight logistics, mobility services, etc.)
dsm-firmenich	Switzerland	Health (pharmaceuticals, health and healthcare services, cosmetics, biotechnology, animal health, etc.)
Fast Track	Malta	Tech solution and/or product development (software, hardware, applications, platforms)
Foundever	France	Tech solution and/or product development (software, hardware, applications, platforms)
Kage	China	Mobility (automotive, freight logistics, mobility services, etc.)
Monzo	United Kingdom	Financial services (finance, insurance, etc.)
PTC	United States	Tech solution and/or product development (software, hardware, applications, platforms)
Smith + Nephew	United Kingdom	Health (pharmaceuticals, health and healthcare services, cosmetics, biotechnology, animal health, etc.)
Symrise	Germany	Other (design and textiles; chemicals, energy and resources; public administration, infrastructure and construction, other services, etc.)
Trend Micro	Japan	Tech solution and/or product development (software, hardware, applications, platforms)
Walldorf Consulting	Germany	Consulting and business services (strategy and processes, human resources, etc.)



The hubs listed above are high-impact strategic projects which bolster Catalonia's position as a draw for advanced technological investment and skilled talent. Relevant information on the main projects under development is set out below:

CoreWeave

Large-scale digital data hub located in the Zona Franca covering **2,200 m²** which houses Nvidia supercomputers specialising in artificial intelligence.

DHL Express

International mega-hub located at El Prat airport, which increases its operational capacity sevenfold and ramps up Catalonia's leadership in global logistics and e-commerce.

dsm-firmenich

Consolidation of its presence in Catalonia in health and nutrition through proactive involvement in local innovation centres related to bioscience and healthy nutrition.

Fast Track

Expansion of its tech hub to attract highly specialised talent for the development and evolution of its digital CRM and marketing automation platform.

Foundever

Global artificial intelligence laboratory (AI Lab) located in the 22@ district geared towards transforming the customer experience through generative AI solutions and customer experience (CX) technologies.

Kage

Kage opens its hub in Catalonia to serve the European market and drive logistics, technological development, and the global growth of batteries and energy solutions, as well as to manage global marketing from its Catalan headquarters.

Monzo

The British neobank's first engineering office in Spain, set up to support its global fintech platform and power the development of software and digital financial solutions.

PTC

Operations centre focused on the digital thread concept and the development of industrial software and Internet of Things (IoT) solutions for engineers and advanced industrial environments.

Smith + Nephew

2,000 m² campus in Esplugues de Llobregat for advanced surgical training and the development of medical robotics solutions and state-of-the-art medtech technologies.

Symrise

The company's first global data and artificial intelligence hub, designed to optimise the creation of fragrances and nutrition solutions through advanced digitalisation and food innovation processes.



Trend Micro

European strategic headquarters engaged in cybersecurity operations development, engineering and support, and enhancing regional digital protection and technology resilience capabilities.

Walldorf Consulting

Hub specialising in cloud transformation through SAP Cloud ERP solutions for large companies, building on Catalonia's role as a high value-added SAP consulting hub.



Big numbers for the hubs set up in 2025

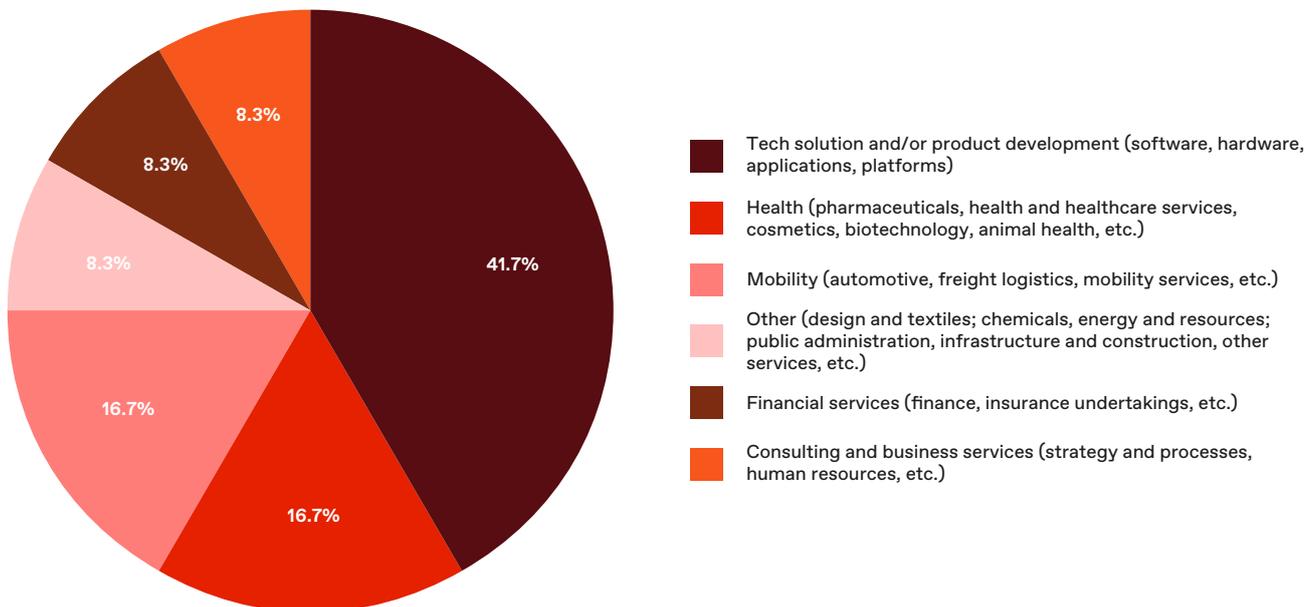
Sectors

The new hubs are committed to technological development and health.

The main business sector of the new hubs set up in Catalonia is **tech solution or product development** which brings together the largest number of projects identified. Next is **health**, with a significant presence of hubs associated with the pharmaceutical industry, biotechnology and digital health.

Less significant, but still important, is **mobility**, while the rest of projects are spread across financial services, consulting and business services, and a range of other sectors, including chemistry, energy, design and infrastructure.

Sectors of companies which have invested in hubs in Catalonia in 2025



Location

Barcelona stands out as the main cluster with expansion towards the AMB and outside the metropolitan area.

Of the **12 new hubs** identified, **seven** are in Barcelona while **four** are sited in other towns in the Barcelona Metropolitan Area (AMB) and one outside the metropolitan area, specifically in **Mataró**.

This spread underlines Barcelona's key role as the primary draw for new tech projects while also revealing geographical dispersion across the metropolitan setting with projects in towns such as **El Prat de Llobregat, Esplugues de Llobregat and L'Hospitalet de Llobregat**.



4. Profile of the tech hubs



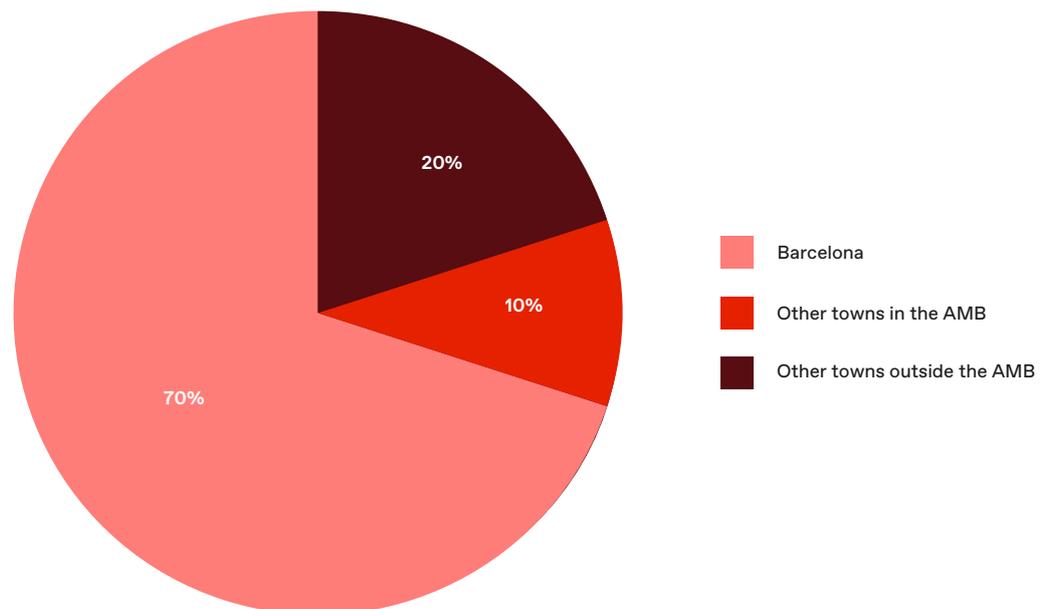
Territorial distribution of the hubs in Catalonia

An ecosystem centred on Barcelona with a stable geographical structure.

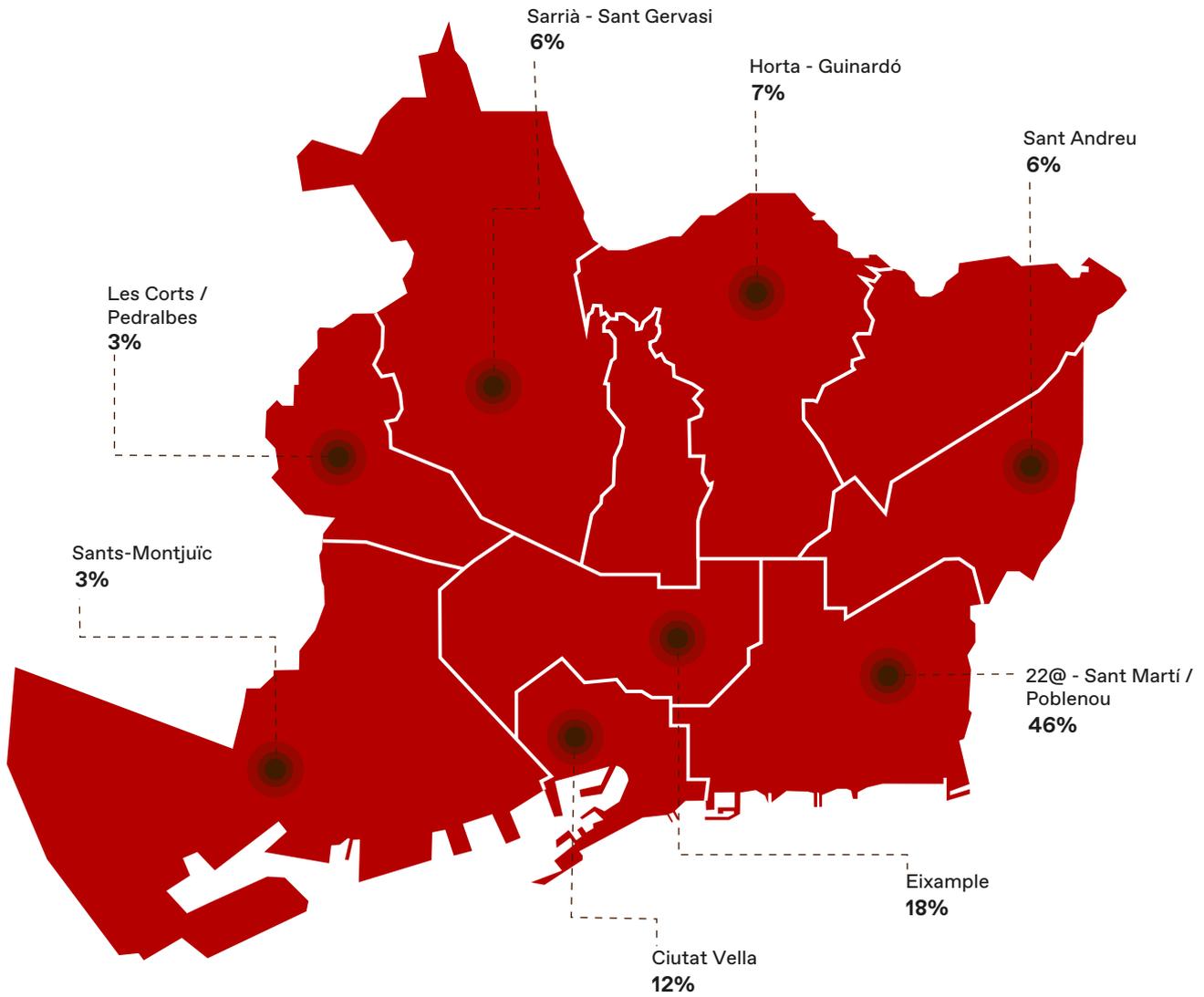
The territorial distribution of the tech hubs in Catalonia continues to show **strong clustering in Barcelona** which is home to **70%** of the hubs. The remaining **30%** is spread across other towns in the region with a significant footprint in the Barcelona metropolitan area (**20%**) and a smaller one in towns outside it (**10%**).

The current pattern reflects a firmly established geographical layout in which Barcelona is the core of the ecosystem while the rest of the region, especially other towns in the metropolitan area, play a supporting role in hosting and implementing tech activities.

Territorial distribution of the hubs in Catalonia

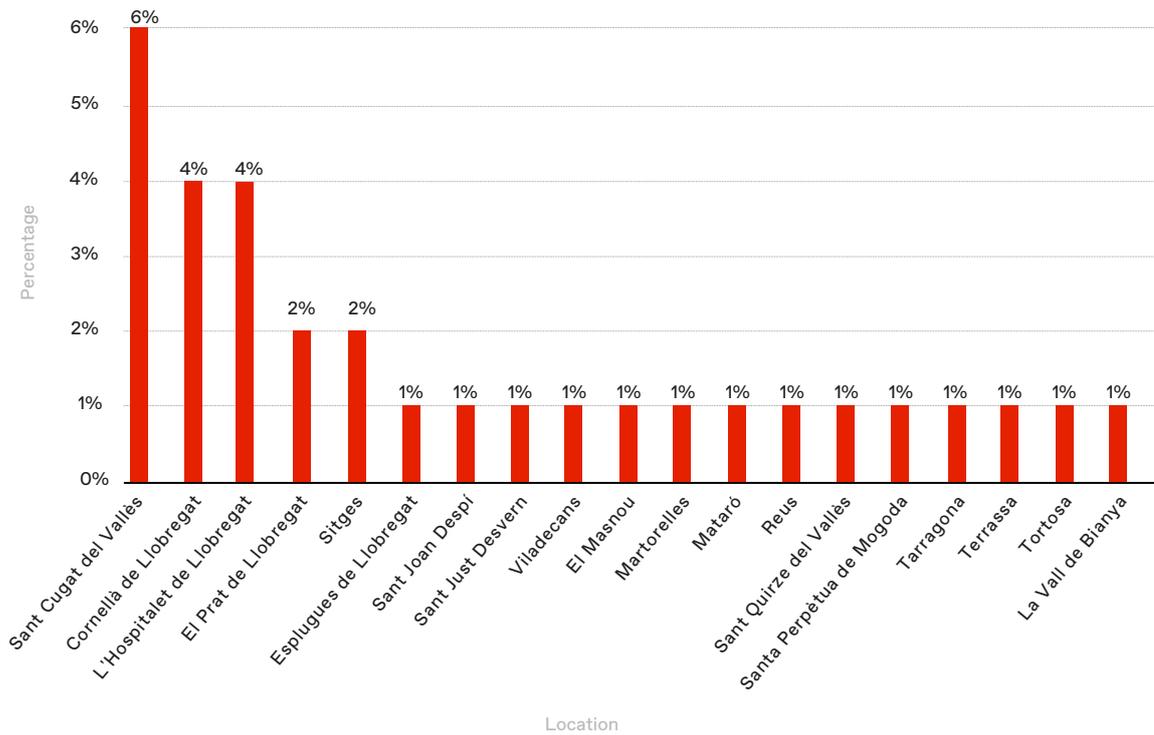


Location of hubs per district in Barcelona



The Barcelona Metropolitan Area (AMB) continues to be the main alternative location to the city of Barcelona. **Sant Cugat del Vallès** stands out as the town with the highest density in this area accounting for **6%** of all hubs, followed by **Cornellà de Llobregat (4%)** and **L'Hospitalet de Llobregat (4%)**. Next come **El Prat de Llobregat (2%)** and **Sitges (2%)**, while the rest of towns host lower numbers at around **1%**.

