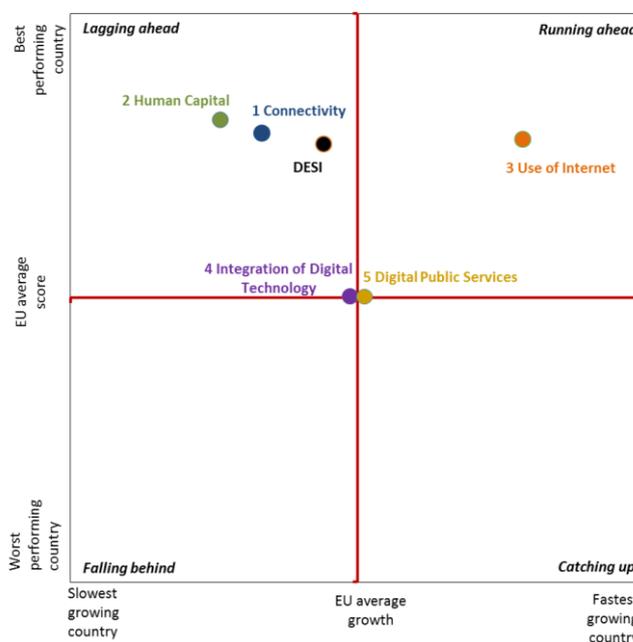


Europe's Digital Progress Report (EDPR) 2016

A report complementing the Digital Economy and Society Index (DESI)¹ country profile

UNITED KINGDOM

The United Kingdom ranks 6th out of the 28 EU Member States in the European Commission Digital Economy and Society Index (DESI) 2016², unchanged from last year. The United Kingdom is in the **lagging ahead** cluster³ of countries; performing better than the EU average but improving at a slower rate than the EU as a whole. Turning to the individual DESI dimensions, the UK has made most progress over the past year in Use of the Internet. In particular, increases in reading online news, use of video calls and social networking were recorded. Small improvements were also been made in Connectivity, Integration of Digital Technologies and Digital Public Services. The score on the Human Capital dimension fell marginally.⁴ However, a significant improvement in the number of STEM (science, technology and mathematics) graduates was recorded. The UK is currently developing a national digital strategy.



The United Kingdom's performance in the five DESI dimensions relative to other EU countries

1 – Connectivity

In Connectivity, the United Kingdom performs relatively well but recent progress has been rather limited. The United Kingdom performs relatively well in terms of fixed broadband coverage and take-up, having 100% household coverage of fixed broadband and 85% household take-up. In terms of fixed basic broadband, and specifically coverage of rural areas, the United Kingdom performs rather well, as it ranks above the EU average (99.7% versus 90.6%). NGA coverage in the United Kingdom, at 91% of households, is significantly above the EU average (71%). Also take-up of mobile broadband, at 87 per 100 people, is significantly above the EU average of 75 per 100.

The UK is implementing a national broadband strategy to extend broadband to the hardest-to-reach areas in the 'final third' of England, Wales, Scotland and Northern Ireland. Although the programme's definition of 'superfast broadband' is lower than the relevant DAE target (i.e. at least 24 Mbit/s instead of 30 Mbit/s), the UK Government intends to reach its target earlier (i.e. by 2017 instead of

¹ The Digital Economy and Society Index (DESI) is a composite index developed by the European Commission (DG CNECT) to assess the development of EU countries towards a digital economy and society. It aggregates a set of relevant indicators structured around 5 dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services. It clusters countries in four groups: Running ahead, Lagging ahead, Catching up and Falling behind. For more information about the DESI please refer to <https://ec.europa.eu/digital-single-market/en/desi>

² DESI country profile for the United Kingdom: <https://ec.europa.eu/digital-single-market/en/scoreboard/united-kingdom>

³ Other lagging ahead countries are Belgium, Denmark, Estonia, Finland, Ireland, Lithuania, Luxemburg and Sweden.

⁴ Due to the inclusion of the variable on basic digital skills that is missing for last year's index due to comparability issues resulting from a change in the some of the questions used in the indicator.

2020). As regards spectrum, the UK has assigned 73% of the overall harmonised spectrum for Broadband and is above the EU average of 69%.

