



Strategic Skills Assessment for the Creative Media Industries in the UK

JANUARY 2010



Contents

R	eport Su	ummary & Structure	5
1	Introd	luction	. 10
2	. Wł	nat drives demand in the Creative Media industries?	. 16
	2.1	The Contribution of the Sector	. 16
	2.2.1	Drivers of Growth, Drivers of Change	. 17
	2.2.2	The Creative Media Economy	. 20
	2.2.3	The Business Context-Digital Britain	. 21
	2.2.4	Opportunities and Challenges - Globalisation	. 22
	2.2.5	Competition and Industrial Structure	. 23
	2.2.6	Convergence and Audience Fragmentation	. 24
	2.2.7	Lower Cost Technology and User-Led Innovation and Content	. 25
	2.2.8	Intellectual Property and Digital Management	. 26
	2.2.9	The Creative Media Workforce	. 27
	2.2.1	O Product Market Structure	. 30
	2.2.1	1 Employment Profile	. 31
	2.4	Recruitment at Entry Level Onwards	. 39
	2.5 I	Retention	. 43
	2.6	The Sub Sector Story	. 44
	2.7	Characteristics of the Workforce	. 46
	2.8 I	Recruitment and Skills Issues	. 46
3	Curre	nt Skills Needs	. 48
	3.1	Overview	. 48
	3.2	Skills Shortages	. 55
	3.3	Skills Gaps	. 58
		Skills Supply: The External Versus the Internal Labour Market	. 59
	3.4.1	Skills Supply: the Education System	. 60

	3.4.2	2 Skills Supply: Workforce Development	. 61
	3.4.3	3 Skills Supply: Diversity	. 63
	3.5	Sub-Sectors	. 65
4	Antio	cipating What Lies Ahead	. 88
	4.1	Growth Continues as Does Freelance Fragility	. 88
	4.2 VET S	A Square Peg in a Round Hole? – Creative Media and the Current system	. 89
	4.3	A Necessary Broadening and Deepening of the Skills Base	. 91
5.	TI	he Geography of the Creative Media Industries	. 93
	5.1	Sector Employment across the UK	. 93
6.	A Pr	referred Vision of Future Success	. 99
	6.1	A Freelance Friendly Sector in a more Freelance Friendly Economy	99
	6.2	Highly Skilled and Highly Geared	. 99
	6.3	An Ever-Widening Talent Pool	100
	6.4	Creating a T-skilled Workforce	100
	6.5	A Greater Plurality of Provision and Providers	101
	6.6 the Cr	A more Flexible and Responsive VET system – that Works Harder feative Media sector	
	6.7	Delivering this Vision of Future Success	102
	6.8	Possible Development Paths for the Sector	102
	6.9	Steady State Evolution	103
	6.10	Accelerated Growth and Diversity	104
7	Tow	ards A Fit for Purpose Creative Media Skills Ecology	106
	7.1	The Policy Context	106
	7.2	Policy Recommendations	111
Αı	nnex A	Creative Media and Gaps in Official Data Sources	117
Αı	nnex B	Sector Overview	126
Αı	nnex C	Limitations of Official Data Sources for Creative Media	129

Annex D	Data Sources	146
Annex E	Acknowledgements	150

Report Summary & Structure

Introduction

Whilst the Creative Media sector offers enormous economic and cultural potential to the UK, it is also fragile, fragmented and poorly supported by the existing Vocational Education and Training (VET) framework.

Compared with other sectors of a similar size, there are few larger firms (those that employ more than 250 people) and far more self-employed contractors and freelancers. As a consequence training and development needs are acute but hard to deliver. Therefore we urgently need to understand the Creative Media sector better, and tailor the supporting infrastructure to deliver to the sector more effectively and sensitively.

This Strategic Skills Assessment (SSA), produced with tries to meet that challenge by being both rigorous and imaginative in outlining how to create the best possible operating environment for the sector.

Key Challenges for the Sector

The analysis begins by outlining some of the key challenges facing the sector – which include gearing up for growth, widening the talent pool, and broadening and deepening the skills base of the sector. In aggregate terms the sector faces some sharp challenges in terms of both general and specific skills development over the next decade.

In terms of highly specific skills needs, digitisation is requiring creative content producers to have a wider brief of technical skills capable of translating content across many platforms. In terms of broader skills needs vital to the performance of the sector, general business skills including management and leadership, knowledge and awareness are also urgently required and are particularly important for future business growth.

This SSA details how best to respond to these challenges, with the key data analysis chapters exploring the following key themes:

- Chapter Two: What drives skill demand in the creative industries?
- o Chapter Three: Current Skills Needs

- Chapter Four: Anticipating What Lies Ahead
- o Chapter Five. The Geography of the Creative Media Industries

In the light of this comprehensive review of the Creative Media Skills Ecology, Chapter Six outlines a preferred future vision for the sector, and two likely future development scenarios.

The first scenario - *steady state evolution* – assumes that there will be no major breakthroughs in the policy and practice of the sector.

The second, and more enticing, scenario for the sector – *accelerating growth* and *diversity* - assumes that concerted action by Government and other key partners helps to transform the operating environment and performance of the sector. In particular the accelerated growth and diversity scenario would see:

- 1. A transformation in the VET infrastructure so that it has a better strategic fit with a predominantly external labour market (ELM) driven sector
- A narrowing in the mismatch between graduate skill sets and employer expectations by creating a closer link between Higher Education (HE)/Further Education (FE) and employers actively facilitated by Skillset

The concluding chapter details the policy recommendations required to transform the operating environment and performance of the sector. The policy recommendations cluster under four core themes – entry level skills development; Continuing Professional Development (CPD) and professional development; wider fiscal and business support for the sector; and continued investment in Skillset's industry specific research and Labour Market Intelligence (LMI):

Policy Recommendations

Entry Level Skills Development

1. Launch a Professional Apprenticeship and Internship Programme for the Creative Media industries to incentivise employers to recruit and train

graduates and grow the UK's pool of experienced Creative Media professionals.

- 2. Urge the film and television industries to provide more equal access to training and skills-based career development through greater use of apprenticeships and graduate internships. Skillset will continue its work on developing codes of conduct for internships and will seek to play a greater role in the coordination of apprenticeships and on-the-job training.
- Continue to support and invest in Skillset's Media and Screen Academy network in their development of fit for purpose Undergraduate and Foundation degree provision.
- 4. Skillset will work to secure ongoing investment to a refreshed approach to an online careers and mentoring provision designed to help people get on and get into the Creative Media industries.
- Publish new guidelines to help galvanise the Industry to do more to tackle the widespread use of unpaid work experience, which while developing skills, discriminates against those who cannot afford to work unpaid.

CPD and Professional Development

- 6. Launch a 'Digital Professional' Skills Development Fund as part of a policy decision to accelerate the growth of the knowledge economy. This fund should leverage public funding to trigger increased investment in the development of content skills by employers, and should support high level skills development (graduate and post-graduate level).
- 7. Undertake a feasibility study to explore how effective a formal membership body could be in underpinning the ongoing professionalisation of the sector. The idea here would be to test the

feasibility of creating a 'Creative Media Industries Institute' which existing practitioners and new entrants could join in the same way that HR and Marketing professionals can join their long established professional bodies.

- 8. Continue to invest in and grow the wider role that Skillset's Screen and Media Academies play in offering CPD business support, Postgraduate provision, Incubation schemes and other development activity
- 9. Endorse the recent recommendations of the House of Lords Communications Committee urging the Government to encourage Public Sector Broadcasters (PSBs) to revive their investment in training^[2]. Skillset will support and help further develop the central industry training role of the BBC and Channel 4 as public realm actors. In addition the UK Film Council should continue to see developing the skills and talent of the workforce as key to the health and wealth of the British film industry and continue its investment. These efforts are a good use of public monies for a sector characterised by an unusually long tail of sole traders and SMEs without the profit margins to sustain large amounts of external training provision.

Fiscal and business support

- 10. Investigate whether a new architecture of fiscal incentives can be created for the larger employers in the sector to employ people from more diverse backgrounds in larger numbers.
- 11. Create a new architecture of engagement for SMEs and sole traders. Skillset and other key agencies will work to create new ways of communicating with the sector through roadshows, social networking sites, twitter, and streamed events.

^[2] House of Lords Communications Committee (2010) – 'First Report: The British Film and Television Industries' (www.parliament.the-stationery-office.co.uk)

Invest in Research and LMI

- 12. Continue and increase investment in a current evidence base that provides the strategic intelligence to routinely inform;
 - the ongoing development and currency of all the other policy recommendations listed above and
 - the introduction of other essential interventions yet to be determined based on new evidence.

1 Introduction

Skillset's aim is:

"To support the improvements to the productivity of our industry to ensure that it remains globally competitive. We do this by influencing and leading; developing skills, training and education policy; and through opening up the industries to the UK's pool of diverse talent."

In working towards that aim, Strategic Skills Assessments (SSA) are an enormously important tool that help us to crystallise our understanding of the Creative Media sector, and to think rigorously and imaginatively about how to create the best possible operating environment for the sector.

We also think that the SSA is particularly important for the Creative Media sector given a key operating paradox for Skillset – namely that whilst the sector is of increasing strategic importance to UK Plc (see Box 1 below), is growing rapidly, and becoming highly diversified and global, we need to know more about the workforce that is so clearly vital to our future economic prosperity and the vibrancy of the UK's cultural and creative life. This creative sector is in urgent need of a more creative public policy response. For this sector, the SSA really does matter.

Box 1:

The UK's World-Class Creative Media Industries

- The UK is the largest producer of TV and radio content in Europe, with only the US generating more value from TV exports;
- The UK is also second only to the US in the global film market, with increasing box office receipts: 30 of the top 200 films at the world box office in 2001 2007 were based on stories and characters created by British writers, generating £14 billion at the worldwide box office;¹
- The UK has the largest Publishing industry in Europe;
- The UK has the largest number of Content for Computer Games studios in Europe and is the third largest producer in the world¹
- Leads the world's ranking for advertising excellence.

¹ Evidence includes Skillset's 'From Recession to Recovery', (2009) based on a sample of 262 employers consulted during 2009 :one third had made or expected to make some staff redundant as a result of the recession and just over one third had not renewed some freelance contracts.

SSAs matter because of their increasingly important contribution to better policy making. SSAs are relatively new tools designed to inform the cross-economic Strategic Skills Audit. They are intended to help decision-makers within Government and industry to plan a better future for respective industries.

They are crucial to informing the priorities for the UK's economy and in turn our global standing. A landscape that the Creative Media sector is well attuned to – given the breadth and depth of its spill-over effects on other sectors of the economy.

As our analysis will make clear, whilst the sector offers enormous economic and cultural potential to the UK, it is also fragile, fragmented and poorly supported by the existing VET framework, this includes dealing with the impact of digitisation and supporting the development of business skills, particularly management and leadership. Making the right investment decisions will be difficult.

There are few larger firms (those that employ more than 250 people) and far more self-employed contractors and freelancers than in other sectors of a similar size and scale. As a consequence of these two factors training and development needs are acute but hard to deliver. Therefore we urgently need to understand this growing and developing sector better, and tailor the supporting infrastructure to deliver to the sector more effectively and sensitively.

This creative sector is in urgent need of a more creative public policy response.

The Creative Media Sector in context

Box 2 below outlines the scope of Skillset and the accepted boundaries of the Creative Media sector.

Box 2: The Scope of Skillset

Skillset is the Sector Skills Council for the Creative Media industry, representing eleven sub sectors which are grouped into four sectors of the DCMS Creative Industries classification. At the heart of the Creative Industries, the Creative Media sector includes companies involved in: Film, Television, Radio, Photo Imaging, Interactive Content Design, Publishing, Animation, Content for Computer Games, Commercials and Promos, Corporate Production, Post Production and Visual Special Effects and Other Specialist Facilities. For ease in some cases the following sectors are referred to and grouped under the umbrella heading 'audio visual': Broadcast, Corporate Production, Commercials and Pop Promos, Facilities, Animation, Interactive Content Design and Content for Computer Games

Within the wider definition of the creative industries, the Creative Media industries are bound by common output in the form of creative content and increasingly the boundaries between these business and sectors are becoming blurred.

Whilst there are still key distribution platforms including; cinema, TV, books/print Media and online and mobile, companies creating content are doing so in a way that can be used for multiple platforms. The business context is providing an opening of channels for distribution and 'multi-platform content' is key.

The Creative Media sector is synonymous with the Creative Content sector and account for 70% of the value and estimated potential growth potential of the Creative Industries generally in the UK. ¹

The routine availability of data from official sources with the precision needed by Skillset and the Creative Media industry to respond to skills demand is limited. Indeed the unique character of the sector with its long tail of micro businesses and far more self-employed and contractors requires Skillset to deliver far more primary labour market research to fill gaps in knowledge than many, if not the majority of, other Sector Skills Councils (SSCs).

