Understanding the Skills Requirements of the Digital Industry

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Overview

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1. What are the challenges the digital sector faces?

2. What are the skills requirements of the industry?

3. How can we strengthen digital skills through the pipeline?

4. The Apprenticeship Levy: what is it and how do we get it right?

5. Post-Brexit – Time for a new migration system

Levels of digital skills

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Basic Digital Skills:
The minimum skills required for an individual to safely use the internet and access the more straightforward benefits online life has to offer.
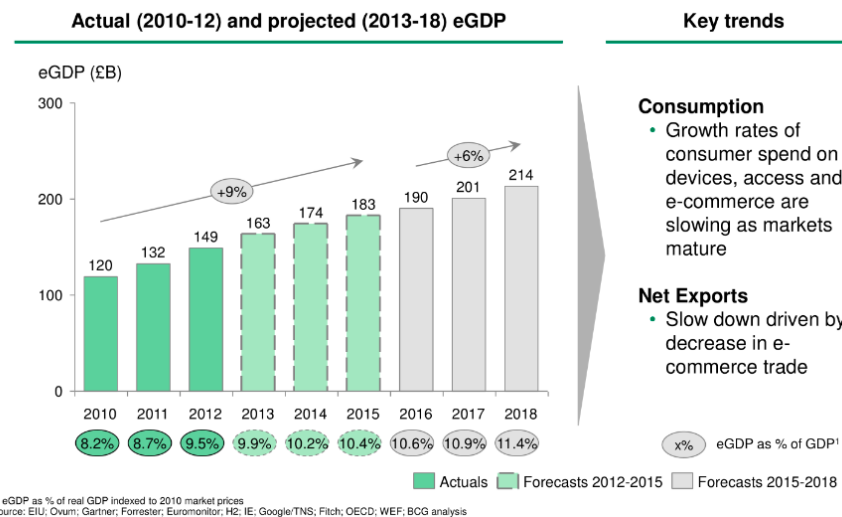
Mid-Level Digital Skills:
The level of skills required to work in a business-proficient manner in a work environment. Completing everyday tasks and contributing.

Advanced Digital Skills:
Skills needed to pursue highly-digitally intensive careers, ranging from big data analysts, cyber security specialists, programme developers, software engineers and more

What are the challenges the tech sector faces?

- UK digital economy world leader, accounting for 10% of GDP

- UK's digital potential must be matched with a robust and growing talent pipeline

- Estimates suggest 134,000 new jobs are created in the tech sector alone per year

- 93% of techUK members surveyed believe digital skills gap directly affects their commercial operations

Actual (2010-12) and projected (2013-18) eGDP

Key trends

eGDP (£B)

Consumption
- Growth rates of consumer spend on devices, access and e-commerce are slowing as markets mature

Net Exports
- Slow down driven by decrease in e-commerce trade

x% eGDP as % of GDP[1]

2010	2011	2012	2013	2014	2015	2016	2017	2018
120	132	149	163	174	183	190	201	214
8.2%	8.7%	9.5%	9.9%	10.2%	10.4%	10.6%	10.9%	11.4%

Actuals Forecasts 2012-2015 Forecasts 2015-2018

1. eGDP as % of real GDP indexed to 2010 market prices
Source: EIU; Ovum; Gartner; Forrester; Euromonitor; H2; IE; Google/TNS; Fitch; OECD; WEF; BCG analysis

Boston Consulting Group (May 2015) *UK's digital economy is world leading in terms of proportion of GDP.*
Baroness Lane-Fox (January 2014) *Maiden speech in the House of Lords.*
Data drawn from private techUK Members Survey, October 2014

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Keeping pace with the skills and workforce requirements of the digital sector.