Location of the hubs by towns outside Barcelona¹⁰



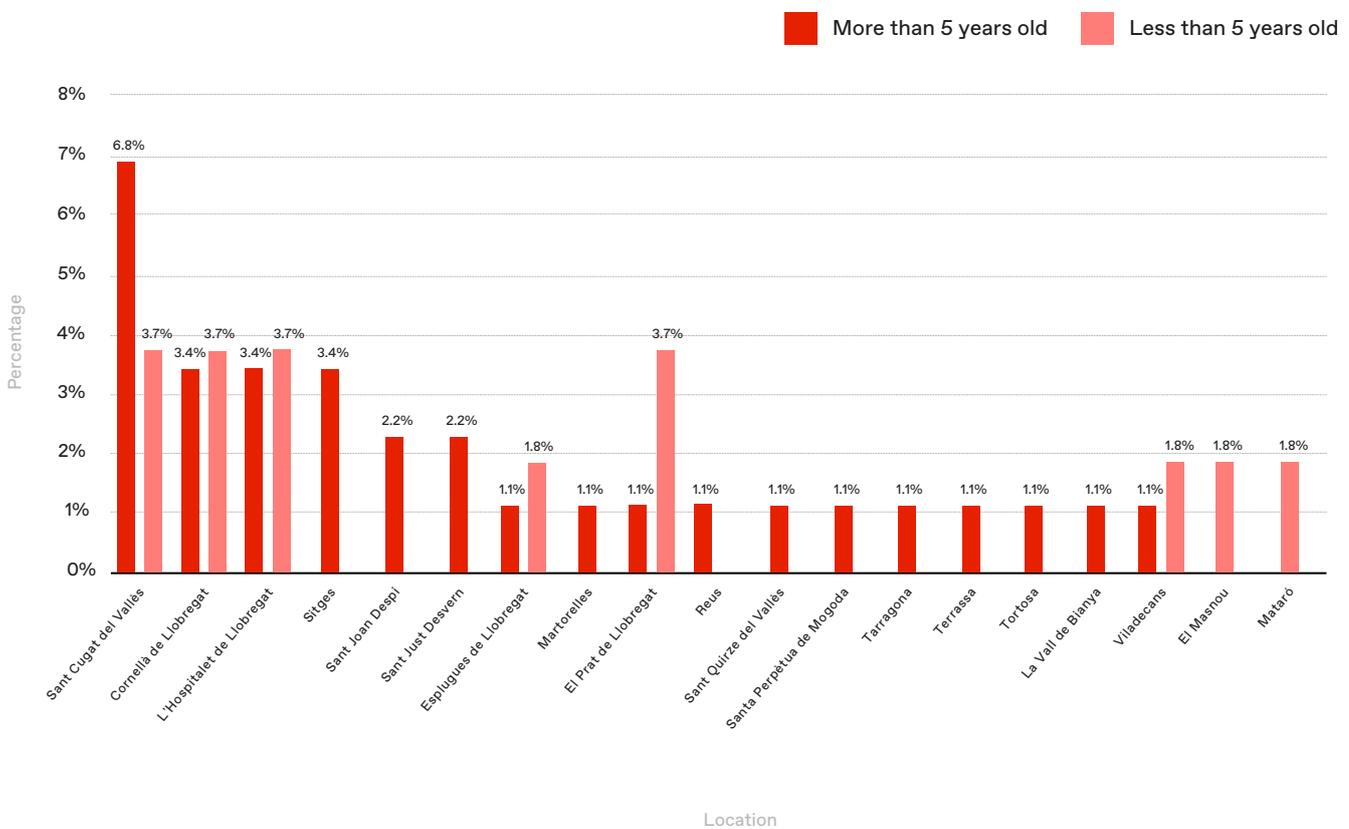
¹⁰ Percentages may not add up exactly to the total (30%) due to rounding of figures to improve the readability of the graph.



The location of tech hubs outside Barcelona also varies by their age. **Sant Cugat del Vallès** hosts the highest percentage of hubs which are more than five years old (7%), followed by **Cornellà de Llobregat** (3%) and **L'Hospitalet de Llobregat** (3%). There are also well-established hubs in towns such as **Sant Joan Despí** and **Esplugues de Llobregat**.

Hubs that are less than five years old are largely clustered in **Sant Cugat del Vallès**, **Cornellà de Llobregat**, **L'Hospitalet de Llobregat** and **El Prat de Llobregat**, all at 4%. Newly created hubs have also been identified in **Viladecans** and **Mataró**.

Location of hubs by towns outside Barcelona by age¹¹



¹¹ The percentages for each segment do not add up to 100% as the remaining percentage is for hubs in Barcelona (63% in the case of hubs more than 5 years old and 78% in the case of hubs less than 5 years old).

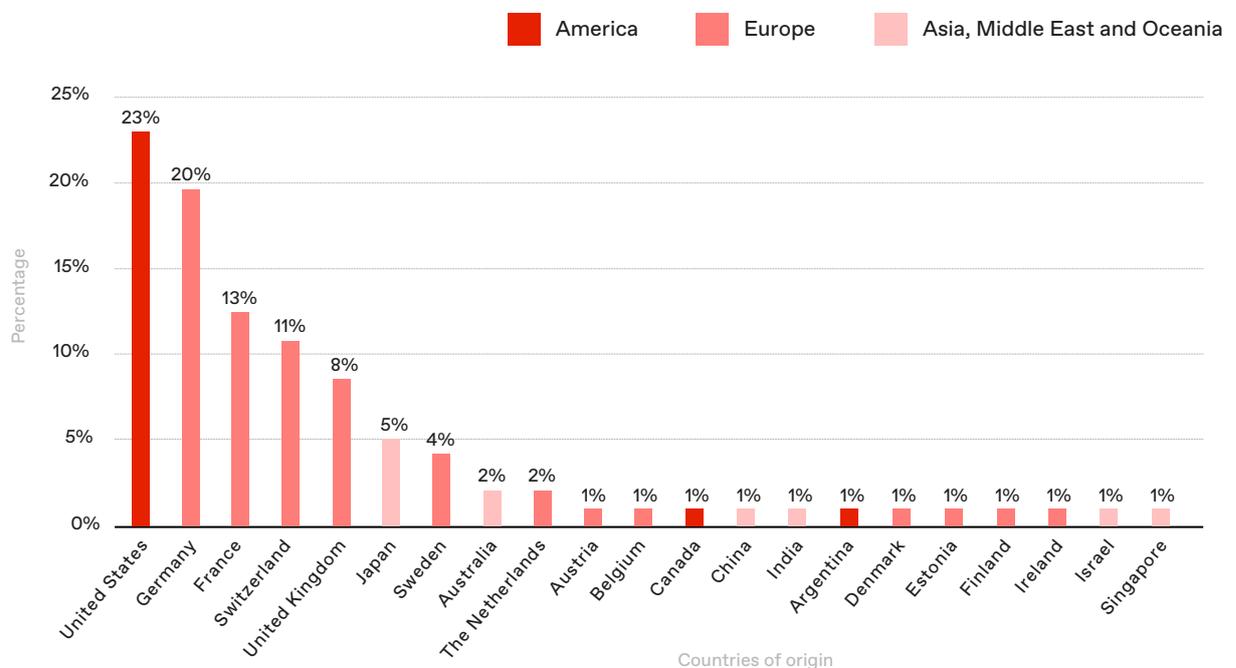


Country of origin of the hubs

The United States is still in the lead while Germany and France have cemented their position as the main European countries of origin. .

The United States is the primary country of origin of hub parent companies at 23%. It is followed by Germany (20%) and France (13%), which account for a significant part of the European ecosystem. Switzerland (11%) and the United Kingdom (8%) round off the group of countries with the highest share.

Hub countries of origin

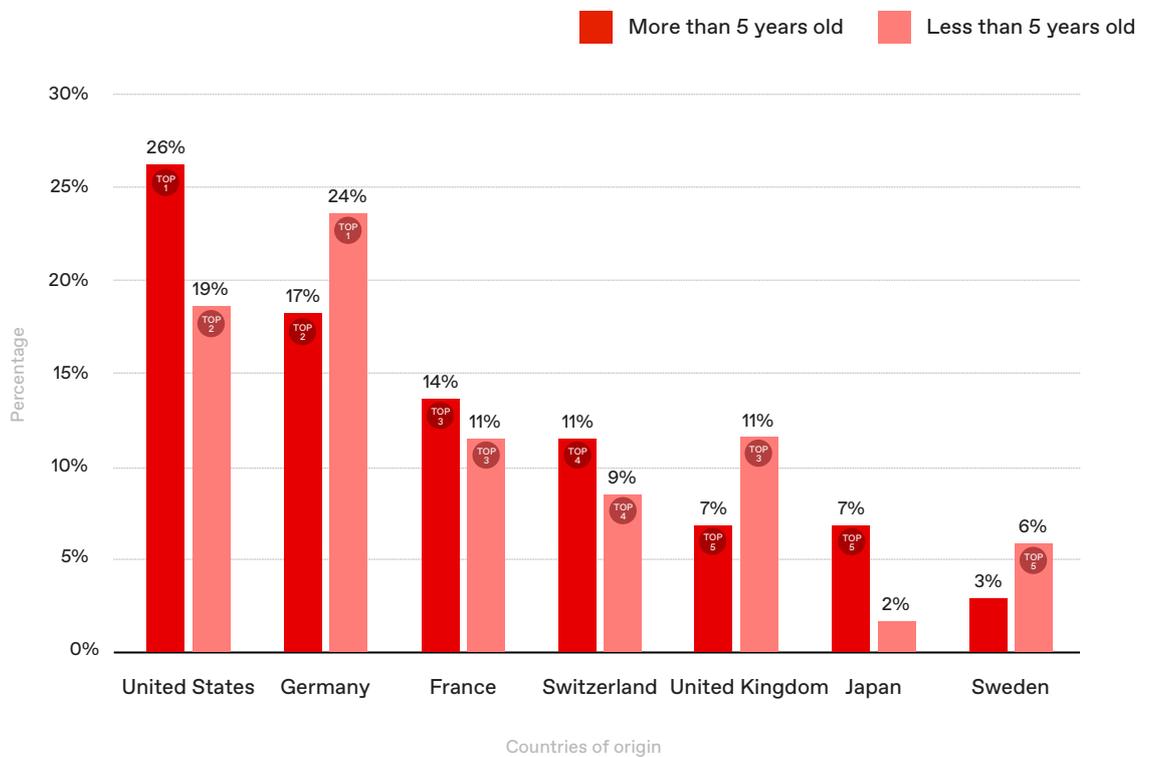


Germany is the main country of origin of the newest hubs.

The **United States** is the country of origin for **26% of hubs which are more than five years old**. **Germany** retains a significant share (**17%**), while **France** accounts for **14%**. **Switzerland** (**11%**) and **Japan** (**7%**) complete the group of countries with the strongest presence among the most established hubs.

Germany takes over the lead in hubs less than five years old at **24%**. The **United States** stands at **19%**, while the **United Kingdom** and **France** both come in at **11%**. **Sweden** is also gaining ground among the newest hubs at **6%** of the total.

Top 7 countries of origin of the hubs by age



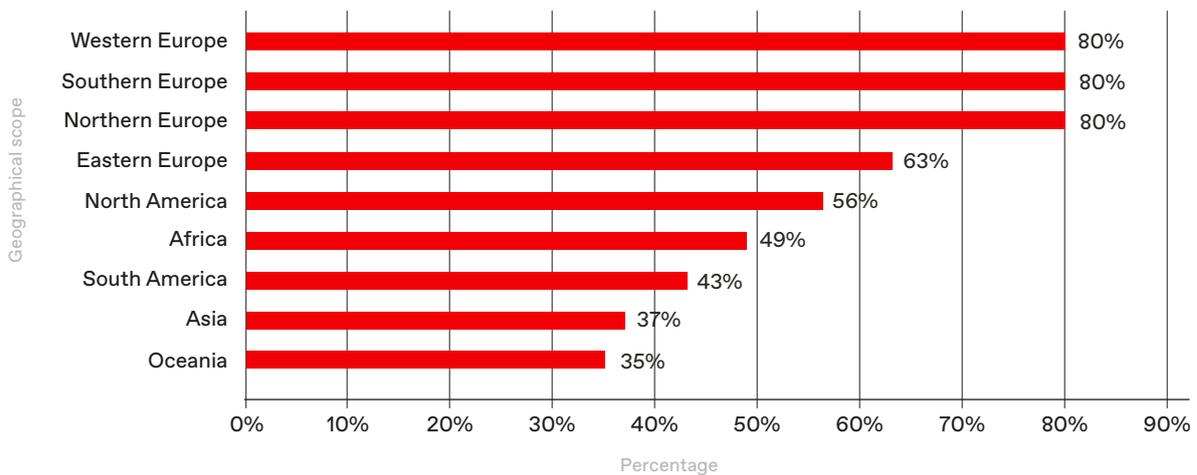
Territorial scope of the services delivered by the hubs

Europe remains the hubs' main area of operation with a high and uniform reach across all regions.

The geographical scope of the services delivered by the tech hubs is mostly clustered in Europe with **80%** of them providing services in Southern, Western and Northern Europe and **63%** in Eastern Europe.

Outside Europe, the hubs continue to have a significant footprint in other international markets with **56%** delivering services in **North America**, **49%** in **Africa** and **43%** in **South America**. **Asia** and **Oceania** are covered by **37%** and **35%** respectively, reflecting a diversified pattern of international operations yet secondary to the European market.

Geographical scope of the services delivered by the hubs¹²



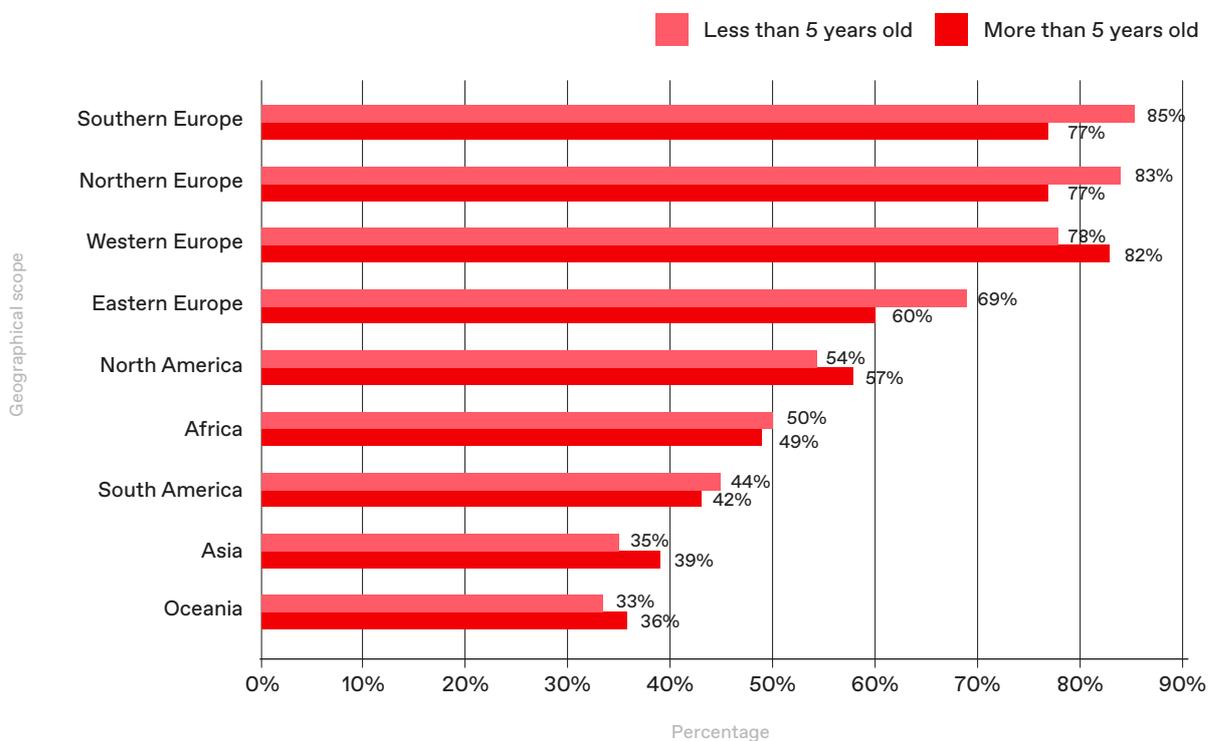
¹² The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



In terms of geographical scope and age, hubs that are **more than five years old** are more prevalent in **Western Europe (82% vs 78% in newer hubs)**. In **Northern Europe**, and although there is a strong presence in both cases, newer hubs post slightly higher scores (**83% vs 77%**). By contrast, **Southern Europe** accounts for a higher proportion of newly founded hubs (**85% vs 77%**), as does Eastern Europe (**69% vs 60%**), pointing to recent buoyancy in these regions.

Outside Europe, differences by age are more modest with similar figures in **North America (54% and 57%)** and a smaller footprint in **Africa, South America, Asia** and **Oceania**.

Geographical scope of services delivered by the hubs by age¹³



¹³ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

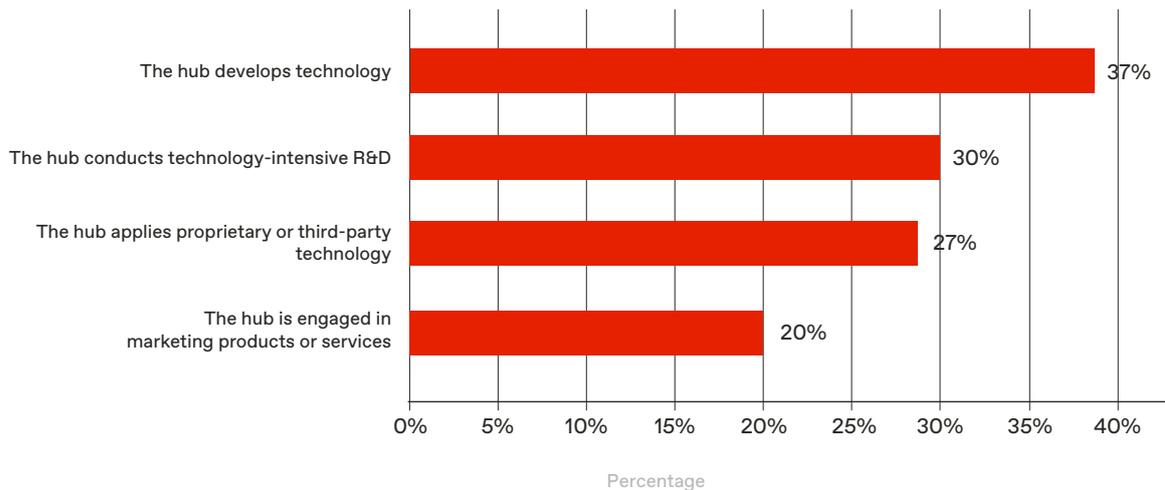


Type of customers and penetration of the hubs

The hubs are more involved in R&D and technological development than in marketing.

The results show that **37%** of the hubs develop proprietary technology and **30%** conduct tech-intensive R&D activities, confirming the predominance of capacity-building roles. Meanwhile, **27%** apply proprietary or third-party technology while product marketing or providing services to third parties (technological advice or consulting) is the least widespread activity (**20%**). This pattern shows that the hubs primarily generate knowledge and foster innovation rather than operate as structures geared towards direct commercial use.