Skillset's unique research programme was established as long ago as 1999 by industry and Government departments of education and skills and culture, media and sport. Such research is mission critical for Skillset and the industry, given the many notable gaps in official data and the growth of new industries in the sector. See Box 3 for more detail.

-

¹ http://www.ikt.org.uk/resource/files/2009/11/02/creative%20industries%20strategy.pdf

Box 3: Creative Media and Gaps in Official Data Sources

Creative Media and Gaps in Official Data Sources

Official data sources that rely on Standard Industrial (SIC) and Standard Occupational Classifications (SOC) are broadly effective for photo imaging and publishing for the purpose of collecting and representing employment and some skills data but less useful for capturing data for the rest of the industry.

- Key elements of the Creative Media industry sit in broad classifications that include activity outside of Creative Media preventing any discrete and crucial analysis e.g. Interactive Content Design, Content for Computer Games and Facilities.
- Official data sources to a greater or lesser extent systematically exclude
 the discrete and increasing freelance labour pool required to create and
 distribute the creative content upon which our digital economy is
 becoming increasingly reliant.
- In some cases sample sizes are too small to enable discrete analysis of data contained within SIC that do exist, particularly to the 5-digit SIC level
- Few data can be cut by nation and region

The Creative Media industry and DCMS with Skillset first reviewed data available for this part of the industry from the ONS and other sources in 1999 and concluded that additional data are required to measure as a priority the size, shape and specific skills demand of the Creative Media industry its constituent sectors and large freelance labour pool to a granular and commonly understood sub-sectoral level, using bespoke methodologies to ensure adequate sample sizes,. In some cases equivalent data cannot be generated eg. GVA and GDP and so these measures exclude contributions from elements not served well by SIC eg Interactive Content Design, Facilities (excl. post production). Content for Computer Games and freelancers.

In some cases, the SIC and SOC systems simply do not provide the level of detail required, as noted above. In other cases within the SIC system, whilst the system itself provides the level of detail required, the sample size of surveys that underpin the key data sources, such as the ABI which measures productivity, are in fact too small to offer robust detailed analysis. As well as systematically excluding sole traders, as far as business activity goes, little data are available at 5-digit SIC level and for example production and distribution activity cannot be disaggregated.

The Challenges facing the Creative Media sector

So what are the overarching challenges for the sector in the decade ahead?

Gearing up for growth

The industry is geared for growth. The new general purpose technology (GPT) that is digitisation is rapidly enabling content to be transferred across platforms. Already this means you can watch most forms of entertainment on your phone if you wish. Soon anything could be a platform. Appliances in the kitchen, receiving equipment installed into the walls of homes, watches, other hand held portable devices (we already have the kindle), spectacles, headsets, i-pods, e-pods, wherever there is access to broadband, content can be received.

Given this growing demand for content and digital media, even those firms that have been hit hard by the recession² are well placed to thrive in the coming upturn. Indeed Nesta predict that on average they will grow at twice the rate of other sectors over the next period.³ This next phase from 2010 to 2013 will be dominated by the need to provide professional and sophisticated content not only 'user-generated' content. Expectations are high and supply must be of outstanding quality.

Broadening the talent pool

Women and people from black and ethnic minority backgrounds (BAME) are under-represented in many parts of the sector.⁴ Older women find it difficult to enjoy having a family and staying attached to work, largely due to the long hours and inflexibility that comes with tight deadlines, short pipelines of future commissions and the need to be available at all times. Skillset's workforce surveys (2008 and 2005) have shown consistent under-representation of parents compared with the wider economy and that this is a particularly acute issue for women. Additionally Skillset conducted some qualitative research to test and explore in depth the hypothesis that parenting and working in the

³ Higgs,P, Cunningham, S and Bakshi, H (2008) *Beyond the Creative Industries: Mapping the Creative Economy*, NESTA, London

² Skillset (2009) 'From Recession to Recovery'. Based on a sample of 262 employers.

⁴ Skillset (2009) Employment Census. Figures exclude film production freelancers, photo imaging and publishing. Skillset (2009) 'From Recession to Recovery'. Based on a survey of 262 employers.

industry is difficult, particularly for women - the results of which are presented in the 'Balancing Children and Work in the Audio Visual Industries' report.⁵

Creating a deep and broad skills base for the sector

The sector faces some sharp challenges in terms of both general and specific skills development over the next decade.

In terms of highly specific skills needs, digitisation is requiring creative content producers to have a wider brief of technical skills capable of translating content across many platforms. Digitisation is still in its infancy. Most previous GPT's have taken decades to refine and develop so that they reach the frontier of their capabilities. The same is true of digitisation. Moore's Law still holds true. For many in the Creative Media sector being ahead of the future developments will be critical to their ability to maximise the growth potential of their sector.

In terms of broader skills needs vital to the performance of the sector, general business skills including management and leadership skills, knowledge and awareness are also urgently required. These skills are particularly important for business growth, with new business models and higher levels of business skills (including management and leadership skills) as a priority.

This Strategic Skills Assessment for the whole United Kingdom will detail how best to respond to these challenges. What now follows is a more detailed breakdown of the drivers of skills demand, the supply-side response to date, current skills needs, plausible future scenarios for the sector, the geography of Creative Media and recommendations for action.

⁶ Moore stated that every 18 months computer processing chips would halve in size and double in computing power.

⁵ Skillset (2006) :Balancing Children and Work in the Audio Visual Industries, 2006

2. What drives demand in the Creative Media industries?

2.1 The Contribution of the Sector

Creative Media is one the UK's major industrial sectors. It is a highly productive provider of creative content that is innovative and world class and makes the UK a world-class player in Creative Media and the market leader in Europe. According to NESTA, the creative industries, at the heart of which is Creative Media, '... are critical to this country's cultural and economic success, contributing more than £50 billion to the economy every year. They also generate important 'spillover' benefits for other sectors that work with them to create innovative products and services.' This includes learning from the creative media industries' ability to take advantage of networks.⁸

As Table 1 below shows, the Creative Industries (of which Creative Media is part) have now established themselves as one of the most important industry sectors, both in terms of GVA contribution and total employment generated across the sector.

Table 1 – Comparison of individual economic indicators between the creative Industries and other leading UK industry sectors

Industry type	Employment	Contribution to GVA
Aerospace1	1,124,000	1.7%#
Pharmaceuticals	72,0001	4%
Energy	137,8002	4.8%
EPES* & ICT2	1,820,000	10%
Construction	1,862,0001	1.8%#
Financial Services2	1,028,000	7.9%
Manufacturing	3,000,000	12%
Creative Industries2	1,100,000	6.4%

^{1 2006; 2 2007;} Source ONS and Industry Estimates. Includes software and reproduction of computer media.

Moreover in comparison to some other knowledge economy sectors the Creative industries (of which the Creative Media Sector is part) are now outstripping other high performing sectors in terms of the rate of job growth. According to the Government's own data creative industries created job growth of over 2% per annum between 1997 and 2006 compared with job growth of

^{*} Electronics, Photonics and Electrical Systems

[#] GDP

⁷ http://www.nesta.org.uk/areas_of_work/creative_industries.

⁸ Ibid

around 1% in financial services over the same period. This amounts to jobs growth of over 400,000 new jobs compared with 120,000 in financial intermediation services for that period and year-on-year growth in GVA of 4% against 8% for financial intermediation services. In short 1% growth in GVA creates roughly four times as many jobs as similar levels of growth in GVA in financial intermediation services.

In terms of the broader economy, creative functions are also deeply embedded in other sectors. One of the reasons for this is the level of innovation that creative occupations enjoy. Innovation has always been an important driver of productivity and performance but in creative occupations it is arguably *the* driver of value adding output. This is especially true of the core content producing areas. The increase in co-production with end-users who utilise the developments in digital technology and new viral marketing techniques that encourage positive feedback loops also accentuate the importance of innovation and the innovation process.¹¹

2.2.1 Drivers of Growth, Drivers of Change

The UK's knowledge economy, in which Creative Media, financial services, health, education and high–medium tech manufacturing form the core, is driven by increasing levels of innovation and co-production with users and customers. Such co-production enables Creative Media industries to respond more quickly to new developments. This is particularly the case with digital innovation. As the Government have emphasised in their policy document, *New Industry, New Jobs*¹³ they expect digital industries to recover strongly during the course of 2010.

⁹ Extrapolated by authors from labour market and other government statistics http://www.statistics.gov.uk/statbase/Source.asp?vlnk=358 and Creative Industries Economic Estimates Statistical Bulletin, DCMS January 2009

¹⁰ Ibid

¹¹ Miles,I and Green,L (2008) *Hidden Innovation in the Creative Industries*, NESTA, London

¹² http://www.berr.gov.uk/files/file51023.pdf

¹³ Ibid

Certain segments of the Creative Media industry are predicted to grow particularly strongly in the years ahead. Employment growth projections, extrapolated from LFS data only and excluding some sub-sectors and freelancers, assume employment growth across the sector of over 4% by 2012 from a benchmark of 2007.¹⁴

Nor should we be surprised by this. The UK economy has been moving steadily towards becoming one of the world's leading knowledge economies for the last 20 years. Today some 33% of the workforce work in jobs that are highly knowledge intensive and a further 27% have jobs with some knowledge content. Those industries at the forefront of this transformation in the value creating base of the economy, such as Creative Media, are increasingly becoming the heavy lifters of economic performance, growing faster than the trend rate of growth in GVA and returning greater levels of value added than older static industrial sectors. Since 1996 manufacturing, for example, has shrunk from 21% to 12% of UK whole economy GVA.

These well documented shifts to a more knowledge based economy are having a number of profound impacts on the organisation of firms, labour markets and the coordination of economic activity – and in turn on the drivers for skills. What then are some of those impacts?

The innovation imperative

Companies must innovate to survive. This means in the future they will need to collaborate more with universities and research institutes, pay more attention to the skills of their workforce, and participate more in the business networks through which knowledge is increasingly diffused. Providers of equity and loan

¹⁴ Working Futures (2007-2017) (2008) SC/IER/CE electronic resource. Please note that the Working Futures projections are based on a model that uses official Government data sources so they do not include facilities, interactive content, Content for Computer Games, freelancers between jobs (LFS) or any freelancers at all (ABI). As such they are likely to be highly conservative estimates of growth.

¹⁵ Knowledge Workers and Knowledge Work, The Work Foundation, March 2009 (http://www.theworkfoundation.com/assets/docs/publications/213_know_work_survey170309.pdf)

¹⁶ http://www.berr.gov.uk/files/file44332.pdf#26

capital have to devise new instruments that take better account of the needs of enterprises, whether start-ups or mature businesses, whose principal assets are intangible knowledge rather than plant and machinery or real estate. This is particularly true for the Creative Media sector.

Vibrant external labour markets for talent

In many knowledge intensive sectors, the boundaries between the firm and the market are shifting as companies increasingly opt to buy people's knowledge and skills on the open market through outsourcing and short-term contracts, rather than hire employees for the long haul. A pattern in which the Creative Media industries are world leaders as illustrated by Skillset's research. More firms are also creating internal network dynamics allowing many more staff to work flexibly – in touch but out of sight. Smaller organisations are increasingly reliant on maintaining relationships and effective supply-chains in order to understand and deliver to their customer.¹⁷

Firms must get the offer to employees and freelancers right and improve the quality of work they offer. Command and control management styles no longer deliver the right results. Companies will need to invest in knowledge more systematically than in the past, which will involve putting more emphasis on innovation. As William Baumol has argued innovation rather than price competition is what drives the market process.¹⁸

The rise of the network economy

In turn, as firms focus more clearly on knowledge as a factor of production, they are organising themselves in new ways. Business networks and collaborative structures are substituting for competition between large integrated firms, partly because firms are increasingly reliant on external as opposed to internal

¹⁷ For a fuller discussion of these points and more detailed research see: http://www.theworkfoundation.com/research/keconomy.aspx

¹⁸ William J Baumol, *The Free Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*, Princeton University Press 2002

knowledge sources. Indeed, some argue that we are approaching a tipping point: the superior efficiency of the "network", underpinned by digital technology, is triggering a new round of creative destruction, and producing unexpected changes in the corporate pecking order. ¹⁹

Sweeping changes are also occurring in the organisation of research and development and in the structure of labour markets. The complexity of the changes underway is evident in the explosive growth in the issue of patents, representing the attempted privatisation of commercially-relevant knowledge, and in the simultaneous advance of the "open-source" movement, which advocates free access within cooperative "knowledge communities".

2.2.2 The Creative Media Economy

From Recession to Growth?

