

BUSINESS INNOVATION & SKILLS COMMITTEE: INQUIRY INTO THE DIGITAL ECONOMY

MEMORANDUM OF EVIDENCE FROM THE CHIEF ECONOMIC DEVELOPMENT OFFICERS SOCIETY (CEDOS)

Executive summary

The digital economy is fundamentally important to the economic future of the UK and to economic development in every part of this country. Many Local Authorities, including CEDOS member authorities, have invested significantly in extending digital infrastructure. Because of its widespread diffusion within the whole economy, the digital economy is becoming synonymous with the national economy.

It is essential that local areas across the country have a level playing field on which to overcome the barriers to success in the digital economy and that all sectors and businesses, particularly small and medium sized businesses, are given every encouragement and assistance to embrace digital technology.

Major barriers to UK business success in the digital economy:

Major barriers are: limited access to digital technology in particular superfast broadband; insufficient business awareness, knowledge and investment; inadequate business support and training; and a shortage of digital skills in the workforce.

Access to digital technology, especially superfast broadband is critically important to economic development but in too many areas high-speed, resilient and reliable broadband infrastructure is a major barrier. Connectivity problems can have a particular impact on small and medium sized businesses.

There is insufficient awareness and knowledge of, and investment in, new and emerging digital technologies particularly amongst some small and medium sized enterprises (SMEs). Related to this is inadequate awareness of the availability of financial support. Data and digital security is a particular area of concern.

Insufficient awareness of digital technologies especially amongst smaller businesses is linked to inadequate business support and training and the lack of a coherent business support framework.

Steps the Government should take to overcome these barriers:

There is a need for a review into the universal service obligation to ensure businesses across the country can access superfast broadband infrastructure and services, alongside a more transparent and competitive marketplace, with more information on speeds and value for money. This will require further intervention and investment by the Government.

Extending superfast broadband to hard-to-reach areas will only be achievable through joint investment by the Government and the industry and a continued

focus on innovation in both technology (fixed and wireless) and business models to allow the market to operate effectively in all areas. More Government funding will be required to ensure full connectivity for these areas.

Ofcom needs to do more to ensure (a) providers meet demand in areas that lack connectivity and invest in the most appropriate technology to provide superfast speeds to hard-to-reach areas; and (b) that businesses, regardless of their location, have access to a real choice of quality, affordable broadband providers.

Tackling lack of awareness and knowledge of, and investment in, new and emerging digital technologies requires developing a coherent programme of business support and training that should be available to all areas and sectors.

Government should provide ongoing and more widespread funding for Local Enterprise Partnerships, devolved authorities, Catapult Centres and other partners to provide and facilitate local programmes to support SMEs to adapt, prepare for, and excel in, the digital economy.

Business support programmes should be accompanied by appropriate Government financial support mechanisms to help SMEs to raise levels of investment in knowledge, equipment and skills through continuous improvements in hardware, software and staff training.

Lessons from the Government's support of tech start-ups and other measures targeted at the digital economy

What initiatives there have been have tended to be geographically limited. It is essential for Government to reach out to help businesses across the country, particularly SMEs, to access new markets, new innovation and new technologies, and implement a long-term strategy to support tech businesses and the digital economy for which we set out a series of necessary measures.

Does the UK's Intellectual Property regulatory regime provide effective protection for the digital economy and sufficient scope for innovation and competition?

The cost and sluggishness of protecting intellectual property contrast with the speed of technology change, leading small companies to look for competitive advantage through agility and know-how instead of through long-term strategies such as patent registrations or diversification.

SMEs in particular are not sufficiently well served by those providing advice and information on intellectual property rights, which is becoming an ever more complex area. More practical 'hands-on' help is needed for the entrepreneur.

What actions could the Government take to foster the development of potentially disruptive technologies? Are further safeguards warranted to help existing businesses adapt to the impact of these technologies on their traditional business models?

