

# Promoting Integration & Diversity In The Digital Labour Market in Spain

February 2019



- ▶ Spain accounts for the fifth-largest information and communications technology workforce (ICT) workforce in Europe and one of the highest levels of educational attainment of ICT workers yet employers report difficulties in filling ICT positions.
- ▶ Despite recent improvements in labour market performance Spain's high youth unemployment is particularly unfavourable for long-term unemployed youth and youth not in employment, education or training (NEET).
- ▶ The representation of women in the Spanish ICT sector is an urgent challenge as the percentage share of women is less than that of men in every single occupation.
- ▶ The Spanish government has implemented action plans for the development of ICT and provision of digital public services. There have also been comprehensive policies to address socio-economic challenges, with some positive results but little data is available at the national level.

### Current developments in the ICT labour market in Spain

**Spain's digital economy has grown rapidly in recent years but employers struggle to find talent with the required skills to fill ICT positions.** In 2017, there were 32,300 registered unemployed ICT specialists but employers reported that job vacancies for ICT specialists were one of the most difficult to fill. Prevailing vacancies for ICT jobs are increasingly attributed to a lack of appropriate skills demonstrated by candidates, which include both technical and soft skills.

**There is high likelihood of cross-border migration for ICT graduates in Spain.** 79 percent of ICT specialists in Spain have an academic degree, which is well above the European Union (EU) average of 62 percent. Unable to find a well-paid job in the national labour market, ICT graduates migrate to other countries and enter the ICT specialist workforce there. There is however, less likelihood of internal migration as graduates are less willing to move to other regions for jobs. Low geographical mobility implies that graduates in surplus provinces

are not necessarily willing or able to move to other provinces that are affected by ICT skills shortages.

**Forecasts indicate that the potential for new jobs and the ICT skills gap is likely to be 22,000 in 2025.** This presents an opportunity for both employers and policy makers to provide new avenues for ICT education and training. Employers have not invested as much as other countries in ICT skills training in Spain and the re-skilling of employees has been relatively delayed. There is a lack of integration of women in ICT education and employment. Women's employment rate today is roughly the same it was in 2007 and they constitute 19 percent of all ICT workers in Spain. More women than men graduate from tertiary education in Spain but more men choose ICT as an educational specialisation.

**Digital policy actions focus mainly on digital literacy and awareness.** The Digital Agenda for Spain was published in 2013, which focuses primarily on ICT infrastructure, accessibility and provision of digital public services. There have been comprehensive policies to fight youth unemployment such as the Strategy for Entrepreneurship and Youth

Employment 2013-2016 (The Estrategia de Emprendimiento y Empleo Joven 2013-2016) and the Youth Employment Operational Programme (Programa Operativo de Empleo Juvenil<sup>24</sup>, POEJ). The policies are mainly contributing to the implementation of the Youth Guarantee initiative, the EU-wide reform aimed at ensuring that all young people up to 25 years of age are given a job, education, learning or work experience.

**Better activation measures for unemployed young people have been introduced.** Activation programmes, unlike free employment service programmes, are targeted to unemployed individuals who are recipients of unemployment benefits. Participation in activation measures, such as interviews with employment counsellors, applying for job vacancies and building individual action plans for joining training or job creation programmes is obligatory for the relevant target groups to bring them closer to employment.

**Improvements in Spain's system for vocational education and training (VET) such as the introduction of a new dual VET system as part the government's modernisation plans.** The Spanish government introduced a new dual VET system in 2012 which resulted in alternating work-based and classroom learning. Public policy has attempted to strengthen the links between employers and VET-providers to increase opportunities for training in

the workplace through apprenticeship contracts. However, dual VET contracts are still a minority in the Spanish labour market and much like VET programmes in general, are perceived as a less attractive alternative to higher education in universities.

**ICT skills training programmes are contributing to solving Spain's ICT skills challenge.** Trainings address the challenge of trainees' lack of market relevant technical and soft skills. ICT vendor qualifications such as those from Cisco, Microsoft and Oracle, among others, have the most value in terms of labour market impact. For employers, it is easy to assess the level of skills based on standardised benchmarks used in ICT vendor qualifications.

**Trainings address the challenge of unemployed and inactive NEET youth in Spain but there is a need for further action.** Due to the enormity of youth unemployment, a higher proportion of ICT skills training are aimed at the cohort aged roughly between 16 and 30 years. Very few programmes that focus on technical ICT skills development are targeted exclusively to girls and women. Active policies should be initiated to encourage more female participation in the ICT sector.

### Key Recommendations

#### Interventions must be targeted at earlier education levels

- Women mentors, especially in STEM, can encourage girls to choose education pathways and careers in technology through shared experiences, advice and networking.
- Summer or afterschool programmes in STEM or specialised ICT courses can be promoted to engage students from at-risk and underrepresented groups.
- Awareness raising campaigns such as 'Girls in ICT Day' can be adapted to the national and local level with the help of participation from enterprises and the non-profit sector.

#### Expand opportunities for vocational education and training

- Increase employer participation in Dual VET training.

#### Improve opportunities for lifelong learning

- Employers should utilise dedicated training programmes to upgrade existing ICT skills for slightly older cohorts and unemployed graduates.
- Workplaces can engage in special learning initiatives for low skilled adults that focus on high-growth occupations that do not require academic degrees.
- Accelerated learning programmes can incentivise training for older workers and women with families due to quicker progress and shorter learning duration.

#### **Enable greater employer engagement for market-relevant training**

- Business-education partnerships should be enabled by stakeholders to develop market-relevant training and ensure action from employers and education and training providers.
- Greater employer engagement is necessary to have an adequate knowledge of relevant ICT skills in the market. This ensures that trainees develop skills in occupations for which jobs are available, ensuring that employer needs for skills are also met.

---

#### **Further information**

For further details about our survey results and methodology, you can request access to our full report, forthcoming in 2018. For questions and queries, please contact:

Werner B. Korte: [Werner.Korte@empirica.com](mailto:Werner.Korte@empirica.com);

Daniel Schmidtman: [Daniel.Schmidtman@empirica.com](mailto:Daniel.Schmidtman@empirica.com)

---

#### **Disclaimer**

This report has been supported by the JPMorgan Chase Foundation, the contents and opinions in this paper are those of the authors alone and do not reflect the views of the JPMorgan Chase Foundation, JPMorgan Chase & Co, or any of its affiliate