

BARCELONA MADRID

DIGITAL TALENT ANALYSIS

SEPTEMBER 2021



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“ Compensation reflects how individuals are valued in an organization.

INTRODUCTION

In many companies, the process for compensation is considered political or arbitrary. Oftentimes it is seen as not fair. This has a huge impact on retention and turnover. Research has shown a direct link between perceptions of fairness and workforce well-being.

Effective compensation strategy can help organizations to attract, retain, and engage the workforce in alignment with the overall business strategy. There is a need for organizations to adjust and readjust their compensation strategies constantly. While other talent strategies have evolved, this part of the talent equation is lagging with most opting for the traditional route.

With advances in Big data & AI technologies, it is now possible to predict trends in the market. This is exactly what TalentUp is doing in the talent market.

The pay that employees receive for their time and effort are the foundation upon which other aspects of Total Rewards are built on. What works well elsewhere will not necessarily work as well within your company. Different rewards are of different values to different people. It's wiser to build your strategy looking for "best fit" for your organization rather than the best practices.



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BARCELONA
MADRID

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BENEFITS ANALYSIS
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HOW TO USE THIS REPORT

This section contains information on the definitions and methodology used throughout the report.

It defines and describes how the data has been collected, the survey methodology, profile characteristics, key statistical terms, and how salary information is represented and reported. It also offers guidance on access to various sources of data.

Reading this section carefully will encourage more meaningful and actionable use of the report. We strongly recommend all readers, even those who are familiar with such reports, read this section before proceeding to the next section.

METHODOLOGY OF THE SURVEY

Positions

- .Net Developer

Android Developer

Backend Developer

Data Engineer

Devops Engineer

Frontend Developer
- Full Stack Developer

Java Developer

Php Developer

Quality Assurance Engineer

Ios Developer

Locations

- Barcelona
- Madrid

Professionals analyzed: 1.44M

Job offers analyzed: 371.68K

Time span: from September 04, 2020 to September 4, 2021.

Multiple control steps have been taken to avoid duplication and to ensure salary information is correct and consistent.

Data Collection

Data was collected from employee profiles, employee publications and job offers. The main data sources include:

- Social networks:

Linkedin, Xing, Angelist
- Global job boards:

Indeed, Stackoverflow, Monster, Angelist, Glassdoor.
- Country-based job boards:

Infojobs, cv.ee, cv.lv, cvonline.lt
- Recruitment agencies websites:

Hays, Robert Walters, Page Personnel.
- Career websites:

Careers at Deloitte
- Other sources:

Slack, public salary surveys, Linkedin publications.

SENIORITY LEVELS

In the workplace, seniority level refers to the level of responsibility and rank an employee holds in the workplace, especially considering how long an employee has worked in a particular field or at a certain organization. Employers use seniority to categorize their employees by knowledge, skill and experience and help them assign projects and create well-rounded teams. Seniority level can have an impact on your pay, responsibilities, promotion opportunities, title and the roles you are eligible for.

Seniority is an important factor in the chain of command at an organization. The more seniority you have at a company, the more sway you are likely to have over business operations, even among peers who have the same role or title. People with more seniority have a nuanced understanding of how a company has operated historically and the standard procedures for carrying out different tasks. Employees with higher seniority provide training and mentorship for employees with a lower seniority level.

“
Junior
Mid
Senior
Lead
Principal

How is seniority level determined?

Depending on where you work, there can be a clear policy outlining how the seniority hierarchy works or it can be more of a general concept. Some companies have an organizational flowchart that indicates who has seniority over who in each department while others reevaluate employee seniority on a situational basis. Three main factors contribute to someone's seniority level: time, knowledge and experience. Employers can use a mix of these characteristics or choose to focus on a single one.

Each factor adds a different benefit for senior employees and their employers:

Time: Time is the standard way of determining someone's seniority. The longer someone has worked in their role at a company, the more they can offer an employer in terms of specific expertise about best practices within their position. Employees who have been at a company longer are usually given privileges over newer employees when it comes to promotions and other advantages. Working at a company long enough to develop seniority shows commitment and reliability.

Knowledge: Gaining more knowledge through formal education, professional development classes and certifications can contribute to someone's seniority. Higher education indicates more authority on a topic, which can be just as important as practical years of experience in the workforce. Employers can require employees to pass certain tests to officially be granted senior status at a business.

Experience: An employee's general experience outside of a specific workplace can also have an impact on their seniority. Someone with industry experience who recently switched to a new employer may be given a lead role and senior benefits ahead of an employee who has worked at the company for a few years but did not have experience beforehand. For example, long-term administrative assistants are extremely valuable to companies in that they have a deep understanding of the organization. In the broad perspective of a company, an administrative assistant who worked at a company in their role for 20 years could be one of the most senior employees. However, another employee would likely have seniority when it comes to making strategic financial decisions. Although the administrative assistant has the most experience with the company, they don't have seniority when it comes to that specific task.

STRUCTURE OF SALARY DATA

Data presentation

Multiple currency feeds were used to update daily currency exchange rates. For each salary entry, the value in EUR and USD (using current exchange rates), as well as the input currency, were stored in the database.

When calculating averages, we convert each group of salaries with a single common exchange rate, based on the most recent stable rates, to minimise cross-currency comparison errors. For example, in a group of 500 salary data points in USD, we would use the same exchange rate to convert all 500 data points from USD to EUR, instead of a different rate for each data point.

Salary data is presented in an aggregated format. The default statistical measure is: Median (50th percentile).

Salary data was obtained in several formats: hourly, monthly or yearly (all fixed pay). The salaries shown in this report are: Annual Salaries with Taxes Excluded.

They do not include:

- Allowances
- Guaranteed payments
- Variable Pay
- Long-term incentive payments
- Other forms of variable pay

Annual wages were calculated by multiplying monthly wages by 12, weekly wages by 52, daily wages by 5 x 52, and hourly wages by $W \times 52$, where W is the legal maximum (or practical maximum, if lower) work-week length in hours. In the case of Barcelona, the work-week length is $W = 40$.

Exchange Rate

1 EUR = 318.914935 HUF.
1 EUR = 43.110881 ARS.
1 EUR = 1.135462 USD.
1 EUR = 0.874959 GBP.

Net salary estimation

To estimate the Net salary for each country we set a target professional: 30 years old, unmarried and resident in the country analyzed.

Diversity accuracy

TalentUp uses a proprietary AI engine to predict diversity parameters analyzing profile photos.

The accuracy for each parameter estimated is:

- Age: ±4.6 years
- Gender: 97% accuracy
- Race: 96.29% precision



REPORT

11 POSITIONS

.NET DEVELOPER

ANDROID DEVELOPER

BACKEND DEVELOPER

DATAENGINEER

DEVOPS ENGINEER

FRONTEND DEVELOPER

FULL STACK DEVELOPER

JAVADEVELOPER

PHP DEVELOPER

QUALITY ASSURANCE ENGINEER

IOS DEVELOPER

02 LOCATIONS

BARCELONA

MADRID

OVERVIEW

CANDIDATES AND JOB OPENINGS

17,419

CANDIDATES
IT POSITIONS

11,086

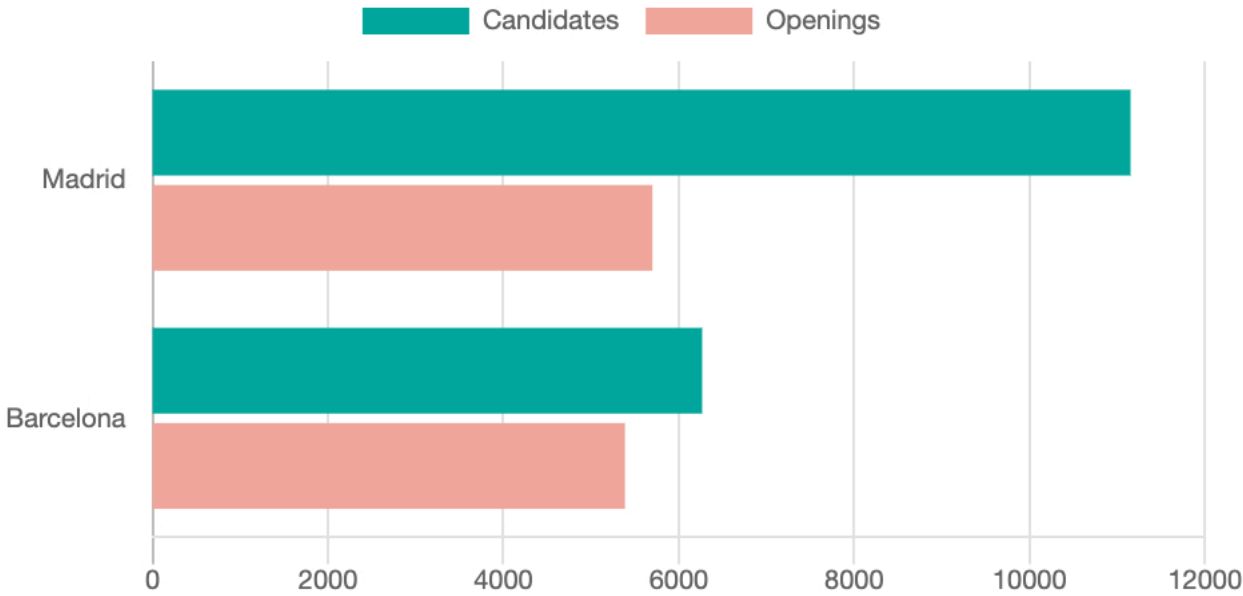
JOB OFFERS
LAST 12 MONTHS

CANDIDATES AND JOB OPENINGS BY LOCATION

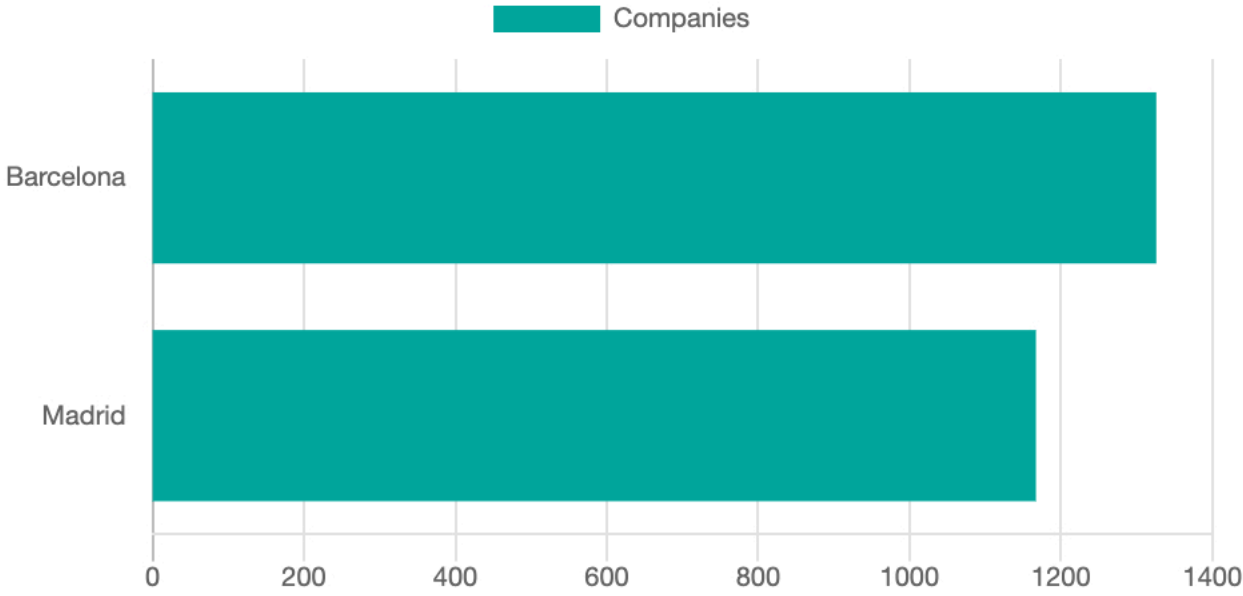
Position	Candidates	Job openings
Madrid	11,152	5,699
Barcelona	6,267	5,387

