

# 1 out of 4 job offers in Barcelona is digital



- **According to the report 'Digital Talent Overview 2023', prepared by Mobile World Capital Barcelona, in 5 years the demand for digital professionals has more than doubled, from 15,856 to 33,624 annual job offers.**
- **Barcelona has reached 100,920 digital professionals in 2022, an annual increase of 7.9%.**
- **A third of Barcelona's digital professionals are from outside Catalonia (32.4%). In the last five years Barcelona has attracted nearly 14,000 professionals.**
- **Barcelona is among the cities with more women in the digital sector with 28.7% of workers, a growth of 6.7% in the last five years.**

Barcelona, 20 July of 2022-. Barcelona has strengthened its position as a benchmark for technological talent over the last five years, both in terms of volume of professionals, demand, and international graduates. This is one of the conclusions drawn from the last 5 editions of the 'Digital Talent Overview' of Mobile World Capital Barcelona.

The results of the report, along with the balance of the last five years and new trends such as generative AI, have been presented today at the press conference by Gina Tost, Secretary of Digital Policies of the Generalitat de Catalunya, Francesc Fajula,

CEO of Mobile World Capital Barcelona and **Jordi Arrufí**, Digital Talent Director of Mobile World Capital Barcelona.

### **The number of digital professionals has increased by 49%.**

Barcelona adds 100,920 digital professionals during 2022, an increase of 7.9% over the previous year. On the other hand, the average salary in Barcelona is 46,940€.

In this regard, the study notes that in the last 5 years the demand for digital professionals has more than doubled, from 15,856 to 33,624 annual job offers. This translates into a 49% increase since 2018.

In 2018, the weight of digital job offers over the total number of sectors was 11% and has now increased to 26%. Consequently, one in four job offers published corresponds to digital professions.

Globally, despite the increase in the supply of digital professionals in the last five years, demand continues to be much higher. This, for example, is reflected in the tension in the market, and how many professionals there are to fill a job. In the last five years, we have gone from having 17 professionals per offer to just 12.

The ranking of the companies that demand the most talent in Barcelona is distributed as follows: consulting firms (NTT Data, Seidor, Accenture and Capgemini), technology hubs (Zurich and HP), scaleups (Glovo and Adevinta) and research centers (Barcelona Supercomputing Center). Compared to 2021, most companies remain in the ranking. The companies new to the 2022 ranking are Barcelona Supercomputing Center (BSC), Capgemini and Amazon.

### **A third of Barcelona's digital professionals are international**

In the framework of the European Union, the evolution of employment in the ICT sector in the last decade is 7 times higher than the growth of employment as a whole. While employment has grown by 7.9% in the last 10 years, employment in the ICT sector has grown by more than 57%.

Barcelona continues to be a benchmark in the European framework to establish itself. A third of Barcelona's digital professionals are international (32.4%). In the last five years Barcelona has attracted 12,382 international professionals.

### **The gender gap persists in the digital sector**

Barcelona is among the cities with more women in the digital sector. If in 2018 there was about 15,000 women exercising digital professions, by 2022 there are more than 29,000. This acceleration has allowed the weight of women in the group of digital professionals to increase from 22% to 28.7%.

This growth places us above the European average, an upward figure in the last 5 years with a growth of 6.7%, although we are still behind cities like Milan, Stockholm or London. At the level of specialization, in Barcelona the presence of women in the field of Digital Marketing (46%) and UX/UI (43%) stands out especially.

On a European scale, even with the good data of increased presence of women in the sector, the gender gap persists in the digital field, since women represent an average of 27.8% of employment in digital professions in Europe.

### **ICT job profiles: the most in demand and the shortage**

According to the study, the most demanded and offered talent profile in 2022 was the Web Developer profile (48% of the demand and 42% of the offer). In the analysis, the demand for Artificial Intelligence profiles stands out especially, which has tripled in the last year, while the volume of professionals has grown by 86%. Likewise, emerging technologies such as Blockchain, computer vision or IoT have more professionals available for each job offer than previous years.

On the other hand, the digital profiles with more shortage - with fewer profiles per job offer - are cybersecurity professionals, with less than 3 professionals per job offer, followed by Cloud professionals, App Developers and Agile/Scrum professionals.

### **New trends, revolution in the labour framework**

Generative Artificial Intelligence plays a new role in the labour market, so for the first time the Digital Talent Overview 2023 report has included 20 international experts to analyse the progressive implementation of technology based on generative AI models.

According to AI Research and the University of Pennsylvania, it is estimated that generative AI could impact half of the daily tasks performed by 19% of American workers and that it could also impact 10% of the tasks performed by 80% of U.S. workers.

Private investment in AI in terms of adoption and investment has accelerated exponentially in the last five years, reaching \$91.9 billion by 2022, according to Stanford University's annual AI report, making it a priority for companies.

In this regard, AI adoption has more than doubled since 2017, from 20% to 50% of the organizations surveyed, and, moreover, 63% of companies expect investment in AI to increase in the next three years.

The adoption of generative AI, therefore, will imply changes in the labour market as we know it today, to the extent that it will allow the emergence of new professions such as: the Prompt Engineer who will be key in the near future as a link between

the technician and AI; auditors of fairness and algorithm bias, to ensure transparency, intelligibility and neutrality; data analysts, data governance specialists, interface designers and experts in usability of AI systems or cybersecurity experts, among others.

In this special section, respondents have highlighted the new market dynamics associated with the democratization of AI and the benefits it can bring. Generative AI can have a positive impact on the elimination of routine tasks and also on time savings (surely linked to the outcome of eliminating routine tasks). To a lesser extent it will impact on activities of high creativity, quality, and finally, decision support.