The hubs' activity in relation to technology¹⁴



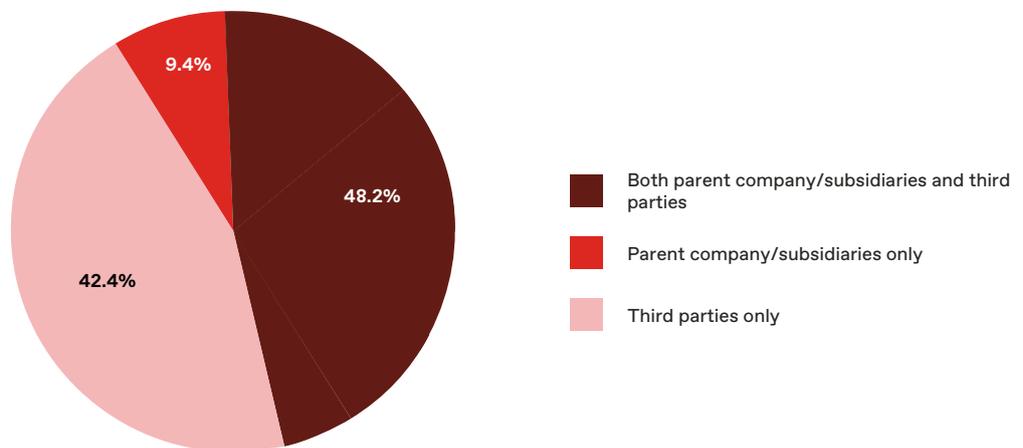
¹⁴ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



The hubs prioritise tech development for their group while selectively engaging with third parties.

The technology developed by the hubs is mostly geared towards the companies' internal ecosystem, either combining services for the parent company/ subsidiaries and third parties (**48.2%**) or exclusively for the organisation (**42.4%**). Only a small proportion of hubs develop technology solely for third parties (**9.4%**). This pattern reflects the fact that the hubs in Catalonia are mainly strategic assets for the group, largely geared towards supporting key operations and generating internal capabilities while in many cases also pursuing additional external opportunities

Who is the technology developed for?



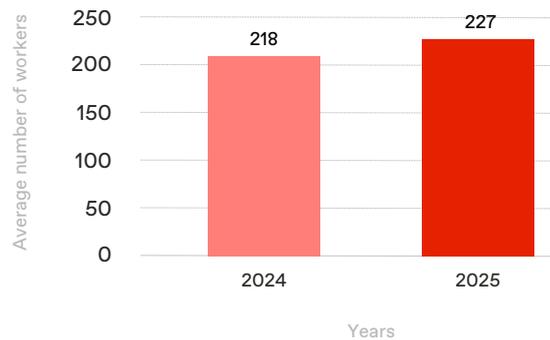
5. Description of talent



The size of the hubs' workforces

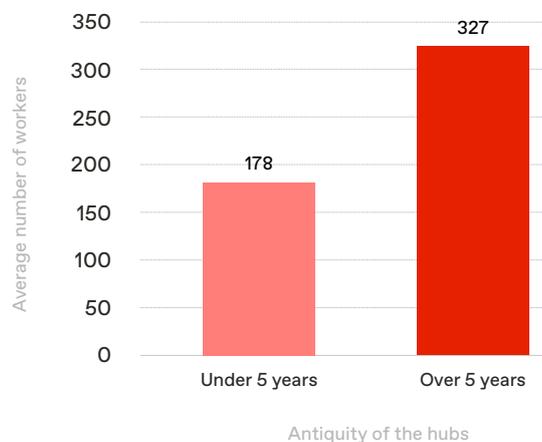
The average size of the hubs has increased compared to 2024: from 218 to 227 people.

Average number of employees per hub

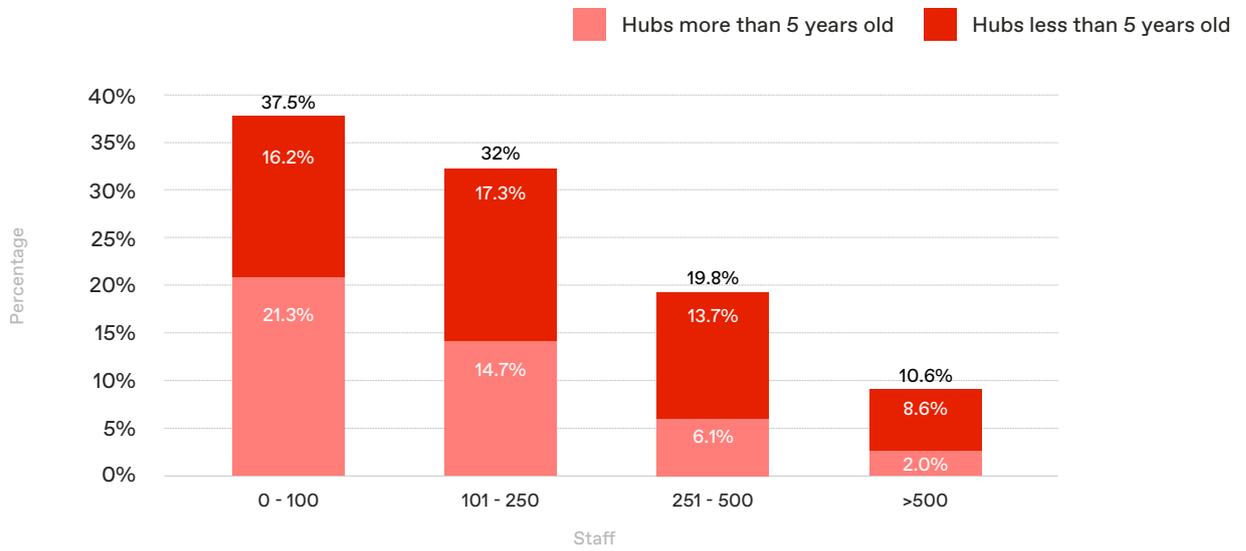


The analysis reveals a significant difference in the average size of hubs based on their age. Hubs which have been operating for more than five years have 327 employees on average, almost twice as many as their newest counterparts where the mean is 178. This gap reflects an evident pattern of consolidation: as hubs mature, they tend to expand their operational capacity, take on greater responsibilities within the group and gradually scale up their teams, while more recently founded hubs are still in the early stages of growth.

Average number of employees by hub age



Distribution of hubs by staff size

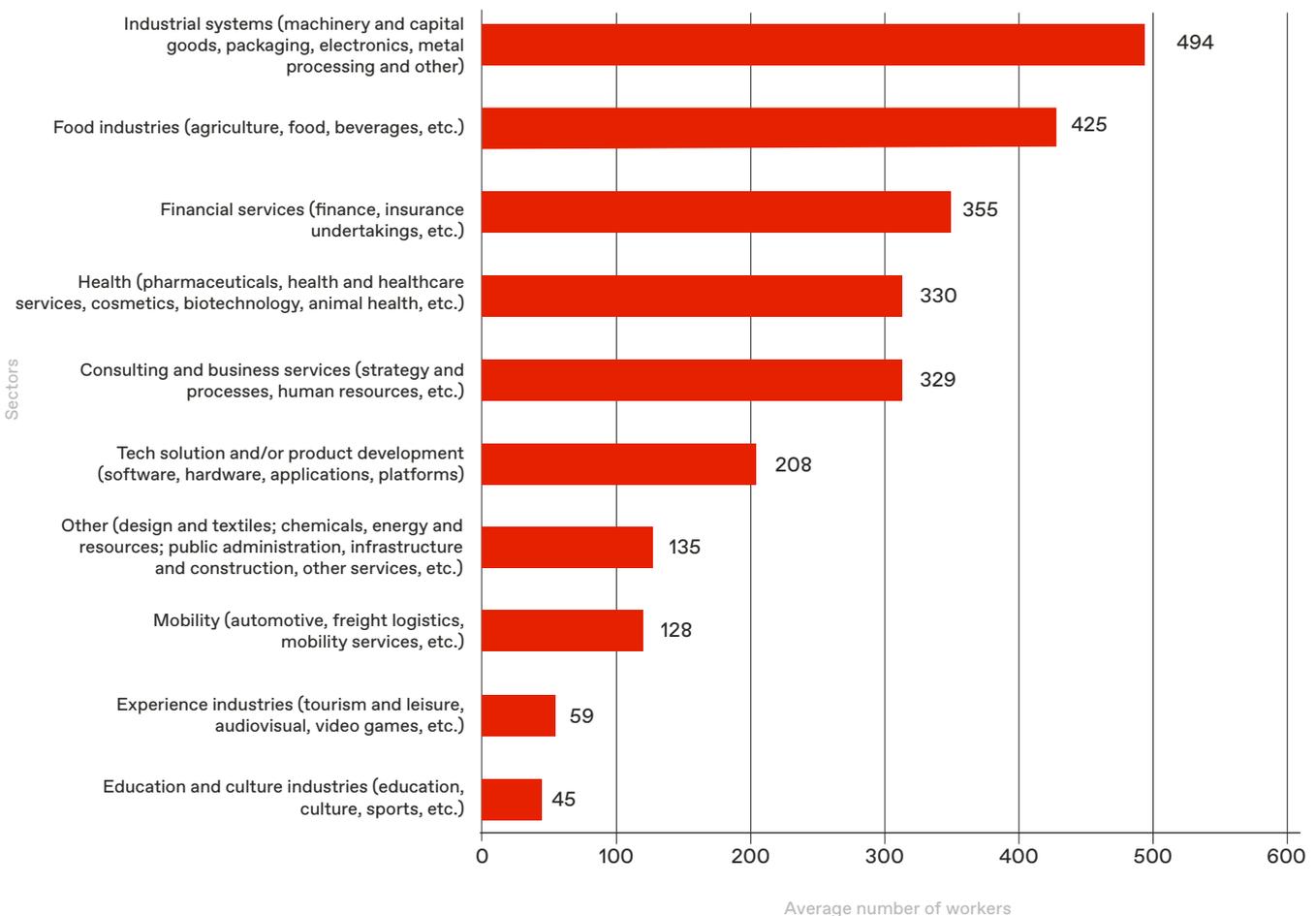


Size of hubs by economic sector

The largest hubs are clustered in industrial systems and food, followed by finance and health.

The industrial systems and food industries host the largest hubs with an average of 494 and 425 employees per hub, respectively. Next are the financial services hubs, with an average of 355 staff members, and the health sector hubs, which have 330 people per hub.

Average number of employees in hubs by sector



Hubs' most sought after specialists in Catalonia

Demand for tech talent is geared towards data, software and security.

The **talent needs of the hub ecosystem in Catalonia** are closely tied to the scalability of tech projects, process digitalisation and rolling out advanced solutions.

Examination of the most sought-after professionals shows significant clustering of demand in **software development, data and systems engineering** which are the hubs' core operational areas. They are joined by experts in **cybersecurity, technology consulting and complex business environment specialisation** which support embedding digital solutions in the business.

Top 10 professionals most sought after by tech hubs¹⁵

1	Software engineers
2	IT consultants
3	Cybersecurity analysts
4	SAP specialists
5	Data analysts
6	Video game developers
7	Business analysts
8	Data scientists
9	Data engineers
10	DevOps engineers

¹⁵ Source: Talent intelligence analysis developed by TalentUp specifically for this report.



Professionals the hubs have greatest difficulty in finding

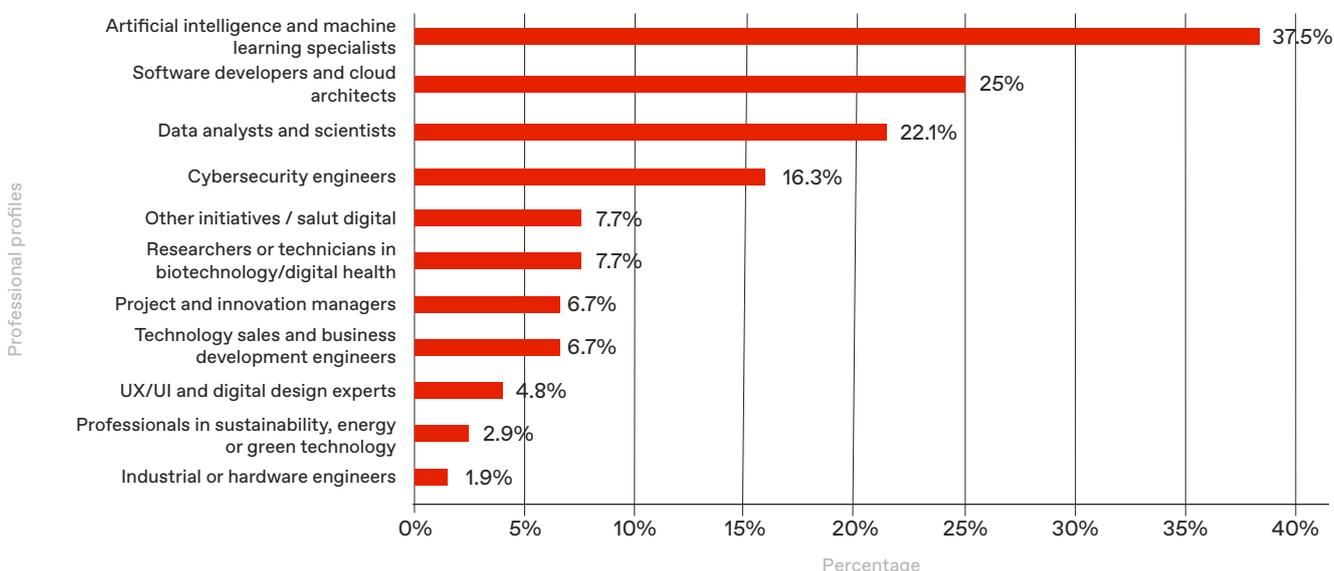
The hubs' problems in getting hold of specialised talent are largely in AI, data and advanced digital architecture roles.

The tech hubs identify highly specialised experts as the main talent bottleneck, particularly in the case of **artificial intelligence and machine learning specialists** who are the hardest to recruit. These professionals are in high demand across the board, small in number and involve extremely specific technical requirements, all of which heightens competition between regions and businesses.

Next are **software developers and cloud architects** along with **data analysts and scientists**, who are key professionals for advanced information management and rolling out scalable digital architectures yet are not available in sufficient quantities to cater for the hubs' needs.

Likewise, **cybersecurity engineers** are still especially tough to recruit given the growing complexity of digital systems and heightened associated risks. Finally, **applied research, technological innovation and highly specialised fields** round off the roles that the hubs are currently having trouble in recruiting.

Professionals the hubs have greatest difficulty in recruiting today¹⁶



¹⁶ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



“Since the Vueling hub was created in 2017, the team has almost doubled in size and gained in specialisation, especially in data and artificial intelligence. We are mainly looking for software, data and DevOps engineers, data scientists, cybersecurity experts and specialists in emerging technologies such as AI. Furthermore, with an aim to attract local talent we have set up Vueling University, our own training programme combining technological specialisation, practical training and corporate culture which enables us to bring new professionals into the team.”

Javier Álvarez
IT Director - Vueling

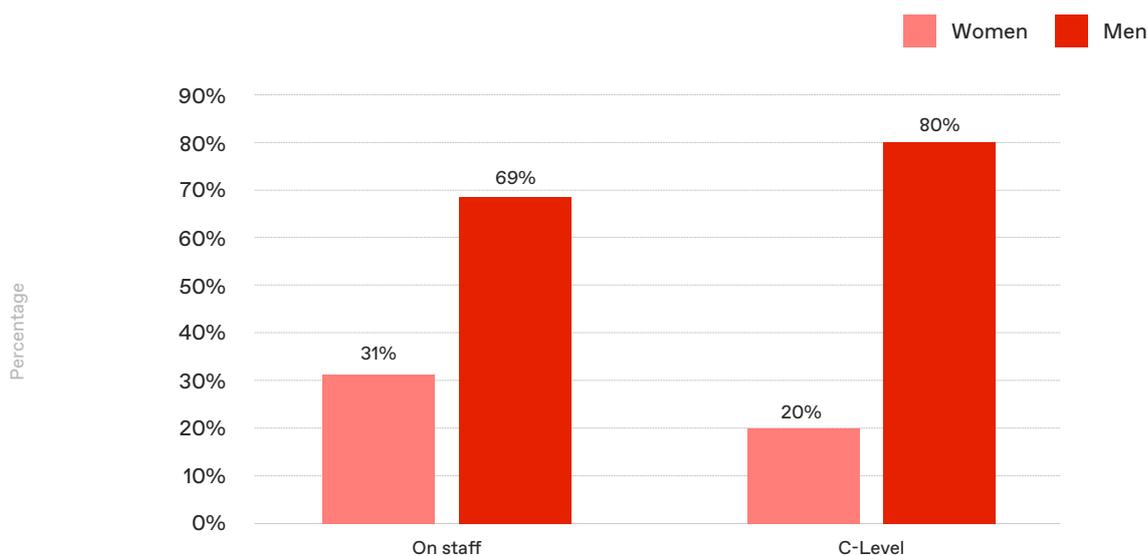


Female talent in the hubs' workforce

Women make up 31% of the hubs' workforce. However, this figure drops to 20% in management levels.

Gender distribution shows differences between the total workforce and the management level of tech hubs. **Women account for 31%** of the total workforce yet make up only **20% at the management level**. This disparity reflects the fact that women are more likely to be recruited at entry levels in organisations whereas management positions have a different structure. Notwithstanding progress in attracting female talent, the translation into leadership roles is still a structural challenge for the tech hub ecosystem.

Women in tech hubs in Catalonia

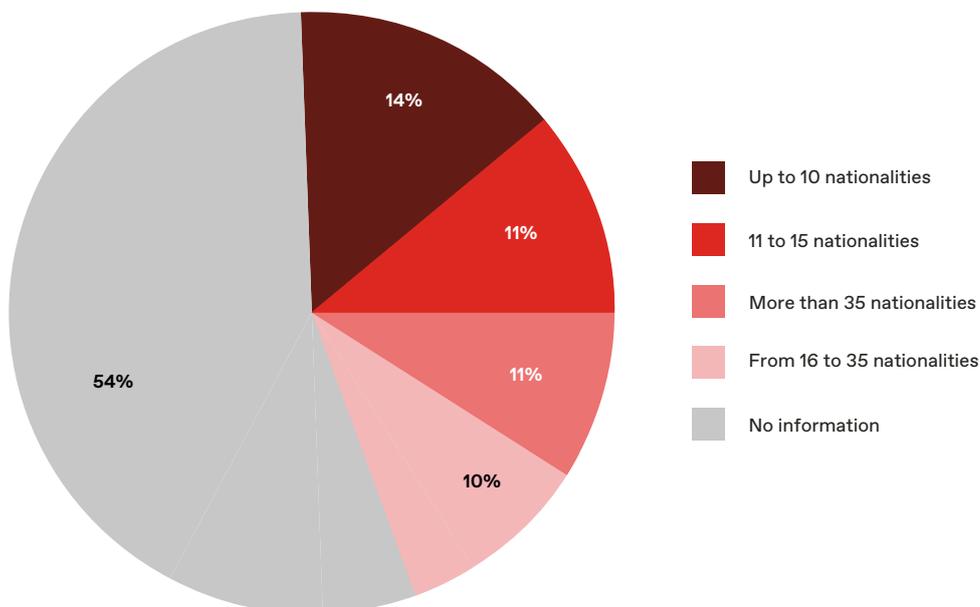


Diversity of backgrounds among employees

High international diversity in the workforces of tech hubs.