techUK members who were surveyed stated that the following occupations were the most difficult to fill:
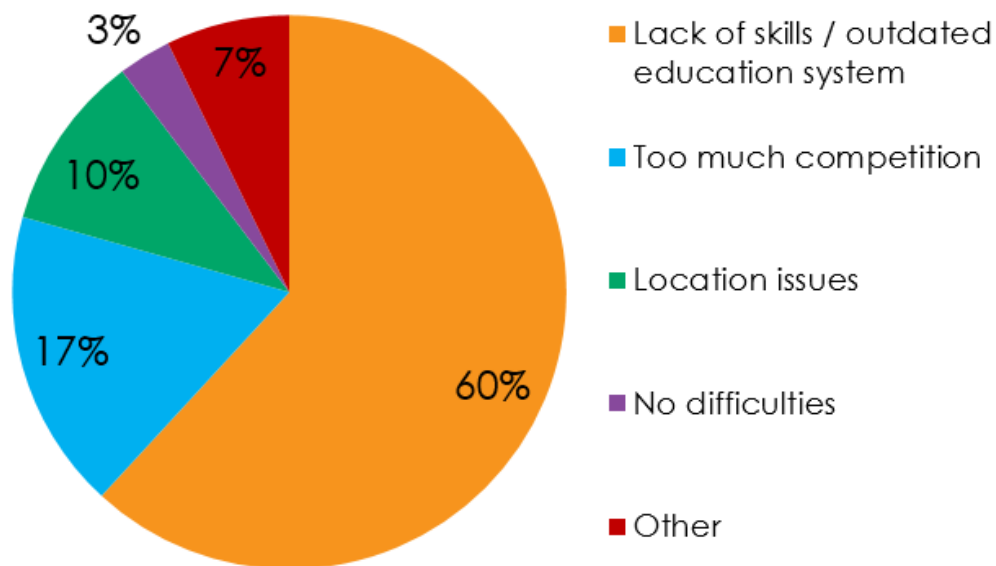
Data Scientist

Senior Developer

Cyber Security Specialist

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The survey also pointed to lack of skills & an outdated education system as the main barrier to acquiring the skills needed:

Why can your business not secure the Digital Skills it needs?

Pie chart legend:
- Lack of skills / outdated education system — 60%
- Too much competition — 17%
- Location issues — 10%
- No difficulties — 3%
- Other — 7%

- There have been a number of highly positive developments in recent years – such as the introduction of the Computing Curriculum

- Government has also committed £80m in funding National Colleges, including Ada National College for Digital Skills
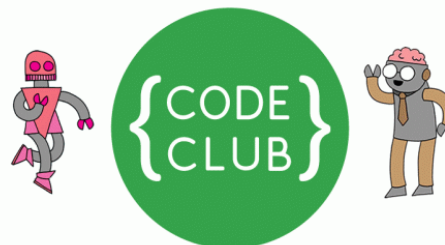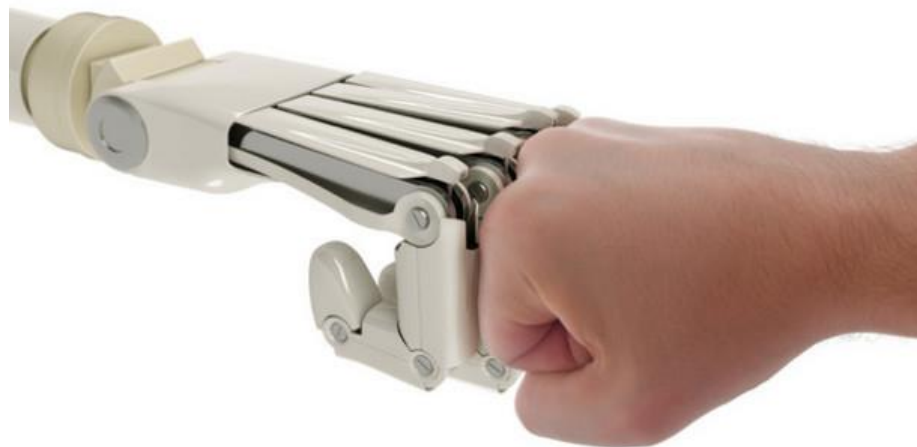
What are the requirements of the digital sector?