Digital disruption is now bringing very significant change to businesses, driving them to create new business models and bring new products and services to

market faster than before but there are reports that many business lack a company-wide approach to digital.

Given the nature of disruptive technologies, it is difficult to suggest specific actions. It has to be recognised that any safeguards that are put in place could impinge on innovation and may limit economic benefits.

Change as a result of technological developments is inevitable, underlining the importance of: all areas of the country having equality of access to digital technology and superfast broadband infrastructure; businesses having strategies for managing and taking advantage of digital innovation; and Government having a cohesive long-term strategy to support businesses.

Actions the Government should take to ensure the availability of a workforce with the skills to support businesses in the digital economy

Fundamental requirements are to ensure: digital skills are embedded into the education curriculum at all levels; employers and technology proficient business leaders are at the forefront of designing post-16 education; businesses are aware of how universities can help them to develop their digital capabilities; better careers information, advice and guidance is available to make young people aware of opportunities.

Government should commit to long-term funding to address the shortage of digital skills, recognising that due to the fast pace of change digital skills requirements will change rapidly.

Government needs to provide the tools and finance to support Further and Higher Education institutions to directly engage with the business community to ascertain what the current skills gaps are, what level of training is required and how support can be tailored and delivered.

There is a need for a wider devolution of the skills agenda to enable faster responses to the needs of business that are tailored to the particular requirements of individual local economies throughout the country.

Introduction

1. This Memorandum of evidence is submitted by the Chief Economic Development Officers Society (CEDOS). The Society represents Heads of Economic Development in upper tier local authorities throughout England. Membership includes county, city and unitary Councils in non-metropolitan areas. The Society carries out research, develops and disseminates best practice, and publishes reports on key issues for economic development policy and practice. Through its collective expertise, it seeks to play its full part in helping to inform and shape national and regional policies and initiatives.

2. We welcome the opportunity to submit evidence to the Business, Innovation & Skills Committee's Inquiry into the digital economy. In framing our submission we have consulted with our members across the country. Our evidence sets out

our overall views and focuses in particular on those of the questions set out under 'scope of the inquiry' that are within our area of knowledge, expertise and experience.

CEDOS overall views

3. The digital economy is fundamentally important to the economic future of the UK and to economic development in every part of this country. Many Local Authorities, including CEDOS member authorities, have invested significantly in extending digital infrastructure. The European Commission has pointed out the EU digital economy is growing at 12 % each year. At the same time it has underlined the fact that "because of the ever-changing technologies of the ICT sector and because of the widespread diffusion of the digital economy within the whole economy, it can no longer be described as a separate part, or subset, of the mainstream economy"¹. As the House of Lords Digital Skills Committee said earlier this year "digital technology is pervasive across all aspects of life, so much so that the 'digital economy' is becoming synonymous with the national economy"².

4. We agree and in our evidence we take a broad view of the digital economy, which we consider is important to all areas of the country. Indeed if this country is to make the most of its opportunities it is essential that local areas across the country have, as far as possible, a level playing field on which to pursue economic action to overcome the barriers to success in the digital economy. It is equally important that all sectors and businesses of all types, particularly small and medium sized businesses, are given every encouragement and assistance to embrace digital technology.

Specific Inquiry questions

What are the major barriers to UK business success in the digital economy? What steps could the Government take to help businesses to overcome these barriers?

CEDOS views:

Major barriers to UK business success in the digital economy

5. In consulting with CEDOS members across the country, the following major barriers have been identified:

- limited access to digital technology in particular superfast broadband;
- insufficient business awareness, knowledge and investment;
- inadequate business support and training;
- shortage of digital skills in the workforce.

6. These are looked at in some detail in the paragraphs that follow. The issue of the regulatory system and the protection of intellectual property has also been raised and is considered under the specific Inquiry question below.

