

Promoting Integration & Diversity In The Digital Labour Market in the UK

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- ▶ With 1.57 million ICT specialists the UK has the largest headcount of ICT workforce in Europe but is facing a shortage of 163,000 which is going to increase up to 575,000 in 2025.
- ▶ There is a wide consensus among both public and private sector stakeholders that the digital skills crisis can adversely affect the economic and social development of the country. This is especially due to the UK's economic reliance on sectors that depend heavily on digital skills.
- ▶ The Digital Skills Crisis report concluded that “only urgent action from industry, schools and universities and from the Government can prevent this skills crisis from damaging our productivity and economic competitiveness”.
- ▶ Diversity in the workforce in general and specifically in ICT is a cause of special concern with vulnerable groups of people significantly under-represented. The gap in UK gender employment rate is at 9.5 percentage points (p.p.), somewhat below the EU average of 10.5 p.p. But the UK still ranks only 17th on this indicator, which points towards a sizeable labour reserve in the form of women at working age who do not participate in the labour market or are unemployed.
- ▶ Despite long standing campaigns from Government and industry there remains a marked gender imbalance in those studying computing—only 16% of computer science students at school are female and this low level of representation persists through higher education and in the workplace. Such shortcomings in inclusion levels for ICT jobs have changed hardly at all since 2011.
- ▶ The number of young people neither in employment nor in education and training (NEET), for which the UK figure (10.9%) is only slightly better than the EU28 average (11.6%), is generally considered a challenge. On this indicator the UK ranks 16th among the 28 EU member states.
- ▶ The UK has so far relied heavily on skilled migrant labour to fill the shortage in ICT specialists. The spectre of Brexit is causing many to question whether tech employers will have access to the talent necessary for the UK economy to prosper in the coming years.
- ▶ UK recruitment firms have reported that job vacancies for ICT specialists are one of the most difficult to fill in the UK. The existing shortages are related not only to a lack of candidates with appropriate formal qualification, but also soft skills such as the ability to work in teams and taking initiative.
- ▶ Both, apprenticeships and College-based technical and professional education (TPE) are particularly important for individuals from diverse and disadvantaged socio-economic backgrounds. However, employer demand for graduates from ICT apprenticeships and the vocational education system remains a challenge. Employers frequently mention that according to their experience, applicants who come with a qualification from an apprenticeship or further education course are found to be unfit for the type of jobs to be found in the digital sectors. This may be changing with introduction of digital apprenticeships and the overhaul of the TPE system, but robust evidence is not yet available because finishers from these programmes only gradually become available on the job market.
- ▶ Apprenticeships have traditionally also suffered from low demand from students due to their low status in the UK and their image of being of a ‘low skilled – low pay’ nature. On a positive note, the number of companies that offer digital apprenticeships has sharply increased in the last years. The Apprenticeship Levy may open up new opportunities for empowering SMEs to invest in training, including admittance of apprentices from underrepresented groups. This will, however require concerted, multi-stakeholder efforts at local level because SMEs typically lack the capacity and

willingness to deal with the practical challenges surrounding working with persons from at-risk groups.

- The UK Digital Strategy 2017 proposes a revised multi-stakeholder partnership approach, in which central government deals directly with employers instead of via intermediaries through the establishment of a new Digital Skills Partnership (DSP). This opens up new opportunities for mainstreaming diversity in ICT training.
- Further activities include the Local Digital Skills Partnerships (LDSPs) started in 2018, the introduction of an Apprenticeship Levy in 2017 and the launch of a new College-based technical and professional education Strategy with the aim to identify a number of broad vocational routes that seek to encourage participation by simplifying the qualification landscape.
- In the UK there are a number of inclusive ICT training programmes and a range of promising approaches, but the overall picture is one of “too little, too few”. Given the size of the challenge as outlined in the Country Report for the UK, these initiatives taken together are unlikely to make a real difference. There is a need for larger, more ambitious training schemes, which generate sufficient visibility to reach large shares of the target group.
- The promising practices identified include programmes which have managed to establish strong and effective partnerships of actors, designed demand driven curricula and programmes – some leading to an industry certificate - and achieved high rates of job placement or retention rates. The importance of these partnerships is underlined by the good practice showcases in the UK but also by the successful cases in the other countries under review and therefore seems to apply universally.
- It is still too early to draw robust conclusions about the recent reforms’ overall impact on the opportunities offered to persons from groups currently underrepresented in the country’s ICT workforce

Current developments in the ICT labour market in the United Kingdom

Recent trends show shortages in ICT skills supply. These shortages have the potential to affect future economic growth for the UK. With 1.57 million ICT specialists the UK has the largest headcount of ICT workforce in Europe but is facing a shortage of 163,000 which is going to increase up to 575,000 in 2025. With the supply coming from the formal education and training system this gap will not be closed. Further means are needed which constitute an opportunity for inclusive ICT training programmes of different type.

The UK has so far relied heavily on skilled migrant labour to fill the shortage in ICT specialists, an opportunity which may no longer work in the future. The spectre of Brexit is causing many to question whether tech employers will have access to the talent necessary for the UK economy to prosper in the coming years.