Even though the UK performs very well in terms of fixed basic broadband coverage of rural areas, and BDUK programme actions already address the gap in the availability of superfast broadband between urban and rural areas, there is still an opportunity for additional effort in order to bridge the gap. Moreover, there is a need for concrete measures and a roadmap to achieve the UK's ultrafast broadband goal, i.e. that at least 100Mbps should become available to nearly all UK premises⁵. Ofcom's recently announced strategic shift to encourage the roll-out of new ultrafast networks wherever possible, as an alternative to the incumbent BT's network, and requiring BT to improve access to its duct and pole infrastructure, is an important step. The United Kingdom still has to fully transpose the Cost Reduction Directive⁶ which could help to speed up broadband roll-out.

2 – Human capital

In Human Capital, the United Kingdom performs very well but its recent progress has been rather limited. A large proportion of the UK population uses the internet regularly (90% - at least once a week); most people do so daily; and only 6% of the population has never used the internet. These figures are well above the averages for the European Union (76% and 16%, respectively). Nevertheless, the UK faces digital skills shortages, particularly at the high end. In terms of basic digital skills, the UK performs above average in the European Union. Indeed the percentage of the population with at least basic digital skills was 67% in 2015, compared with an EU average of 55%. However a third of the population is in effect digitally illiterate. The UK also suffers from a large and growing shortage of skilled ICT professionals. While employment of ICT professionals in the UK has grown significantly in recent years, supply is not keeping pace with demand. Graduate numbers have fallen dramatically over the last decade, more than in other countries, and, despite some recent improvement, have now fallen to 63% of the number recorded for 2003. This effect is exacerbated by an increasing number of retirements and exits. There is also a strong gender divide with very few women studying and choosing ICT careers. While many countries in the European Union face similar challenges, the UK is particularly affected. At around 1.5 million, the UK employs the largest number of ICT professionals in the European Union, accounting for around 5% of UK employment, and demand continues to grow.

The United Kingdom has developed a digital skills strategy⁷ in collaboration with industry which it published in October 2014. The strategy addresses three main lines of action: creating new talent, expanding the talent pool, and developing the skills to succeed in new markets. The strategy is being implemented by industry in collaboration with government and other relevant stakeholders. In education, a new computing curriculum was developed with industry and introduced into the school curriculum in September 2014. The curriculum takes a three pronged approach covering learning about how computers function, programming/coding and digital literacy; some universities have rolled out new courses designed to bridge the gap between IT and business. The United Kingdom has an active digital skills coalition in "The TECH partnership"⁸ (see box) which functions as the UK's national coalition in the Grand Coalition for Digital Jobs. Basic digital skills are being addressed through the "Go On UK" initiative.⁹ These two bodies (the Tech Partnership and Go On UK) are responsible for tracking and reporting on the progress of the digital skills strategy. The UK is reforming the apprenticeship system and has created new degree apprenticeships, including for

⁵ The relevant DAE target is that 50% of the EU to subscribe to broadband above 100 Mbps by 2020.

⁶ Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L155, 23 May 2014, p. 1)

⁷ https://www.thetechpartnership.com/globalassets/pdfs/research-2014/informationeconomydigitalskillsstrategy_oct14.pdf

⁸ <https://www.thetechpartnership.com/>

⁹ <https://www.go-on.co.uk/>

digital. The UK has set up the Ada National College for Digital Skills, the Institute for Coding and the Digital Business Academy. They are also reviewing accreditation and funding of digital skills and have developed courses on cyber security and IT conversion courses.

The UK is well aware of the digital skills challenges it faces and is making a concerted effort to address them. The UK has developed a comprehensive digital skills strategy. Actions to implement curricula change in schools and introduce new courses in further and higher education are major steps to increase the supply and quality of digital skills, of all levels, in the economy and society. Key to the success of these initiatives will be providing the necessary training and support to teachers to improve their digital skills; breaking down barriers to more female participation in technology related streams of education and careers; and ensuring life-long learning opportunities for learning and upgrading digital skills of all types. In this context, a review of accreditation for digital skills acquired through non-formal and informal means is also welcome.