Creative Media has been growing GVA both absolutely and as a proportion of the overall economy. The current recession has damaged it like most other sectors of the economy but it has also been hampered by other changes to market structure. Television in particular has been struggling with advertising shifting to online opportunities. Some 84% of companies say their business has been affected by the recession in the past twelve months with a downturn in commissions received and budget reductions the most common experiences. A quarter of companies report non-payment for completed work, cancelled contracts, or lower overall levels of production. Nearly one third of companies had made or expected to make some staff redundant as a result of the recession. Over half of companies expect the recession to have a long term effect on labour supply for their business, and over three quarters expect it to affect the labour supply to the wider industry throughout the UK. Overall the Creative Media sector is struggling with reduced revenue and difficulties in accessing finance.²⁰

¹⁹ See for example Leadbeater, C (2008) We Think Profile Books, London

²⁰ Skillset (2009) 'From Recession to Recovery'. Based on a sample of 262 employers

However, all indices point to growth in the medium term; the National Endowment for Science, Technology and the Arts (NESTA) analysis for 2009-2013 points to growth as businesses take advantage of digital technologies to develop new business models. Indeed, historically, recessions have played a role in triggering new business start-ups. The 1990s dot.com boom and crash resulted in the birth of the blogosphere and new technology-enabled services like eBay and Skype, largely because many 'technological IT wizards' were made redundant and had time to experiment and create. Technology is an important driver of innovation and innovation is a way of life for the Creative Media industries, which show significantly higher values of innovation than other UK enterprises – (70% as against 55%)²¹.

The underlying reason for optimism in growth for the Creative Media sector is the opening up of new markets and new opportunities globally as a result of digital communications and global supply networks. Already we have seen some phenomenal global growth with UNESCO claiming that trade in cultural goods rose from \$39.3 billion in 1994 to \$59.2 billion in 2002. The EU enjoyed a 52 % share of the world's exports during this time and OECD estimates suggest that the UK is the world's biggest exporter of cultural goods, surpassing even the US: in 2002, it exported \$8.5 billion of cultural goods (compared with \$7.6 billion by the US, and \$5.2 billion by China).

Future trends show no real sign of changing. For example India is anticipating more than 500% growth in broadband capability between 2008 and 2013. China is set to have more than 700 million mobile phone subscribers soon and is adding nearly 100 million subscribers a year. Sterling is also at a very low level when set against other world currencies, such as the Euro, creating a favourable export environment. Indeed during 2009 publishing exports, for example, have increased continuously despite the recession.

2.2.3 The Business Context-Digital Britain

²¹ Includes all Creative Industries, DTI Occasional Paper No. 6. Innovation in the UK: Indicators and Insights, July 2006.

21

²² http://www.indiabroadband.net/india-broadband-telecom-news/11682-india-register-500-growth-broadband-services-within-5-years.html

²³ http://www.pcworld.com/businesscenter/article/148851/china_mobile_phone_subscribers_pass_600_million_mark.tml

²⁴ http://www.statistics.gov.uk/statbase/TSDdownload2.asp

Digital Britain set an ambitious agenda to ensure the UK is at the leading edge of the global digital economy. This includes the urgency of upgrading to a full rollout of digital infrastructure in the UK; the importance of investment in quality Creative Media and online services; and the need to ensure that everyone can participate in the digital society through action on universal connectivity and digital media literacy.

The review of infrastructure as part of Digital Britain included a review of our position globally in terms of both the 'pipes' (technology infrastructure and broadband access) and the poetry (creative content). The report and recommendations identified the potential for the UK to increase its position in the global league table with the right strategic focus from both government and industry. Skills and people were very much at the centre of this analysis and the Digital Economy is now an identified sector of priority as part of the Government's new industrial strategy.

Creative Media is also a frontline sector for filling the gap that may be left behind by a slightly shrunken financial services sector. The comments to that effect by Government ministers and the Chairman of the FSA, Adair Turner²⁵, may turn out to be little more than comments depending on how current and future changes to the regulatory regime affect financial services. Nevertheless Creative Media are a priority sector for Britain's future economic performance.

2.2.4 Opportunities and Challenges - Globalisation

Globalisation offers significant opportunities for the Creative Media industries. In summary these are:

- Growing potential markets for UK-produced content in all formats, across all media:
- An increasing range of foreign competitors with access to the UK market;
- Increasing potential for sourcing services from the UK to overseas ('off shoring').

In all three cases, it is the emerging economies of India and China that will have greatest impact on the UK industry. The growing populations of both countries

_

²⁵ Interview in the September 2009 issue of Prospect magazine

will help to ensure that they maintain their emerging roles as both suppliers and markets: by 2010, India is projected to add 83 million workers to the global economy, China 56 million, and the EU just 100,000. These figures reflect the coming size and shape not only of the labour market, but also the media content market. However, it is currently expected that successfully entering the Chinese market in particular will require both patience and precision, not least as income levels will prohibit consumption of content on a Western scale, even as GDP and average earnings continue their steady increase. The current orthodoxy is to treat China and India as key suppliers in the short term and key markets only in the longer term.

Perhaps of more concern to the UK's Creative Media is the use by different governments of tax breaks and other fiscal incentives to lure producers to site their operations away from the UK. The mooted Irish 5 year tax holiday for example²⁷ for the games industry has got many UK-based games companies lobbying furiously for the Government to uphold the suggestion in the Digital Britain report for a 'cultural tax break'.²⁸ Other countries such as France and Canada already offer attractive incentives through their tax system to the games industry and some commentators have claimed this is offering greater protection to those businesses that are based in Canada and offering an incentive to UK-based industries to de-camp there.²⁹

Clearly with global opportunities comes the threat of genuinely 'footloose' international sectors, such as much of the Creative Media sector. Government support and encouragement is thus vital for these sectors to remain indigenous and competitive.

2.2.5 Competition and Industrial Structure

²⁷ http://www.incgamers.com/News/18919/tiga-on-irish-tax-break-proposals

²⁶ Deloitte 200

²⁸ http://www.incgamers.com/News/20017/

²⁹ http://www.ldpcreative.co.uk/2010/01/gaming-industry-repeats-tax-re.html

It is likely however, that as the processes of convergence progress, competitive boundaries will become increasingly blurred. The common feature of the global opportunities presented by new and developing technology is that they will be beyond the scope and scale of almost all single companies, even large established multinationals or conglomerates. Alliances and partnerships will therefore need to be formed for opportunities to be realised, commonly with companies in technology and telecoms, and sometimes with companies that will be competitors in other markets. Learning how to navigate through this increasingly complex competitive environment may well be a distinguishing feature of companies which survive through the chaotic environment precipitated by the current economic downturn, and those which do not.

Supply chains will necessarily lengthen and the freelance and contract based nature of so much of the Creative Media sector will offer both opportunity and threat to the industry. Supply chain and project management will become an increasing skill need for Creative Media organisations – what Susan Berger describes as coordination capabilities.³⁰

These are the skills that will enable key individuals to coordinate the functions of often disaggregated supply chains. Indeed rather than just needing to coordinate matters inside a single company, individuals need to be able to coordinate activity across many different companies and suppliers – all part of the same supply chain – and as importantly across different cultures.

2.2.6 Convergence and Audience Fragmentation

According to figures from the Internet Advertising Bureau, the web in the UK will take in advertising revenues of £2bn this year, surpassing the combined revenues of the entire national newspaper sector and making the internet advertising market more than half that of the TV industry. Advertising revenues from the internet are growing annually at a far higher rate than from other sources – 40% compared with 10% from the cinema, 2% from TV and actual decreases of 4% from magazines and 0.4% from newspapers.³¹

_

³⁰ Berger, S et al (2005), How We Compete, Currency/Doubleday, New York, NY

³¹ The Advertising Forecast, Advertising Association statistics published by <u>www.WARC.com</u>, Nielson Media Research, World Advertising Research Centre.

Thus, unlike many sectors of the economy, the current challenge for those in most sectors of the Creative Media industry is less about the scale of demand, but its complexion and the ways in which it can be met. In particular, recent years have witnessed fragmentation of markets on a huge scale, meaning that broadcasters and publishers in particular have for some time had to rethink their business models radically. It has long been clear that the traditional media paradigm of broadcasters and publishers providing advertisers with direct or exclusive access to mass markets and relying solely on that revenue source has gone for good. The huge decline in advertising revenue has presented many employers in the sector with profound business challenges long before the rest of the economy began its slide towards recession.

Paradoxically though, it is in fact audience fragmentation which is driving growth in demand – in the last ten years, for example, cable and satellite subscription revenue has tripled, while DVD revenues have increased fifteen-fold and downloading has enabled audiences to access content in more personalised ways.³² In today's more affluent world user autonomy over access is the new gold standard for Creative Media organisations.

2.2.7 Lower Cost Technology and User-Led Innovation and Content

User-led innovation has become increasingly important and several of the UK's existing creative businesses such as web content and video games have been cited as examples of excellence.³³ This includes User Generated Content (UGC) through, for example 'Twitter' and other social media sites and blogs. In the US, UGC site visitors are projected to grow from 69 million in 2006 to 101 million in 2001, with corresponding growth in advertising revenue from \$1 billion in 2007 to \$3.3 billion in 2008.³⁴

³² Media Predictions, TMT Trends, Deloitte 2009.

³³ Annual Review, NESTA, Feb 2009.

³⁴ 'User Generated Content, Social Media and Advertising', IPA, April 2008.

In the UK, around 19 million people in the UK (50% of internet users) visit Facebook, spending an average of six hours per month in May 2008. ³⁵ Social media sites such as Facebook have also opened up their platforms to individuals and businesses to create widgets and have created and developed the structure to support the commercialisation of these applications. The key conclusion is that digitisation and platform proliferation are enabling the enduser far more control over when, where and how they access content. Indeed social networking sites such as My Space, You Tube and Facebook allow large amounts of freedom to self-publish and co-create content which is an added source of competition for professional content providers. This process might best be described as access autonomy – freeing the user to make the critical decisions over where and when creative content consumption occurs.

However, economic and quality factors suggest that sites that had to date focused exclusively on UGC may well have to scale back some of their offerings, and offer content that is more professionally produced, which can generate revenue.³⁶

2.2.8 Intellectual Property and Digital Management

A mass of niche services have been created and with these opportunities come new challenges – peer sharing and privacy for example – challenging content creators' ability to earn from their own intellectual property at a time when budgets have been squeezed.

With format export fees partially replacing lost advertising revenue, the potential for intellectual property theft has been greatly heightened and poses a serious threat to many content producers.

In summary, although the changing landscape is a challenge it also represents a significant opportunity. The Creative Media industries are seen as an important sector in driving the recovery of the economy. Additionally, both the

³⁵ OFCOM Annual Report, 2009.

³⁶ Media Predictions, TMT Trends, Deloitte 2009.

UK Government and the devolved national governments see skills as the key element in increasing both personal and national productivity.³⁷

2.2.9 The Creative Media Workforce

There are an estimated 25,200 Creative Media companies (not including sole-traders)³⁸. The vast majority (77%) of companies are small (fewer than 10 people) with a fifth (19%) of the workforce and 1% of companies are large (200 people and more) employing 35% of the industry's workforce. ³⁹ This is similar to the employment distribution in the wider economy. ⁴⁰ Based on official figures, some 24% of the total creative workforce in the UK is employed outside the creative industries. Not far off the proportion found in financial services (39%). ⁴¹ (Though according to LFS data that includes other creative sectors but excludes some Creative Media sectors and freelancers, the figure is around 35%). ⁴² This helps explain the considerable spillover effects that emanate from those holding a creative content skillsbase.

The Creative Media industry has, like most other industries, suffered at the hands of the recession not least in terms of employment but nevertheless remains a significant employer across the UK.⁴³ Half a million⁴⁴ people work in the industry and a further 130,000⁴⁵ are employed in Creative Media occupations in other industries. In addition Creative occupations, a sub-set of which includes Creative Media and software publishing, have experienced

³⁷ See World Class Skills: Leitch Review of Skills (2006) Department of Business, Innovation and Skills

³⁸ Creative Industries Economic Estimates Statistical Bulletin, DCMS January 2009.

³⁹ Skillset (2006) Employment Census, and Skillset analysis of Experian 2007.

⁴⁰ http://www.statistics.gov.uk/cci/nugget.asp?id=1238

⁴¹ Higgs,P, Cunningham, S and Bakshi, H (2008) *Beyond the Creative Industries: Mapping the Creative Economy*, NESTA, London

⁴² Skillset (2009) Employment Census

⁴³ Evidence includes Skillset's 'From Recession to Recovery', based on a sample of 262 employers consulted during 2009 :one third had made or expected to make some staff redundant as a result of the recession and just over one third had not renewed some freelance contracts.

⁴⁴ Skillset (2009) Employment Census, secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K) and Labour Force Survey, ONS April - June 2009.

⁴⁵ LFS, ONS April-June 2009 and Creative Media Workforce Survey, Skillset 2008

unprecedented growth in recent years and employment has been growing at 2%, comparing favourably with a 1% average for the whole economy.⁴⁶

The Creative Media industry is reliant on a wide range of occupations from creative and technical such as construction, set crafts, web/interactive content design and visual effects, through to management and business roles, all of which benefit from applied Creative Media specific knowledge. Please see Table 2 for a full breakdown of employment by occupation.

