UK COMMISSION FOR EMPLOYMENT AND SKILLS

Sector insights: skills and performance challenges in the digital and creative sector

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Sector insights: skills challenges in the digital and creative sector

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Foreword

The UK Commission for Employment and Skills (UKCES) is a publicly funded, industry-led organisation providing leadership on skills and employment issues across the UK. Together, our Commissioners comprise a social partnership of senior leaders of large and small employers from across industry, trade unions, the third sector, further and higher education and all four UK nations.

Our vision is to create, with industry, the best opportunities for the talents and skills of people to drive competitiveness, enterprise and growth in a global economy.

Over the next three years our ambition is to see industry in the UK create “ladders of opportunity” for everyone to get in and on in work. This means employers improving entry routes into the labour market for young people, ensuring the existing workforce has the skills businesses need to compete and individuals need to progress, and deploying those skills in a way that drives productivity and growth. This is a collective agenda for employers working in partnership with government, trade unions, education providers, industry bodies and local organisations.

Our Research

Our research mobilises impartial and robust national and international business and labour market research to inform choice, practice and policy. We aim to lead the debate with industry to drive better outcomes for skills, jobs and growth.

Our ambition is to cement the UK Commission’s reputation as the ‘go-to’ organisation for distinct high quality business intelligence, and communicate compelling research insights that shape policy development and influence behaviour change.

In order to achieve this, we produce and promote robust business intelligence and insights to ensure that skills development supports choice, competitiveness and growth for local and industrial strategies.

Our programme of research includes:

- producing and updating robust **labour market intelligence**, including though our core products (the Employer Skills Survey (ESS), Employer Perspectives Survey (EPS) and Working Futures Series)
- developing an understanding of what works in policy and practice through **evaluative research**
- providing research **insight** by undertaking targeted thematic reviews which pool and synthesise a range of existing intelligence.

Our research programme is underpinned by a number of core principles, including:

- providing **business intelligence**: through our employer surveys and Commissioner leadership we provide insight on employers' most pressing priorities
- using evaluative insights to identify **what works** to improve policy and practice, which ensures that our advice and investments are **evidence based**.
- adopting a **longer term, UK-wide, holistic perspective**, which allows us focus on big issues and cross cutting policy areas, as well as assessing the relative merits of differing approaches to employer engagement in skills
- providing **high quality, authoritative and robust data**, and developing a consistent core baseline which allows comparison over time and between countries and sectors.
- being **objective, impartial, transparent and user-friendly**. We are free of any vested interest, and make our LMI as accessible as possible.

We work in strategic partnership with national and international bodies to ensure a co-ordinated approach to research, and combine robust business intelligence with Commissioner leadership and insight.

The overall aim of this project is to identify skills and performance challenges in the digital and creative sector. Focusing on five occupations, it identifies current issues and trends that are affecting the sector's labour market; considers how the digital and creative sector may evolve over the coming decade; and draws out the potential impact of these changes for future skills needs. The study also considers the use of and interest in National Occupational Standards amongst digital and creative employers.

Sharing the findings of our research and engaging with our audience is important to further develop the evidence on which we base our work. Evidence Reports are our chief means of reporting our detailed analytical work. All of our outputs can be accessed at www.gov.uk/government/organisations/uk-commission-for-employment-and-skills

We hope you find this report useful and informative. If you would like to provide any feedback or comments, or have any queries please e-mail info@ukces.org.uk, quoting the report title or series number. We also welcome feedback on Twitter.

Lesley Giles

Deputy Director

UK Commission for Employment and Skills

Executive Summary

The digital and creative sector is an important part of the UK economy. It encompasses a wide range of activities, including: telecommunications; computer programming and consultancy; publishing; films and music; programming and broadcasting; design and photography; and creative arts and entertainment. This report covers the digital and creative sector across all four nations of the UK.

Current workforce and skills challenges

The UK digital and creative sector has grown rapidly in recent years. It contributes almost nine per cent of total UK GVA and employs 2.1 million people. Digitisation of the wider economy is driving extremely strong demand for digital services, and the recent widening of tax relief has stimulated very strong growth in certain areas of the creative industries.

The greatest recruitment challenges are currently experienced by those seeking workers with digital skills. Graduate recruitment is an important source of workers for the sector, but there are concerns that many graduates leave university without up-to-date technical skills, or the softer skills required to be effective in the workplace. Rapid technological advances are leading to skills gaps amongst the existing workforce. At the same time, employers encounter fewer difficulties recruiting to some more creative roles which are extremely attractive to potential employees. However, it would be wrong to draw a simple distinction between the digital and creative sub-sectors. The boundaries between digital and creative are becoming increasingly blurred and employers increasingly seek a fusion of creative and technical skills, combined with business and softer skills.

Outlook for the digital and creative sector

Further growth in demand for digital content and services, in particular, is expected to drive expansion of the digital and creative sector. The sector is expected to need 1.2 million new workers between 2012 and 2022, to both support growth and replace those leaving the sector. This is equivalent to half the current workforce. There are particular concerns about the ability of the education system to supply the quantity and quality of workers needed for digital roles.

There was a strong consensus amongst those interviewed for this project that technological trends will be the most important influence on the future development the digital and creative sector and its skills needs. Reflecting the increasing convergence between digital and creative activities, this view was consistent across employers in both the digital and creative sub-sectors.