COMPANIES BY LOCATION

Company size	# Companies
Barcelona	1326
Madrid	1167



Candidates and job openings by city



Companies by city

GROSS SALARY

Position	Barcelona	Madrid
.NET Developer	49700	47400
Android Developer	56900	60300
Backend Developer	53800	58900
Data Engineer	58800	56800
Devops Engineer	55300	56100
Frontend Developer	52200	56000
Full Stack Developer	54800	62600
Java Developer	49900	46200
PHP Developer	45600	44200
Quality Assurance Engineer	42800	41800
IOS Developer	55700	54300

Gross salaries for senior professionals, 50th percentile (EUR)

NET SALARY

Position	Barcelona	Madrid
.NET Developer	31300	29900
Android Developer	35800	48800
Backend Developer	33900	37100
Data Engineer	34600	35800
Devops Engineer	37000	35300
Frontend Developer	25700	35300
Full Stack Developer	34500	50700
Java Developer	31400	29100
PHP Developer	28700	27800
Quality Assurance Engineer	27000	26300
IOS Developer	35100	34200

Net salaries for a senior professional unmarried, 30 years old. 50th percentile (EUR)

BARCELONA

CANDIDATES AND JOB OPENINGS

6,267

CANDIDATES
IT POSITIONS ANALYZED

5,387

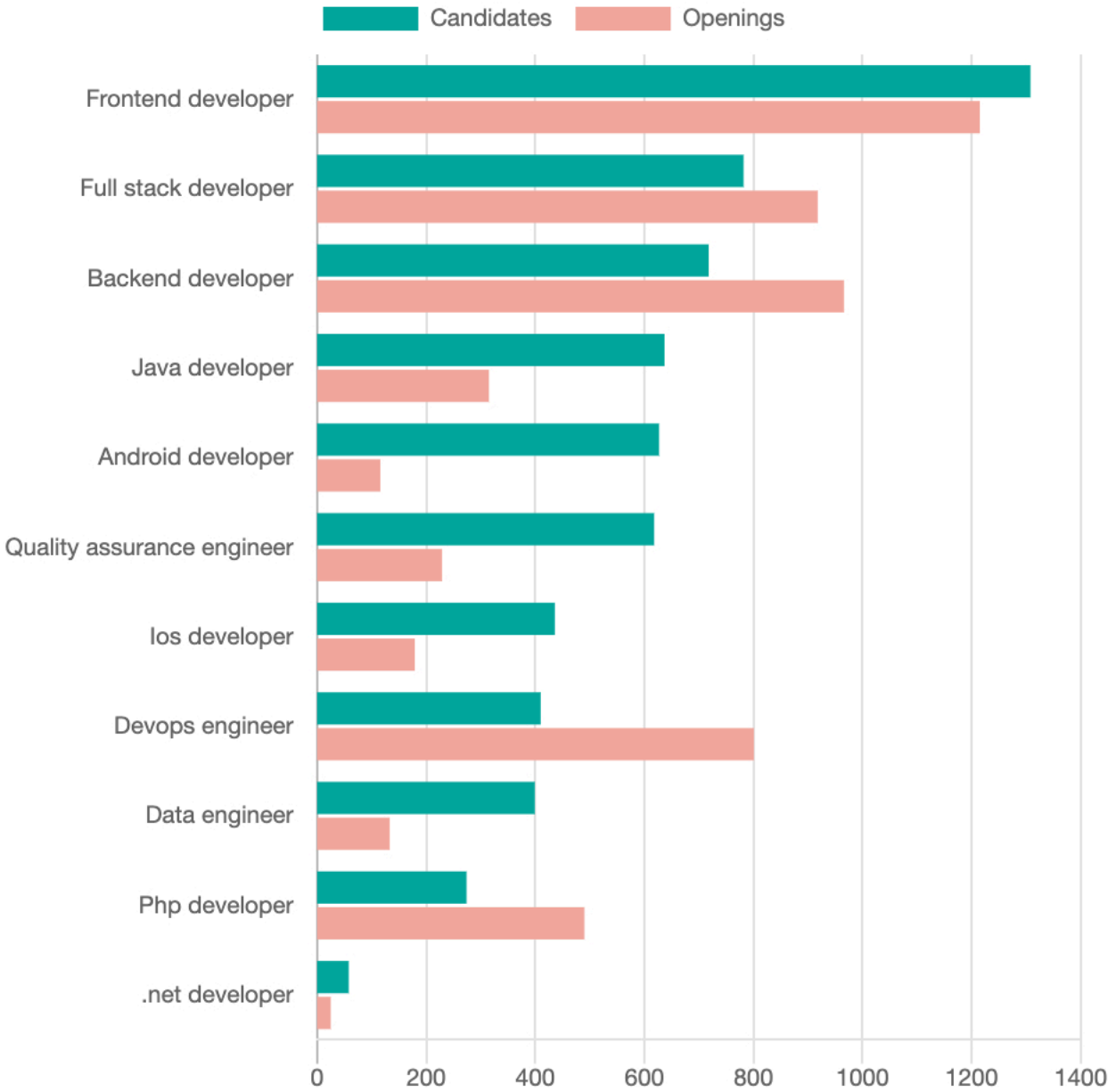
JOB OFFERS
LAST 12 MONTHS



CANDIDATES AND JOB OPENINGS BY POSITION

Position	Candidates	Job openings	Ratio
Frontend developer	1,308 (20.87 %)	1,215 (22.55 %)	1.08
Full stack developer	782 (12.48 %)	918 (17.04 %)	0.85
Backend developer	718 (11.46 %)	966 (17.93 %)	0.74
Java developer	637 (10.16 %)	315 (5.85 %)	2.02
Android developer	627 (10.0 %)	116 (2.15 %)	5.41
Quality assurance engineer	618 (9.86 %)	229 (4.25 %)	2.7
Ios developer	436 (6.96 %)	179 (3.32 %)	2.44
Devops engineer	410 (6.54 %)	801 (14.87 %)	0.51
Data engineer	399 (6.37 %)	133 (2.47 %)	3.0
Php developer	274 (4.37 %)	490 (9.1 %)	0.56
.net developer	58 (0.93 %)	25 (0.46 %)	2.32
Total	6,267 (100 %)	5,387 (100 %)	1.16

Ratio = Candidates / Job openings

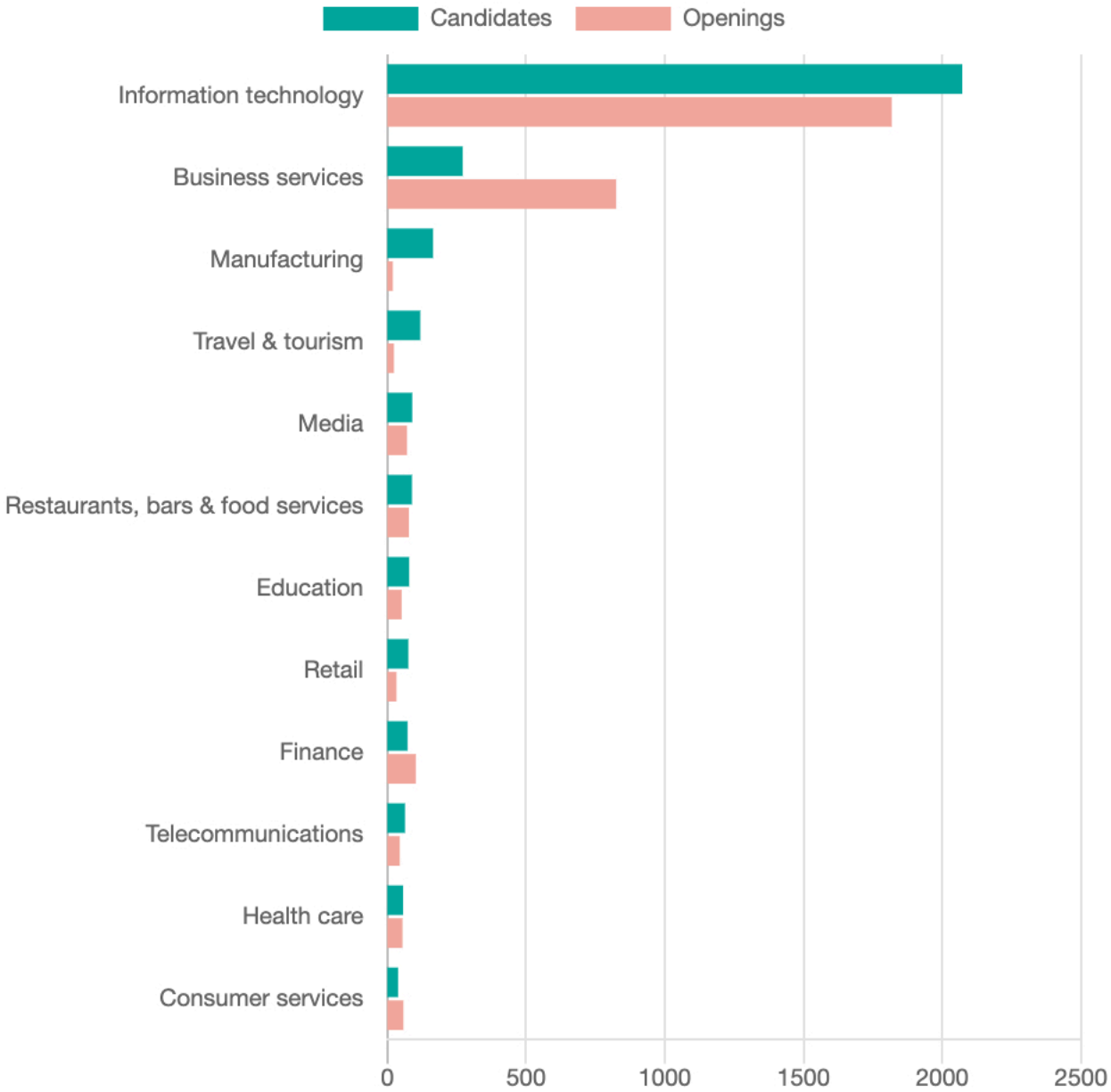


Candidates and job openings by position

CANDIDATES AND JOB OPENINGS BY SECTOR

Sector	Candidates	Job openings	Ratio
Information technology	2,072 (33.06 %)	1,818 (33.75 %)	1.14
Business services	272 (4.34 %)	825 (15.31 %)	0.33
Manufacturing	165 (2.63 %)	20 (0.37 %)	8.25
Travel & tourism	119 (1.9 %)	24 (0.45 %)	4.96
Media	90 (1.44 %)	71 (1.32 %)	1.27
Restaurants, bars & food services	89 (1.42 %)	78 (1.45 %)	1.14
Education	79 (1.26 %)	52 (0.97 %)	1.52
Retail	76 (1.21 %)	33 (0.61 %)	2.3
Finance	73 (1.16 %)	103 (1.91 %)	0.71
Telecommunications	64 (1.02 %)	45 (0.84 %)	1.42
Health care	57 (0.91 %)	55 (1.02 %)	1.04
Consumer services	39 (0.62 %)	58 (1.08 %)	0.67