Table 2 Occupational Breakdown

OCCUPATIONAL GROUP	Total (%)
Creative Media (excl. publishing)	
Strategic Management	5%
Creative Development	2%
Production	11%
Legal	1%
Broadcast Management	3%
Broadcast Engineering & Transmission	2%
Editorial, Journalism and Sport	5%
Content Development	1%
Art and Design	9%
Animators	3%
Costume/Wardrobe	1%
Make Up & Hairdressing	1%
Camera/Photography	10%
Lighting	2%
Audio/Sound/Music	3%
Transport	*

OCCUPATIONAL GROUP	Total (%)
Publishing	
Managers and Senior Officials	25%
Professional occupations	7%
Associate Professional and Technical	36%
Administrative and Secretarial	12%
Skilled Trades Occupations	4%
Personal Service Occupations	0%
Sales and Customer Service Occupations	5%
Process Plant and Machine Operatives	3%
Elementary Occupations	8%
Total Publishing	100%

⁴⁶ Creative Industries Technology Strategy 2009-2012', Technology Strategy Board 2009.

28

Studio Operations	*	
Technical Development	3%	
Editing	2%	
Laboratories and Imaging Services	5%	
Manufacture	1%	
Servicing	1%	
Retail and Exhibition	10%	
Libraries and Archives	2%	
Distribution, Sales and Marketing	2%	
Business Management	13%	
Other	2%	

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008)Feature Film Production Workforce Survey, and LFS, ONS April-June 2009.

NB: Data for publishing are taken from the LFS Jul-Sep 2009 and due to data restrictions cannot be disaggregated further.

Creativity is recognised as an important driver of innovation and the Creative Industries show significantly higher values of innovation and creativity than other UK enterprises (70% as against 55%)⁴⁷. According to the Technology Strategy Board the Creative Sector, with Digital Creative Media industries at the heart of this sector, is an important stimulator of innovation in the wider economy, via firms they can work with as partners and/or suppliers.⁴⁸ The strong conclusion in a recent NESTA report⁴⁹ pointed to the Creative Industries, (a sub-set of which includes Creative Media and software publishing) and specifically the talent we have nurtured within it, becoming a key driver for the UK's recovery from recession and that the industries will take centre-stage as a major, high growth contributor to the UK economy over the next 5 years.

⁴⁹ Attacking the Recession: How Innovation Can Fight the Downturn, NESTA Discussion Paper, December 2008.

⁴⁷ Includes all Creative Industries which includes software and reproduction of computer media, DTI Occasional Paper No. 6. Innovation in the UK: Indicators and Insights, July 2006.

⁴⁸ Investing in the Creative Industries; a Guide for Local Authorities, Work Foundation, June 2009.

Moreover, perhaps more than any other sector, Creative Media includes much hidden innovation. A report by NESTA⁵⁰ concluded that such innovation was not picked up by traditional methods of measuring research and development. This was due to the way that content providers in the Creative Media sector coproduce much of their content with consumers. This method of co-production, which is having a spillover effect in other areas such as some public service provision, is also creating new forms of business model. Content is being used across different platforms and this is set to be a growing trend and a huge area of value-adding activity by the sector. Finally much of the innovation is unique to the particular product, service or solution being developed and not easily replicable.

The digital future relies heavily on the Creative Media industries and its capacity to generate compelling educational, entertainment, commercial and public service content and services which can engage citizens, learners and consumers around the world. As has been argued above innovation is intrinsic to the sector and encouraging it within education, the existing workforce and industry is critical. The answer to which lies in collaboration between creative and technical drivers of the digital work to research, develop and prototype whilst equipping the workforce of the future and the workforce of today with the right skills to innovate, create and communicate in a digital environment.

2.2.10 Product Market Structure

The core business of the Creative Media industries is to create high quality and professionally produced content across the full range of platforms from mobile phones to Content for Computer Games to film and TV screens. In most sectors of the industry, there are businesses whose exclusive domain is content creation, others which provide a supporting role in that process, and others involved in the distribution, transmission or exhibition of that content. This can be illustrated by reference to the film industry which comprises not only production companies, but significant numbers of businesses in the facilities

_

⁵⁰ Miles,I and Green,L (2008) *Hidden Innovation in the Creative Industries*, NESTA, London

sector who provide services such as studio and equipment hire or post production, and also companies involved in distributing and exhibiting films.

Sectors differ however in terms of the supply chain through which content is created: for example in television, much production is now commissioned by a small number of broadcasters and undertaken externally in the independent production sector. In other sectors, in-house production remains the prevailing model. In some sectors, all content produced is for public consumption (such as Broadcast, Film, Animation, Commercials and Content for Computer Games), in others it is primarily or exclusively for business (such as corporate production) while sectors such as Interactive Content Design and Publishing produce and disseminate content to both people and businesses.

Increasingly the linear value chain and specific supply relationship in place within the sub sectors is being supplemented by an opportunity for the 'content creators' to apply their content to a variety of platforms and distribution channels. 'Interactive or digital media companies' are, from the outset, creating content for multiple use and not for example with a primary use and then to be 'adapted' for on-line purposes. Growing opportunities are seeing a new type of company and dynamic business model becoming the norm.

2.2.11 Employment Profile

Overall, 34%⁵¹ of those working or available for work in the Creative Media industry are 'freelance' and the remaining operate on an 'employee'⁵² basis. It must be born in mind that this is a conservative estimate as the full implications of the recession on freelancing will not be fully understood until further scheduled work is carried out (Skillset's 2010 Creative Media Workforce Survey). Table 3 below shows that many sectors of the Creative Media industries are characterised by high levels of freelancing, especially those areas most closely involved in the production process for example Film Production (80%), Independent Production for Radio (61%), Photo Imaging (60%),

⁵¹ Skillset (2009) Employment Census, ,Skillset/UK Film Council (2008) Feature Film Production Workforce Survey and LFS, ONS April-June 2009.

⁵² 'Freelance' = contract of less than 365 days and 'employee'=contract of 365 days or more.

Corporate Production (54%), Animation (46%) and Independent Production for TV (44%). 53

Table 3: Percentage Freelance by Sector

	%
Sector	freelance
Television	
	28
Terrestrial TV	19
Cable & Satellite Television	11
Independent Production (TV)	44
Community TV	
TV Distribution	
Radio	23
Broadcast Radio	22
Independent Production (Radio)	61
Animation	46
Interactive Content Design	21
Online Content	23
Offline Multimedia	24
Mobile Content	16
Other Interactive Content	
Design	9
Content for Computer Games	4
Content for Computer Games	4
Commercials Production and Pop Promos	41
Corporate Production	54

Ocatan	%	
Sector	freelance	
Facilities	29	
Post Production	24	
Special Physical Effects	44	
Studio & Equipment Hire	40	
Outside Broadcast	24	
Processing Laboratories	12	
Visual FX	12	
Manufacture of AV Equipment	7	
Other Services for Film and Television	42	
Film	31	
	_	
Cinema Exhibition Film Distribution	21	
Film Production		
FIIIII FIOUUCIIOII	80	
Publishing	13	
Book publishing	19	
Newspaper publishing	5	
Journals & periodicals	18	
Other publishing	10	
News Agencies	17	
Publishing of Directories & Mailing Lists	17	
Other info service activities	27	
Photo Imaging	60	
Photographic activity	60	
•		
Archives & Libraries	17	
TOTAL	34	
et/UK Film Council (2008) Feature Film		

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, and LFS, ONS April-June 2009.

⁵³ Skillset (2009) Employment Census, secondary analysis of unit lists for Skillset/UK Film Council (2008) Feature Film Production Workforce Survey and LFS, ONS April-June 2009.

As Table 4 shows freelancing dominates some occupational groups more than others. More than half the workforce in some occupational groups is freelance such as camera/photography (73%), make up/hairdressing (63%), lighting (61%), costume/wardrobe (53%) and audio/sound/music (52%).⁵⁴ This is far higher than the whole economy average which stands at just under 5% of the total number of jobs.⁵⁵

Freelancing dominates the Creative Media sector and contracts vary considerably. Overall, the average number of days worked was 174, a significant drop from 187 in 2005. This works out at 77% of a full working year (based on a working year of 226 days). Studio and equipment hire had the lowest number of days at 147 in 2007 down by 11% on 2005. Content for Computer Games had the highest utilisation rate at 205 days or over 90%. Even in this sector working days were down on 2005 – another indicator of the impact of the recession on the sector. ⁵⁶

Freelancing dominates the Creative Media sector and working patterns vary considerably. The percentage of freelancers who had a contract for their current or most recent work varies greatly by sector. Overall, 69% said that they did. Contracts are most prevalent in terrestrial TV (81%), independent production (75%), other Interactive Content Design (75%), Content for Computer Games and web and internet (both 69%). They are least common in studio/equipment hire (46%), other facilities (51%), corporate production and cinema exhibition (55%). The average contract length at one month was enjoyed by 38% of the freelance workforce, followed by more than one month but less than three, by 26%. Only 16% enjoy a contract of over six months. ⁵⁷

Overall, 55% of contracts contained provision for holiday credits, 23% for sick leave and 6% for maternity/paternity leave. Higher proportions of people than average working in Interactive Content Design, Broadcast radio, and Animation have provision for both holiday and sick leave. Though provision for

⁵⁴ Ibid.

⁵⁵ http://www.contracteye.co.uk/contractor_numbers_uk.shtml

⁵⁶ Skillset (2008) Creative Media Workforce Survey. Excludes Film Production, Photo Imaging and Publishing

⁵⁷ Ibid

maternity/paternity leave is highest in studio/equipment hire, Content for Computer Games and Interactive Content Design, employment of women in these sectors is extremely low.⁵⁸ More sub-sectoral analysis is contained in section 2.7 below.

Table 4: Percentage Freelance by Occupation

Occupational Groups	%
Strategic Management	14
2. Creative Development	39
3. Production	34
4. Legal	15
5. Broadcast Management	42
6. Engineering and Transmission	8
7. Editorial, Journalism and Sport	14
8. Content Development	33
9. Art and Design	37
10. Animators	24
11. Costume/Wardrobe	53
12. Make-Up and Hair Dressing	63
13. Camera/Photography	72
14. Lighting	61
15. Audio/Sound/Music	53
16. Transport	30
17. Studio Operations	20
18. Technical Development	13
19. Editing	42
20. Laboratories/Processing	8
21. Manufacture	11
22. Servicing	13
23. Libraries and Archives	7
24. Distribution, Sales and Marketing	5
25. Business Management	9
26. Retail and Exhibition	50
27. Other	84

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2008) Photo Imaging Workforce Survey, LFS April - June 2009.

⁵⁸ Ibid

Many in the workforce use their skills across sectors which is unsurprising due to the converging media industry. As is shown in Table 5 below sectors where this is most apparent include outside broadcast (72%), post production (61%), animation and independent production for television (49%), in each of which one in four or more is freelance:

Table 5: Percentage Work in other Creative Media Sectors⁵⁹

Sector	% Worked in other Creative Media industry
Television	
Terrestrial TV	34
Cable & Satellite Television	32
Independent Production (TV)	49
Radio	
Broadcast Radio and Independent Production (Radio)	23
Animation	57
Interactive Content Design	
Online Content	34
Other Interactive Content Design	39
Content for Computer Games	19
Other Content Creation	67
Corporate Production	70

Sector	% Worked in other Creative Media industry
Facilities	
Post Production	61
Studio & Equipment Hire	43
Outside Broadcast	72
Manufacture of AV Equipment	13
Other Facilities	40
Film	
Cinema Exhibition	3
Archives & Libraries	31
TOTAL	35

Source: Creative Media Workforce Survey, Skillset 2008.

The typical workforce profile across the industries, with significant variations at sub sector level is; white, male, young and highly qualified:

Table 6: Workforce Profile by age by Sub-Sector

	Mean		25- 34	35- 49	50+
		24			
Television	n	%	%	%	%
Terrestrial TV	42	2	23	48	25
Cable & Satellite TV	37	4	41	41	13

⁵⁹ Skillset (2008) Creative Media Workforce Survey, Figures exclude film production, photo imaging and publishing.