¹ *Digital Agenda for Europe* – launched in 2010 and updated in 2014 European Commission

² *Make or Break: The UK's Digital Future* House of Lords Select Committee on Digital Skills February 2015

Limited access to digital technology especially superfast broadband

7. Access to digital technology, especially superfast broadband is critically important to economic development. In its Digital Agenda, the EU observes that the digital economy is growing at seven times the rate of the rest of the economy and that much of this growth has been fuelled by broadband Internet³. It points out that the development of high-speed networks today is having the same impact as the development of electricity and transportation networks a century ago. For the UK, the Government's Broadband Impact Report recognises that "it is now widely accepted that the availability and adoption of affordable broadband plays an important role in increasing productivity in national economies"⁴.

8. Digital connectivity is essential for our economy to adapt, innovate, compete and grow – globally and locally – but as the Government's recently published Productivity Plan acknowledges, although our digital infrastructure is improving, "there are still too many businesses hampered by slow connections"⁵. This is confirmed by CEDOS members from different parts of the country, who underline the fact that in too many areas high-speed, resilient and reliable broadband infrastructure is a major barrier. As one of our members emphasised: "the main limitation when it comes to anything digital is a lack of access to competitive high speed broadband - not just superfast download speeds but also superfast upload speeds".

9. Connectivity problems can have a particular impact on small and medium sized businesses. The Federation of Small Businesses (FSB) in a new report into the health of the digital communications market for small businesses, says that whilst most small businesses recognise the opportunities of doing more online – many are not confident they will get a quality service on which they can build the future of their business. In some instances the FSB says "this has led to many small businesses disengaging from the market - potentially missing out on the many benefits better connectivity can bring"⁶.

Insufficient business awareness, knowledge and investment

10. Notwithstanding the FSB findings referred to above, CEDOS members have highlighted an insufficient awareness and knowledge of, and investment in, new and emerging digital technologies particularly amongst some small and medium sized enterprises. This is also evidenced by recently published research from the Department for Business, Innovation and Skills into digital connectivity, which said: "a quarter of SMEs report that they do not possess basic digital skills" and found that "there is an attitudinal barrier amongst a minority of SMEs towards developing an online presence, a lack of awareness about the benefits and opportunities available, and a lack of understanding about online security threats"⁷.

³ *Digital Agenda for Europe* – updated 2014 European Commission

⁴ *UK Broadband Impact Study* - SQW November 2013

⁵ *Fixing the Foundations – Creating a more prosperous nation* HM Treasury July 2015

⁶ *Reassured, Optimised, Transformed: Driving digital demand among small business* Federation of Small Businesses September 2015

⁷ *Digital Capabilities in SMEs* Department for Business Innovation & Skills September 2015

11. Related to this is inadequate awareness of the availability of financial support. Despite there being a number of funds and financial opportunities, including at the EU level, there are reports of start-ups and SMEs often citing the financial landscape as being complex and confusing, with many struggling to compete with more established digital businesses. The House of Lords Digital Skills Committee has referred to the challenges in accessing adequate finance as one of the barriers holding back SMEs from reaching their full potential.

12. Data and digital security is a particular area of concern - the lack of security within existing systems has been described by one of our members as 'a time bomb waiting to explode'. Training, awareness and financial support is needed urgently to allow companies to adequately protect themselves.

Inadequate business support and training

13. The lack of sufficient awareness of digital technologies especially amongst smaller businesses is linked to inadequate business support and training. This is identified as a major barrier, with the lack of a coherent business support framework resulting in:

- businesses not knowing where to go to get support and being confused by the private sector offer;
- micro and small businesses finding it hard to identify and afford the high-quality digital support and training that have become essential to the success of all types of business.

Workforce digital skills

14. Workforce skills are a key issue across all industries and in all places, but particularly in the knowledge and digital economies. CEDOS members have highlighted the shortage of digital skills in the workforce as a barrier, echoing the findings of the House of Lords Digital Skills Committee when it reported earlier this year, that not only is there a shortage of medium and high level digital skills in the UK, which needs immediate attention if the UK is to remain competitive globally but also that "the entire workforce will need to embrace technological change and acquire new and differing levels of digital skills"⁸.