Ratio = Candidates / Job openings



Candidates and job openings by sector

CANDIDATES AND JOB OPENINGS BY COMPANY SIZE

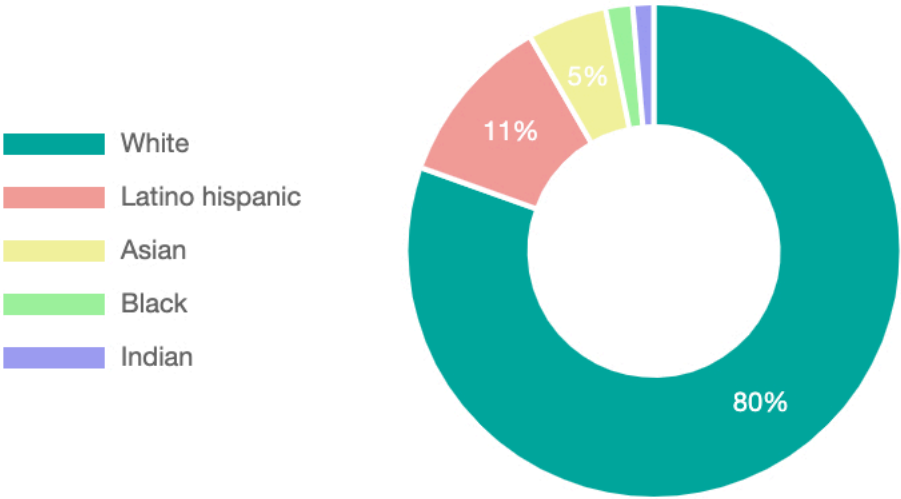
Company size	Candidates	Job openings	Ratio
1-10	330 (5.27 %)	275 (5.1 %)	1.2
11-20	220 (3.51 %)	490 (9.1 %)	0.45
21-50	345 (5.51 %)	518 (9.62 %)	0.67
51-100	350 (5.58 %)	868 (16.11 %)	0.4
101-200	485 (7.74 %)	427 (7.93 %)	1.14
201-500	344 (5.49 %)	413 (7.67 %)	0.83
501-1000	165 (2.63 %)	130 (2.41 %)	1.27
1001-2000	151 (2.41 %)	127 (2.36 %)	1.19
2001-5000	114 (1.82 %)	321 (5.96 %)	0.36
5001-10000	187 (2.98 %)	48 (0.89 %)	3.9
10001	150 (2.39 %)	145 (2.69 %)	1.03

Ratio = Candidates / Job openings



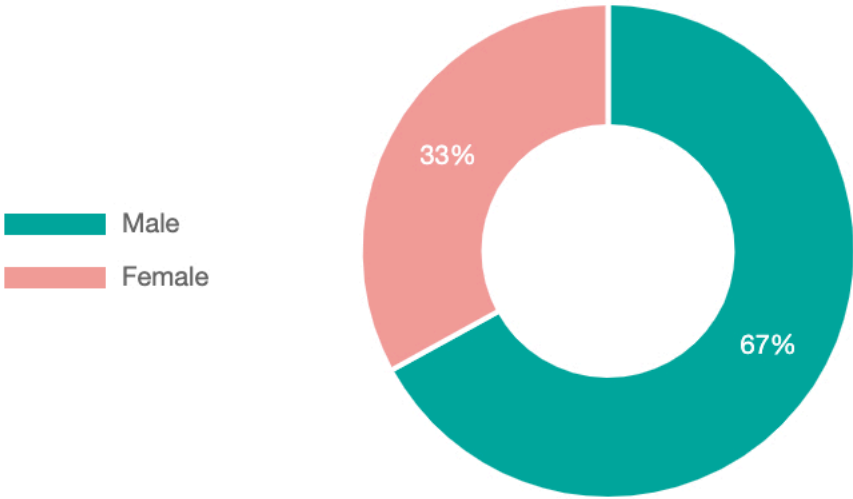
Candidates and job openings by company size

RACE



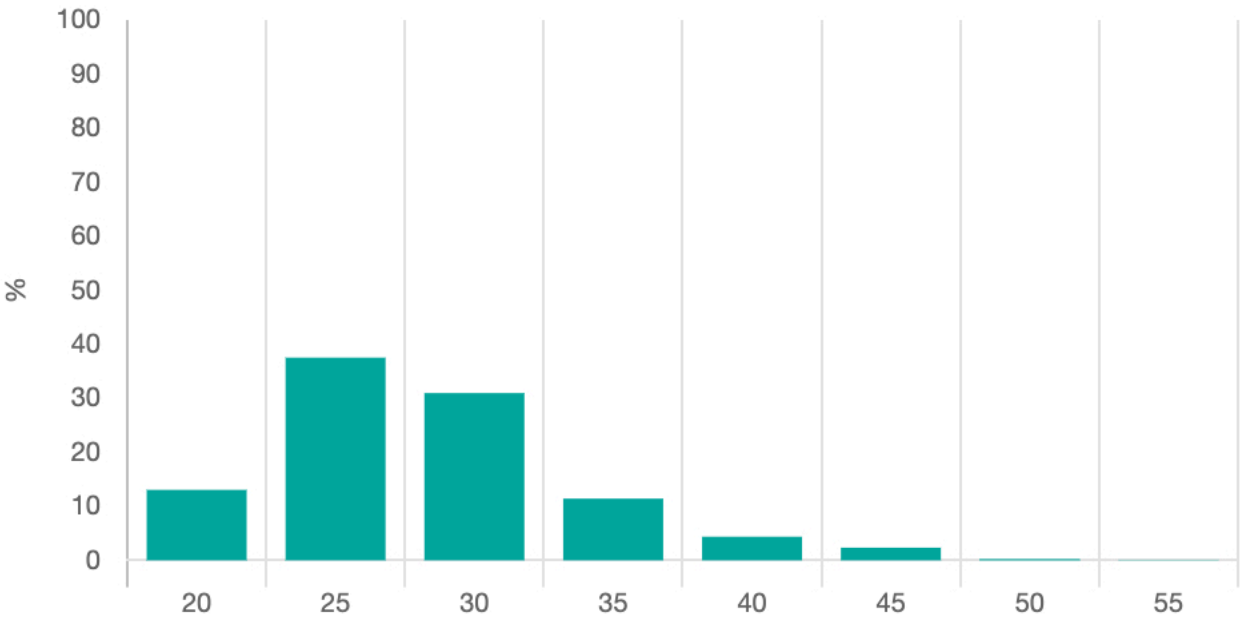
Percentage professionals by race

GENDER



Percentage of professionals by gender

AGE



Number of professionals by age

DIVERSITY BY POSITION

Position	Male	Female	Age (Avg)
Frontend developer	71 %	29 %	29
Full stack developer	77 %	23 %	30
Backend developer	76 %	24 %	30
Java developer	74 %	26 %	30
Android developer	77 %	23 %	30
Quality assurance engineer	60 %	40 %	29
Ios developer	82 %	18 %	29
Devops engineer	83 %	17 %	32
Data engineer	76 %	24 %	26
Php developer	76 %	24 %	27
.net developer	82 %	18 %	33

Gender and average age by role

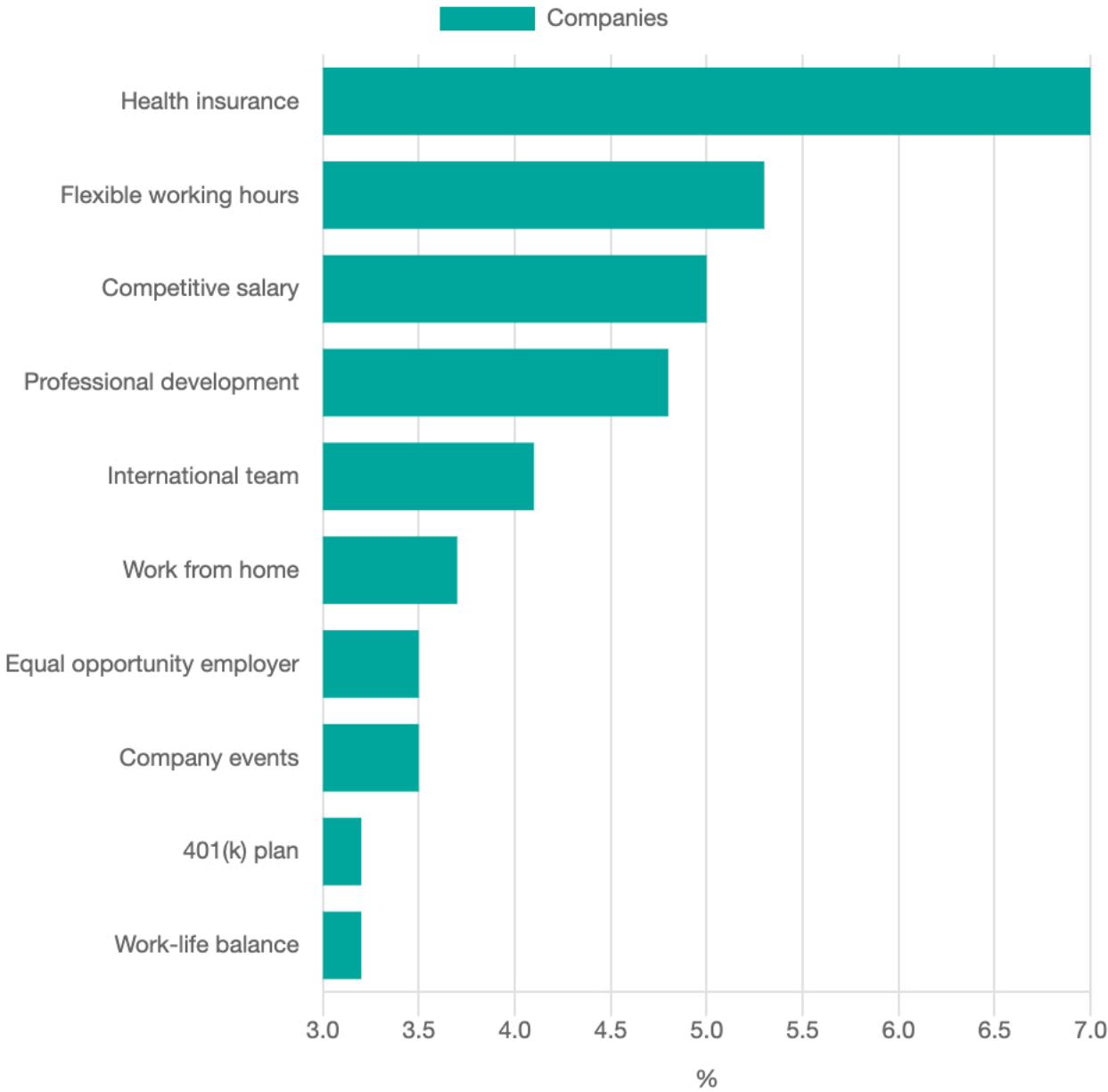
Lower value Higher value

BARCELONA

SALARIES & BENEFITS

BENEFITS

Benefits	# Companies
Health insurance	7.0 %
Flexible working hours	5.3 %
Competitive salary	5.0 %
Professional development	4.8 %
International team	4.1 %
Work from home	3.7 %
Equal opportunity employer	3.5 %
Company events	3.5 %
401(k) plan	3.2 %
Work-life balance	3.2 %



Most popular benefits offered in Barcelona

SALARIES. OVERVIEW

Position	25th percentile	50th percentile	75th percentile	90th percentile
.NET Developer	44800	49700	52900	54100
Android Developer	53000	56900	58900	64800
Backend Developer	51900	53800	61200	61600
Data Engineer	52300	58800	63300	75500
Devops Engineer	49100	55300	58700	65200
Frontend Developer	49900	52200	56600	59700
Full Stack Developer	52600	54800	57900	59800
Java Developer	39200	49900	57900	61000
PHP Developer	39700	45600	53400	55200
Quality Assurance Engineer	41100	42800	44100	45400
IOS Developer	50400	55700	60300	64700

Salaries for senior professionals (EUR)