Independent Production for TV/Community TV	39	7	31	40	22
Radio					
Broadcast Radio	40	7	30	42	21
Facilities					
Post production	39	8	30	43	19
Studio/Equipment Hire	37	17	33	32	18
Outside Broadcast	43	1	25	43	30
Transmission	44	2	10	60	27
Equipment Manufacture	43	0	17	63	20
Other Facilities	40	8	31	34	27
Animation	38	5	42	37	16
Content for Computer Games	33	10	49	37	4
Interactive Content Design					
Online Content	36	4	49	37	9
Other Interactive Content Design	38	5	31	41	23
Other Content Creation					
Corporate Production	39	8	36	32	25
Other Content Creation	36	9	44	36	11
Archives & Libraries	41	4	22	50	24
Film					
Cinema Exhibition	29	39	39	17	6
Film Production	43	8	34	42	16
Photo Imaging	42	10	18	44	29
Publishing	37	13	26	33	28
Total	38	9	35	39	17

Source: Skillset (2008) Creative Media Workforce Survey; Skillset/Film Council (2008) Feature Film Survey; Skillset Publishing Sector Labour Market Profile; Skillset (2007) Photo Imaging Workforce Survey

• Representation of women is lower in Creative Media than across the economy as a whole (42% compared with 46%) and varies considerably by sector with more than two fifths in Radio (44%), TV (41%) and Film Production (40%). Female freelancers make up only a third of the workforce overall and the proportion of female freelancers varies from just 22% of the total number in Photo Imaging to half of those freelancing in Publishing. ⁶⁰ Skillset's research has also shown that representation is dropping whereas the opposite is the case for the economy as a whole ⁶². Skillset research has also repeatedly shown that representation of older women is extremely low

⁶⁰ Skillset (2009) Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey and LFS, ONS April-June 2009.

⁶¹ Skillset (2009) Employment Census. Figures exclude film production freelancers, photo imaging and publishing; Skillset (2006) Employment Census

⁶² LFS April-June, ONS 2009; Skillset (2009) Employment Census; Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009; Skillset (2006) Employment Census.

and has identified the cause of this to be the particular challenges of balancing starting and raising a family with working in the Creative Media industry, for example due to long and unpredictable hours.⁶³

- Fewer in the Creative Media industry compared with the economy as a whole is from a Black Asian or Minority Ethnic Background (BAME) (6% compared with 9%) and 24% of London's economy is from a BAME background, which is where three in ten in the Creative Media industry is based. Recent Skillset research has shown that representation of BAMEs in some sectors of Creative Media is on the decrease for example 7.2% to 4.6% in Commercials and Pop Promos and 5.9% to 3.5% in corporate production. Interestingly only 6% of BAME workers are freelance across the Creative Media sector with a low of 3% in Photo Imaging and a high of 9% in Film Production.
- Fewer than one in ten (8%) in the Creative Media industry workforce is disabled⁶⁷ which is lower than across the economy as a whole where 13% is disabled. The figure was 7% for freelancers.⁶⁸
- The Creative Media workforce is young and two fifths (41%) is under 35 years as can be seen in Table 6 above. ⁶⁹ Differences are evident by contract type and sector; 44% of employees compared with 29% of freelancers is under 35 years and around half and more fall into this age category in interactive content design (53%), other content creation ⁷⁰ (53%), studio and equipment hire (50%), animation (47%), cable and satellite TV (45%), although again there are differences between sectors: only 17% of

⁶³ Skillset (2006) Balancing Children and Work in the Creative Media Industries,

⁶⁴ Skillset (2009) Employment Census, Skillset/UK Film Council (2008), Feature Film Production Workforce Survey Skillset (2007) Photo Imaging Workforce Survey and LFS Apr-Jun 2009; All UK: LFS, average of four quarters, 2008. Skillset (2006) Employment Census

⁶⁵ Ibid.

⁶⁶ Ibid

⁶⁷ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009;

⁶⁸ LFS, average of four quarters, 2008.

⁶⁹ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey and LFS Apr-Jun 2009.

⁷⁰ Includes Commercials Production, Corporate Production and Pop Promos.

those in audio visual media are over 50⁷¹, but 29% of those in photo imaging⁷² and 34% of those in publishing.⁷³

- Moreover only a third of people working in the Creative Media sector have dependent children (33%). There are 32% among those working in Photo Imaging who have dependent children and 40% among those working in publishing. This falls to 27% in audio visual and film production.⁷⁴ The whole economy average is over 50%. Freelancers are on average between 3-5% more likely than employees to have no dependent children, reflecting the somewhat greater uncertainty of their working lives.⁷⁵This means a significant proportion of the 59% of people who are married or in long-term relationships have no dependent children, perhaps offering anecdotal evidence of the difficulties of balancing work and other facets of life in the Creative Media industries. Evidence shows this is a particular problem for women who are mothers.⁷⁶
- This assumption is given further credence when average hours worked is examined. Some 50% of the Creative Media workforce regularly work more than 9 hours a day. For 12% 12 hour days are the norm not the exception.⁷⁷ This figure rises to 43% if you are in film production and a further 24% in this sub sector work more than 13 hours a day. Freelancers work especially long hours with contractors getting their monies worth in the audio visual sectors and film production sectors in particular. In audio visual industries 30% of freelancers regularly work more than 10 hours a day compared with just 10% of permanent staff and in Film Production the figure rises to more than two thirds of the total (67%) who regularly work more than 10 hours a day compared with 58% of the permanent workforce. For Photo Imaging the

⁷¹ Skillset (2008) Creative Media Workforce Survey

⁷² Skillset (2007) Photo Imaging Workforce Survey

⁷³ LFS April-June, ONS 2009.

⁷⁴ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey

⁷⁵ http://www.statistics.gov.uk/cci/nugget.asp?id=1163

⁷⁶ Skillset 2006, Balancing Children and Work in the Creative Media Industries,

⁷⁷ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey .

number working 9-10 hours a day is 30% and a mere 7% work for more than 10 hours per day on average.⁷⁸

The Creative Media sector is highly skilled and one of the most highly qualified in the economy; 57%⁷⁹ in Creative Media has a degree or equivalent level 4 qualification compared with 35% of the population of working age across the economy.⁸⁰ Freelancers in particular tend to have degrees (57% compared with 54% of permanent employees over the whole sector).⁸¹

2.4 Recruitment at Entry Level Onwards

Most sectors of the industry have long been characterised by an oversupply of potential new entrants keen to enter an area commonly seen as glamorous and exciting. One result of this oversupply has been a high level of voluntary or unpaid working, undertaken in order to get a foot in the door and a first paid job: more than two fifths (44%) of the workforce in Creative Media report having worked unpaid in order to get into the industry. Formal recruitment measures such as advertising and recruitment agents are still relatively uncommon in most sectors of the Creative Media and a third report entering the industry this way and this reduces to a quarter for those already in the industry. More people in the industry report securing both their first and current job through informal channels such as word of mouth or personal contact. ⁸²

The most common mode of recruitment into first jobs was through response to an advertisement (31%), though less formal modes such as through a friend or relative (22%) or direct contact with a company (19%) are also common. This is quite a different picture to the means through which respondents heard about their current or most recent job, the most common of which was directly from an employer (32%, though only 12% for first job), while fewer respondents report hearing of their current job through an advertisement (24%), than their first job

⁷⁸ Ibid

⁷⁹ Skillset (2008) Creative Media Workforce Survey, ,Skillset/UK Film Council (2008) Feature Film Production Workforce Survey ,Skillset (2007) Photo Imaging Workforce Survey and LFS, ONS Apr-Jun 2009.

⁸⁰ LFS, average of four quarters, 2008. Also see https://almanac09.ukces.org.uk/Skills/D1/Forms/AllItems.aspx

⁸¹ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey ,Skillset (2007) Photo Imaging Workforce Survey and LFS, ONS Apr-Jun 2009.

⁸² Skillset (2008) Creative Media Workforce Survey Figures exclude film production, photo imaging and publishing.

(31%). In other words, less formal recruitment methods become more prevalent once individuals are moving around within the industry than when they first entered it. This is particularly true of outside broadcast (49%); animation (41%); terrestrial TV (41%) and post production (40%). ⁸³

There are some considerable differences between sectors. In particular, responding to an advertisement is most common in archives and libraries (54%), transmission (48%), outside broadcast (47%), and broadcast radio (3%). Entry via a friend or relative is most common in studio/equipment hire (37%), other content creation (36%), and corporate production (35%).⁸⁴

Overall the figures for year of entry to the sector are as follows: 10.5% reported entering the industry before 1980, 16% during the 1980s, 28% during the 1990s, and 42% since 2000. There are some major variations by sector, with higher proportions with longer service (pre-1980) in transmission (24%), outside broadcast (23%), other facilities (20%) and terrestrial TV (19%). The proportion of newer entrants (2004 or later) is highest in cinema exhibition (55%), Content for Computer Games (35%), studio/equipment hire (35%), and other content creation (26%). 85

Lack of information on the range of occupational roles also complicates the picture and employers report that the X Factor generation have little knowledge about wanting to work in the Media and less about how to enter Creative Media professions. This results in an oversupply in most general 'Creative Media roles' and skills shortages in areas like Broadcast Technology and Engineering and the more craft-orientated occupations. Indeed graduates as a proportion of the overall workforce has increased from 66% in 2003 to 73% in 2009. Yet the overall proportion of people with a relevant technical or vocational qualification is low at 7% with some notable exceptions such as broadcast (33%), transmission (25%), studio/equipment hire (16%), and equipment manufacture (13%). 86

⁸³ Ibid

⁸⁴ Ibid

⁸⁵ Ibid

⁸⁶ Skillset (2008) Creative Media Workforce Survey

Table 7 shows the shape of the qualifications landscape across the sector.

Table 7 Highest Qualification Held by Sector and Contract Type

	Graduate Total	Postgraduate qualification in media/related subject	Postgraduate qualification in other subject	Undergraduate qualification in media/related subject	Undergraduate qualification in other subject	A technical or vocational qualification relevant to work in the industry	Any other technical or vocational qualification	A level/GNVQ media or related subject	National/Scottish Vocational Qualification	Modern Apprenticeship/ Apprenticeship	None of these	Base
Sector	%	%	%	%	%	%	%	%	%	%	%	n
Television												
Terrestrial TV	68	18	11	15	24	10	2	2	1	*	17	1,428
Cable & Satellite TV	72	13	5	28	27	8	1	5	*	0	13	204
Independent Production for TV/Community TV Radio	72	15	10	23	24	8	2	2	*	*	16	741
Broadcast Radio	71	22	112	13	24	7	2	2	1	0	18	630
Post production	70	15	7	28	20	9	2	2	0	0	18	179
Studio/Equipment Hire	65	14	2	20	29	16	4	8	0	2	12	45
Outside Broadcast	39	6	4	20	9	33	8	5	0	0	16	75
Transmission	57	5	12	10	30	25	5	0	0	0	12	42
Equipment Manufacture	68	0	26	6	36	13	2	9	0	0	9	47
Other Specialist Facilities	66	8	11	25	22	8	5	0	0	1	20	90
Animation	92	31	12	33	16	1	0	1	0	0	7	104
Content for Computer Games	80	10	27	13	30	2	0	1	1	1	15	104
Interactive Content Design	88	29	15	20	24	4	1	1	0	0	7	229
Other Interactive Content Design	88	13	10	30	35	4	0	0	0	0	9	47
Corporate Production	77	21	11	32	12	7	2	*	*	*	14	148
Other Content Creation	63	18	1	28	18	6	2	2	0	0	27	91
Archives & Libraries	74	24	17	17	16	7	5	0	0	0	15	76
Publishing	45	-	-	-	-	-	-	-	-	-	10	-
Film												
Cinema Exhibition	51	10	11	8	22	5	3	11	1	0	30	214
Film Production	58	7	8	20	37	4	8	16	-	-	12	-
Photo Imaging	43	-	11	-	29	12	-	7	2	1	20	-
Contract Type												
Employees	75	18	15	26	44	17	9	14	2	1	16	2,625
Freelancers	70	19	13	30	35	18	11	15	3	2	19	2,023

Source: Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey and Skillset (2007) Photo Imaging Workforce Survey

Lack of information getting to new entrants – a mere 29% said they had had any careers advice⁸⁷ - coupled with informal entry routes and high qualification entry bars are resulting in serious representational issues (socio-economic, gender and in terms of BAME representation). The main barriers to better recruitment are as follows:

- 1. Across the industry, routes to entry have been characterised by knowing people in the industry and hence risk being seen by those who might not usually consider a career in the creative industries as elitist (for data see above). As such, this sector as a whole is not diverse though there are examples of good practice.
- 2. Demographic change presents considerable challenges to the sector and too often the sector does not follow best practice in its recruitment practices (see above for detail).
- 3. Career paths across the sector are not necessarily well-known or understood by school leavers, graduates or their careers advisors.
- 4. Whilst some employers are doing a considerable amount of training (accredited and non-accredited), the sector as a whole is characterised by a lack of formality or comparability in its approach to training.
- 5. There is a general lack of the right formal qualifications and scepticism over the quality of qualifications provided by many of the existing suppliers. There is also an acute fear of more bureaucracy and red tape.
- 6. People offer themselves free to gain work experience (at school leaver, student and graduate level). This means employers do not need to invest or engage with these volunteers in the same way as they would if they were trainees or employees.