Highlight: "The TECH partnership"

The United Kingdom has an active digital skills coalition in "The TECH partnership"¹⁰ which is licensed by the UK government as the Sector Skills Council for Business and Technology and which functions as the UK's national coalition in the Grand Coalition for Digital Jobs. It is a coalition of employers (including also a stakeholders' network and a set of Ambassadors, including a significant cohort of MPs), working to "Inspire young people about technology, accelerate the flow of talented people from all backgrounds into technology careers and help companies develop the technology skills they need for the future." Together with "Go On UK", the UK initiative on digital inclusion and basic digital skills, the TECH partnership is responsible for tracking and reporting on progress on the UK's digital skills strategy. It is also responsible for the development of the highly successful ITMB course designed to bridge the gap between IT and business and which has spread and been emulated across a number of universities and higher education establishments in the UK.

3 - Use of Internet

In Use of Internet Services, the United Kingdom is performing relatively well and has also made good progress in the last year. As mentioned above, most UK citizens are now online. By far the most popular online activity in the UK is shopping. 87% of UK internet users buy online. As such, the UK ranks first in terms of online shopping amongst Internet users. This position is unchanged over the last year. Social networking (71%), reading online news (71%) and online banking (63%) are also activities undertaken by the majority of internet users. Use of VoD (Video on Demand) is also relatively widespread. Use of music, video and games online is below the EU average and the UK ranks 26th in the EU for this indicator.

4 – Integration of digital technologies

In Integration of digital technologies by businesses, the United Kingdom shows only average performance even if its progress is on a par with the EU average. Businesses in the United Kingdom are not fully taking advantage of the possibilities of digital technologies for business. The percentages of businesses using technologies such as electronic information sharing (ERP – 17%) and RFID (1.6%), are very low; so the UK ranks third to last and second to last in the EU for these two indicators. However, take-up of Social Media, at 34% of enterprises, is advanced. Domestic eCommerce by SMEs is also somewhat more widespread in the UK than in other EU countries. However, turnover from eCommerce is somewhat below the EU average, while the percentage of SMEs that sell online cross border is somewhat higher.

¹⁰ <https://www.thetechpartnership.com/>

The UK's Digital Economy Strategy 2015-2018¹¹, published in 2015 sets out UK strategy to help businesses innovate through digital technologies. The strategy has five objectives: encouraging digital innovators; focus on the user; equipping the digital innovator; growing infrastructure; platforms and ecosystems; and ensuring sustainability. It will commit a total of £120 million over a four year period for the implementation of the strategy, including £15 million a year to support innovative business projects and a further £15 million to support the Data Catapult centre, the Open Data Institute and Tech City UK, each of which is involved in delivering the objectives of the strategy.

5 - Digital Public Services

In Public services, the United Kingdom shows only average performance and its progress is also on a par with the EU average. While active eGovernment use is somewhat above the EU average, online service completion and in particular the sophistication of the services on offer could be improved: availability of pre-filled forms is very low (17 out of 100), and the UK ranks 26th out of 28 countries. However, the UK is "best in class" within the EU for use of Open Data.

The Government Digital Strategy¹², published in December 2013, sets out how the UK government's plans to redesign its digital services to make them so straightforward and convenient that people prefer to use them. In other words, the strategy sets out how the government will become digital by default. On the 1 June 2015 the UK government defined an updated Digital by Default Service Standard¹³ listing 18 criteria that digital public services must meet in order to appear in the UK eGovernment portal (GOV.UK). Those quality criteria will ensure a smooth transition towards use of the digital channel as the main channel for citizen-government interaction. Since April 2016, GOV.UK Verify is the default way for accessing eGovernment services. It requires a single set of log-in credentials provided by certified private service providers through a federated system. This system offers a level of security sufficient for allowing people to interact with public authorities entirely online for a range of public services. The UK government is one of the founders of the Open Government Partnership (OGP). In its second National Action Plan (published in October 2013)¹⁴ it continues to build on the open data commitments made in the first National Action Plan and addresses several other cross-cutting, open government issues.

¹¹ <https://www.gov.uk/government/publications/digital-economy-strategy-2015-2018>

¹² <https://www.gov.uk/government/publications/government-digital-strategy/government-digital-strategy>

¹³ <https://www.gov.uk/service-manual/digital-by-default>

¹⁴ http://www.opengovpartnership.org/sites/default/files/20131031_ogp_uknationalactionplan.pdf