BARCELONA

COMPANY ANALYSIS

1,326

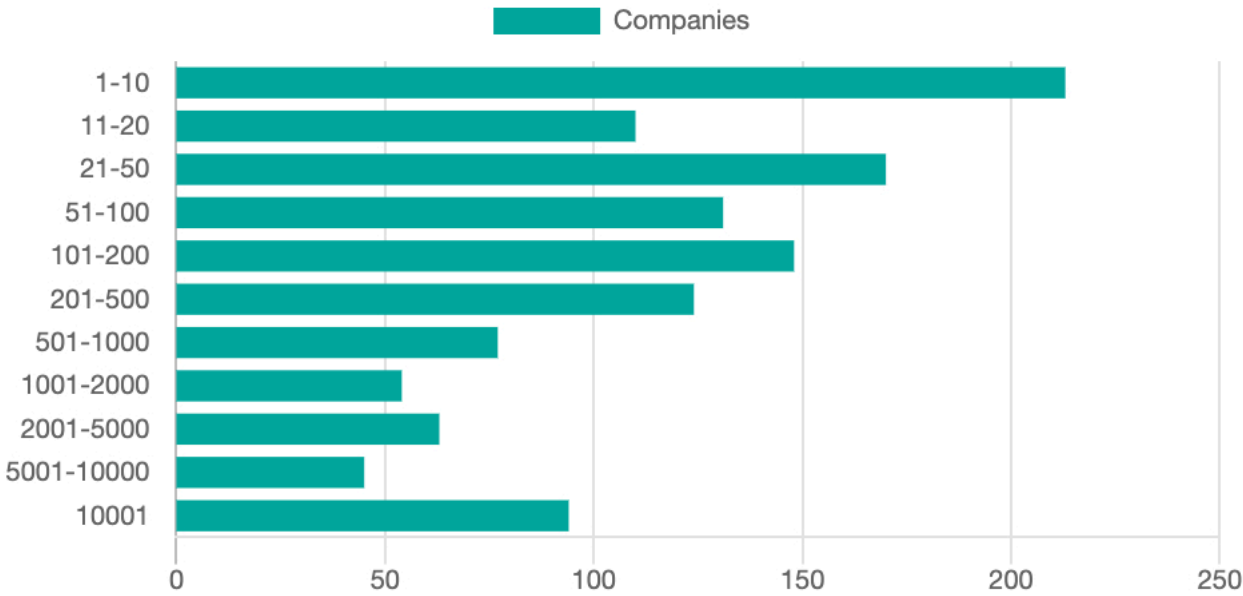
COMPANIES ANALYZED

236

FUNDED COMPANIES

COMPANIES BY SIZE

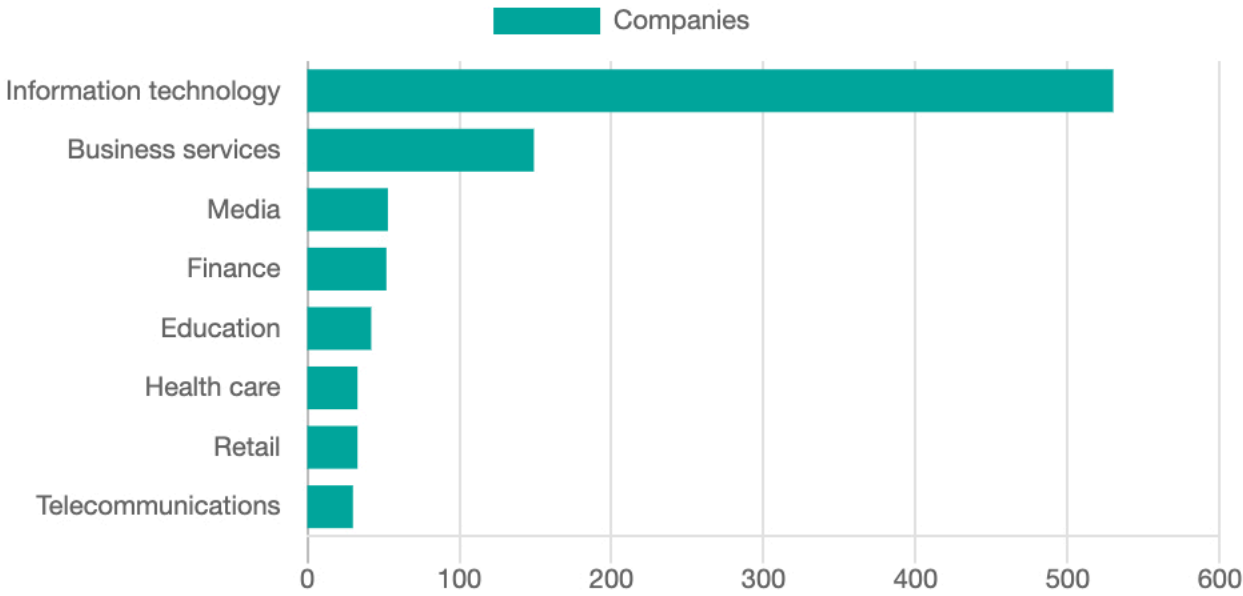
Company size	# Companies
1-10	220
11-20	113
21-50	171
51-100	133
101-200	150
201-500	132
501-1000	82
1001-2000	57
2001-5000	68
5001-10000	46
10001	115



Number of companies by size

COMPANIES BY SECTOR

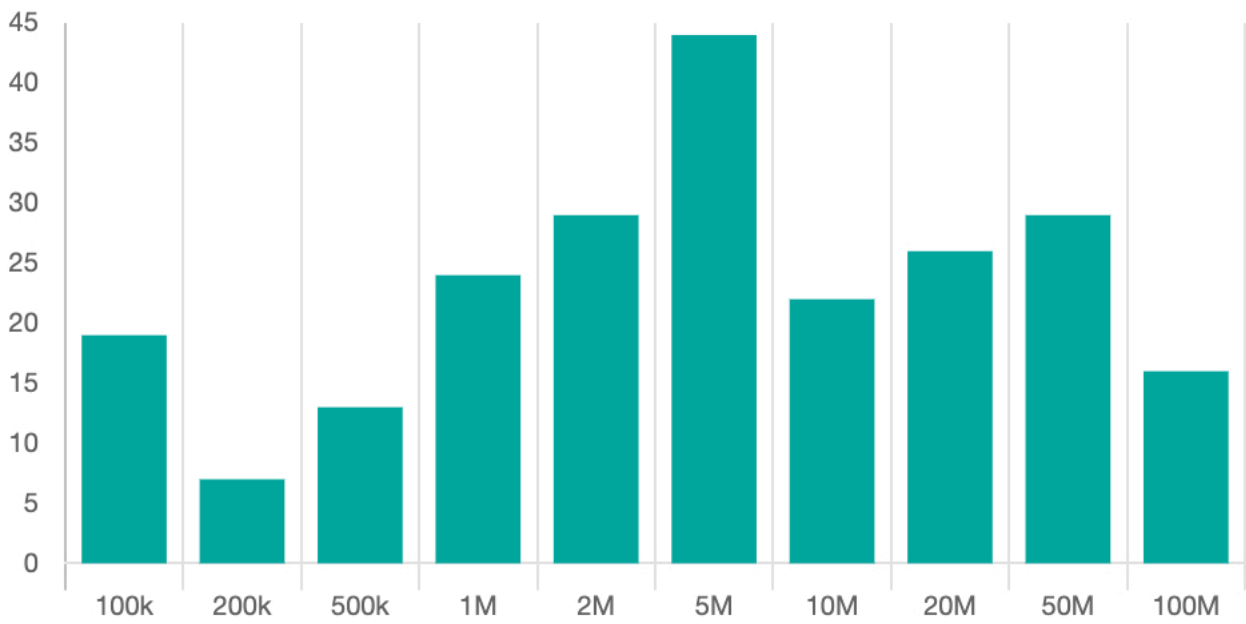
Sector	# Companies
Information technology	552
Business services	153
Media	56
Finance	52
Education	45
Health care	34
Retail	33
Telecommunications	33



Number of companies by sector

FUNDING

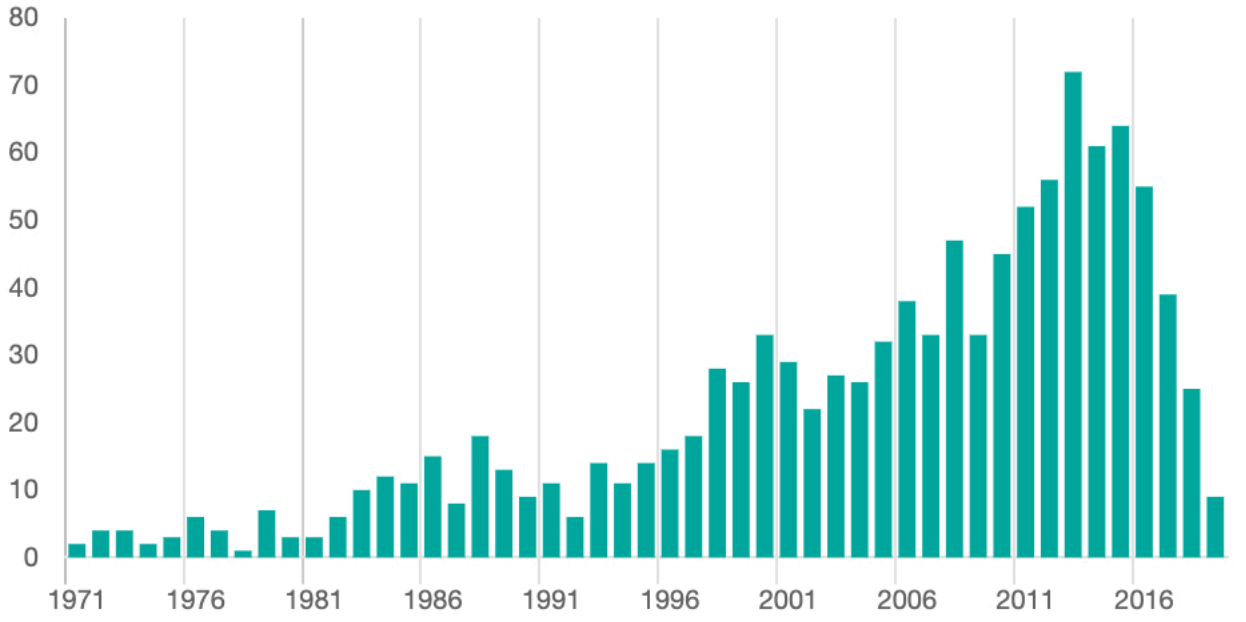
Total funds (EUR)	# Companies
100k-199k	19
200k-499k	7
500k-999k	14
1M-1.99M	24
2M-4.99M	31
5M-9.99M	45
10M-19.99M	22
20M-49.99M	27
50M-99.99M	31
+100M	16