The chart shows that tech hubs in Catalonia boast a high level of international diversity in their teams. While a significant proportion of the hubs have workforces containing up to 10 nationalities, a considerable proportion are made up of much more diverse teams at over 15 and sometimes more than 35 nationalities. These figures reflect the hubs' ability to attract international talent and build multicultural environments, especially those that are larger and have a global reach.

Percentage of hubs with diverse backgrounds in their workforce

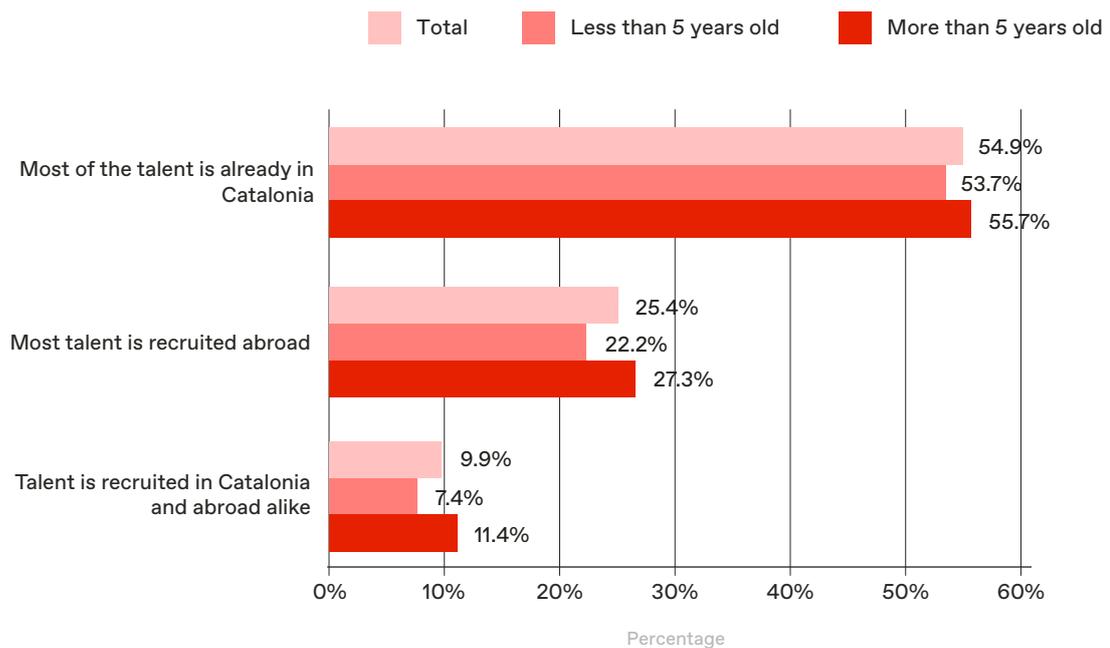


Attracting local talent

Most of the talent in Catalonia's hubs is local with additional backing from the international market.

Talent recruitment in Catalonia's tech hubs shows an exceptionally consistent pattern regardless of the hub's age. Both hubs less than five years old and more established ones **mainly hire talent that is already in Catalonia** (53.7% and 55.7%, respectively). At the same time, a significant proportion of hubs strike a balance between attracting local and international talent alike, particularly in hubs more than five years old (11.4%). Mostly international recruitment is less common in both groups, albeit slightly more prevalent in more mature hubs. Overall, the results confirm the robust availability of local talent and the supporting role of international recruitment.

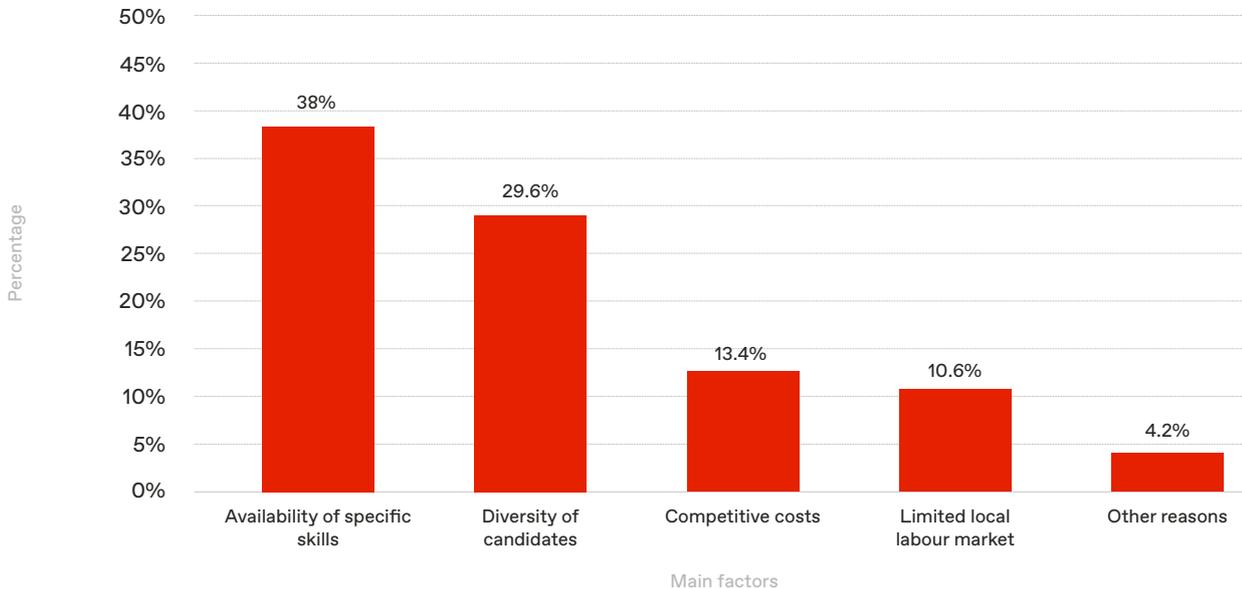
Where does the talent in Catalonia's tech hubs come from?



Talent specialisation is the main criterion in choosing recruitment sources.

The hubs' choice of talent sources is mainly shaped by the availability of specific skills as the single most significant factor. Next comes diversity of profiles, which underscores the value of having complementary, multidisciplinary teams. Competitive costs and local labour market constraints are secondary considerations, suggesting that recruitment decisions are based more on skillsets and candidate suitability than strictly financial factors.

Main factors explaining the choice of talent sources¹⁷



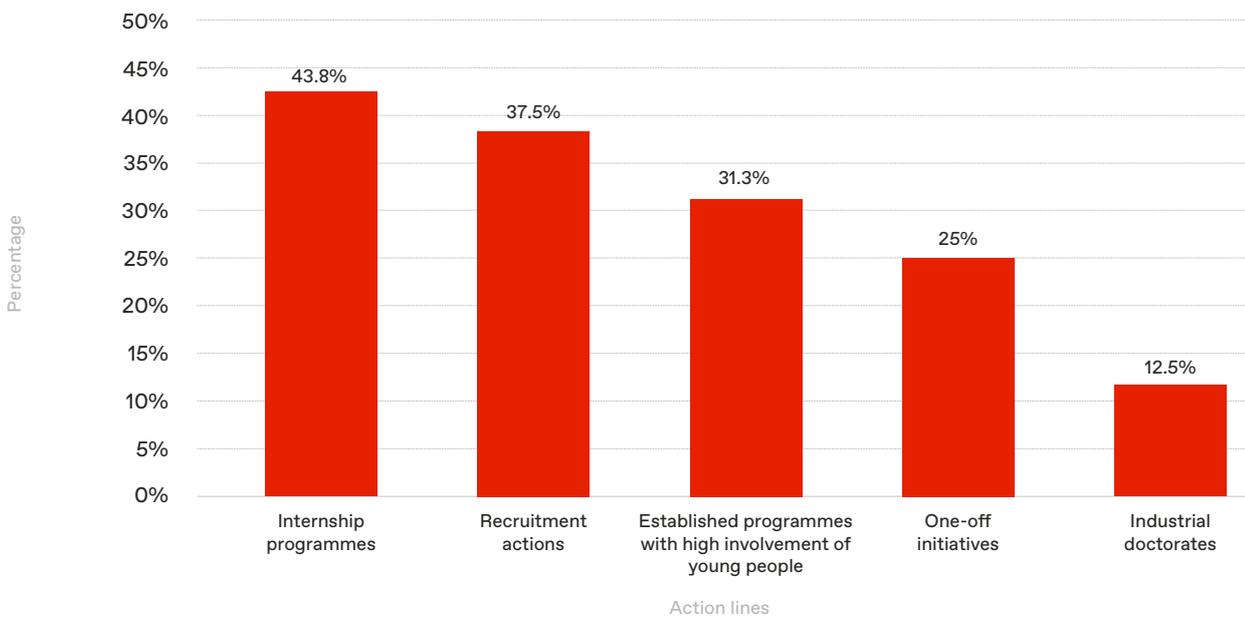
¹⁷ The percentages in the chart do not add up to 100%, as this was a voluntary question and some of the hubs did not provide information for this indicator.



Strategies to attract young talent focus on internships and early onboarding.

The tech hubs mainly rely on internship programmes and recruitment activities, such as university events or fairs, as the main levers for developing young talent. These initiatives are filled out by more structured integration programmes (boot camps or integration programmes for groups at risk of exclusion) while one-off initiatives and industrial doctorates are significantly less common. The pattern points to a strategy geared towards early talent identification and gradual onboarding into the organisation.

Main actions taken by the hubs to develop young talent¹⁸



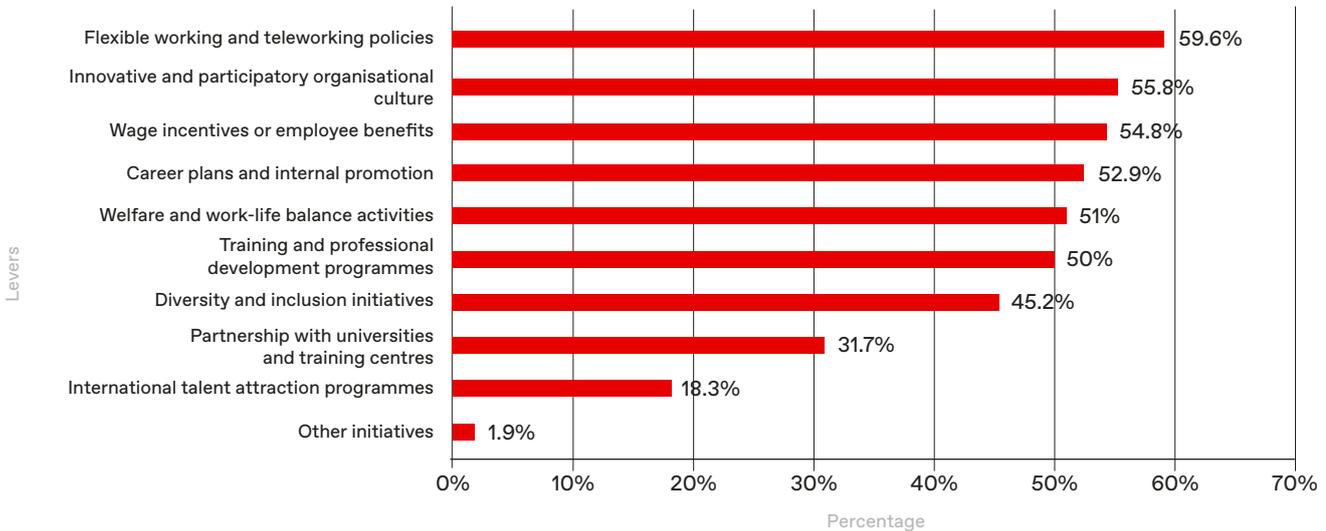
¹⁸ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



Work flexibility and organisational culture are key to attracting and retaining talent.

The tech hubs prioritise **work flexibility and teleworking** as the main lever for attracting and retaining talent, closely followed by an innovative and participatory organisational culture plus wage incentives and employee benefits. Likewise, career plans, welfare policies and training programmes add to a holistic retention approach anchored in professional development and the employee experience. Conversely, initiatives to attract international talent and partnerships with universities are less prominent in today's strategies.

Main levers used by the hubs to attract and retain talent¹⁹



¹⁹ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



6. Cutting-edge technology



The technologies developed by Catalonia's hubs

Catalonia's tech hub ecosystem cements the software development and architecture technology segment which spearheads the region's tech capabilities.

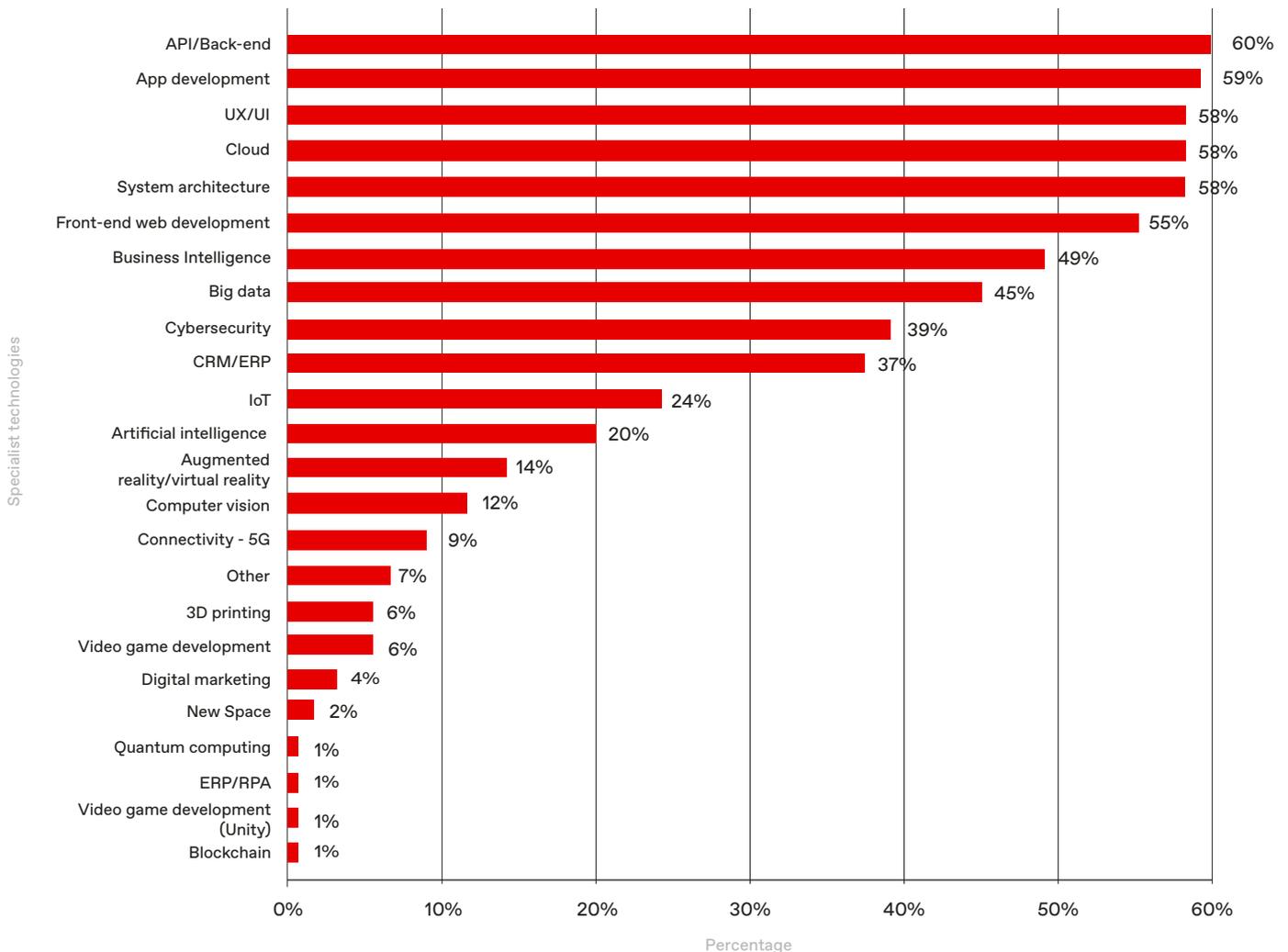
API and back-end development (60%), systems architecture (58%) and app development (59%) remain the most specialised areas as they are the foundation on which complex digital platforms are designed, integrated and scaled.

Digital experience and interaction layer technologies are still equally significant. **UX/UI design**, featured in **58%** of hubs, and **front-end development (55%)** reflect the growing importance of user experience and interface quality as standout factors in digital product development.

There has also been a gradual increase in **data-oriented technologies** compared to the previous edition. **Cloud solutions** are emerging as key infrastructure for rolling out digital services (**58%**). **Business intelligence (49%)** and **big data (45%)** technologies also feature prominently, bolstering the ecosystem's position in high value-added activities.



Hub specialisation technologies²⁰



“Looking ahead, the technologies which will be most significant are those geared towards data management and data transformation to train AI; in this context, their quality, value and confidentiality will be even more critical. Meanwhile, the European hybrid and sovereign cloud will play a key role. GenAI will also drive automation, the expansion of human capabilities and new bespoke human-machine interfaces. Finally, upgrading legacy systems and strengthening cybersecurity will be crucial in an increasingly complex geopolitical environment.”