42

⁸⁷ Ibid

Existing over supply in some sub-sectors creates a strong economic disincentive to change

2.5 Retention

The oversupply of people wanting to enter the industry has also had implications for retention as well as recruitment: as already noted, people who choose to start a family commonly find it difficult to combine this with a career in the Creative Media industry and the problem appears more acute for women. It is also possible that the perception of ease of replacement overlooks the value of the skills and experience gained by people leaving the industry typically in their thirties and forties; the industry thus routinely and avoidably loses a highly skilled segment of its workforce to other sectors of the UK economy. ⁸⁸ Such oversights have hidden economic costs. ⁸⁹

This situation is exacerbated by freelancing and ensuring freelancers have skill currency and are agile (available) at times of work fluctuation is an issue for those sectors such as camera/photography, make up/hairdressing, lighting, costume/wardrobe and audio/sound/music, ⁹⁰ where this freelance pool is a significant part of the workforce.

Skillset's Creative Media Workforce Survey 2008 data⁹¹ illustrates that more than 50% of the workforce have always been freelance. There are considerable variations by sector: the vast majority of those in other content creation (84%), other Interactive Content Design (75%), and studio/equipment hire (72%) had always worked freelance, but only a minority in cable and satellite (23%), web and internet (31%), and post production (33%). However more than 40% state they became freelance through redundancy or fear of redundancy while 39%

⁸⁸ Skillset (2006) Balancing Children and Work in the Audio Visual Industries.

⁸⁹ http://www.faqs.org/abstracts/Retail-industry/UK-COST-OF-REPLACING-STAFF-INCREASES-UK-WORKERS-LOSING-OUT-ON-HOLIDAY-ENTITLEMENT.html

⁹⁰ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009.

⁹¹ Skillset (2008) Creative Media Workforce Survey

did so for greater freedom and more control over their working lives and 26% in order to earn more money. 92

Added to which, as noted earlier, recent Skillset research⁹³ has shown that since the recession women and BAMEs are less well represented in some of sectors of the industry. The full implications of the recession on the make up of the industry will be captured in Skillset's 2010 Creative Media Workforce Survey.

Some of these people have, or could end up, leaving the sector at this crucial time, taking their experience and talent with them. The risks these factors pose need to be addressed to sustain the vitality of this strategically important sector.

2.6 The Sub Sector Story

A more detailed breakdown of current skills needs by sub- sector is in section 3 below, for the Creative Media story is a complex one. Each sub sector has particular idiosyncracies and nuances that command attention. Video, film and photography has seen GVA growth of 6% per annum between 1997 and 2007. The other sub-sectors have enjoyed at, or just above, whole economy trend rates of growth of between 2% and 3%. 95

Each of the sub sectors has different labour market characteristics and Table 8 indicates the particular unique labour market characteristic that stands out in each sub-sector of the Creative Media.

Table 8: The Unique Labour Market Characteristics of each Sector

Sector	Unique Labour Market Characteristic
Television	
	Highest proportion of women employed in
Terrestrial TV	any sub sector (48%)
Cable & Satellite Television	Highest proportion of employees at 89%
	4 times the number of freelancers
	compared to cable and satellite and twice
Independent Production (TV)	the rate of terrestrial. Also lowest number

⁹² Ihid

⁹³ DCMS Creative Industries Statistical Bulletin January 2009

⁹⁴ Ibic

⁹⁵ Ibid

	of BAMEs at 7% in sub sector					
Radio						
Broadcast Radio	More evenly spread across the UK					
Independent Production (Radio)	Second highest number of freelancers at 61% of all sub- sectors					
Animation	Only 2% are from a BAME background					
Interactive Content Design	More than 11% work in Wales					
Content for Computer Games	Less than 50 workers in Northern Ireland					
Other Content Creation						
Commercials Production and Pop Promos	Only 46% based in London					
Corporate Production	54% are freelance					
Facilities						
Post Production	96% in England and 80% in London					
Special Physical Effects	88% done in England and the rest in Scotland					
Studio and Equipment Hire	More than half outside London					
Visual FX	Only 500 people employed outside London and hardly any in the other nations from a total of 6,900					
Other Specialist Facilities	95% are in England and 46% in London					
Film						
Cinema exhibition	No freelancers in this sector					
Film Production	Highest number of freelancers at 89%					
Publishing	Highest proportion of non-graduates at 62%					
Book publishing	68% found in England outside London					
Newspaper publishing	Largest number of employees at 58,000 of any sub-sector					
News Agencies	Very few news agencies' workers outside England					
Publishing of Directories and Mailing Lists	And the same is true of this sub-sector					
Photo Imaging						
Photographic Activity	Third highest proportion of freelancers at 60%					
Archives and Libraries	Only employs just over 300 people. Smallest sector.					

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, and LFS, ONS April-June 2009.

As can be seen from the table above there is a wide disparity between different elements of each sub-sector. Some sub sectors are heavily clustered in London and England while others, such as the interactive content industries, have very low numbers of people employed who come from a BAME background. Television production in the independent sector is dominated by freelancers but not as heavily as film production where a lack of any sort of US style studio system means that 9 out of

10 workers in this sub-sector are freelance. Yet if you work in the private sector cable and satellite television industry you will probably be an employee whereas the public sector BBC has far more freelancers.

Some surprising quirks appear such as the low numbers of graduates in publishing compared to other sub-sectors and the relatively small number of book publishers in London compared to publishers in England outside London. Is this a function of the high cost of London's commercial property perhaps?

2.7 Characteristics of the Workforce

Most key occupational groups within the industry operate within a national or international labour market; people will generally need to be willing to travel to wherever work is in order to develop or sustain a career in the industry. Some 55% of people in the sector had stayed away from home overnight in order to fulfil a contract obligation. The sectors in which this is most prevalent are equipment manufacture (94%), outside broadcast (89%), corporate production (75%), and studio/equipment hire (68%). ⁹⁶ More people live in the South East than work there and the reverse is true of London. ⁹⁷

2.8 Recruitment and Skills Issues

There are few differences across the UK in the levels of reported skills gaps or shortages given the wide geographical scope of the labour market. However, considerable debate has taken place around the challenge of nurturing growth and development in the nations and regions outside London. There is perceived to be a lack of senior roles outside London in both management and production. A number of television industry leaders outside London have pointed to the lack of a critical mass of production making it difficult either to grow indigenous talent, or to persuade high-level industry professionals to relocate. London and the South contain just over 50% of all the strategic managers, 56% of all the production staff and 58% of all the creative development staff. London alone has more than a third of all the strategic managers and more than 46% of the production staff and around 39% of all the creative development specialists. It

46

 $^{^{96}}$ Skillset (2008) Creative Media Workforce. Excludes film production, photo imaging and publishing

⁹⁷ Ibid

also has more than 50% of the engineering and transmission specialists to cite just a few examples. 98

The tendency by broadcasters to commission single series only has also been cited as holding back the development of a local talent base as broadcasters tend to want to use known executive producers on programmes, but it is not feasible to relocate talent on the basis of a single commission. Commissioners would therefore need to commit to at least two returning shows in a region in order to facilitate relocating senior talent and to build an indigenous talent pool at other grades. As such, training schemes outside London can only succeed if there are job opportunities once training is completed.

-

⁹⁸ Skillset (2009) Employment Census, Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, and Labour Force Survey Apr-Jun 2009.

3 Current Skills Needs

3.1 Overview

Overall the Creative Media sector is in rude health. It has grown at twice the rate of the whole economy up until 2007 and contributed nearly 7% of the UK's gross value added. By 2017 employment growth in the sector is expected to have reached 40% from the total employed in 1997. Despite the recession growth from 2007 up to 2017 is expected to reach 8%. This works out as 9% in Scotland over this period; 7% in England, 27% in Wales and 13% in Northern Ireland.

It has also created jobs at twice the rate of the financial intermediation sector over the same period. This is good news. And yet, as has been mentioned above, the new general purpose technology of digitisation is transforming industries and sectors across the economy. From high-tech manufacturing to education to health to Creative Media digital mechanisms are transforming business models and ways of working. And Creative Media is a sector highly reliant on and in partnership with the ICT sector.

So it follows that the advances in digital technology represent perhaps the greatest single movement in skills requirements in the Creative Media industries, transforming the ways in which content is produced, aggregated and distributed. New platforms require not only new technical skills, but also the development of new business models, flexible and adaptive management and visionary creative leadership. As with all new technologies their introduction can be highly disruptive and lead to considerable change. Across the Creative Media industries from newspaper publishing to television production organisations are struggling to adapt.

⁹⁹ Working Futures (2007-2017) (2008) SC/IER/CE electronic resource. Please note that the Working Futures projections are based on a model that uses official Government data sources so they do not include facilities, interactive content, Content for Computer Games, freelancers between jobs (LFS) or any freelancers at all (ABI). As such they are likely to be highly conservative estimates of growth.

¹⁰⁰ Ibid

¹⁰¹ Ibid

Traditional production processes are being questioned, and new techniques rapidly move from "cutting edge" to industry standard (think of the recent advances in CGI technology in film production for example). Although the importance of learning the skills to use technology cannot be overstated, the benefits of a fully digital workflow will only impact when production staff embrace and adapt to the collaborative working enabled by new techniques. Such collaborative working creates pressure on senior executives to manage and lead in different ways.

Beyond digitisation the sector has other problems and issues. There is a steady exit of skilled people in their 30s and 40s. As retailers have found, ¹⁰² reflecting the diverse make-up of the general population among your employees is good for the bottom line and yet too few parts of the Creative Media industries reflect such diversity. This in itself will act as a drag on economic success as more diverse organisations tend to be more innovative and thus more economically successful.

There are too many reported barriers to training from employers and employees and freelancers alike. Those sectors that report the most need for training such as animation, post production, outside broadcast and film production are also the most reliant on freelancers who overall receive less training than employees. ¹⁰³ This is because freelancers often cannot, or believe they cannot, afford the luxury of not being available to work.

As Table 9 shows there are also differences between the reported experiences of employees and freelancers. Overall 91% of freelancers and 86% of permanent staff report some difficulty getting training. Far higher proportions of freelancers than employees report virtually every type of barrier. Some of the most striking examples of this include fees being too high (reported by 62% of freelancers vs. 34% of employees), fear of losing work due to committing time to training (37% vs. 7%), and possible loss of earnings. The only barriers more

1

¹⁰² http://innovationzen.com/blog/2007/05/07/the-benefits-of-a-diverse-workforce/

¹⁰³ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey

widely reported by employees than freelancers were difficulty assessing the quality of courses and employers being unwilling to pay for training.

Substantially lower than average proportions of respondents report barriers in post production, Content for Computer Games, other Interactive Content Design, corporate production and cinema exhibition. The prevalence of each type of barrier within each sector largely reflects the extent of freelancing within each sector, bearing in mind the pattern by contract type noted above.

Table 9: Proportion of the Workforce Experiencing Barriers or Obstacles to Obtaining Training by Sector and Contract Type

Barriers	All	All	Audio	Audio	Film	Film	Photo	Photo
			Visual	Visual	Production	Production	Imaging	Imaging
5 0/								
F= %	F	Ъ	F	Р	F	Р	F	Р
Freelance								
P = %								
Permanent								
N/A = not								
applicable								
Lack of	25	21	27	21	23	26	23	24
suitable								
courses								
Fear of loss	31	17	30	17	30	20	33	23
of earnings								
Fees too high	50	38	67	38	30	24	54	49
Domestic	9	9	8	9	5	8	07	4.5
arrangement	9	9	8	9	5	8	27	15
s create								
problems								
Inconvenient	20	21	34	22	8	8	10	6
place								
Inconvenient	23	19	27	19	20	16	16	16
time								
Fear of loss	34	8	35	7	36	24	19	21
of work due								
to early								

commitment to train								
Poor information available	25	27	27	28	23	16	29	27
Difficulty in assessing course quality	27	25	32	25	18	18	37	28
Employers won't pay	18	34	21	36	17	12	13	18
Employers won't give time off	10	26	9	27	12	6	7	17
Lack of employer support	0	5	0	5	N/A	N/A	N/A	N/A
Not enough time	1	2	1	3	N/A	N/A	N/A	N/A
Difficulty taking time off	19	3	N/A	N/A	35	39	35	39
Not enough funds	N/ A	N/A						
Other	6	3	10	3	2	0	2	0

Source: Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey.

The publishing industry in identifying skills gaps have increased the volume of training provided to the existing workforce (43%) and increased or expanded trainee programmes (26%).¹⁰⁴

There are also differences between demographic groups in their reporting of barriers or obstacles to receiving training, as shown in Table 10 below. Men and BAMEs reported barriers to training more than other groups in virtually every category (see below). For instance, in sectors covered by Skillset's 2008

-

¹⁰⁴ http://www.skillset.org/uploads/pdf/asset_14113.pdf?1

Creative Media Workforce Survey, 22% of men report possible loss of earnings compared with 12% of women, while 41% of BAMEs report a lack of suitable information compared with 25% of white respondents, and 34% cite difficulty assessing the quality of courses, compared with 27% of white people.