Number of companies by funding amount

FOUNDING YEAR

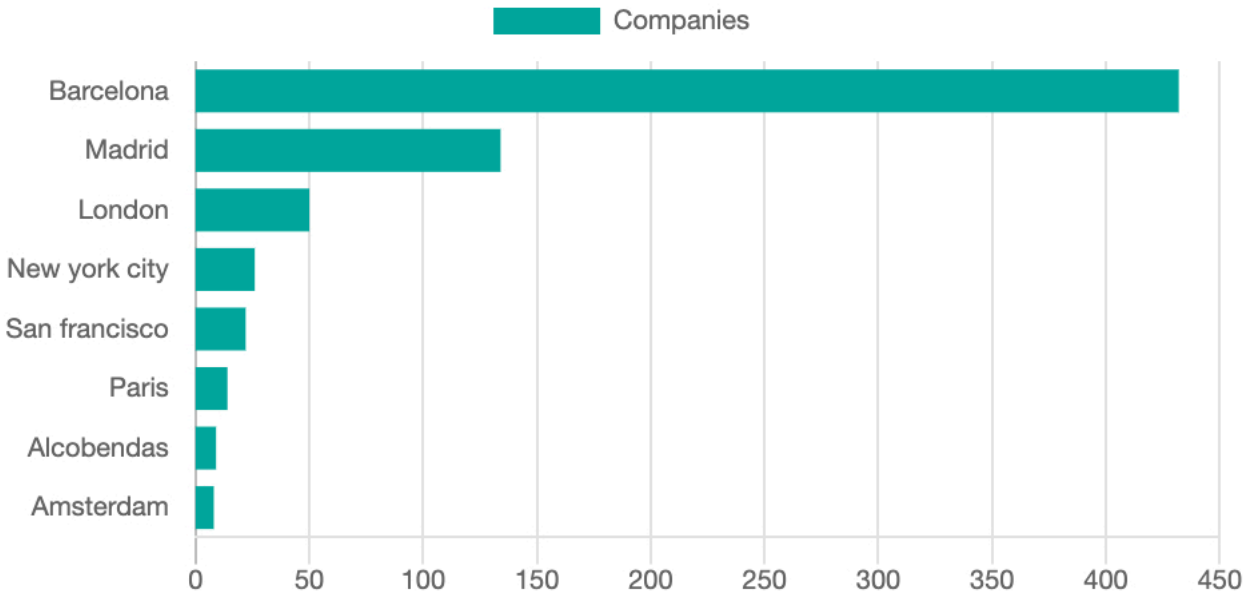
Year	# Companies
1970-1975	18
1975-1980	24
1980-1985	47
1985-1990	65
1990-1995	61
1995-2000	127
2000-2005	140
2005-2010	202
2010-2015	317
2015-2020	129



Number of companies by year founded

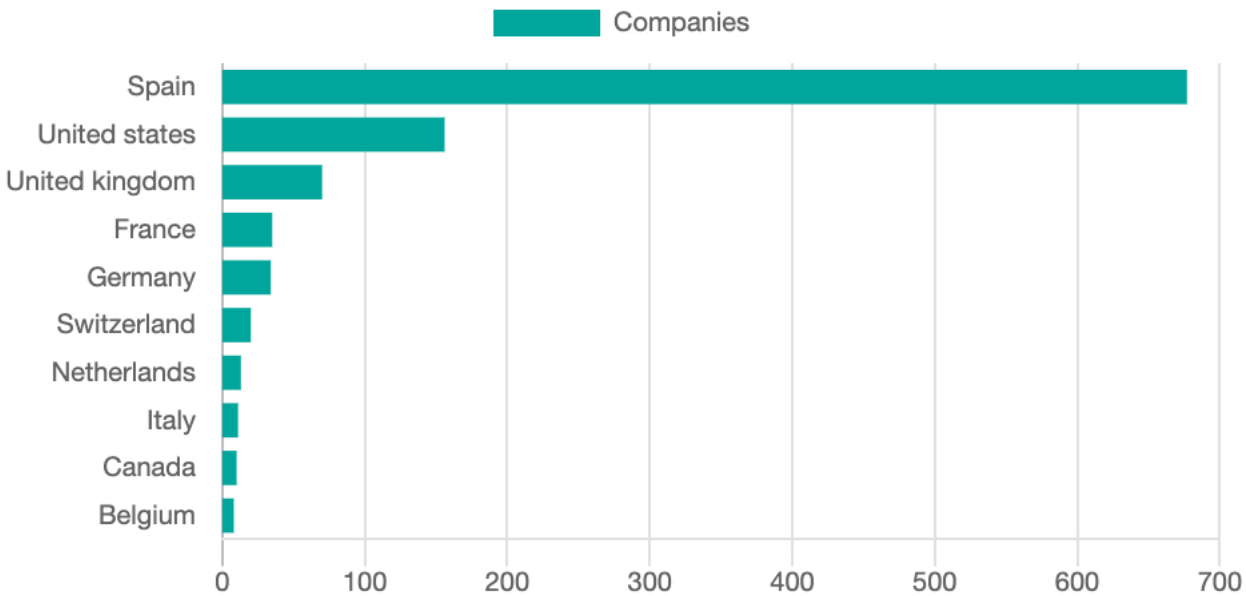
HEADQUARTERS

City	# Companies
Barcelona	445
Madrid	141
London	50
New york city	28
San francisco	22
Paris	18
Alcobendas	9
Amsterdam	8



Number of companies by headquarters (city)

Country	# Companies
Spain	701
United states	165
United kingdom	70
France	43
Germany	38
Switzerland	22
Netherlands	13
Italy	12
Canada	10
Belgium	8



Number of companies by headquarters (country)

MADRID

CANDIDATES AND JOB OPENINGS

11,152

CANDIDATES
IT POSITIONS ANALYZED

5,699

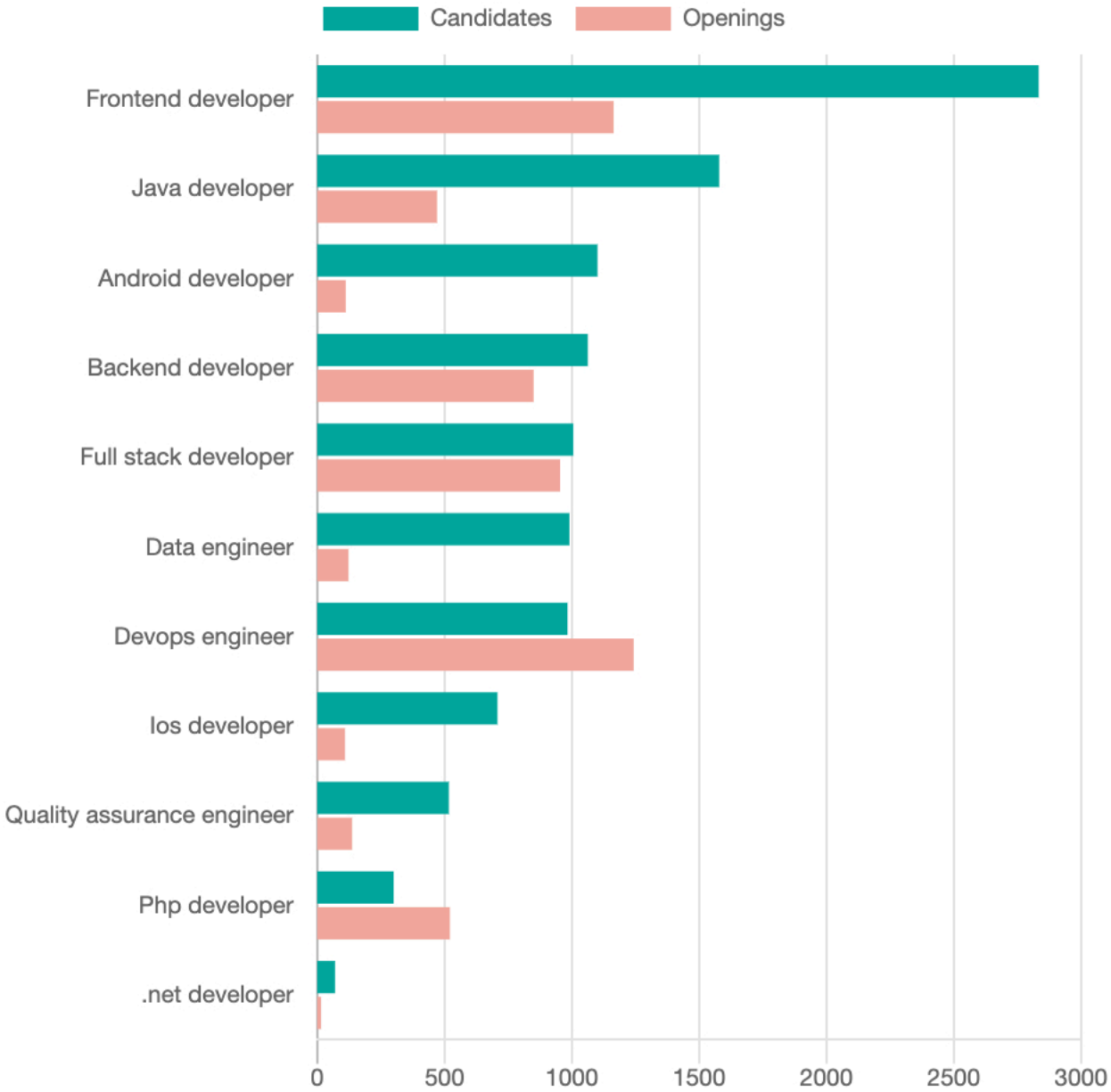
JOB OFFERS
LAST 12 MONTHS



CANDIDATES AND JOB OPENINGS BY POSITION

Position	Candidates	Job openings	Ratio
Frontend developer	2,834 (25.41 %)	1,164 (20.42 %)	2.43
Java developer	1,579 (14.16 %)	471 (8.26 %)	3.35
Android developer	1,101 (9.87 %)	112 (1.97 %)	9.83
Backend developer	1,063 (9.53 %)	850 (14.91 %)	1.25
Full stack developer	1,006 (9.02 %)	954 (16.74 %)	1.05
Data engineer	991 (8.89 %)	123 (2.16 %)	8.06
Devops engineer	983 (8.81 %)	1,243 (21.81 %)	0.79
Ios developer	708 (6.35 %)	109 (1.91 %)	6.5
Quality assurance engineer	517 (4.64 %)	137 (2.4 %)	3.77
Php developer	300 (2.69 %)	521 (9.14 %)	0.58
.net developer	70 (0.63 %)	15 (0.26 %)	4.67
Total	11,152 (100 %)	5,699 (100 %)	1.96