Santi Ristol
 Director Digital Competence Centre – Worldline

²⁰ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

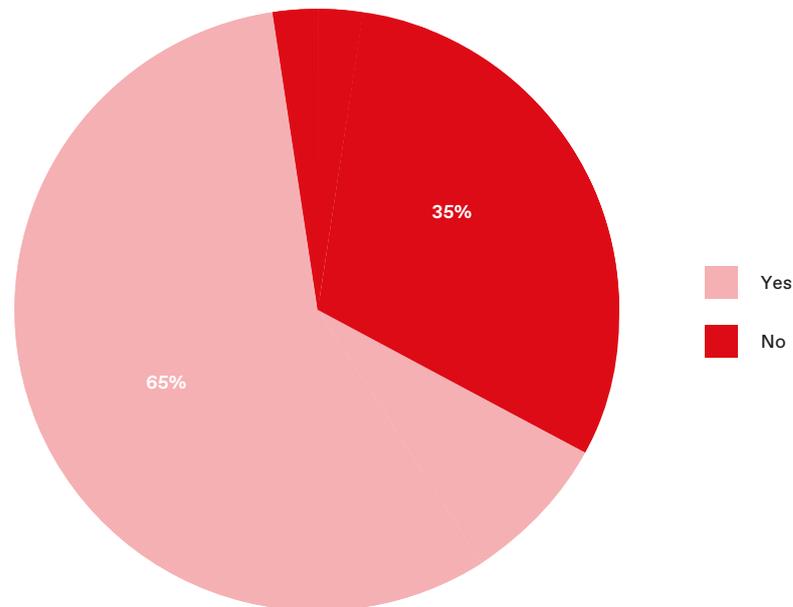


The commitment to deep tech as a driver of technological innovation

Deep tech development continues to play a significant role in Catalonia's tech hub ecosystem.

Sixty-five per cent of hubs report working on this type of technology, confirming a significant commitment to areas of high technological complexity with major transformational potential.

Proportion of hubs developing deep tech



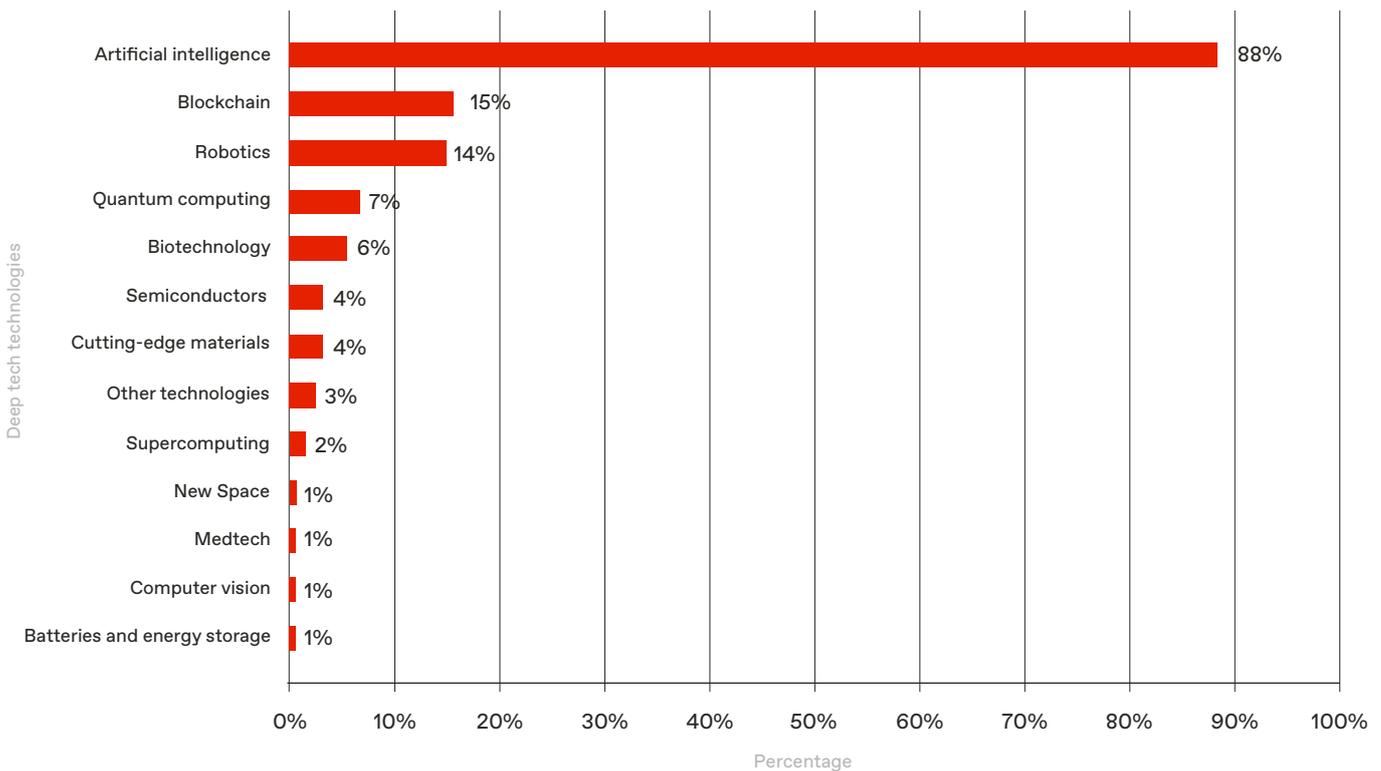
Artificial intelligence: leader of the deep tech ecosystem

Artificial intelligence bolsters its leadership position in the deep tech ecosystem of Catalonia's hubs.

In the deep tech segment, **artificial intelligence is emerging as the dominant force**: it is featured in **88%** of the hubs developing this type of technology. Alongside artificial intelligence, other technologies including **blockchain (15%)** and **robotics (14%)** also stand out, albeit to a much lesser extent than AI.

Technologies such as **quantum computing (7%)**, **biotechnology (6%)**, and **semiconductors and advanced materials (4%)** are less widespread, **confined mainly to highly specialised hubs.**

Deep technologies the hubs are working on²¹



²¹ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



Sector rollout of deep tech underlines AI's cross-cutting features and reveals varying levels of technological specialisation.

Deep tech's sector distribution confirms AI's cross-cutting features as it is widely used in most of the sectors examined. It is particularly prominent in **tech solution and product development**, which hosts around **72%** of deep tech capabilities, and in **consulting and business services (54%)**, **health (57%)** and **mobility (57%)**.

Furthermore, sectoral specialisation patterns in other deep tech areas are more entrenched. **Robotics and semiconductors** are gaining ground in **industrial systems** (together accounting for around **40%**), while technologies such as biotechnology, quantum computing and cutting-edge materials are seeing more limited and targeted implementation mainly in sectors and hubs with a highly specialised technological profile.

Distribution of deep tech developed by sectors

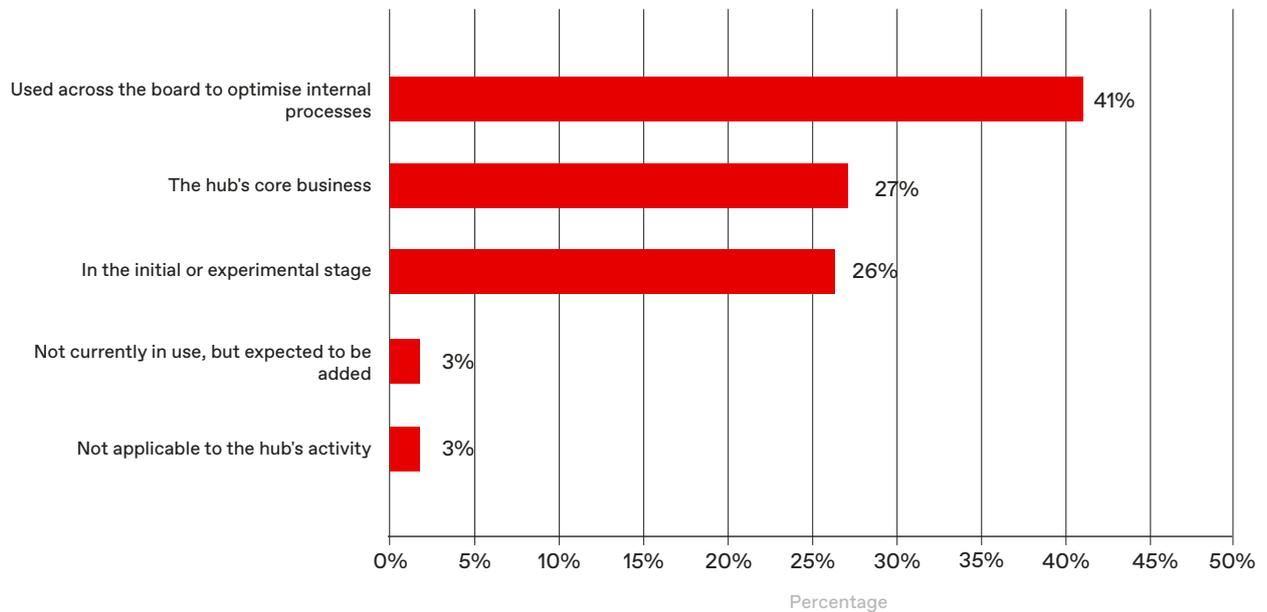


From emerging technology to operational mainstay: the role of AI

Artificial intelligence is now playing a significant role in Catalonia's tech hubs as more than just an emerging technology.

In 41% of the hubs, AI is used across the board to optimise internal processes and ramp up operational efficiency while for 27% it is their core business. Furthermore, 26% of hubs are still in the initial or experimental stages, evidence of an ecosystem rapidly transitioning towards increasingly structural uptake of this technology.

Role of artificial intelligence in hub operations

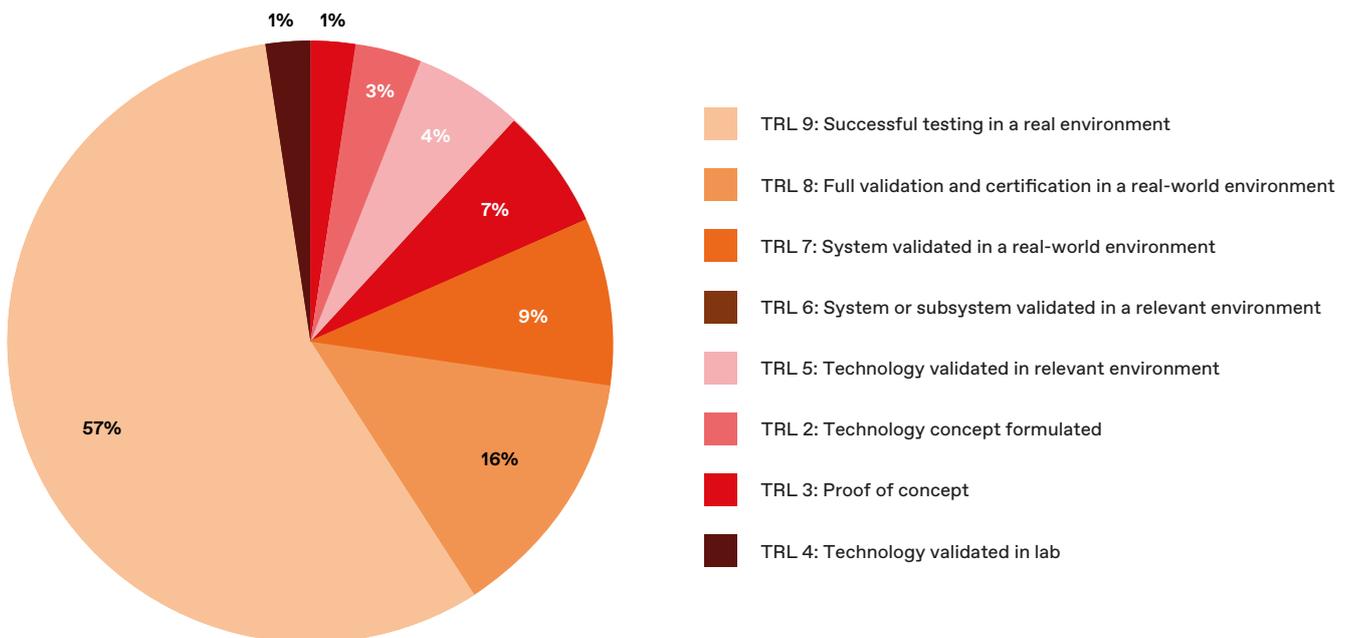


Catalonia's tech hub ecosystem is gaining in readiness, targeting tried-and-tested technologies which are ready for use in real-world settings.

The **technological readiness**²² of Catalonia's hub ecosystem is mainly at advanced stages of development. Most hubs in Catalonia (82%) operate with **technologies which have been successfully validated and tested in real environments (TRL 7-9)**, confirming a mature technological environment geared towards rollout, scalability and effective uptake of solutions.

This clustering of hubs in advanced stages of technology readiness helps to position **Catalonia as a leading and stable setting for the development, validation and uptake of technologies.**

The hubs' technology readiness level²³



²² Technology readiness level (TRL) is a scale used to assess the degree of readiness of a technology from basic research to its use in a real-world operational environment. It comprises three major stages: research and proof of concept (TRL 1-3), validation and demonstration (TRL 4-6) and development and deployment (TRL 7-9). It is a common tool used in R&D and innovation projects to assess the state of technological development.

²³ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

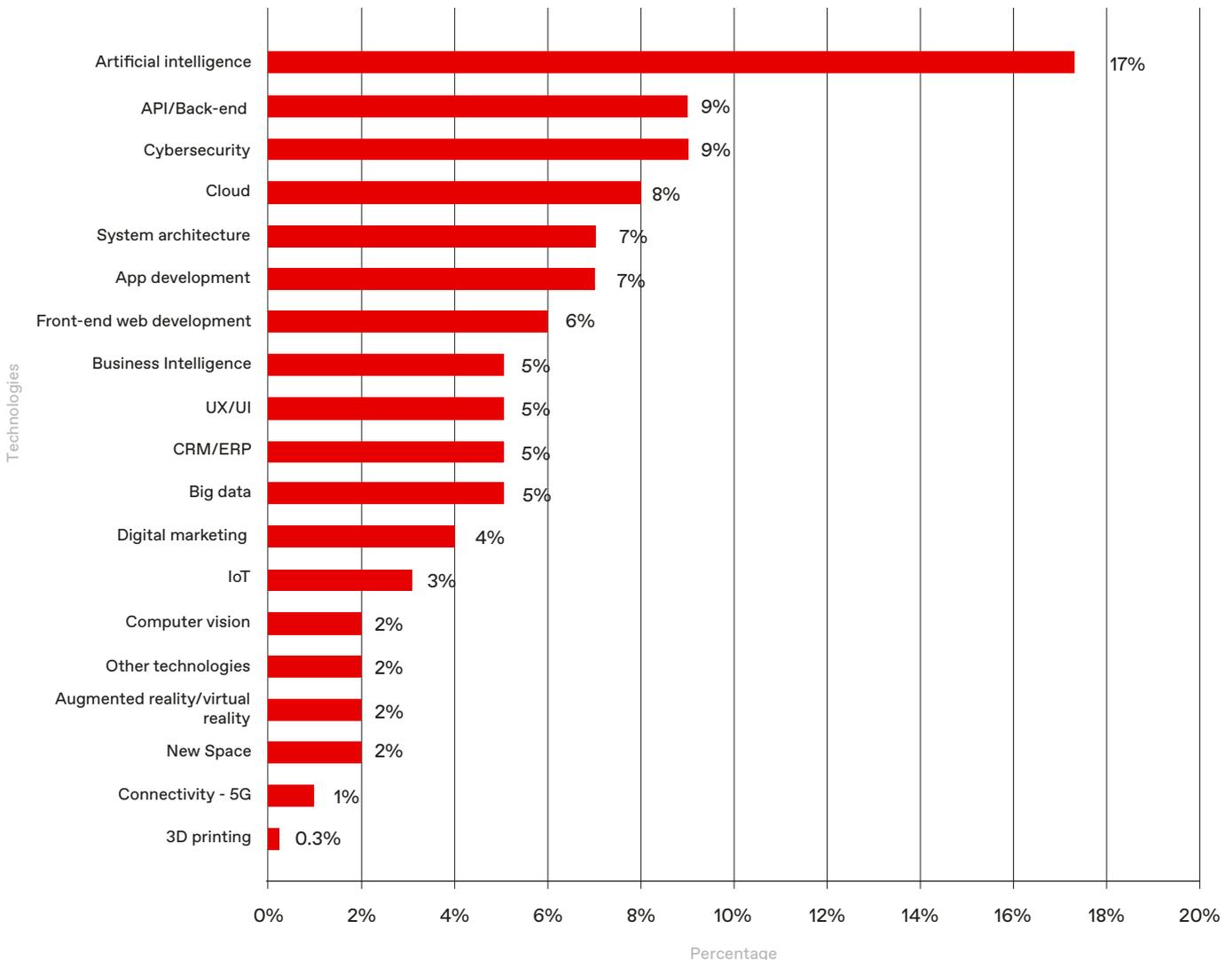


Artificial intelligence spearheads the expansion of the technology portfolio of Catalonia's hubs.

Artificial intelligence is the main technology in the process of expanding the technology portfolio of Catalonia's hubs and is mentioned by 17% of them as a domain in which they are adding or enhancing capabilities. This shift shows that artificial intelligence is not only an enabling technology but also one of the main drivers for the development of Catalonia's tech hubs.

Alongside artificial intelligence, the inclusion of capabilities in back-end and cybersecurity (9% in both cases) and in cloud computing (8%) and systems architecture (7%) also features prominently, reflecting an expansion of the portfolio geared towards bolstering robust, secure and scalable architectures.