Steps the Government should take to help businesses to overcome these barriers

Access to digital technology especially superfast broadband

15. We share the concern of the House of Lords Select Committee on Digital Skills about the pace of universal internet coverage and the delivery of superfast broadband in this country. In our view superfast broadband should be regarded as a fundamental infrastructure in much the same way as electricity, water and transportation networks are. Access to the latest digital technology in particular superfast broadband is an essential for all areas of the country if the UK is to compete effectively in the global economy. As the Government has identified in

⁸ *Make or Break: The UK's Digital Future* House of Lords Select Committee on Digital Skills February 2015

its Productivity Plan, a 'world-class digital infrastructure' is one of the pillars needed to underpin the required growth in our productivity.

16. To achieve this, the Government must ensure that businesses in all areas are able to access superfast broadband to enable them to fully partake in, and benefit from, the digital economy. There is a need for a review into the universal service obligation to ensure businesses across the country can access superfast broadband infrastructure and services, alongside a more transparent and competitive marketplace, with more information on speeds and value for money. This will require further intervention and investment by the Government together with action by the industry regulator Ofcom.

17. Extending superfast broadband to hard-to-reach areas will only be achievable through joint investment by the Government and the industry and a continued focus on innovation in both technology (fixed and wireless) and also business models to allow the market to operate effectively in all areas. As commercial operators will only invest where there is a demonstrable return on investment, more Government funding will be required to ensure full connectivity for hard-to-reach areas, accompanied by strong partnership and collaborative working to ensure effective and efficient local delivery. This may not just require gap funding, but in line with the recent BDUK pilots, new market making to enable alternative technologies and providers to enter the market. Alongside this, Ofcom needs to do more in its role as a regulator to ensure (a) that providers both meet demand in areas that continue to lack connectivity and invest in the most appropriate technology to provide superfast speeds to hard-to-reach areas; and (b) that businesses, regardless of their location, have access to a real choice of quality, affordable broadband providers.

Business support and training

18. Tackling lack of awareness and knowledge of, and investment in, new and emerging digital technologies, particularly amongst some small and medium sized enterprises, requires developing a coherent programme of business support and training that provides the necessary advice, mentoring and coaching from business experts and provides a platform for businesses to access, explore and share best practice about the latest digital technologies including the critically important area of data security. This should be available to all areas and sectors.

19. A local example of a business support programme that can make a real difference to businesses, particularly the smallest, is the *Head into Digital* campaign run in Tees Valley in early 2015. This was funded by the Department for Business Innovation and Skills through its *Small Business Digital Capability Programme Challenge Fund* and supported non-digital companies through activities such as awareness-raising, training, seminars, 'digital healthchecks', online information provision and support targeted on specific groups (More information on the project can be provided if the Committee wishes).

20. Overall, the evaluation of projects delivered through this funding stream across the UK found that "they have had positive influence on turnover, employment and cost-savings; increased awareness of new opportunities and new ways of working" and that "ongoing activity in these areas will be needed to

maximise future impacts”⁹. Likewise, the Department for Culture, Media & Sport Woman and Broadband Challenge Fund provides further examples of relatively small-scale local projects, in this case targeting support to women entrepreneurs. An example is from Central Bedfordshire Council which, through a competitive pilot process, was able to support over 120 women to start businesses, gain additional digital skills and/or return to the labour market. Whilst a second round of this programme has been launched, the issue remains around securing the long term sustainability of such interventions and embedding local champions/skills for the future. We consider that the Government should provide ongoing and more widespread funding for Local Enterprise Partnerships, devolved authorities, Catapult Centres and other partners to provide and facilitate local programmes to support SMEs to adapt, prepare for, and excel in, the digital economy.