Despite long standing campaigns from Government and industry there remains a marked gender imbalance in those studying computing. Only 16% of computer science students at school are female and this low level of representation persists through higher education and in the workplace. Such shortcomings in inclusion levels for ICT jobs have changed hardly at all since 2011.

Digital apprenticeships and other reforms of qualifications from technical and professional education have started but not yet revealed the intended success. It remains to be seen to what extent the picture will change over the longer term. There is no conclusive evidence yet whether the **Apprenticeship Levy** is helping to address disparities in access to ICT training.

The Digital Strategy 2017 for the UK aims at enabling a more diverse digital workforce by helping more women into tech and supporting other underrepresented groups, such as people with disabilities and those from minority background or lower socio-economic areas. It asked for establishment of new **Digital Skills Partnerships (DSP)**, bringing together stakeholders who are passionate about closing the digital skills gap. This shall ensure strong collaboration between the public, private and third sector to tackle the digital skills gap in a coordinated and coherent way. The process only started in 2018. The Digital Strategy prioritises public-private partnerships with both the industry and the NGO sector to tackle the digital skills gap and fostering digital inclusion.

Key activities are expected to include the development of local digital skills strategies (LDSP), based on prior experience and in close collaboration with relevant local and combined authorities, as well as the business and NGO sectors. LDSPs will identify

the skills needs for their local area, so that education and training provision can be better matched to local demand. Part of the funding can be derived from the Apprenticeship Levy, if local businesses pool the funding they receive as part of the apprenticeship levy and invest this in a set of agreed strategic initiatives to promote digital skills in their area, as we recommend they do.

The government has supported development of the so-called Tech Talent Charter as a means to promote action by employers on a purely voluntary basis. The Charter provides organisations with guidelines and principles they may want to adopt to boost diversity and inclusiveness of their ICT workforce.

Overall, the ICT training landscape in the UK is in the midst of a radical overhaul. Its proponents promise that it will result in substantial improvement concerning inclusiveness of training offers and, ultimately, diversity of the ICT workforce. Such promises have been made before. It is certainly too early to draw robust conclusions about the reforms' overall impact on the opportunities offered to persons from groups currently underrepresented in the country's ICT workforce. Nevertheless, the available evidence including our own analysis of the inclusive ICT training landscape points to some serious hurdles, which need to be overcome if significant improvements are to be achieved.

Key Recommendations

Embed a focus on diversity in Local Digital Skills Partnerships

The current reshuffling of the UK's system for digital skills provision offers a window of opportunity for strengthening and mainstreaming an emphasis on diversity. The new focus on local level partnerships means that the work of "increasing the digital capability needed to build inclusive, thriving local economies" is being devolved to the regional and local level, for which Local Digital Skills Partnerships (LDSPs) are currently being launched. Additional funding is available from the Apprenticeship Levy if local SMEs can be convinced to pool their funding for initiatives promoting inclusiveness. Associations representing groups currently under-represented in the ICT workforce are recommended to mobilise resources to lobby for a strong emphasis on diversity in the local digital skills strategies being drafted.

Step up promotion of ICT careers, including digital apprenticeships, to women and the BAME community

The continuing problems in getting more women and members of other groups under-represented in the digital workforce to embark on careers in ICT point to the persistence of deep-rooted, cultural norms and out-of-date value systems, including stereotypical views among key influencers such as parents, teachers and peers. Against this background, there are indications that Digital Apprenticeships can be attractive to and suitable for female school leavers and BAME youth in a way that a university degree in Computer Science is not. Substantial, concerted efforts are required, however, to effectively promote ICT careers to these target groups, and to overcome traditional prejudices against apprenticeships as a high-value pathway to employment. Such activities need to target the career guidance system as well as other key influencers and the wider public. Best use should be made of the experience of successful, volunteer-driven initiatives, like coding clubs addressed specifically at young women.

Open up ICT training to people with special support needs

Many individuals, including parents of young children, need flexible arrangements and additional support that indirectly help and motivate them to start and complete their ICT training. By allowing people to fit their job and training around their life, a wider range of people could be enabled to participate. Support services that can help overcome practical obstacles may include childcare, eldercare, coaching, networking, and time off from work. Companies as well as specialised training providers are also often found to be ill-equipped to deal with trainees from minority groups due to limited prior exposure. Targeted guidance is required to ensure that stakeholders can and do maximise their leverage in recruiting and supporting young people from under-represented groups. In addition, more use should be made of 'in training' support for those who may find it harder to adjust to the training setting or workplace, for example through mentoring (see recommendation below).

Set up cross-organisational and cross-regional mentor networks

Mentoring using (mostly) volunteer, seasoned ICT specialists as mentors and role models has been tried and tested and proven to effectively address challenges in attracting and supporting underrepresented groups, in particular women to encourage girls and women to consider ICT careers. The main two reasons for this are: first, because female role models have been found to play a key role in young women's attitude to working in

the digital sectors; second, because it tends to be comparatively easy to recruit volunteer mentors among women working in the digital sectors. This is because, as surveys have repeatedly shown, they have typically perceived a range of gender related obstacles themselves during their career, which they are often keen to help remove for future generations of women working in the sector. It is against this background that the establishment of cross-organisational and cross-regional mentor networks could help in supporting the diverse target groups in successfully completing training programmes.

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:

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