Expansion of the technology portfolio²⁴



²⁴ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



7. The hubs' commitment to sustainability

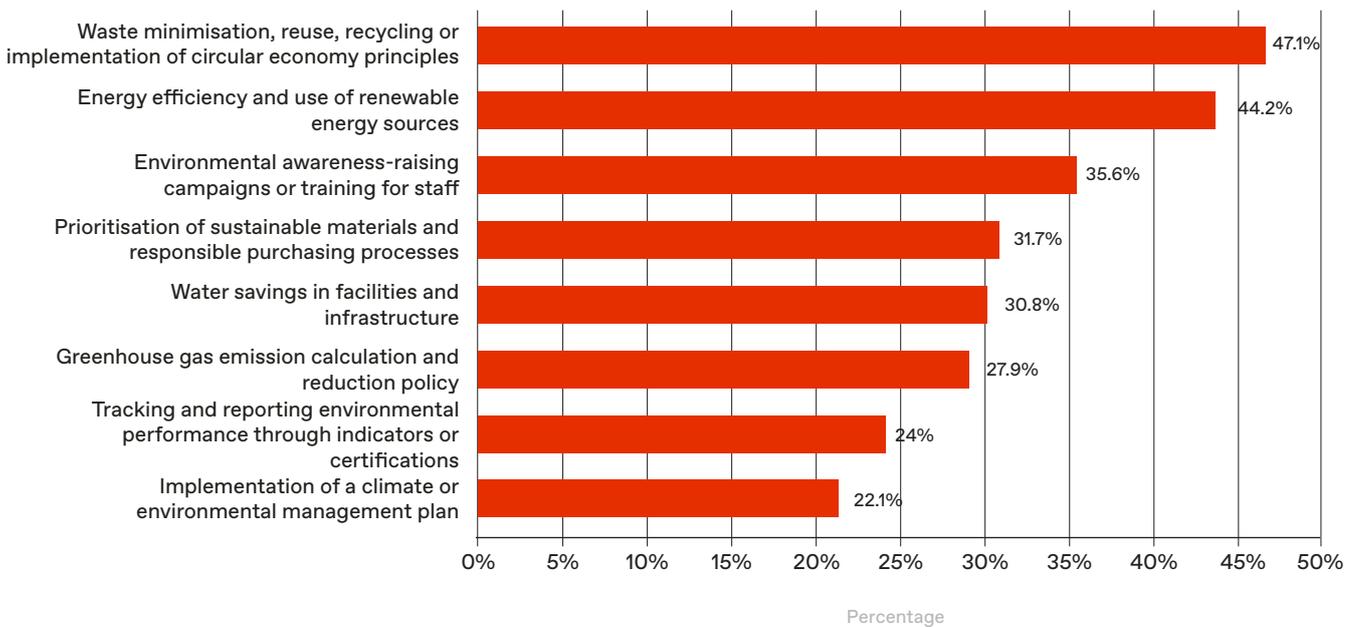


The tech hub's environmental commitment

Almost half of the hubs already have waste reduction measures in place.

The tech hubs are **strongly committed to sustainable practices which have a direct impact, are easy to roll out in the short term** and also hardwired into their routine operations. The most widespread initiatives address **waste minimisation, reuse and recycling**, implemented by **47.1%** of the hubs, followed by **energy efficiency and using renewable energy sources (44.2%)** plus **environmental awareness and training campaigns (35.6%)**. This approach reveals a growing commitment to sustainability, prioritising specific measures which enable effective progress towards more responsible management models.

Environmental responsibility measures taken by the hubs²⁵



²⁵ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

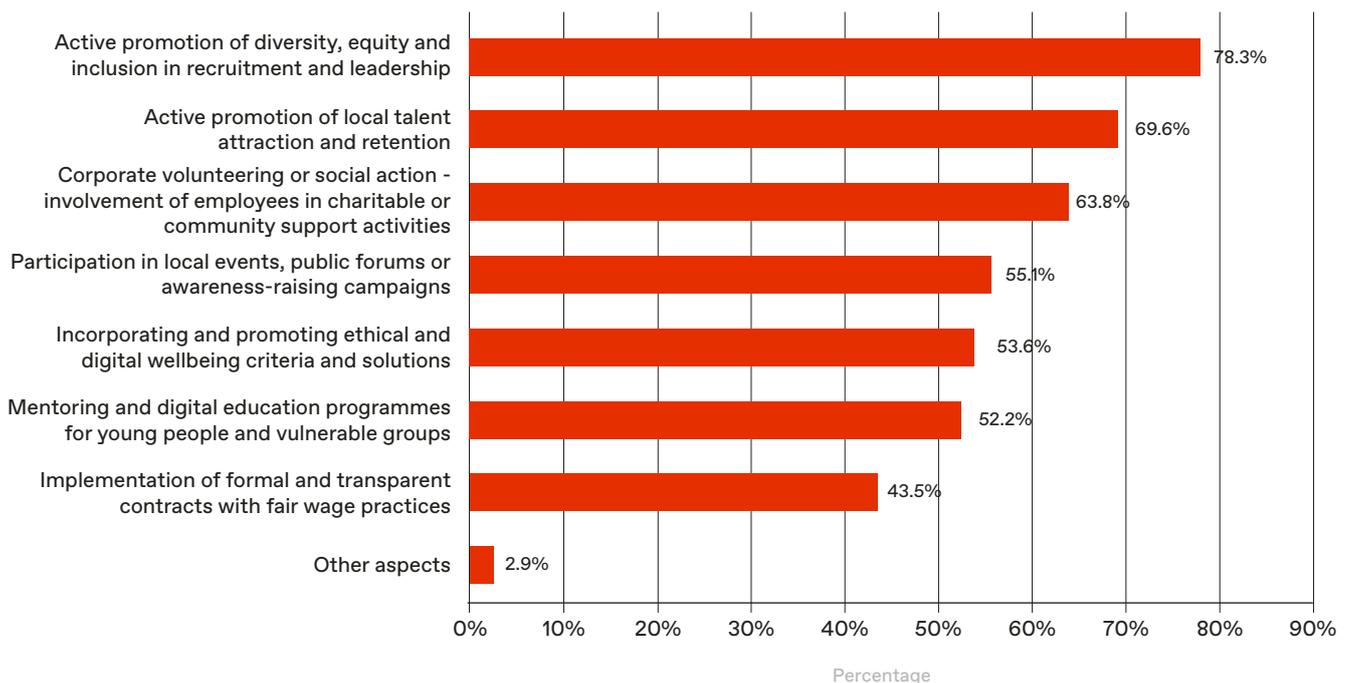


Main social responsibility measures taken by the hubs

Nearly 8 out of 10 hubs actively promote diversity and inclusion.

The tech hubs prioritise rolling out social responsibility measures in **diversity, talent attraction and social engagement**. **Active promotion of diversity and inclusion (78.3%)** stands out in particular, followed by **talent attraction initiatives (69.6%)** and **corporate volunteering (63.8%)**. Furthermore, more than half of the hubs encourage **local community involvement, talent development and mentoring programmes** which bolster their commitment to social integration and professional development.

Social responsibility measures implemented by the hubs²⁶



²⁶ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

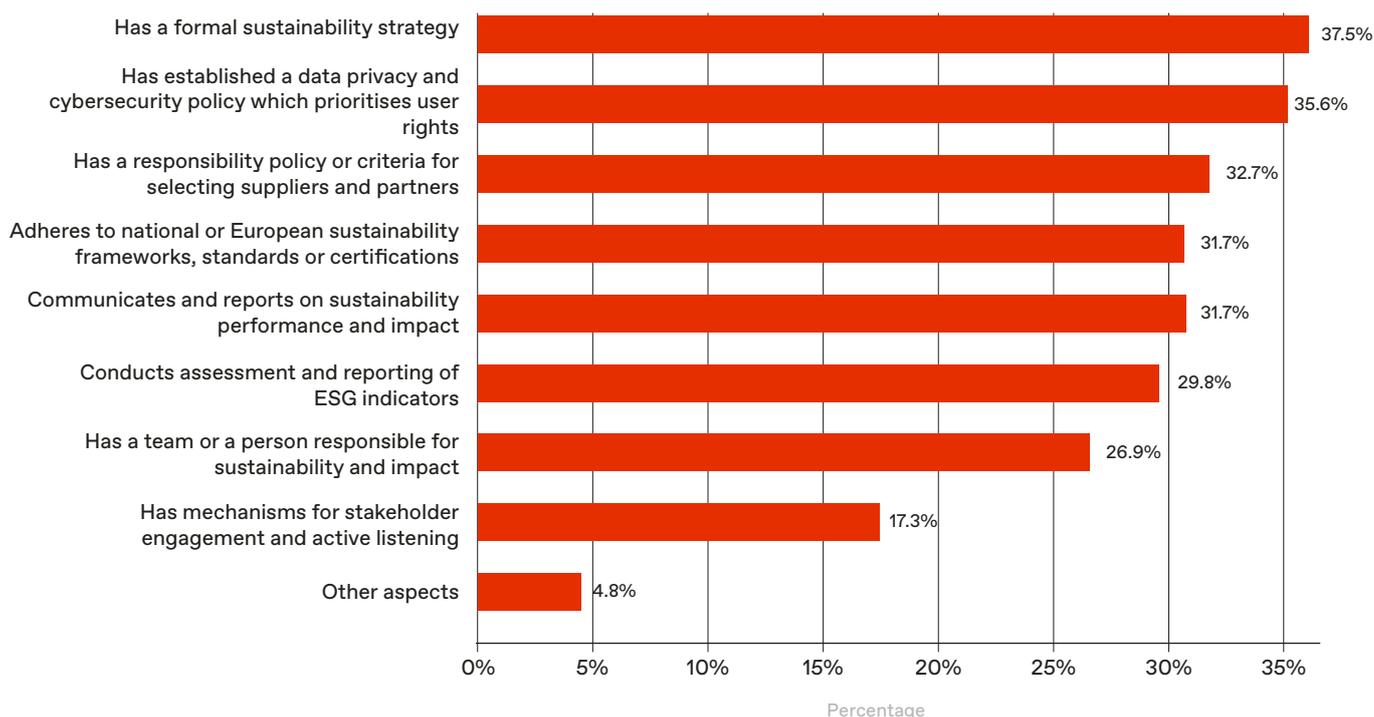


Baking sustainability criteria into hub governance

More than a third of the hubs structurally embed sustainability in their governance.

A significant part of the hubs already build sustainability criteria into their governance. **Thirty-seven point five per cent** have a **formal sustainability strategy** in place, **35.6%** have set up **privacy and responsible data management policies** and **32.7%** use **responsibility criteria in their decision-making**, disclosing steady progress towards more sustainable governance models.

Impact and sustainability aspects in governance applied by the hubs²⁷



²⁷ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.

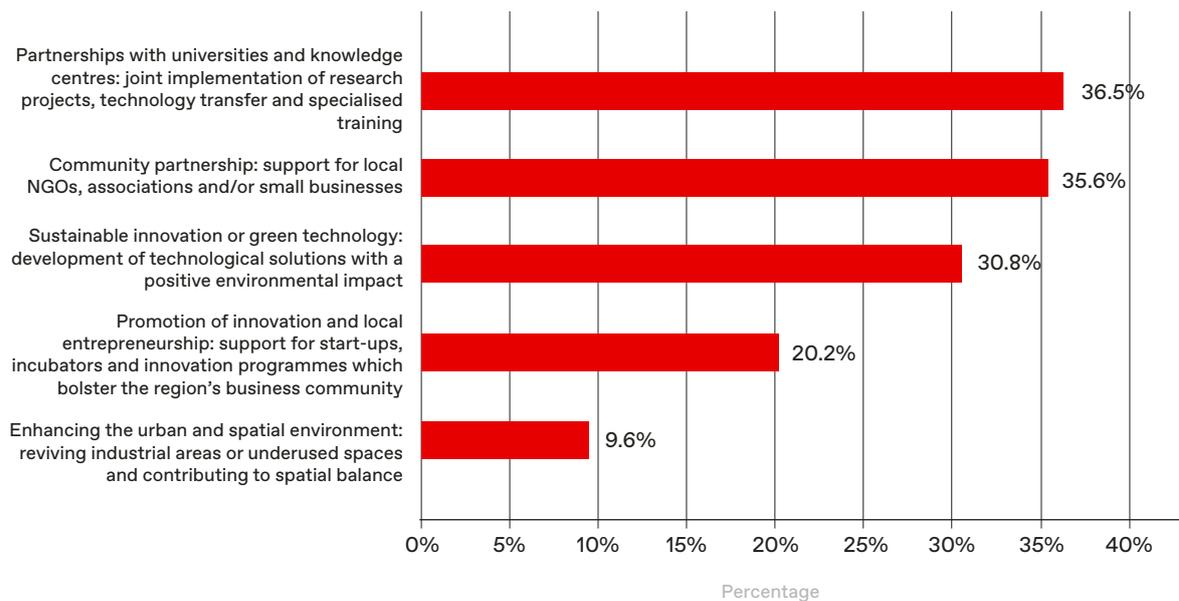


The hubs' input to territorial and social impact projects

More than 35% of hubs work with the local community on impact projects.

The tech hubs are mainly involved in **partnerships with universities and knowledge centres (36.5%)** and **community collaboration and local support initiatives (35.6%)**. A significant proportion also unlocks **sustainable innovation projects with a positive impact (30.8%)** and actions to foster **local entrepreneurship (20.2%)**, while efforts to **enhance the urban and spatial environment (9.6%)** are less common.

Projects the hubs partner²⁸



²⁸ The percentages represent the proportion of hubs that have selected each option in a non-exclusive multiple-choice question. Since respondents could tick more than one option, the sum of the percentages is not necessarily 100%.



8. A deeper look into the hubs



Dow Jones Hub Barcelona

Ingrid Verschuren
EVP Data & AI, GM EMEA

Silvia Bellmunt
Senior Technical Recruiter - Engineering,
Data & Product

Key company data:

Company sector: Media, data and technology

Key hub data:

Year hub set up: 1998

Location: Barcelona, 08005

Scope: Global

Number of employees: 487

Percentage of female staff: 41% - 50%

Staff nationalities: 43

Technologies it develops:



Big data & data engineering



Artificial Intelligence and NLP



Machine learning

Hub description:

The **Dow Jones Hub in Barcelona** was set up in 1998 to bring together and power a number of the company's strategic functions: **data, news writing, customer service, technology and research.**

Initially engaged in data analysis and multilingual data management tasks, the hub has evolved into a leading tech centre for the company with teams covering engineering, data science, product and design.

Catalonia was the natural choice to set up the hub due to the availability of **international talent**, in particular to meet diverse language needs and fill highly skilled technological roles. The hub has also gradually expanded by leveraging Barcelona's potential as a growing technology cluster.



The hub is now working hard on **data and AI** to integrate NLP and LLM models into internal products and processes from advanced news translation to information extraction coupled with solutions to minimise risk and ensure compliance.

Successes over the last year:

Technology

- **Driving AI applied to Dow Jones's business and products**

The Dow Jones Hub in Barcelona has made significant headway in using multilingual AI, especially in advanced translation projects, which have enabled expansion into new markets such as South Korea. Arabic has also recently been added to the language catalogue. The hub's position as a leading tech player in data, NLP and generative AI has likewise been cemented.

- **Strategic product development**

The hub has directly contributed to the development and evolution of products geared towards data analysis and information content for risk and regulatory compliance areas. One prominent example is the **Risk Journal**, a digital specialised news product which aggregates and analyses information on regulatory updates, geopolitical risks and compliance. This tool is specifically designed to support decision-making with compliance in mind and exemplifies the hub's evolution towards the creation of value-added products anchored in data and specialised content.

Talent

- **Recruiting highly specialised staff**

The Barcelona hub has bolstered its team with professionals in NLP, LLM, product management and data engineering, notwithstanding the competition to secure such specific and sought-after candidates in the market.

- **Local training and recruitment programmes**

The Dow Jones Hub has stepped up its partnership with Catalan universities including the UAB, UB, UPC and UPF through summer internship programmes designed to recruit young talent in technology fields. These programmes specifically focus on encouraging women to take up tech-related roles to help narrow the gender gap in areas such as data science, engineering and applied technology.

The hub's vision and outlook for the future:

In the short term, the hub seeks to consolidate its technology, product and data teams, bolster its core functions and continue rolling out AI across all Dow Jones products. Meanwhile, in the medium to long term the hub plans to grow as an **end-to-end tech centre** with robust teams specialising in full-stack, product, design and data science. The aim is to deepen strategic areas such as generative AI, NLP and advanced analytics.

Barcelona is **emerging as a tech cluster** hosting an **expanding** ecosystem blending start-ups and large tech corporations. The **Dow Jones Hub Barcelona** aims to become fully integrated into this tech cluster as a key player.

“International talent was key to our choice of Catalonia; it allows us to hire everyone from highly qualified, multilingual research staff to talent specialising in the development of advanced data and artificial intelligence technologies.”

dsm-firmenich

Marco Jongen

SVP Business and Digital Engineering

Ipek Ozsuer

Chief Digital and Information Officer

Otilia López

Country leader and financial director

Key company data:

Company sector: Health, nutrition and beauty

Key hub data:

Year hub set up: investment started in 2016 and the Digital and Technology (D&T) hub was formally founded in 2025

Location: Barcelona, 08908

Scope: Global

Number of employees: 104

Percentage of female staff: 25%

Percentage of foreign staff: 22%

Technologies it develops:



Data and artificial intelligence



Transactional core including SAP (ECC, S4 and BTP)



Cybersecurity



Digital workplace



Network, hosting and cloud



Platform/product-based operating models

Hub description:

The **dsm-firmenich D&T hub in Barcelona** is one of the **organisation's global strategic D&T centres**. It also plays a key role in the group's digital transformation, data-driven innovation and operational efficiency on an international scale. Although investment in talent began in 2016, the hub was formally established in Catalonia in 2025. In fact, it evolved from an operational support role to a centre of technological excellence with global responsibilities.

It designs, operates and enhances the digital infrastructures, databases and transactional systems underpinning business continuity and scalability. It implements a platform-product operating model which blends distinctive in-house engineering with embedding market-leading solutions. It also drives next-generation growth insights through advanced analytics, generative AI and smart agents. Artificial intelligence, coupled with data, digital solutions and engineering, is one of the centre's most strategic and standout mainstays.