21. Business support programmes should be accompanied by appropriate Government financial support mechanisms to help and encourage small and medium sized enterprises to raise levels of investment in knowledge, equipment and skills through continuous improvements in hardware, software and in-house staff training.

Workforce digital skills

22. Steps that could be taken in relation to this barrier are considered below under the specific Inquiry question on skills.

What lessons can be learned from the Government’s support of tech start-ups and other measures targeted at the digital economy? How is this developing around the regions and nations of the United Kingdom?

CEDOS views:

23. The overall impression from feedback received from CEDOS members is one of insufficient support outside London, not only for tech start-ups but also for existing tech companies. Indeed one of our members said “What support for tech start-ups? This is not reaching the regions at all”. The reality is that what initiatives there have been have tended to be geographically limited and competitive, for example the Government’s Broadband Connection Vouchers scheme, which was focused on benefiting businesses in 50 UK cities and is now fully committed and closed to new applicants; TechNorth launched in October 2014 and covering seven cities; and the Digital Catapult Centre based in London with spokes in Brighton, Sunderland and Bradford.

24. With Tech City in London funded by the Department for Business Innovation & Skills and gathering much media and industry focus, we consider that it is even more essential for Government to reach out to help businesses across the country, particularly SMEs, to access new markets, new innovation and new technologies, and implement a cohesive long-term strategy to support tech businesses and the digital economy by:

⁹ *Evaluation of the Small Business Digital Capability Programme Challenge Fund* Department for Business Innovation & Skills September 2015

- directing further support at start-up, micro and small businesses to enable them to commercialise and up-scale their products, services and businesses;
- encouraging cross-sector collaboration that brings together the private and public sectors and academic institutions to establish new supply chains and business methods;
- ensuring appropriate finance is available to enable young and small businesses to break into the marketplace;
- creating a coherent business support framework that provides for the necessary advice, mentoring and coaching by business experts;
- providing for appropriate digital skills training to create a talented workforce;
- ensuring that appropriate digital infrastructure and premises are available locally to start-up, micro and small businesses to enable them to grow;
- investigating the roll out of further spokes of the Digital Catapult Centre across the UK;
- providing an appropriate platform for start-up, micro and small businesses to showcase their products/services and to compete with more established businesses.

Does the UK's Intellectual Property regulatory regime provide effective protection for the digital economy and sufficient scope for innovation and competition?

CEDOS views:

25. The report of the independent review into intellectual property and growth by Professor Ian Hargreaves commissioned by the Prime Minister in November 2010, made the point that in advanced economies like the UK's, innovation is crucial to competitive edge and that this makes Intellectual Property (IP) policy an increasingly important tool for stimulating economic growth. The Prime Minister asked the Review to consider whether the UK's IP framework needed to adapt in the interests of encouraging innovation and growth. The Review, which emphasised the importance of smaller companies to innovation and to job creation, concluded that such adaptation is required and said: "the UK's current IP system is falling behind what is needed, especially in the area of copyright"¹⁰.

26. This has been underlined more recently in Innovate UK's Digital Economy Strategy 2015-18, which says: "The cost and sluggishness of protecting intellectual property contrast with the speed of technology change, leading small companies to look for competitive advantage through agility and know-how instead of through long-term strategies such as patent registrations or diversification"¹¹.

27. The Hargreaves Review also stated that research undertaken confirmed that SMEs in particular are not sufficiently well served by those providing advice and information on intellectual property rights, which is becoming an ever more complex area. This is underlined by one of our members who says "material available from the regulatory regime is, on the whole, of an advisory nature

¹⁰ *Digital Opportunity – A Review of Intellectual Property and Growth* Professor Ian Hargreaves May 2011

¹¹ *Digital Economy Strategy 2015-18* Innovate UK February 2015

when perhaps for the industry, more practical 'hands-on' help is needed for the entrepreneur".