Ratio = Candidates / Job openings

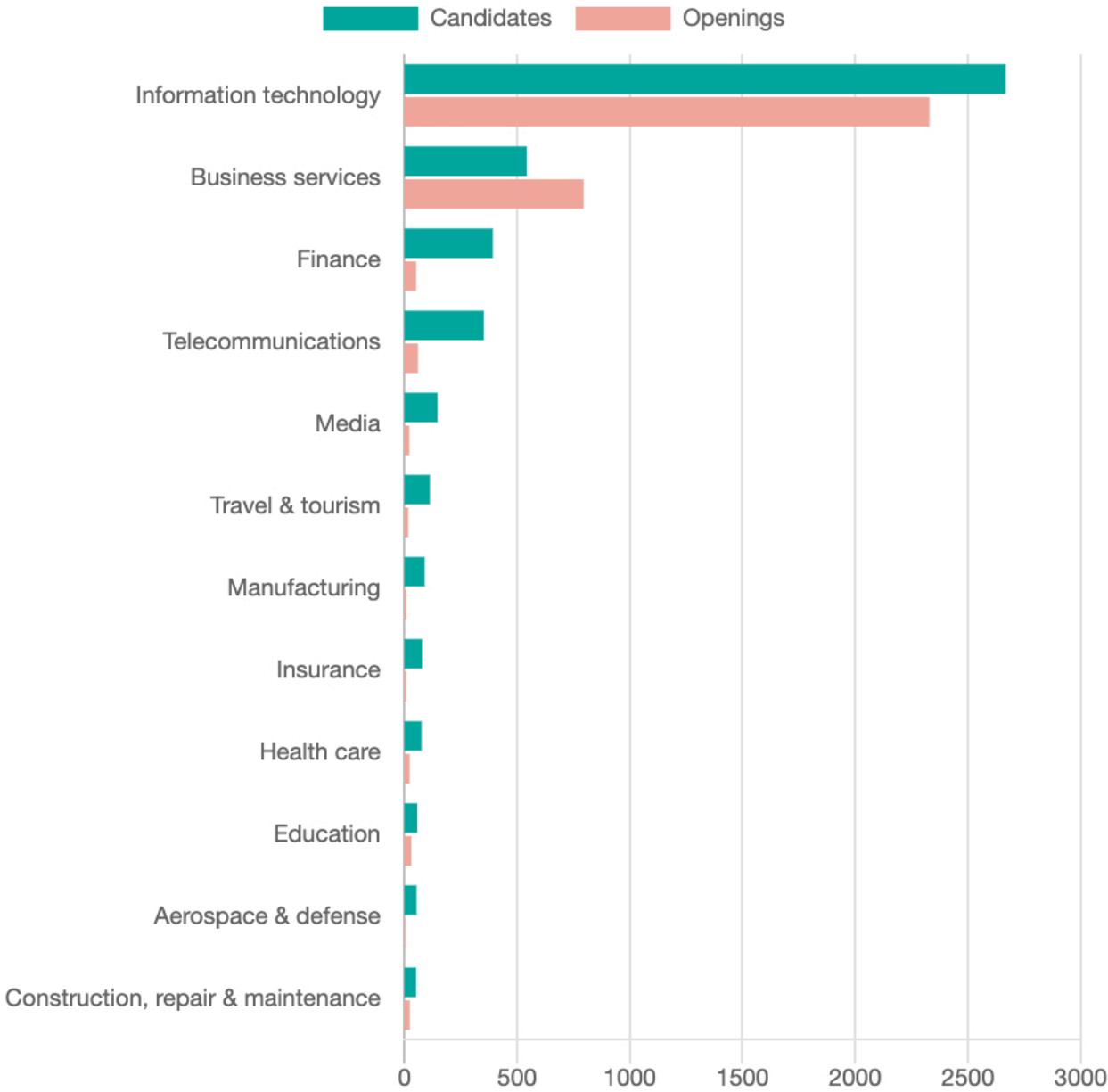


Candidates and job openings by position

CANDIDATES AND JOB OPENINGS BY SECTOR

Sector	Candidates	Job openings	Ratio
Information technology	2,667 (23.91 %)	2,329 (40.87 %)	1.15
Business services	543 (4.87 %)	795 (13.95 %)	0.68
Finance	392 (3.52 %)	52 (0.91 %)	7.54
Telecommunications	352 (3.16 %)	60 (1.05 %)	5.87
Media	147 (1.32 %)	22 (0.39 %)	6.68
Travel & tourism	113 (1.01 %)	17 (0.3 %)	6.65
Manufacturing	90 (0.81 %)	9 (0.16 %)	10.0
Insurance	78 (0.7 %)	8 (0.14 %)	9.75
Health care	76 (0.68 %)	23 (0.4 %)	3.3
Education	57 (0.51 %)	30 (0.53 %)	1.9
Aerospace & defense	54 (0.48 %)	5 (0.09 %)	10.8
Construction, repair & maintenance	52 (0.47 %)	24 (0.42 %)	2.17

Ratio = Candidates / Job openings

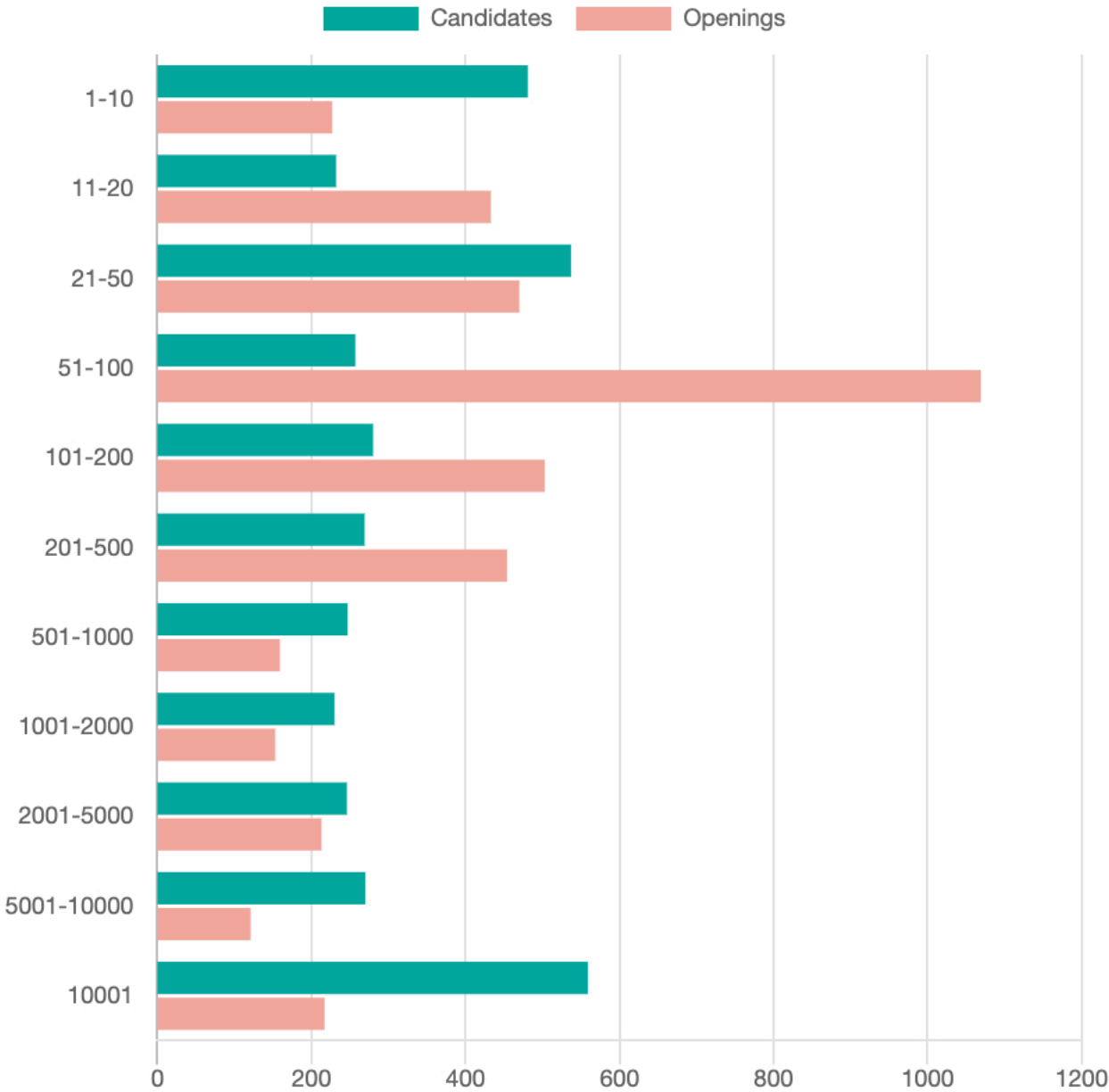


Candidates and job openings by sector

CANDIDATES AND JOB OPENINGS BY COMPANY SIZE

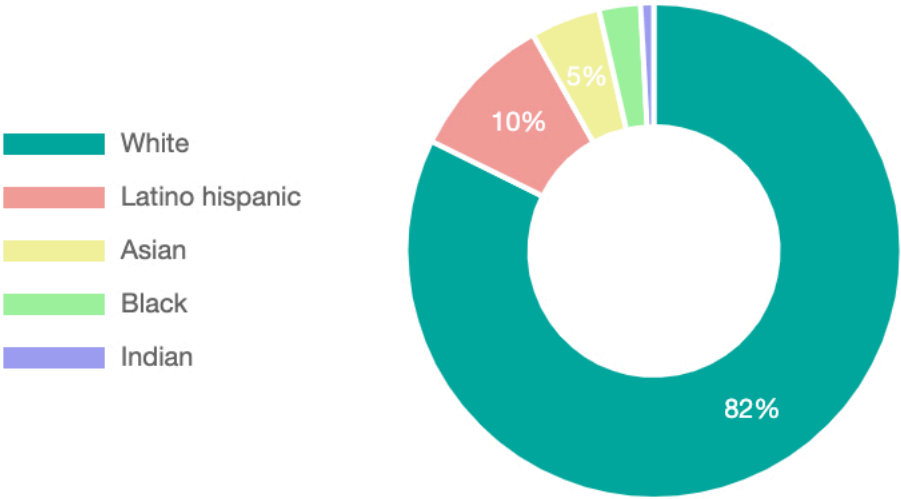
Company size	Candidates	Job openings	Ratio
1-10	481 (4.31 %)	227 (3.98 %)	2.12
11-20	232 (2.08 %)	433 (7.6 %)	0.54
21-50	537 (4.82 %)	470 (8.25 %)	1.14
51-100	257 (2.3 %)	1,069 (18.76 %)	0.24
101-200	280 (2.51 %)	503 (8.83 %)	0.56
201-500	269 (2.41 %)	454 (7.97 %)	0.59
501-1000	247 (2.21 %)	159 (2.79 %)	1.55
1001-2000	230 (2.06 %)	153 (2.68 %)	1.5
2001-5000	246 (2.21 %)	213 (3.74 %)	1.15
5001-10000	270 (2.42 %)	121 (2.12 %)	2.23
10001	559 (5.01 %)	217 (3.81 %)	2.58

Ratio = Candidates / Job openings



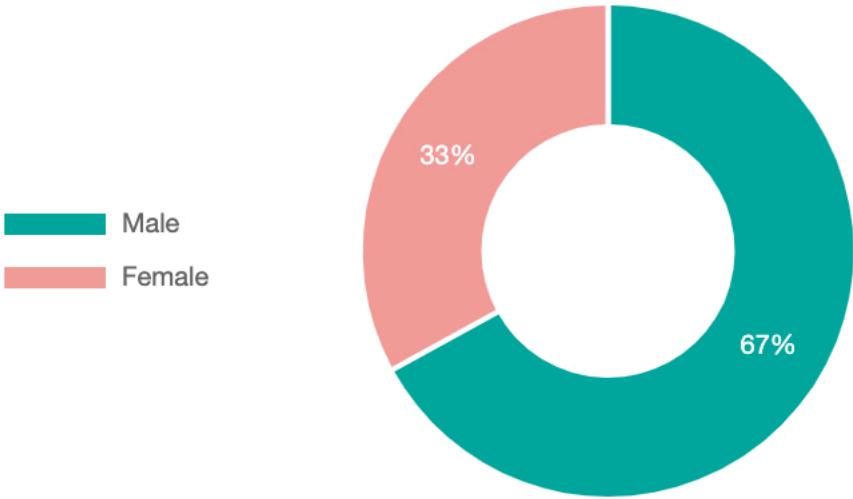
Candidates and job openings by company size

RACE



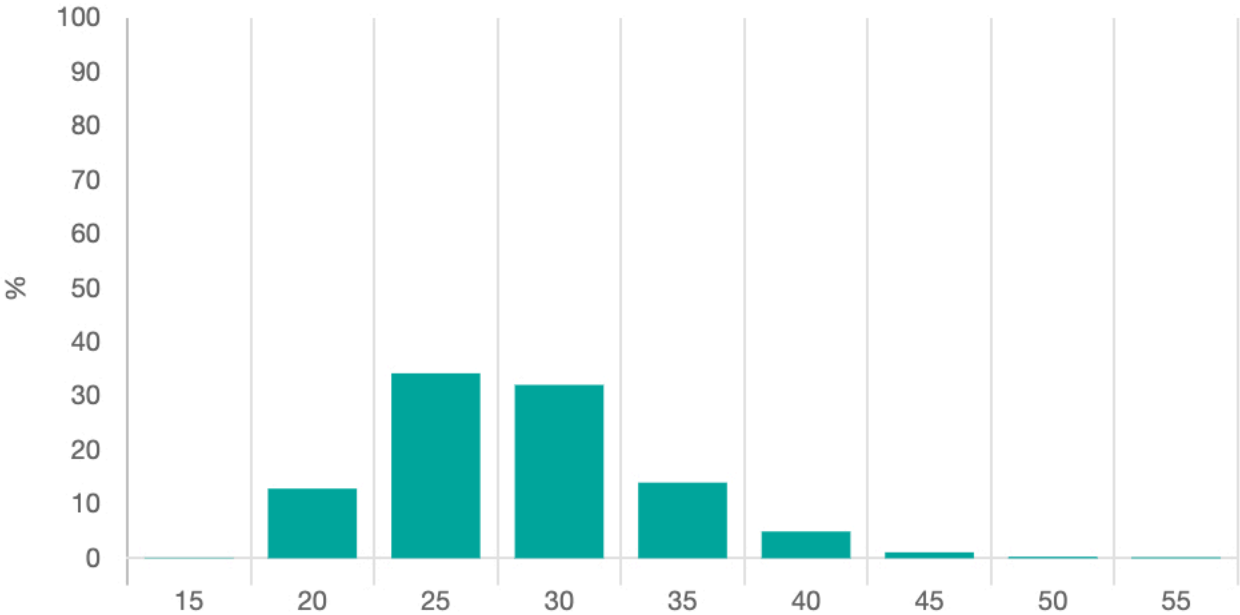
Percentage professionals by race

GENDER



Percentage of professionals by gender

AGE



Number of professionals by age

DIVERSITY BY POSITION

Position	Male	Female	Age (Avg)
Frontend developer	70 %	30 %	28
Java developer	78 %	22 %	24
Android developer	84 %	16 %	27
Backend developer	79 %	21 %	29
Full stack developer	77 %	23 %	28
Data engineer	85 %	15 %	27
Devops engineer	82 %	18 %	29
Ios developer	77 %	23 %	29
Quality assurance engineer	49 %	51 %	29
Php developer	77 %	23 %	27
.net developer	80 %	20 %	28