Successes over the last year:

Technology

- **Digital business fundamentals and AI-driven innovation**

The Barcelona D&T hub has enhanced its position as dsm-firmenich's global facility for digital fundamentals and AI-driven innovation. Over the past year, the hub has advanced secure enterprise platforms, upgraded core systems and fast-tracked the company's shift to a product-centric, data-driven operating model. Key achievements include:

- **Enhancing the digital business foundation** including cloud, cybersecurity, core SAP systems and the global digital workplace, supporting stable, scalable and resilient operations across all business units.
- **Scaling data and AI capabilities**, delivering advanced analytics, governed data products and generative/agent AI solutions built directly into business processes.
- **Expanding the operating model**, enabling faster delivery of digital capabilities across customer, product creation, manufacturing, supply chain, finance and human resources.

Taken together, these advances position the hub as a critical driver of business value creation and digital transformation throughout the enterprise.

Talent

- **Building a high-value international hub grounded on specialised talent, inclusion and belonging**

The hub's growth is powered by highly specialised tech talent and a strong digital culture. Barcelona has become a magnet for specialists in data, artificial intelligence, cybersecurity, cloud, platform engineering and product management.

The hub brings together professionals from 22 countries and a wide array of expertise. Guided by dsm-firmenich's inclusion and belonging agenda, it fosters an inclusive, multicultural and equitable environment with more opportunities for women to build careers in technology. Recruitment combines experienced professionals with emerging talent through close partnership with universities and a balanced mix of local and international hiring. This inclusion of talent and skills underpins the hub's ability to support the operating model across all key areas.

The hub's vision and outlook for the future:

In the short term, the Barcelona hub will continue to **step up its leadership in data and AI, cybersecurity, networking, hosting and smart cloud, transactional core (SAP ECC, S/4 and BTP) and digital workplace capabilities**. The aim is to deepen the internalisation of critical skills, improve **engineering readiness and increase technological autonomy in strategic areas**. Under the leadership of Digital Business & Engineering together with Data and IA, the hub will further consolidate the operating model as the cornerstone for enterprise-wide digital delivery. In the medium and long term, the hub is positioned to become a leading European **centre for generative AI, agent AI, secure digital architectures and large-scale enterprise platform engineering**. The hub will play a key role in building a strong core, connecting the organisation to progress and driving next-generation growth ideas in health, nutrition and beauty.

In Barcelona, the ambition is to keep on delivering high-impact digital solutions which seamlessly connect technology, business and market, ramping up both dsm-firmenich's global competitiveness and Catalonia's status as a premier region in digital talent and advanced technological innovation.

“Our Barcelona D&T hub brings together diverse, high-calibre teams to build a strong core, connect to progress and drive next-generation growth for dsm-firmenich.”

HP

Daniel Martínez

Division President of Large Format Printing
Director of the HP Barcelona International Centre

Key company data:

Company sector: Technological development (advanced printing, additive manufacturing, software and artificial intelligence)

Key hub data:

Year hub set up: 1985 (starting as a manufacturing facility, later evolving into an R&D and AI Hub)

Location: Sant Cugat del Vallès, 08174

Scope: Global

Number of employees: 2,500

Percentage of female staff: 41% - 50%

Staff nationalities: 60

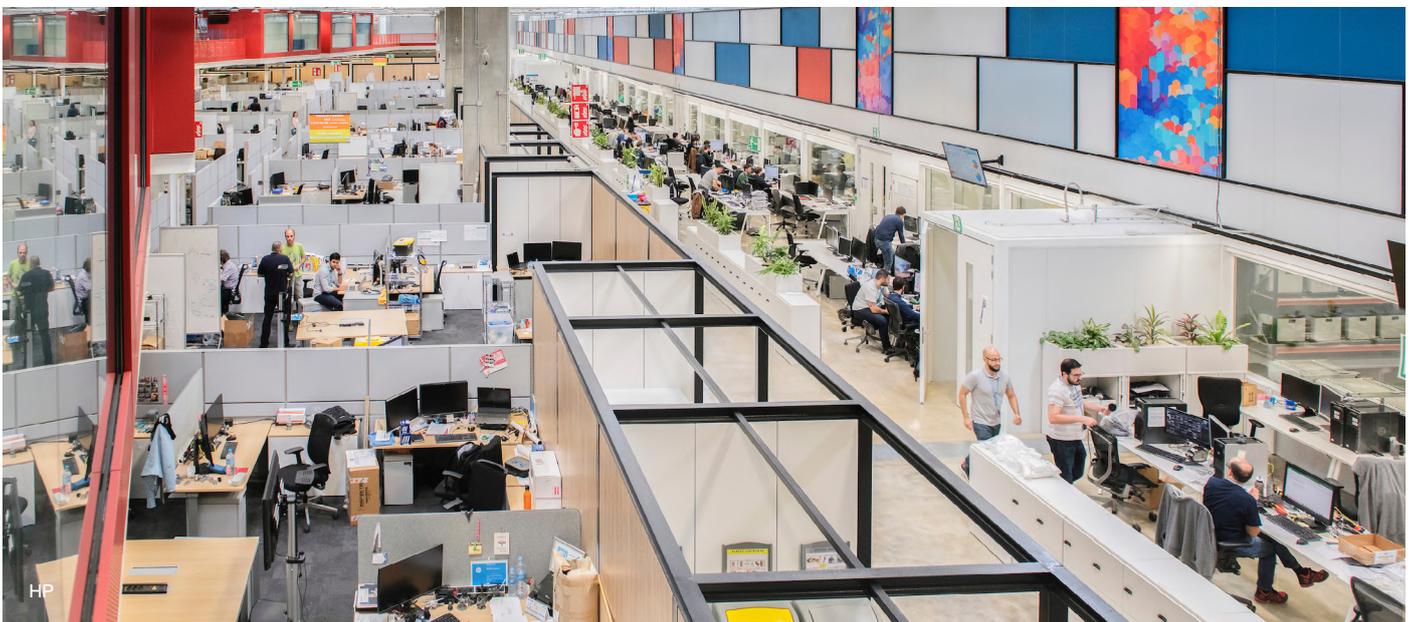
Technologies it develops:

- | | |
|---|--|
|  Artificial intelligence |  Industrial and large format printing |
|  Edge computing |  Industrial software |
|  Cloud |  Robotics |
|  Advanced data analysis and process optimisation |  3D printing and additive manufacturing |

Hub description:

HP's Barcelona hub is one of the **group's most important innovation facilities worldwide** and the company's **main R&D hub** outside the United States. With a history spanning forty years, the campus has evolved from an initially manufacturing-oriented hub to a **centre of technological excellence** with global responsibilities in advanced printing, additive manufacturing, software and, more recently, artificial intelligence.

Barcelona is currently the world leader in two key business lines for HP: large format printing and 3D printing. It is also a cross-cutting innovation hub for multiple units in the group. This evolution has been consolidated with the launch of the **HP AI Innovation Hub**, designed to be a **global flagship in artificial intelligence and a new strategic linchpin for the hub**.



Successes over the last year:

Tecnologia

- **Artificial intelligence applied to advanced printing and professional devices**

HP's Barcelona hub is leading the development of artificial intelligence applied to industrial printing systems. It integrates advanced capabilities directly into large-format printers and industrial printing equipment. AI models are developed and customised to run on the device, enabling real-time analysis of operational data, automatic optimisation of printing parameters and enhanced quality and reliability in end output.

This approach allows products to evolve towards more autonomous, efficient and smart systems, reducing cloud dependencies, improving information security and offering a more advanced user experience in professional environments such as printing, engineering and industrial production.

- **Digitalisation of the construction industry and additive manufacturing with integrated AI**

One of the hub's strategic strands is digitalisation of the construction industry and additive manufacturing, combining software, printing and artificial intelligence. Platforms have been developed in Barcelona which connect technical offices, architects and construction sites, integrating digital drawings, printing devices and robotic systems to ensure consistency between design and performance.

These solutions make it possible to verify versions of drawings, reduce site errors and improve overall project productivity by addressing structural inefficiencies in the industry. In 3D printing and additive manufacturing, AI built into the equipment enables real-time process adjustment, material optimisation and the wider application of these technologies in medical, industrial, advanced prototyping and other sectors.

Talent

- **An international knowledge and R&D cluster**

The campus is staffed by 2,500 professionals from more than 60 countries, including over 800 engineers dedicated to R&D. The HP AI Innovation Hub engages more than 200 professionals from various business units, teaming up with universities, technology centres and partners.

The hub's vision and outlook for the future:

In the short term, the Barcelona hub will enhance its role as a **global centre for innovation in artificial intelligence**, expanding the HP AI Innovation Hub's capabilities and increasingly integrating AI into products, platforms and internal processes. The immediate focus is on fast-tracking the development of AI-based solutions with direct market and business impact.

In the medium and long term, the hub is set to become a **global touchstone in AI applied to advanced printing, additive manufacturing and digitalisation of industrial sectors**, consolidating Barcelona as a strategic base for specialised knowledge in HP. The hub seeks to continue to be one of the group's global drivers of growth and technological differentiation while adding to Catalonia's international positioning as an innovation region.

“The HP AI Innovation Hub has cemented its position as a strategic powerhouse for the group's global innovation, integrating artificial intelligence, software and advanced printing to lead product evolution and unlock future business growth.”

Keysight Technologies Hub

Judith Contreras Rosell
Keysight Spain General Manager

Key company data:

Company sector: Technological development (electronic instrumentation)

Key hub data:

Year hub set up: 2016 (Quantum Solutions) and 2024 (Artificial Intelligence)

Location: Barcelona, 08039

Scope: Global

Number of employees: 20

Percentage of female staff: 41% - 50%

Staff nationalities: 12

Technologies it develops:



Artificial intelligence applied to software and instrumentation



Simulation, design and validation software



Quantum computing and control



Digital twins

Hub description:

Keysight Technologies operates in **electronic instrumentation, telecommunications and validation of complex technological systems**. The company develops solutions to design, simulate and validate critical infrastructures prior to rollout.

Keysight was founded in 2014 as a spin-out from Agilent Technologies and has been based in Barcelona since 1999, initially as a customer service hub delivering operational support and services to the parent company. It subsequently evolved into a **strategic R&D hub**.

In 2024, it cemented its position as a centre of excellence in **artificial intelligence and advanced software**, playing a **key role in global technology strategy**. The hub also stands out for its work in **quantum computing, advanced simulation and high-performance computing**.



Successes over the last year:

Technology

- **Artificial intelligence and advanced software**

Keysight Technologies' Barcelona hub has become a strategic centre for advanced software development and artificial intelligence with global responsibilities across the organisation. It develops proprietary AI R&D capabilities which are directly embedded in the company's products in both software environments and hardware instrumentation solutions. The idea is not only to use AI as an internal support tool but additionally turn it into a driver of product innovation to improve the simulation, design and verification capabilities of complex technological systems.

- **Quantum computing, advanced testing and technology standardisation**

It further addresses the development of advanced solutions in quantum technologies and highly complex testing systems. In quantum computing, the hub has taken part in designing and developing one of the world's most advanced commercial quantum control systems implemented at the Global Research and Development Center for Business by Quantum-AI Technology (G-QuAT) from the National Institute of Advanced Industrial Science and Technology (AIST) in Japan. This system enables the operation of large-scale quantum computing infrastructures with the capacity to manage more than 1,000 qubits and has become an international leader in quantum system control, stability and scalability.

Talent

- **Highly specialised talent as a critical competitiveness factor**

The growth of Keysight Technologies' hub in Barcelona is based on attracting highly specialised talent, especially PhDs in machine learning, data science or artificial intelligence, coupled with in-depth knowledge in sectors such as telecommunications, advanced networks and autonomous mobility.

The hub's vision and outlook for the future:

Keysight Technologies' hub in Barcelona is set to be a **preeminent international centre for applied artificial intelligence, advanced software and quantum technologies**. The goal is to consolidate and scale up the capabilities already developed, ramping up the hub's position as a specialised node for knowledge-intensive technologies.

The hub's growth is envisaged not only in terms of volume but also most importantly in **technological depth and strategic impact**. Teams are therefore clustered by key competencies and specific areas of knowledge. This approach will support both the development of new solutions and the maturation and sustainability of technologies already deployed, enhancing the hub's ability to operate as a stable and critical centre of excellence in an increasingly distributed global technology ecosystem.

“Barcelona's strategic position has made it possible to build a hub which is a flagship in technologies for developing quantum solutions and AI in the global electronic instrumentation market.”

KION

Víctor García
Director of the Digital Hub

Key company data:

Company sector: Intralogistics and industrial mobility
(commercial vehicles, material flow management, digital supply chain solutions)

Key hub data:

Year hub set up: 2024

Location: Barcelona, 08018

Scope: Global

Number of employees: 45

Percentage of female staff: 21% - 30%

Staff nationalities: 19

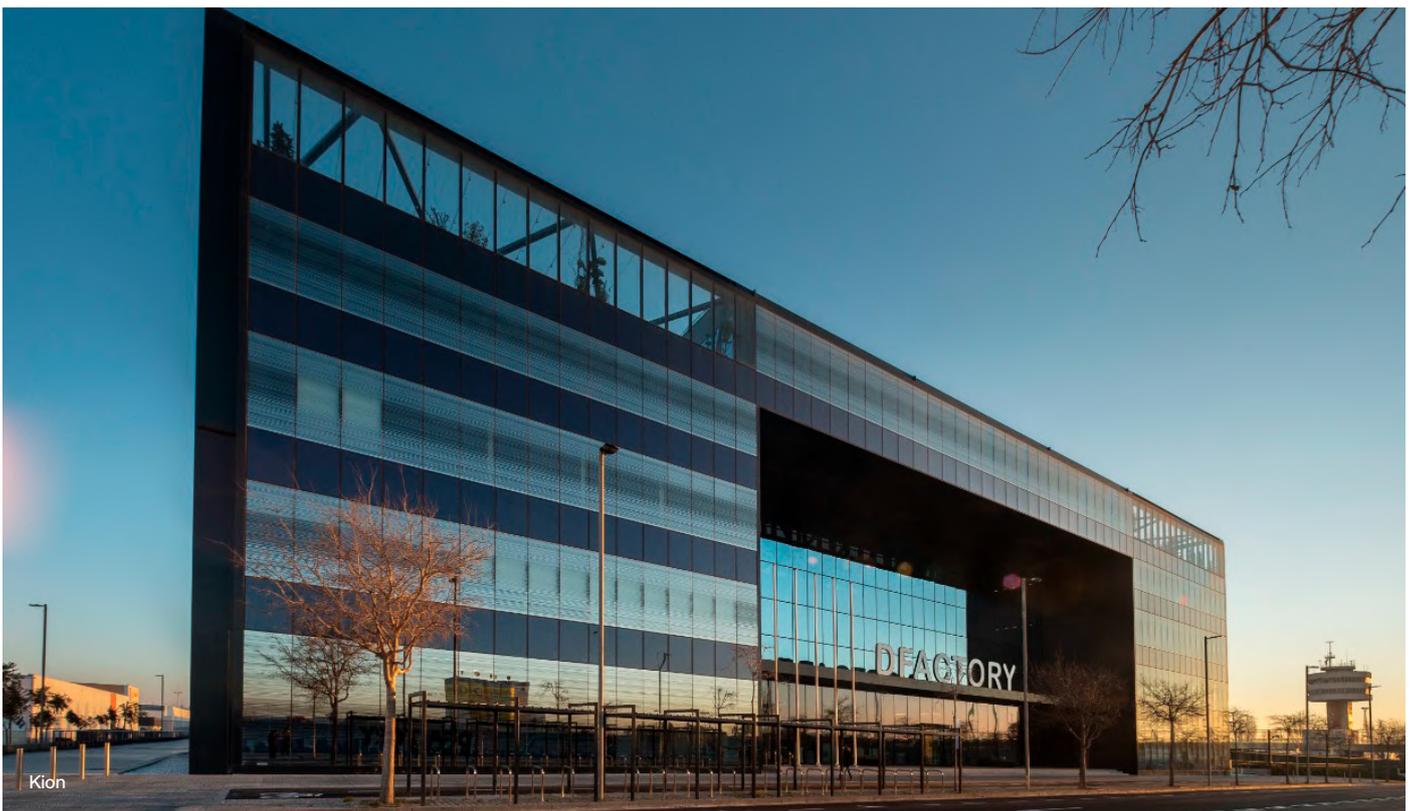
Technologies it develops:

-  IoT
-  Artificial intelligence
-  Vehicle-integrated systems
-  Advanced data analysis
-  Cloud
-  Fleet and energy management systems for electric vehicles

Hub description:

KION has set up its digital hub in Barcelona to unlock the development of **advanced digital solutions for intralogistics**, a key area in **industrial supply chain efficiency and competitiveness**. This hub seeks to make material flow operations smarter, safer and more sustainable by putting data and operational knowledge at the core of decision-making.

The choice of **Barcelona** was based on a robust commitment to a setting capable of attracting tech talent and also featuring outstanding international connectivity and strategic proximity to key industrial clients. This enables the group to bring digital development closer to the actual use of solutions, fast-tracking innovation cycles and enhancing direct partnership with the market.



The digital hub brings together **digitalisation, data analysis and artificial intelligence** to shift intralogistics towards more efficient and operational performance-oriented models. The goal is to **optimise fleet management, improve safety and security in industrial environments** and unlock more responsible energy management, especially in highly electrified operations.

Following sustained growth since its inception, the KION Digital Hub Barcelona is now a crucial part of the group's digital strategy, playing an increasingly significant role in **product development and solutions validation with customers across Europe**.

Successes over the last year:

Technology

- **Bolstering the digital portfolio and fast-tracking the development of intralogistics solutions**

One of the KION Digital Hub Barcelona's main achievements has been its direct input into developing and deploying the group's digital portfolio, enhancing key capabilities in fleet management, data analytics and digital solutions for operational optimisation. This contribution has made it possible to shorten time to market for new features and validate use cases in real-world industrial environments.

- **Co-creating with industrial customers and better product-market fit**

The hub's location in Barcelona has enabled it to forge close and ongoing ties with industrial customers in the Iberia region who are actively engaged in developing and honing digital solutions. This collaborative working model has made it easier to test, customise and improve solutions in line with actual operational needs, leading to more efficient uptake and scalability to other European markets.