What actions could the Government take to foster the development of potentially disruptive technologies? Are further safeguards warranted to help existing businesses adapt to the impact of these technologies on their traditional business models?

CEDOS views:

28. 'Disruptive technologies' and 'digital disruption' are terms used to describe change resulting from digital technologies that disrupt established business models. It is evident that digital innovations are transforming the economic landscape far more profoundly than previous big shifts with, it is likely, much more to come. As a paper from Deloitte has put it "digital disruption explodes the status quo, rewrites economics, scrambles supply chains and blurs category boundaries. It also pushes a business into new dimensions while questioning its very survival"¹².

29. Moreover, the pace is quickening. The latest survey of Chief Information Officers (CIOs) by Harvey Nash/KPMG¹³ reports that two thirds of CIOs report that digital disruption is now bringing very significant change to their businesses, driving them to create new business models and bring new products and services to market faster than before. However, it warns "CIOs are concerned that they could lose significant market share to competitors more adept at using technology, yet despite this threat, three in four still don't have a company-wide approach to digital"¹⁴.

30. Given the nature of disruptive technologies, it is difficult to suggest specific actions. Moreover, it has to be recognised that any safeguards that are put in place could impinge on innovation and may limit economic benefits as a consequence. Change as a result of technological developments is inevitable. This underlines the importance of: all areas of the country having a level playing field for their businesses to operate in, with equality of access to digital technology and superfast broadband infrastructure; businesses having strategies for managing and taking advantage of digital innovation; and for Government supporting businesses by implementing a cohesive long-term strategy with the range of measures set out in paragraph 24 above.

What actions could the Government take to ensure the availability of a workforce with the skills to support businesses in the digital economy?

CEDOS views:

31. The shortage of digital skills in the workforce has been identified as one of the major barriers to UK business success in the digital economy – see paragraph 14 above. Fundamental requirements are to ensure:

¹² *Digital disruption Short fuse, Big bang?* Deloitte August 2012

¹³ *CIO Survey 2015* Harvey Nash in association with KPMG May 2015

¹⁴ *Pace of digital innovation quickens* KPMG News Release 19 May 2015

- digital skills are embedded into the education curriculum at all levels - schools, colleges and universities;
- employers and technology proficient business leaders are at the forefront of designing post-16 education;
- businesses are aware of how universities can help them to develop their digital capabilities;
- better careers information, advice and guidance is available to improve the perception of careers in IT, digital, creative and other related sectors and make young people aware of opportunities.

32. Whilst embedding digital learning into the education system will take time, there is, as recent research from the Department of Business Innovation & Skills has pointed out, a need for immediate action: "embedding digital learning throughout the education system is a long-term solution, but there is also a clear need to enhance digital capabilities in the shorter term. Key to increasing capacities to take advantage of digital opportunities are providing digital courses and awareness-raising initiatives through existing local private and third sector networks, and improving cyber security"¹⁵. There also needs to be more promotion of, and accessibility to, initiatives such as the UK Trade and Industry e-exporting programme, and those from the Digital Business Academy, and 'Do More Online'.

33. All of this underlines the need for a Government commitment to long-term funding to address the shortage of digital skills. Equally, in implementing actions, it must be recognised that due to the fast pace of change digital skills requirements will change rapidly. Government will need to ensure that support agencies are encouraged to proactively engage with businesses and that their offer is flexible to meet the needs of an ever changing landscape. To enable this, the Government needs to provide the tools and finance to support both Further and Higher Education institutions to directly engage with the business community to ascertain what the current skills gaps are, what level of training is required and how support can be tailored and delivered. This highlights a need for a wider devolution of the skills agenda to enable faster responses to the needs of the business that are tailored to the particular requirements of individual local economies throughout the country.

¹⁵ *Digital Capabilities in SMEs: Evidence Review and Re-survey of 2014 Small Business Survey respondents* BMG Research and Durham University for Department of Business Innovation & Skills September 2015