Table 10: Proportion of the Workforce Experiencing Barriers or Obstacles to Obtaining Training by Gender, Age and Ethnic Origin

	Lack of suitable training in the UK	Lack of suitable training in the region/nation I live/work	Possible loss of earnings	Fees are too high	Training is inconvenient places	Training is at inconvenient times	Domestic/personal arrangements	Fear of losing work through committing time in advance	Lack of information about what available	Difficult to assess the quality of courses	Employers not willing to pay for training	Employers not willing to give time off for training	Don't have enough time	Lack of employment support	No barriers or obstacles experienced	Other	Base
Gender	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	n
Male	24	26	22	42	22	26	9	17	27	33	37	30	3	3	10	5	872
Female	19	19	12	41	17	22	9	13	25	22	32	20	3	4	14	5	685
Age																	
16 to 24	23	22	24	51	26	21	1	21	25	23	31	19	0	4	12	4	80
25 to 34	23	26	20	46	19	24	7	16	24	28	34	23	3	4	12	5	529
35 to 49	21	20	15	37	18	25	14	14	28	29	37	31	2	3	10	4	678
50+	22	23	14	38	23	26	8	16	28	29	30	19	3	3	15	8	250
Ethnic Origin																	
White	22	23	17	42	19	24	10	15	25	27	34	25	3	4	12	5	1,401
BAME	24	21	26	39	25	30	10	18	41	34	41	37	3	0	8	4	148
Total	21	22	17	40	19	24	9	15	25	27	34	25	3	4	11	5	1,580

Source: Skillset (2008) Creative Media Workforce Survey. Excludes film production, photo imaging and publishing

Demand for training and development at the current time is high¹⁰⁵ and more companies consulted in 2009 reported an increase in requests for training

Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey.

(22%) than a decrease since the recession began. ¹⁰⁶ In Skillset's Creative Media Workforce Survey of 2008, the most common areas of training were reported as relating to multi-platform content and new and digital technology (also one in four employers identifying this need). ¹⁰⁷ One in two people declared a current need for training. Six in ten had undertaken training in the previous year, receiving an average of 11 days each (an increase from 7 days in 2005).

This compares favourably with the whole economy average of around 6 days per employee per annum and illustrates the demands new technology is placing on employees to keep abreast of developing skills needs. Comparing employees with freelancers, freelancers were more likely to need training (60%). A smaller proportion of freelancers had undertaken training (43% v. 65%) but those who had taken training had undertaken more (an average of 13 days v. 9 days) For an overview of the most common training patterns see table 11 below.

The older the worker the higher demand for training, especially in digital areas. In sectors covered by Skillset's 2008 Creative Workforce Survey, those who entered the sector before 1969 had the highest demand for training in specific software applications (30%); online/web design/Interactive Content Design/electronic games (18%) new/digital technology (25%) and editing (22%). This is perhaps not such a surprise since digital technologies are relatively recent technologies. Management and leadership training (20%) and specific software solutions (20%) was most sought by those who had entered the workforce in the 1990s. Business skills (13%), production (13%) and post production (12%) training was most in demand from the most recent entrants to Creative Media who joined after 2008. The 1980s cohort were most in need of

¹⁰⁶ Skillset (2009) From Recession to Recovery,. Based on a sample of 262 employers.

¹⁰⁷ Ibid

¹⁰⁸

http://www.cipd.co.uk/subjects/Irnanddev/general/_learning_and_development_summary?vanity=http://www.cipd.co.uk/subjects/Irnanddev/general/_Irngdevsvy.htm

¹⁰⁹ Skillset (2008) Creative Media Workforce Survey. Figures exclude film production, photo imaging and publishing.

specific software applications (20%) while the 1970s cohort wanted training in new/digital technology the most (20%). ¹¹⁰

The sectors with the highest percentages trained are broadcast radio (74%), cinema exhibition (73%), web and internet (66%), and terrestrial TV (64%). The sectors with the lowest proportions are other content creation (33%), archives and libraries (37%), other facilities (43%), and animation (47%). In larger sectors, there are few if any changes since 2005. 111

Classroom based courses are more common than average in equipment manufacture (91%), other Interactive Content Design (84%), and terrestrial TV (78%). On the job training is most prevalent in archives and libraries (69%), cinema exhibition (68%), post production (57%), and cable and satellite TV (50%). Courses delivered using technology occur most frequently in corporate production (35%), and animation (32%). 112

Well over 90% of the workforce value the training they had received and saw it as beneficial. Around three quarters said that it has improved their performance in their current role, and a similar proportion that it had helped them in their general development and broadening of skills. Just over half said it had improved their confidence and less than one in five that it had helped them in any particular other way 113

A large proportion of roles in all sectors are industry-specific and often highly specialised. Many roles are esoteric and require up to date skills with particular machinery or software. There is thus a very wide range of skill areas within the sector, and often a small labour pool from which to recruit too many of those areas. This can mean that in spite of the oversupply of potential new entrants to the industry, serious gaps and shortages can and do occur in particular areas.

54

Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey; LFS Apr – June 2009

¹¹¹ Ibid

¹¹² Skillset (2008) Creative Media Workforce Survey

¹¹³ Ibid

Some of the skills issues that have arisen as a result of the above factors are described below.

Table 11: Training by most frequent type across the Creative Media sector

Training type	Sub-sector	Proportion of workers undertaking training
Specific Software applications	Audio Visual	17%
Health and Safety	Audio Visual	15%
Health and Safety	Film Production	17%
Art/design/camera/construction	Film Production	12% on each area
Specialist software skills	Photo Imaging	35%
Business Skills	Photo Imaging	14%

Sources: Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey. Excludes Publishing

3.2 Skills Shortages

Most areas of the Creative Media industries have long been characterised by an oversupply of potential new entrants. One result of this, as has already been noted, has been a high level of voluntary or unpaid working, with nearly half the workforce in Creative Media reporting having worked unpaid in order to get into the industry¹¹⁴.

The highest proportions of people who had worked unpaid lay in Other Content Creation (75%); Independent TV production and Community TV production (56%); Studio and Equipment hire (55%); Broadcast radio (54%) and Corporate production, other Interactive Content Design and Post production (53%). More than 50% of animators had also worked unpaid. Some 47% of women (compared with 44% of men) had worked unpaid and the 25-34 age group showed the highest proportion of free working at 55%. Around 50% of BAME people compared with 44% of white people had also worked for nothing.

¹¹⁴ Skillset (2008) Creative Media Workforce Survey. Figures exclude film production, photo imaging and publishing.

This requirement to work for love not pay touches more broadly on issues of social mobility. It is less than satisfactory that so many entrants require private means in order to get a foothold in the industry. The recent report by the Panel on Fair Access to the Professions, led by former secretary of state Alan Milburn MP, described the ways social mobility can become ossified which include a lack of proper and openly contestable paid entry-level work. There remains a complacency among employers in the broader sector that must be challenged if growth rates are to continue as expected.

Mismatch of applicants' skills to the needs of the job is a common issue, and experience in work is often a much greater priority than academy qualifications. Expanding new creative apprenticeships across more areas of the Creative Media industries might assist in this regard. 116

Across the Creative Media industries, skills in short supply from new entrants include production skills for multi-platform content, understanding of intellectual property legislation, management and leadership, and commercial acumen. In the Creative Media industries, the most common areas of training identified by employers are related to new and digital technology (one in four people). ¹¹⁷ In addition management and leadership skills to take advantage of and monetise this content are a priority for the sector (cited by one in ten people) ¹¹⁸.

Multi-skilling competence is a significant requirement of digital media workflow, from content creation and production to metadata management. Yet there is a shortage of new people in the industry equipped with 'T-skills' - highly specialised in one core field, but with broad skills and knowledge to utilise their specialism across teams and platforms¹¹⁹.

¹¹⁵ http://www.cabinetoffice.gov.uk/media/227102/fair-access.pdf

¹¹⁶ http://www.ccskills.org.uk/Qualifications/CreativeApprenticeships/tabid/82/Default.aspx

¹¹⁷ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers.

¹¹⁸ Skillset Archives Skills Strategy, 2009; Skillset (2008) Creative Media Workforce Survey. Figures exclude film production, photo imaging and publishing.

¹¹⁹ A Skills Review for the TV & Radio Sector, Skillset, 2009; Skillset/UK Film Council Feature Film Production Workforce Surveys 2005 and 2008. Figures exclude photo imaging and publishing.

Broadcast engineering has long been recognised as a skills shortage area¹²⁰. A combination of lack of new recruits; inappropriateness of training provision in further, higher and commercial education; an ageing profile of the workforce; lack of a framework for continuing professional development; and the rapid impact of technological change has meant that many companies feel this area is a priority for action¹²¹.

Visual Effects (VFX) is dependent on highly specialised technical and artistic skills that are also in considerably short supply globally. Visual effects companies are recruiting from all over the world to meet that demand for specialised technical roles, and VFX has been placed on the Home Office skills shortage list 122.

Table 12: Most cited training needs

Training needed	Sub-sector	Demand for training				
Management and Leadership	Audio Visual	13%				
Online, web design, interactive content or Content for Computer	Audio Visual	All 11%				
Games; business skills and editing	Film Production	19%				
Finance / Business / Marketing/ Management	Film Production	19%				
Art / Design	Film Production	16%				
Camera	Film Production	13%				
Business skills	Photo Imaging	18%				
Specialist software skills	Photo Imaging	48%				
Colour management	Photo Imaging	13%				

¹²⁰ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers and Skillset Submission to the Development of MAC Shortage Occupation Lists, 2009

57

¹²¹ Final Summary Report from the M.TEST Project and Recommendations, Skillset/IABM, February 2009.

¹²² Skillset Submission to the Development of MAC Shortage Occupation Lists, 2009.

Source: Skillset (2008) Survey of the Creative Media Workforce; Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey

Comparing the training most frequently undertaken and the training most often cited as being required, it is easy to see the lack of supply around areas of technical skill requirements and more general leadership, management and business skills that employees want but do not seem to get.

3.3 Skills Gaps

One in two companies in the Creative Media industries reports skills gaps, ¹²³ and the most commonly reported are those concerned with specific software applications, and understanding and exploiting digital technological advances. New skills are needed to meet demand for quality content on *any* platform; this multi-platform capability is the second highest skills gap among the workforce ¹²⁴. The most recent research shows this is one of the top three skills gaps resulting from the recession, cited by one in four ¹²⁵.

Management, leadership and business skills are major development needs across the workforce in all Creative Media industries, particularly in relation to project and production management for multi-platform (see training demand table 12 above)¹²⁶. On a senior management level, gaps in negotiation and leadership skills are frequently associated with the challenges of managing the change from traditional to digital.

Overall, Creative Media professionals need to become increasingly multi-faceted. Ideas often need to be multi-disciplinary and media neutral so that they can be applied down a number of channels. The increasing importance of digital content has led to a growth in the value of specialists in this discipline, expanding existing roles and creating entirely new roles. This has the knock on effect of increasing employee churn and higher salaries. Across industry, people are required to have a broader understanding of technologies related to their function, be it software, hardware or communication technology.

¹²⁵ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers.

¹²³ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers.

¹²⁴ Skillset (2008) Creative Media Workforce Survey

¹²⁶ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers; Skillset (2008) Creative Media Workforce Survey; Skillset (2009) A Skills Review for the TV & Radio Sector.

3.4 Skills Supply: The External Versus the Internal Labour Market Conundrum

Perhaps the most interesting facet of the Creative Media sector is the fact that it is so atypical of the general labour market with its heavy reliance on freelancers. Most of the last century our economy has been dominated by employment rather than self-employment. ¹²⁷ This leads many observers to conclude that such an atypical situation is in need of correction in order to conform with the mainstream. Yet this is to miss the point about the unique dynamics of the sector with its concentration of small organisations and sole traders. The industrial structures and institutions have not emerged in many of the sub-sectors to support organisational labour markets of the kind that typify many other sectors. This is because of the nature of the project based work on offer across the sector and the need to keep overheads low and margins sharp.

Intrinsically this type of external labour market has many advantages to employers – flexibility, adaptability, the speed of matching skills to task, lower fixed costs, and lower management costs. These vibrant external labour markets are a source of competitive strength to the sector, which need to be enhanced in such a way that some of the downsides for individual contractors are minimised. For example some academics have described the evolution of the creative industries' labour markets as being like the introduction of a 'tournament' culture to these industries. ¹²⁸ In short this means that aspiring entrants compete with each other for no, or little, financial reward in order to gain network and social capital that will enable them to join their chosen profession and be paid for their skills.

People who work in the Creative Media industries quickly accommodate to the higher levels of labour market insecurity their chosen professions lead to. In these industries you are often only as good as your last commission which is why awards are such an important element in badging and branding quality and success - perhaps far more than qualifications in some parts of the sector. They assume that their external labour market situation is the norm, not the

¹²⁷

http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&hdAction=Inkhtml&contentId=872020

¹²⁸ Guile,D (2009) Learning to work in the creative and cultural sector: new spaces, pedagogies and expertise

exception, and embrace the fact that their external or secondary labour market is in fact - for them - a primary labour market. Adaptability is a key aptitude of the Creative Media worker.