Talent

- **Attracting and consolidating tech talent as a driver of the hub's growth**

KION Digital Hub Barcelona's growth is anchored in recruiting and nurturing highly specialised tech talent. The hub employs professionals with expertise in data, advanced analytics and artificial intelligence who are directly involved in developing proprietary solutions.

The hub's vision and outlook for the future:

In the short term, the KION Digital Hub Barcelona will bolster its input into the development of the digital portfolio, expanding the capabilities of fleet management solutions and adding new features grounded in data and artificial intelligence. The hub will also consolidate the team in Barcelona, ensuring a robust yet flexible structure which allows development capabilities to be tailored to evolving projects and business needs.

In the medium to long term, it is set to become a **centre of excellence in digital technology applied to intralogistics** with growing strategic importance in the KION Group. The operating model is designed to grow steadily and sustainably, bringing together experts from various technological fields and reworking the team's size and priorities based on the maturity of the digital portfolio. This approach will enable the hub to maintain a high level of efficiency, enhance cross-functional collaboration and deliver ongoing support for the group's competitiveness across Europe.

“Based in Barcelona, the KION Digital Hub is powering the digital transformation of intralogistics, turning data and technology into more efficient, secure and sustainable operations.”

QIAGEN

Francesc Benítez
Head of QIAstat Technologies

Key company data:

Company sector: Health (healthtech)

Key hub data:

Year hub set up: 2018 (integration of the start-up into the multinational)

Location: Barcelona, 08028

Scope: Global

Number of employees: 240

Percentage of female staff: +50%

Staff nationalities: 12

Technologies it develops:



Rapid molecular diagnostics



Microfluidic technology



Artificial intelligence



Data analysis

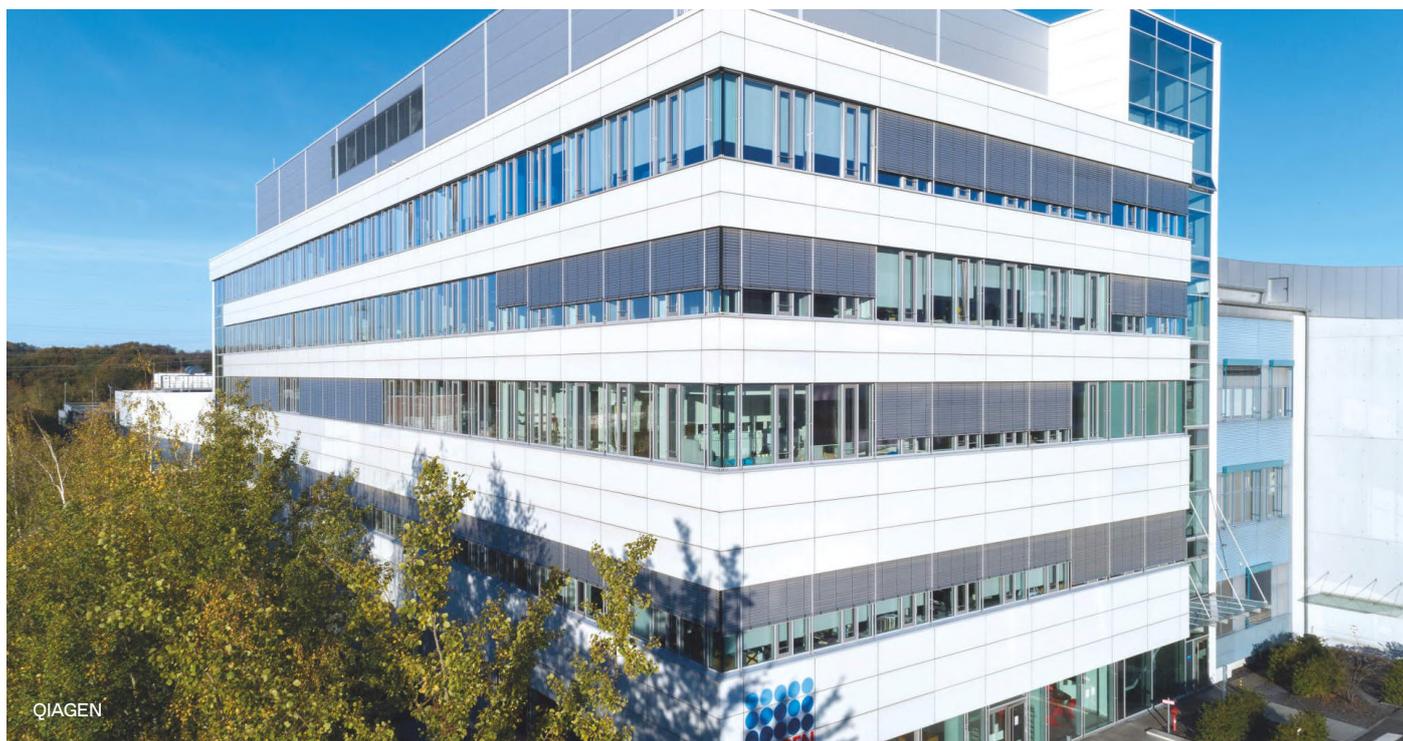


DNA and RNA molecular detection systems

Hub description:

QIAGEN's hub in Barcelona is a leading facility for **rapid molecular diagnostics, specialising in the development of portable, high-precision PCR-based technologies**. Derived from a Catalan start-up and integrated into the multinational in 2018, the hub has established itself as a key player in QIAGEN's global innovation. It develops both the core technology and the microfluidic cartridges which enable fast, integrated PCR that can be used close to the patient.

In Barcelona, the hub works across the board on **infection diagnosis** (Covid, flu, pneumonia, sepsis, etc.) and delivers technological support to other global units, including personalised medicine projects in **oncology and early detection of neurodegenerative diseases**. The hub also stands out for its high level of digitalisation, often operating as a pilot venue where **new AI methodologies and digital processes** are tested before being scaled up.



The hub's successes over the last year:

Technology

- **Democratisation of high-precision PCR**

QIAGEN Barcelona has developed a high-speed, portable PCR platform able to detect pathogen DNA and RNA in minutes. This miniaturised, automated and point-of-care-optimised solution maintains the sensitivity and specificity of a central laboratory, extending molecular diagnostics to a range of infections including respiratory and urinary diseases, sepsis and emerging pathogens. The combination of accuracy, speed and accessibility makes this technology a crucial factor in democratising advanced molecular diagnostics. Developed entirely in Barcelona, it has become a strategic asset for QIAGEN and one of the main reasons for consolidating and expanding the hub in Catalonia.

- **Artificial intelligence and advanced analytics**

The hub also excels in developing and applying artificial intelligence and advanced analytics throughout the product lifecycle. Deep learning and machine learning models are harnessed for quality control in production and also for analysing large volumes of molecular data to identify complex correlations which enable continuous improvement in diagnostic device processes and performance.

In parallel, the hub is exploring development strands aimed at integrating laboratory-generated data with the patient's clinical context to enhance diagnostic interpretation and shift towards more informed clinical decision-making models.

Talent

- **Recruiting highly specialised professionals**

The hub works with extremely specialised and hard-to-find technical professionals, especially those able to integrate technologies from various sectors into a single product. This capability is critical in an environment that combines molecular technology, engineering and software.

- **Powering the local ecosystem**

QIAGEN has directly contributed to the development of Barcelona's technological and industrial ecosystem by partnering with local engineering, process and software providers. These partnerships have had a significant impact: some of these providers have expanded their facilities and capabilities owing to the volume and specialisation of the projects undertaken in conjunction with the hub.

The hub's vision and outlook for the future:

In the short term, QIAGEN's Barcelona hub will continue to step up its **PCR technology capabilities**, looking to increase production efficiency and the cross-functional integration of data and artificial intelligence along the entire value chain. This development will make it possible to optimise processes, enhance decision-making and move towards more scalable, evidence-based operational models.

In the long term, the vision is to **cement Barcelona as a preeminent European cluster for advanced clinical diagnostics**, adding to QIAGEN's global research and innovation capabilities. The hub seeks to steadily expand its scientific and technological role, attracting highly qualified talent and helping to develop high value-added diagnostic solutions which have a direct impact on the **European biomedical ecosystem**.

“We want QIAGEN's hub to be visible and a touchstone in the scientific community to ensure scientists, engineers and physicists are aware of the cutting-edge technological complexity behind it and the added value it can bring to their fields.”

Schwarz

Eduardo Sánchez-Colorado
CEO Schwarz Digits Spain

Alexander Hess
Head of Schwarz IT

Key company data:

Company sector: Digital products / Retail, customer & loyalty / IT solutions and cybersecurity

Key hub data:

Year hub set up:

2015: SCRM established its Barcelona hub

2019: SCRM integrated into the Schwarz Group, becoming SCRM Lidl International Hub

2021: Schwarz IT Spain established

2026: SCRM and SCHWARZ IT are integrated under the **Schwarz Digits Spain** brand (merger of the two organisations)

Location: Barcelona, 08002

Scope: Europe and United States

Number of employees: 850

Percentage of female staff: 25 - 35%

Number of nationalities in the workforce: 40

Technologies it develops:

Digital customer platform	CRM / ERP	UX / UI	RAP (Rapid Application Development)
Application development	Cloud	System architecture	Salesforce
API / Back-end	Front-end web development	IDP Solutions	Data platform and data engineering
Data Science	Analytics / BI	.NET	Swift
Kotlin	GoLang	Databricks	Snowflake
APEX	React i React Native	Python	Google Cloud / Google Workspace
STACKIT	ServiceNow	Azure	Cybersecurity

Hub description:

Schwarz Digits Spain is the Schwarz Group's central digital and technology hub in Barcelona, supporting the global strategy of the group - which includes Lidl, Kaufland and PreZero - to prioritise internal technological development as a key growth lever.



The hub is the outcome of sustained strategic evolution. It dates back to 2015 with the establishment of SCRM, tasked with developing the Lidl Plus customer digital platform. In 2019, this unit was integrated into the Schwarz Group as **SCRM Lidl International Hub**. At the same time, **Schwarz IT Spain** was set up in 2019 as a strategic extension of the group's central IT organisation with a robust commitment to Barcelona as a city drawing world-class international tech talent. In 2026, both units are to be merged into a single structure: **Schwarz Digits Spain**, designed as a global hub to scale up the group's digital operations worldwide. This integration ensures that the group's digital strategy - from retail excellence to environmental leadership - is anchored in advanced proprietary technology developed in-house.

Barcelona's technology ecosystem and international connectivity mean the hub is optimally positioned to support the Schwarz Group's global digital expansion.

Successes over the last year:

Technology

- **Data and loyalty platform with direct business impact**

The hub has cemented its position as a centre of excellence in strategic digital solutions. A key example is the end-to-end development of Lidl Plus, the group's loyalty programme, managed from Barcelona and rolled out in 31 countries with more than 120 million users. The platform features advanced capabilities including personalised promotions, gamification and innovative payment and shopping solutions such as Lidl Pay, Self-Scanning and Click & Collect.

- **Advanced capabilities in cloud, cybersecurity and IT operations**

The hub develops and operates cloud and cybersecurity services which support the group's global operations. Especially significant is the hub's role in the development of STACKIT, the Schwarz Group's proprietary cloud, a long-term strategic commitment which bolsters European technological sovereignty and lessens dependence on critical third-party infrastructure.

Talent

- **Cementing a fast-growing specialised hub**

The hub attracts highly skilled business and IT professionals, motivated to improve the customer experience at all touchpoints. The blend of local, international and remote talent has enabled rapid scaling up of software development, cloud architecture and cybersecurity capabilities, turning the hub into a leader in the Catalan technology ecosystem.

The hub's vision and outlook for the future:

Schwarz Digits Spain will continue to expand its technological capabilities and team with the goal of consolidating Barcelona as a key centre for the development of the group's core digital products and services featuring increasingly close integration with retail business units. In the medium and long term, the hub seeks to become a **European flagship in cloud, data and artificial intelligence applied to retail**. Barcelona will become the main entry point for the group's new digital initiatives, bringing together product owners and teams with end-to-end responsibility.

The ultimate goal is to build a **digital, efficient and technologically sovereign** global trade model.

“In Barcelona, Schwarz Digits Spain is laying the technological foundations which enable the group to evolve towards a more digital, efficient and sovereign retail model, coupling business knowledge with groundbreaking solutions in cloud computing, cybersecurity and artificial intelligence.”

Smith&Nephew

Antonio Gaznares
Country Lead Spain & Portugal

Key company data:

Company sector: Health (healthtech)

Key hub data:

Year hub set up: 2025

Location: Barcelona, 08950

Scope: Europe and LATAM

Number of employees: 280

Percentage of female staff: +50%

Staff nationalities: Unknown

Technologies it develops:

-  VR and AR applied to surgical training
-  Navigated surgical robotics
-  Virtual simulators
-  Bioimplants, tissue regeneration and advanced biological treatments

Hub description:

The **Smith&Nephew Competence Centre** in Barcelona is a specialised hub in the medtech (medical devices) industry geared towards **advanced medical training, surgical simulation** and support for the **clinical validation of innovations** mainly for orthopaedic, sports and soft tissue repair surgery. The hub has been kicked off in 2025 with the goal of enhancing clinical training and the safe uptake of new surgical solutions.

Its core business is **training and validation**, providing healthcare professionals with a **fully equipped operating theatre, virtual simulators, augmented reality technology and state-of-the-art audiovisual infrastructures** to recreate real surgical settings for training, testing and validation of techniques.



The hub operates as a **laboratory for applied ideas**: it furnishes the resources for surgeons, scientists and bioengineers to validate clinical applications and evaluate the use of technologies and implants prior to implementation in healthcare practice. The hub is thus a meeting point between **clinical knowledge, scientific evidence and the healthcare system's needs**.

Through structured practical training sessions and partnerships with hospitals, scientific societies and universities in the region, the hub contributes to **knowledge transfer and continuous improvement of surgical practice**. Catalonia has been chosen as the site because of its access to scientific talent, world-class hospital ecosystem and proven track record in medical training and advanced surgery, factors that make it a strategic location for this type of specialised infrastructure.

Successes over the last year:

Technology

- **Immediate scalability of training and clinical validation**

In its first few months of operation, the hub has delivered specialised training to a large group of healthcare professionals and cemented its position as a groundbreaking venue for clinical development and validation. The facilities have made it possible to conduct advanced anatomical practice programmes and surgical technique and implant evaluation sessions, enhancing its role as a pivotal hub for knowledge transfer and optimising solutions in the Smith&Nephew portfolio.

- **Integration of AR, VR and surgical navigation in real training pathways**

The integration of immersive technologies - such as augmented and virtual reality, advanced surgical navigation and state-of-the-art simulators - cements the hub as a leading platform for surgical training and validating innovative concepts. This technological ecosystem allows for the recreation of high-fidelity surgical scenarios with the aim of expediting hands-on learning and furnishing a safe environment for evaluating and validating new techniques and devices.

Talent

- **Fast-track connection to the Catalan ecosystem**

The hub has quickly built up a network of strategic partnerships with referral hospitals, specialist scientific societies, universities and knowledge centres.

The hub's vision and outlook for the future:

In the coming years, the hub plans to further build on its role as a flagship centre for **advanced surgical training and validating emerging clinical solutions**, steadily expanding its capabilities in robotics, navigation and regenerative technologies. As its operations grow and its network of partners expands, the hub seeks to play an increasingly significant role within the organisation and enhance its input to the development of Catalonia's scientific and technological landscape.

“Smith&Nephew is building a hub designed to fast-track clinical development of surgical innovation, ensuring it is safe, effective and carefully integrated into clinical practice.”

T-Systems

Manuel Gutiérrez
Vice President of Digital Solutions at
T-Systems Iberia

David Isern
Reus Site Manager, Area and Chapter
Lead of T-Systems Iberia Global Produc-
tion Centres

Key company data:

Company sector: Digital services, IT and digital transformation (infrastructure, applications and managed services)

Key hub data:

Year hub set up: 2008

Location: Reus, 43204

Scope: Global

Number of employees: 370

Percentage of female staff: 11% - 20%

Staff nationalities: 14

Technologies it develops:



Applied artificial intelligence



Digital platforms and application development



IT infrastructure operation and monitoring



Critical systems for public services and transport infrastructure



Data sovereignty-oriented solutions and secure architectures

Hub description:

T-Systems' hub in Reus was set up in 2008 with the purpose of establishing a second talent base in Catalonia to deliver services to the public sector and local customers, leveraging a location with available technological talent, competitive costs and functional proximity to Barcelona, all key factors for efficient and scalable operations.

Over time, the hub has evolved from an initial support role to become a consolidated production site which today works directly with domestic and international end customers and takes on significant responsibilities within the group's global operating model. This evolution has been bolstered by sustained growth in the team and the group's steadily increasing confidence in the capabilities built up in Reus.



The Reus hub currently **handles end-to-end digital solutions in which it designs**, develops and operates highly complex digital applications and infrastructures delivering services to international airports, railway networks and government agencies by combining **advanced engineering, artificial intelligence and in-depth industry knowledge** to turn invisible technology into essential services operating every day all over the world.

Successes over the last year:

Technology

- **AI applied to critical systems and public services**

Consolidation of artificial intelligence as a cross-cutting approach in reengineering applications and platforms with a particular impact on citizen services and the operation of critical systems, evolving towards more natural, efficient and secure interactions.

- **Highly complex international projects operated from Reus**

Implementation and maintenance of international airport management systems and Swiss railway applications, seen as flagship projects in the group due to their critical nature, scalability and operational requirements.

Talent

- **Growth and internationalisation of the team as a strategic lever**

Reaching a workforce close to 400 people with more than 100 international staff members, thereby cementing Reus as a draw for specialised talent in the Catalan tech ecosystem.

The hub's vision and outlook for the future:

Over the next few years, the Reus hub seeks to cement its position as a **European leader in critical technology and applied artificial intelligence**, targeting a 500-strong headcount and bolstering its role as an innovation incubator for local and international customers.

“In Reus, T-Systems is showing that the most critical technology may not always be the most visible, yet it is the most essential for the global operation of societies and infrastructures.”



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