Gender and average age by role

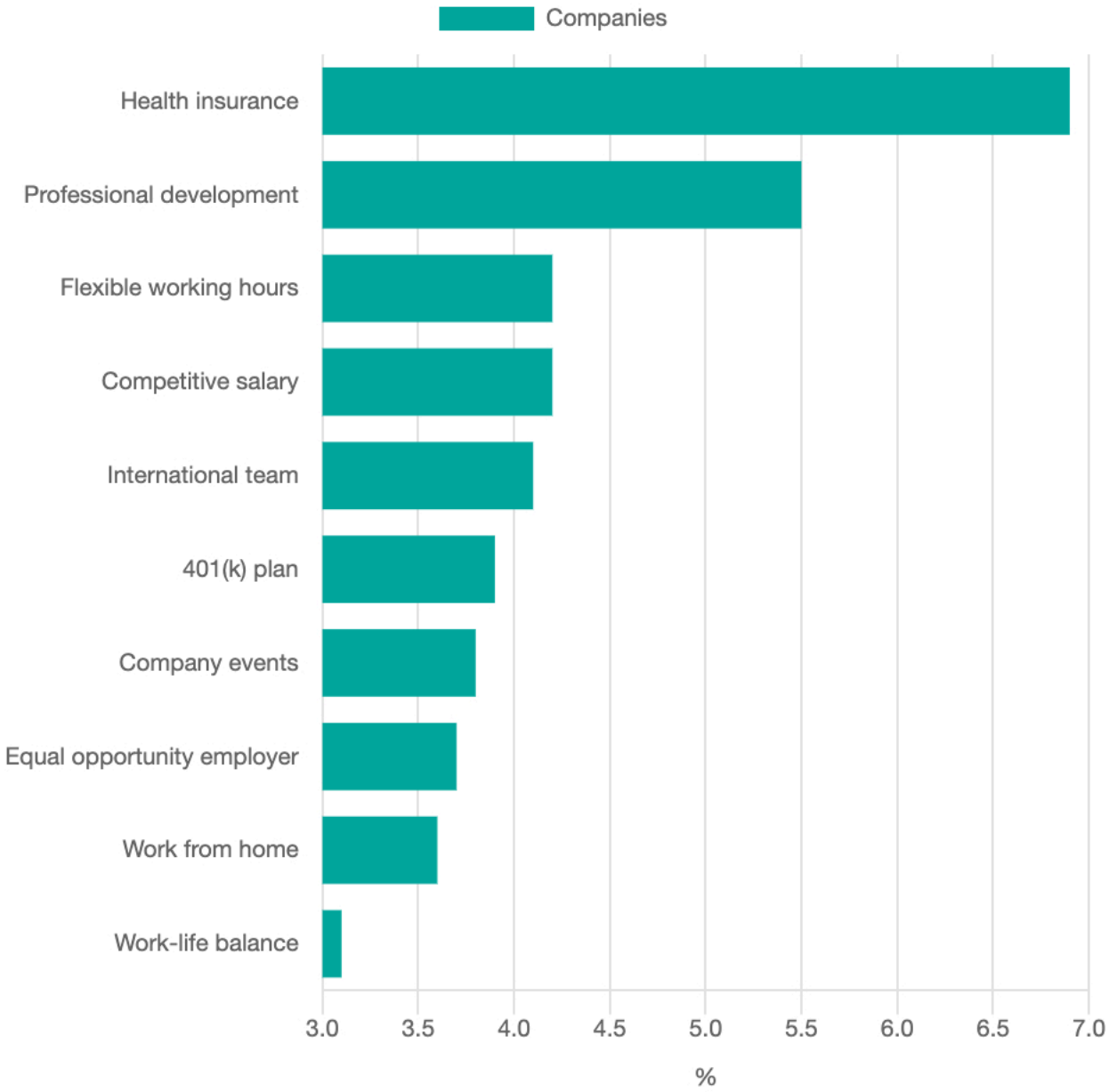
Lower value Higher value

MADRID

SALARIES & BENEFITS

BENEFITS

Benefits	# Companies
Health insurance	6.9 %
Professional development	5.5 %
Flexible working hours	4.2 %
Competitive salary	4.2 %
International team	4.1 %
401(k) plan	3.9 %
Company events	3.8 %
Equal opportunity employer	3.7 %
Work from home	3.6 %
Work-life balance	3.1 %



Most popular benefits offered in Madrid

SALARIES. OVERVIEW

Position	25th percentile	50th percentile	75th percentile	90th percentile
.NET Developer	44500	47400	49900	52800
Android Developer	58600	60300	63800	72200
Backend Developer	56600	58900	63400	63900
Data Engineer	50700	56800	70100	84500
Devops Engineer	54300	56100	58900	59700
Frontend Developer	54100	56000	58700	61900
Full Stack Developer	60200	62600	64000	64400
Java Developer	35100	46200	53100	56000
PHP Developer	42200	44200	48600	48700
Quality Assurance Engineer	40100	41800	43500	48600
IOS Developer	46300	54300	57200	62400

Salaries for senior professionals (EUR)

Lower salaryHigher salary

MADRID

COMPANY ANALYSIS

1,167

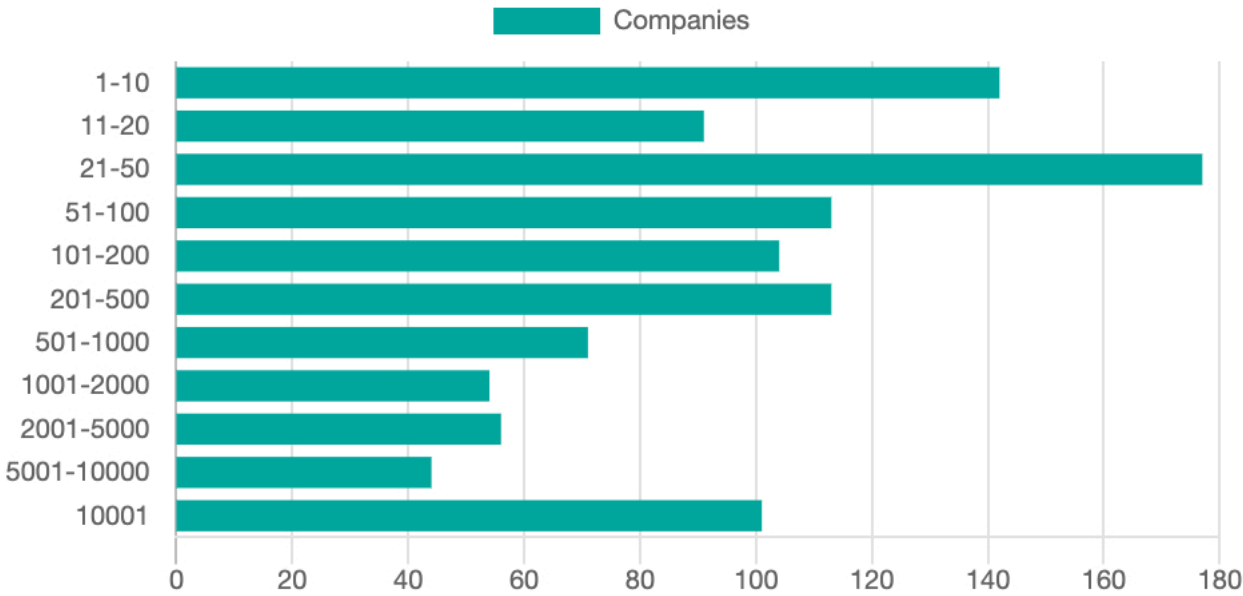
COMPANIES ANALYZED

131

FUNDED COMPANIES

COMPANIES BY SIZE

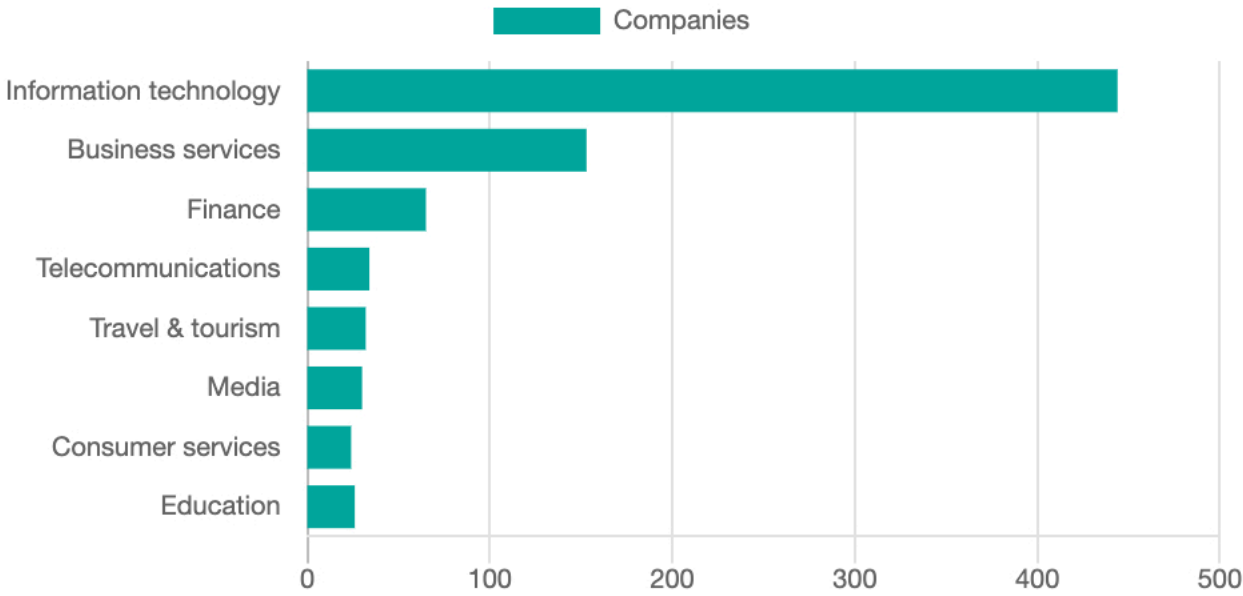
Company size	# Companies
1-10	146
11-20	92
21-50	180
51-100	117
101-200	110
201-500	125
501-1000	75
1001-2000	58
2001-5000	59
5001-10000	45
10001	120