- However – the implementation of the curricula still faces challenges which need addressing:

  - 43% of teachers surveyed did not believe they had received adequate training and support in delivering the curriculum

  - 30% of teacher surveyed did not have access to the right training material

Education Technology. (September 2015). *Primary teachers still lack computing confidence.*

What are the requirements of the digital sector?

- But with the pace of technological change – it is estimated that some 65% of children entering primary schools today will be working roles that do not currently exist

- Education & training provisions must be reformed to keep up with the advanced technological changes & ageing workforce

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- Focus should be on the application of knowledge rather than acquisition

- Digital skills of utmost importance to prepare the future workforce for the jobs of tomorrow

- Education providers have opportunity to look forward and shape curricula accordingly

How can we raise digital skills competency through the pipeline?

Digital Skills through the pipeline

- Digital skills are not just about the needs of tech companies - by 2020 everyone will need basic digital skills to participate as a digital citizen

- However, 10% of UK adults will be without those basic digital skills in 2020

Booz & Co and Go ON UK (November 2012) *The Case for Universal Digitisation*

techUK members are doing a great job with not only training their current workforce, but using their great resources to bring digital skills to SMEs and people across the UK

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- Economy cannot rely on the next generation alone to fill skills gaps – must also prepare existing workforce for jobs of the future

- Demographic trends of an ageing workforce in the UK indicates we must shift to life-long learning

Getting the Apprenticeship Levy right for tech.

Getting the Apprenticeship Levy right for tech

- One of the first steps in reaching the target of three million apprenticeships is the Apprenticeship Levy

- The apprenticeship levy will be set at a rate of 0.5% on an employer's pay bill. Each employer will receive an allowance of £15,000 to offset against their levy payment.

- Statistics indicate the average tech sector salary is £50,000, therefore the tech industry is more likely to be affected.

The Apprenticeship Levy

BUSINESS IS GREAT BRITAIN

Apprenticeships

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- techUK believes the Government's current approach to apprenticeships does not provide adequate digital skills that are increasingly necessary for citizens in the digital world

- Flexibility is essential – many tech sector employers will be looking at apprenticeship for the first time to meet the requirements of the Levy

Getting the Apprenticeship Levy right for tech

- The Government must align the apprenticeship delivery plan with the Government's "smarter state" ambition.

- Further consideration should be given to how apprenticeships can best be used to help companies where there are roles are risk of automation or augmentation

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- The accreditation process needs to be adaptive and responsive to the lightning-fast pace of change in many sectors.

- techUK recommends increasing the number of transferable levy funds to 80% so larger employers can contribute to their local supply chains and businesses in their regions.

The time is now for a smart new migration system

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Access to international talent has been inherent to success of the UK tech sector – and while industry in Government invest in domestic digital skills, we need a smart migration approach

- Cut off of access to international talent which is vital to the growth of the UK tech sector

- Punitive measures for International Students studying in the UK, making UK Universities a less attractive place to study then work

- A migration system which does not reflect the dynamic nature of the tech sector's roles

So what should the Government do?

1. The Government must confirm EEA nationals residing in the UK prior to 23 June 2016 have an unequivocal a right to remain.

2. A dynamic, smart migration mechanism should be implemented which harnesses the best of new technologies to streamline the process and create an agile operating model which works for hiring and exporting talent alike.

3. Policy-makers should consider frictionless, short-term business visas for travel within the EU for UK citizens and vice versa

4. Migration policy must be data-driven and responsive to economic needs, building trust with both the public and business

Key takeaways

1. Government and industry must work together to meet the needs of the future workforce.

2. Digital skills should be an essential component in lifelong learning.

3. To get the Apprenticeship Levy right, the Government must be forward facing on future business needs

4. A smart, dynamic migration system is needed that is data driven and responsive to both public and business needs

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