Significant technological trends will include: strong growth in demand for technology from across the economy; the growing importance of cyber security; the convergence of content across platforms; mobile and cloud computing; big data and analytics; the automation of routine tasks; new applications of social media; and new business models and collaborative platforms.

The future development of the sector could also be influenced by regulatory changes. Some of these may reflect the need to make current regulations more relevant to the digital world, such as changes to rules governing the ownership and use of data and intellectual property. More broadly, favourable taxation rules have been an important driver of growth in the creative industries in recent years and there is a risk that the rate of growth could slow if these incentives were removed. Some of the most internationalised areas of the digital and creative industries could also be affected by changes to taxation policies in other countries which affect the relative attractiveness of the UK as a location for undertaking work.

It is possible that employment laws may be changed to make it more difficult for creative firms to employ unpaid interns, or to increase the regulation of self-employed workers. There may also be renewed pressure for employers to re-double efforts to increase the proportion of female workers in the digital sub-sector and non-white employees in the creative sub-sector. Such changes may imply a need for more formal and proactive approaches to human resource management for some employers.

Demographic and economic factors will also shape skills needs. Population ageing may create new opportunities in areas such as healthcare technologies. Workforces may increasingly include a more diverse mix of older workers that retire later, and ‘digital natives’ that bring a deep and intuitive knowledge of digital technologies. Deepening globalisation will present opportunities to sell into new markets, but also greater competitive pressures and the potential to move higher value activities overseas.

Future workforce and skills challenges

The merging of digital and creative roles, higher client expectations and greater competitive pressures mean that employers in both the digital and creative sub-sectors increasingly seek a ‘fusion’ of technical expertise, creativity and softer skills. Rapid technological change means employers will value those workers who are best able to adapt and respond to technology. They will also seek those who can think strategically to identify ways to best exploit and adapt new technologies. Although this applies most directly to those in technical roles, there will be an increased need for digital skills right across the digital and creative sector, and indeed the whole economy.

Technological trends will call for individuals with specialised knowledge in cyber security, mobile and cloud computing, big data, and social media, but workers across the sector will need some degree of knowledge of these issues and their implications. Progress in some areas may be offset by a reduction in demand for those with skills in older technologies. The digital and creative sector will also need the expertise to anticipate how markets and consumers may respond to new business models, and regulatory and legal expertise to help shape and comply with new rules on IP and data protection.

It will also be necessary to put in place new and more proactive human resources functions to meet the pressing need to recruit large numbers of new workers, particularly to digital roles, and to encourage greater workforce diversity. Stronger people management skills may be needed as older workers retiring later find themselves working alongside young 'digital natives' with very different skills.

Ever-closer global economic integration suggests a growing need for those with the skills to develop international networks; promote and sell UK outputs overseas; identify competitive threats; and develop strategies to maximise the UK's share of the global market for digital and creative outputs.

National Occupational Standards (NOS)

Awareness and use of NOS is lower in the digital and creative sector than across the economy as a whole, although employers, particularly larger organisations, do contribute to their development. NOS could be made more useful and relevant to digital and creative firms by:

- using them to ensure that those leaving education are equipped with the right skills
- focusing on core skills, rather than technical skills that may become outdated
- reducing detail
- improving the NOS database
- developing a clearer narrative on the rationale for and advantages using of NOS.

Implications for the supply of skills

A range of initiatives (both UK wide and nation-specific) have been put in place by sector bodies and employers to address the challenges above. However, it may be possible to do more in the following areas:

- Explore new models for ensuring employees in small and larger firms alike have access to the ongoing training they need to keep up with technological developments. This could include building stronger relationships with local educational institutions and training providers to enable employees to undertake modular training with minimal disruption to work.
- Help young people at school and university, as well as their parents, guardians and advisers, to identify the skills they will need for a career in the digital and creative sector. This will empower individuals to take greater responsibility for ensuring they acquire the skills employers need. This may suggest a role for specialist careers guidance and an increase in work placements.
- Consider how the allure of a career in the creative industries can be harnessed to encourage more people to acquire the digital skills needed across the digital and creative sector.
- Market the digital and creative sector to a wider field of potential recruits with different educational and professional backgrounds, and ensure conversion courses are available to help people move into roles where shortages are most severe.
- Research why unemployment rates are so high for computer science graduates at a time when the digital sector finds it difficult to hire the workers it needs.
- Identify how universities can work with employers to ensure courses better equip young people with the skills digital and creative employers need, and ensure they keep up with technological change.
- Ensure there is a wide choice of courses that combine the technical and creative skills employers need, so the study of digital and creative is not seen as an either/or choice. Such courses should also include modules on business and softer skills.
- Ensure students in digital subjects pick up at least a basic knowledge of issues such as cyber security, intellectual property and data protection.
- Consider whether there is scope to tailor apprenticeships to better suit the profile of digital and creative employers.
- Assess whether lessons may be learned from the Irish institutes of technology model to bring more non-university graduates into digital and creative roles.
- Consider whether sufficient expertise is available in areas such as legal services, human resources, market and pricing analysis, and business strategy, which will increasingly be needed to support the growth of the digital and creative sector. The sector should also consider whether there is a need for skills initiatives to tailor such expertise to the specific and rapidly evolving needs of digital and creative employers.

In addition, the sector should consider whether additional skills initiatives are needed in the immediate term to alleviate shortages in areas that are growing extremely rapidly following the introduction of new tax incentives.

Executive Summaries present the key findings of the research produced by the UK Commission for Employment and Skills. More detailed analytical results are presented in Evidence Reports.

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