Number of companies by size

COMPANIES BY SECTOR

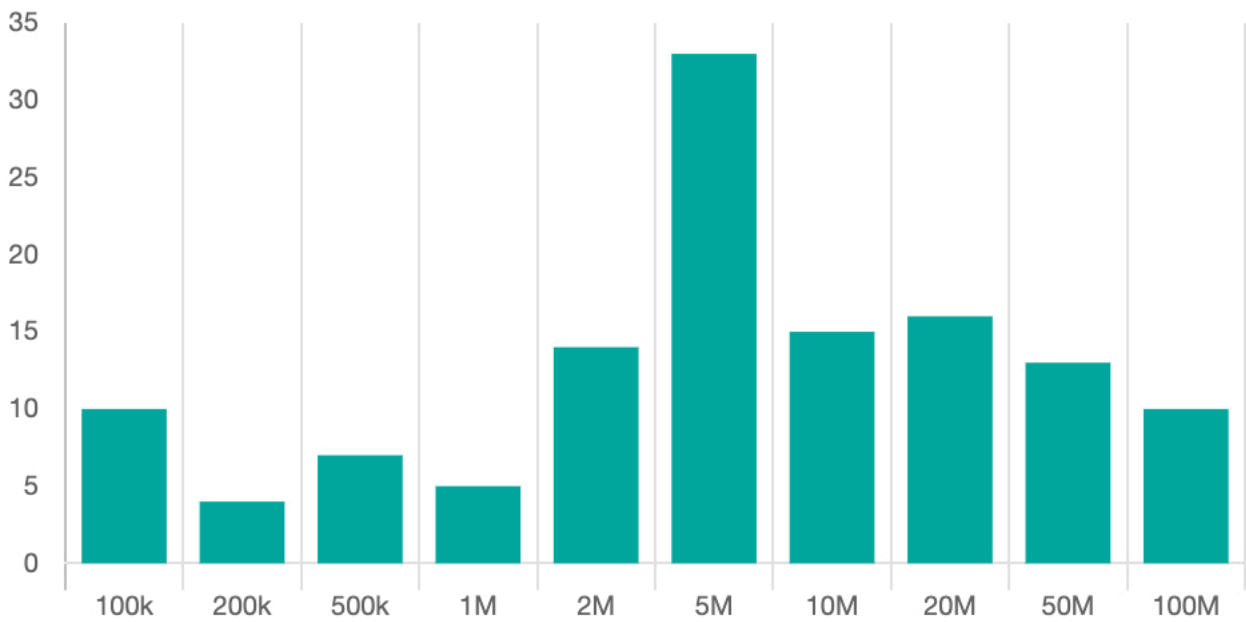
Sector	# Companies
Information technology	471
Business services	155
Finance	66
Telecommunications	39
Travel & tourism	32
Media	31
Consumer services	27
Education	27



Number of companies by sector

FUNDING

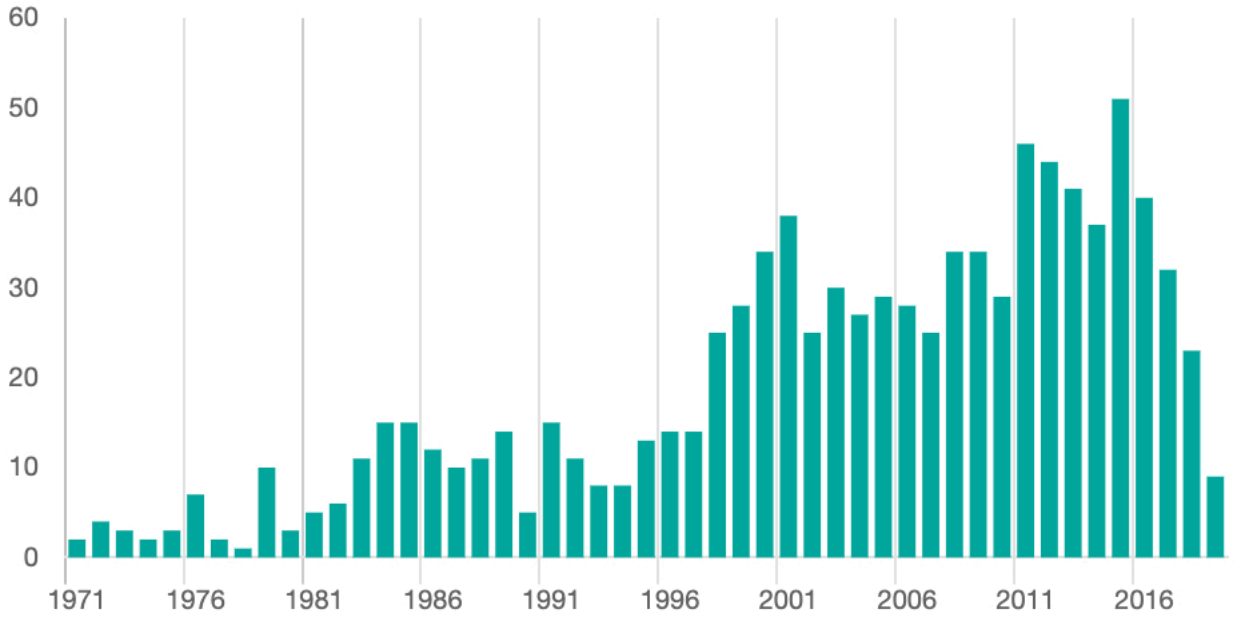
Total funds (EUR)	# Companies
100k-199k	10
200k-499k	4
500k-999k	7
1M-1.99M	5
2M-4.99M	15
5M-9.99M	34
10M-19.99M	15
20M-49.99M	16
50M-99.99M	14
+100M	11



Number of companies by funding amount

FOUNDING YEAR

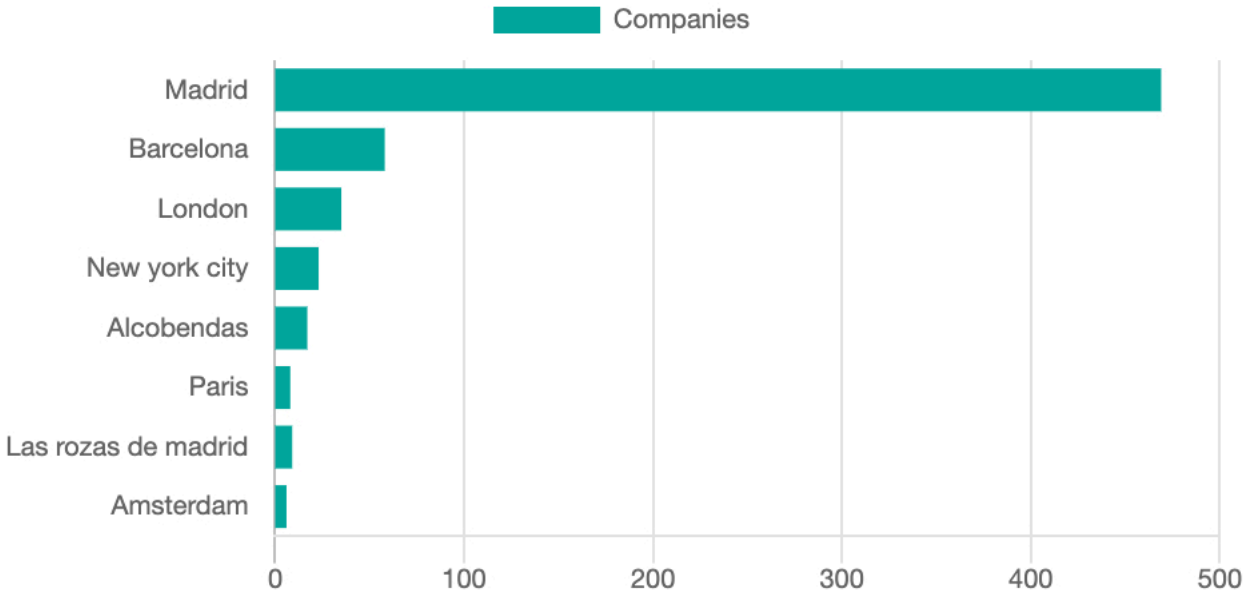
Year	# Companies
1970-1975	16
1975-1980	25
1980-1985	57
1985-1990	54
1990-1995	60
1995-2000	123
2000-2005	156
2005-2010	155
2010-2015	228
2015-2020	104



Number of companies by year founded

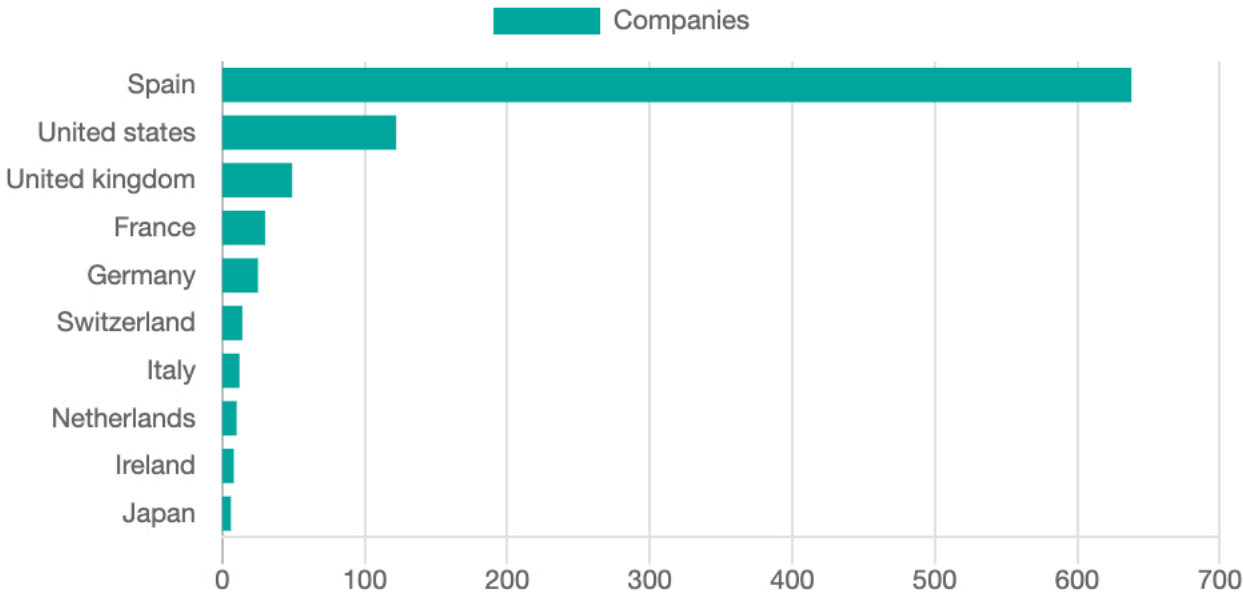
HEADQUARTERS

City	# Companies
Madrid	482
Barcelona	66
London	36
New york city	24
Alcobendas	17
Paris	11
Las rozas de madrid	9
Amsterdam	7



Number of companies by headquarters (city)

Country	# Companies
Spain	663
United states	131
United kingdom	50
France	38
Germany	27
Switzerland	16
Italy	12
Netherlands	12
Ireland	8
Japan	6



Number of companies by headquarters (country)



ABOUT TALENT UP

TalentUp offers data-driven insights into the talent market to help companies drive effective recruitment and retention strategies.

With TalentUp talent market data, companies can tailor their human resource strategies to discover

exceptional talent, detect market opportunities and present better job offers.

240M

PROFESSIONALS

7M

COMPANIES

46M

JOB OFFERS

12M

SALARIES



ABOUT GETWITH

GetWith is an end-to-end tech hiring solution that makes it easier for developer to find great jobs and faster for companies to build strong teams.

Developers apply for multiple jobs by taking a single tech challenge that accurately presents their skills, and companies get introduced to pre-screened candidates that are a great fit. Find out more at getwith.io.

+25k
DEVELOPERS

+30
TECH CHALLENGES

+200
COMPANIES

90%
CHALLENGE
COMPLETION RATE

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