3.4.1 Skills Supply: the Education System

The sector as a whole is also characterised by high levels of level 4 and above qualifications. Nearly 60% of the sector have degrees and many in media related subjects. This compares with just 27.3% of adults between 16 and 64 who held level 4 qualifications or above across the whole UK workforce in 2007. 130

Between 2002 and 2008 entries to media studies courses rose by 27%, to journalism by 73%, to cinematics and photography courses by 51% and other creative arts and design courses by a staggering 767%. This suggests that higher and further education providers are even more important to this sector than other sectors. Reflecting this, there are 13,000 media programmes at Further and Higher Education levels serving an estimated 50,000 students.

Despite this growth in provision, until recently employers have expressed concerns about the course content of many higher education providers. However with the establishment of the Skillset Screen and Media academies and Accredited courses there is now greater dialogue and greater communication between higher education and the industry, with a strong emphasis on tutor placements and good practice in curriculum development design and delivery. This is resulting in education programmes at all levels being seen as meeting the needs of the Industry although more work needs to be done.

An important step change has been that the Screen and Media Academies are offering not only entry level type programmes at Foundation Degree and undergraduate level, but also short courses and CPD for experienced

131 http://www.universitiesuk.ac.uk/Publications/Documents/Facts_creative%20sector09.pdf

¹²⁹ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS 2005 (publishing total employed) and LFS Apr-Jun 2009

¹³⁰ Annual Population Survey, NOMIS. Residents aged 16-Retirement

professionals with a wider range of business development and applied research programmes.

As a consequence employers are becoming much keener to promote greater uptake of Sector Skills Council backed courses and accreditation services, which identify provision that best meet industry needs. For example Foundation degrees have already proved to be a success in enabling better access to careers due largely to the work placement element of the course. This helps foundation degree takers to gain a foothold in the industry and build up much-needed social capital at an early stage in their careers.

Barriers remain in creating cross-disciplinary pathways in education that would add significant value for the Creative Media industry. To support progression there is a need to bring students together across disciplines to collaborate, innovate and pursue new research and development. Industry needs to be more engaged with Higher Education to help shape provision, support delivery and provide work experiences that enable graduates to become more work ready.

Work is now also underway to position the Skillset Academies and Accredited Courses as the suppliers of higher level professional Skill development and applied research, however this needs to be accelerated and the need for brokerage between Industry and the providers needs to be recognised and funded.

In the school system there are significant issues with careers advice. Students generally are not receiving high quality advice to help them understand the opportunities across the digital sectors and make appropriate subject choices. Too many careers' advisors have only a shady knowledge of how to advise students interested in a career in the Creative Media industries. The degree of network capital required to enter many of the professions is also a handicap. The online site Skillset Careers has been established to help rectify the gap of relevant careers information, advice and guidance for the Creative Media industries.

3.4.2 Skills Supply: Workforce Development

-

¹³² www.skillset.org/careers.

Demand for training remains high in the Creative Media industries. In Skillset's Creative Media Workforce Survey of 2008, the most common areas of training were reported as relating to multi-platform content and new and digital technology (one in four employers identifying this need). One in two people declared a current need for training. Six in ten had undertaken training in the previous year, receiving an average of 11 days each (an increase from 7 days in 2005). Comparing employees with freelancers, freelancers were more likely to need training (60%). A smaller proportion of freelancers had undertaken training (43% v. 65%) but those who had taken training had undertaken more (an average of 13 days v. 9 days)¹³³.

Barriers to training are also a challenge for the Creative Media industries. In the 2008 survey, nine in ten in the Creative Media industry workforce reported barriers or obstacles to training. Overall, the most common were that fees are too high (40%), employers were unwilling to pay for training (34%), and it was difficult to assess the quality of courses (27%). There were considerable differences between the experiences of employees and freelancers. A far higher proportion of freelancers than employees reported virtually every type of barrier. For example, freelancers were more likely to say fees were too high (reported by 62% of freelancers vs. 34% of employees), and to fear losing work due to committing time to training (37% vs. 7%). The only barriers more widely reported by employees than freelancers were difficulty assessing the quality of courses, and employers being unwilling to pay for training ¹³⁴. More recently, one in two Creative Media companies said their ability to deliver training has been affected by the recession ¹³⁵.

A particular issue in terms of workforce development for the digital economy is the key role of leaders and managers in the Creative Media industries in creating new business models and exploiting the opportunities provided by digital platforms. SMEs in particular need help, which is not currently widely available, to understand the potential, find new approaches to content creation and Intellectual Property exploitation, and develop new business models for growth.

¹³³ Skillset (2008) Creative Media Workforce Survey. Figures exclude film production, photo imaging and publishing.

¹³⁴ Ibid.

¹³⁵ Skillset (2009) From Recession to Recovery. Based on a sample of 262 employers.

3.4.3 Skills Supply: Diversity

A particular issue in terms of skills supply into Creative Media industries is the changing profile in terms of women and Black, Asian and Minority Ethnic representation (see Table 13), which has fallen sharply in recent years in some sub-sectors, along with an increase in people leaving the industries in their thirties and forties ¹³⁶.

There is considerable variation across the sub sectors. Some such as television, radio, film and publishing and some areas of facilities at least have female representation above 40%. However for the games industry the story is nothing short of shocking. Moreover no sub sector performs very creditably when it comes to representing people from BAME backgrounds.

Table 13: Diversity by Sub-Sector

	%	
Sector	Women	% BAME
Television	41	9
Terrestrial TV	48	9
Cable & Satellite Television	36	12
Independent Production (TV)	38	7
Radio	44	7
Broadcast Radio	45	7
Independent Production (Radio)	30	4
Other Content Creation	14	4
Commercials production and Pop Promos	15	5
Corporate production	14	4
Animation	19	2
Archives & Libraries	16	4
Interactive Content Design	6	4
Online Content	6	5
Offline Multimedia	5	0
Mobile Content	1	0
Other Interactive Content Design	3	1

Sector	% wome	n %BAME
Sector	WOITIE	II /0DAIVIL
Facilities	26	7
Post Production	12	5
	12	5
Special Physical Effects	36	5
Studio & Equipment		
Hire	23	8
Manufacture of AV		
Equipment	34	4
Other Services for Film		
and Television	33	8
Processing		
laboratories	46	17
Outside broadcast	9	3
Visual FX	19	8
Film	41	6
Cinama Exhibition	40	4
Cinema Exhibition	43	4
Film Distribution	41	7
Film Production	43	4
Publishing	47	6
-		
Photo Imaging	43	3

¹³⁶ Skillset (2008) Creative Media Workforce Survey; Skillset (2006) Balancing Children and Work in the Audio Visual Industries; Skillset (2005) Survey of the Audio Visual Industries' Workforce; Skillset (2003) Workforce Survey.

63

Content for Computer Games	6	3
Games Development	7	3
Games Publishing	3	0
Games Development Support	2	18

Similarly as indicated by Table 6 on page 33 age is also an issue of some concern to the sector, mainly because in some sub sectors so many people are comparatively youthful – take cable and satellite television for example where more than 45% are under 35; and in some there is a predominance of older more experienced people who will reach retirement age in the next decade or two – see for example transmission where over 87% are over 35 and 50% aged 35-49, or outside broadcast where 74% are over 35, or archiving and library work where 73% are over 35.

3.5 Sub-Sectors

Television

Overview

Television is one of the major sub sectors within the Creative Media industry. It comprises broadcast television, cable and satellite television and independent production. Current estimates suggest that around 50,000 people are employed across the sub sector in the UK. The majority of jobs - around 43% - are in the Independent Production sub-sector while broadcast and cable and satellite respectively enjoy 31% and 25% of the total. Moreover the Independent sector is made up of mainly small companies (some 90% employ less than 50 people) though some companies operate at scale.

An estimated 34,000 people work in Broadcast TV in the UK. ¹⁴⁰ The BBC is the largest employer and producer of the Public Service Broadcasters (PSBs). The broadcast TV industry comprises just over 300 businesses including the eight terrestrial broadcast TV companies (BBC, ITV, Channel 4, Five, S4C, STV UTV and Channel Television). In addition to the main terrestrials there are around 300 cable and satellite companies and a growing number of community TV companies, which share the analogue spectrum of 18 Restricted Services Licences.

Broadcast TV, like the rest of the Creative Media industry, is characterised by a much higher proportion of freelance and short-term contract working than the economy as a whole. Overall, 28% of the TV sector works freelance (though figures vary from 44% in Independent Production to 11% in cable and satellite TV). The sector also draws on the Facilities and Animation sector for support. The sector is highly qualified with 71% of workers holding a degree.

¹³⁷ Skillset (2009) Employment Census and Labour Force Survey April - June 2009.

¹³⁸ Ibid

¹³⁹ Skills Review: A Skills Review for the TV and Radio Sector: A Report for Skillset, Ofcom and BTSR (May 2009)

¹⁴⁰ Skillset (2009) Employment Census and Labour Force Survey April - June 2009.

¹⁴¹ ibid

¹⁴² Skillset (2008) Creative Media Workforce Survey

Around two thirds of the TV industry (66%) is based in London, but there are creative clusters in cities around the UK. The North West is the second largest centre of activity, with 10% of the workforce, but there are both broadcasting and production companies in Glasgow, Cardiff, Bristol, Birmingham, Leeds and Liverpool, among others.

A number of factors suggest a growing importance for the TV sector as an employer within the Creative Media industry. These include:

- Developments in high definition, interactive and online television together with professionally produced content which have strengthened the sector in the face of pressure from user generated content;
- Proliferation of digital TV channels providing an increasing market for the independent production sector;
- Regulatory and other commitments to increase output outside of London including commitments by the BBC.

Demand for training by the TV sector workforce according to respondents to the Skillset 2008 Creative Media Workforce Survey in the three main sub-sectors remained high at more than 50% of respondents but down on the more than 60% of 2005. The most requested training was in 'editing' (11% of respondents), software specific to the industry (16%) production (10%) and camera training (8%).¹⁴³

Skills Shortages

These include:

 A shortage of skills in special effects generation (which is also a problem in the context of the film sub-sector);

 A shortage of leadership and management skills within independent production companies cited as a training need by 13% of the workforce¹⁴⁴

¹⁴³ Skillset (2008) Creative Media Workforce Survey.

¹⁴⁴ Skillset (2008) Creative Media Workforce Survey

- A shortage in higher level business skills, including management and leadership, amongst senior executives (e.g. in securing multi strand funding packages and brand sponsorship for commercial TV projects);
- A shortage in entrepreneurial skills (and confidence) both in terms of those employed at various levels within the industry, and also amongst freelancers, particularly freelancers who may have been forced to take this route as a result of redundancy.¹⁴⁵

Current Skills Gaps

- Company training needs tend to span a range of subject areas.
- Over half (55%) of the TV workforce had received some training. This varied from two thirds (64%) of the broadcast TV workforce, to 53% of the cable and satellite workforce and 48% of the independent production workforce. Two thirds (64%) of permanent employees working in the TV industry had received some training compared to just 37% of freelancers.
- On average the TV workforce received 5.1 days training. Individuals working
 in independent production received the greatest number of days training on
 average (5.5 days) compared with an average of 4.9 days for both the cable
 and satellite and broadcast TV workforce. Freelancers received an average
 of 3.7 days, compared to the 5.9 days received by employees. 147
- The TV workforce were most likely to have received training in health and safety (19%), specific software applications (16%), editing (14%), camera (11%), production (10%) and ethics/safeguarding trust (9%). ¹⁴⁸
- Employers noted a need for higher level technical skills for assistant producers for example and broader transferable skills ('T-skills') particularly in relation to core business and entrepreneurial skills¹⁴⁹

¹⁴⁵ Skills Review: A Skills Review for the TV and Radio Sector: A Report for Skillset, Ofcom and BTSR (May 2009)

¹⁴⁶ Skillset (2008) Creative Media Workforce Survey

¹⁴⁷ Ibid

¹⁴⁸ Ibid

Future skills

In terms of identifiable skill needs in the future, the main focus for the TV subsector seems to be:

- Programme innovation;
- Deal structuring;
- Cross media ownership;
- IP issues;
- Extended scheduling skills.

The skills will be most needed in commissioning, scheduling, transmission and distribution, followed by production and post production, and lastly concept development. All skills will need to be applied across a variety of output platforms. ¹⁵⁰ Underpinning these skills areas, high quality management skills will increasingly be in demand, including:

- Asset exploitation and management;
- Risk management;
- Project management;
- Partnership and investor relation management;
- Marketing and promotional management.

Finally, technical expertise will continue to be highly important as digitisation continues to increase the technical content of the Creative Media Industry processes, products and services.¹⁵¹

¹⁵¹ Skills Review: A Skills Review for the TV and Radio Sector: A Report for Skillset, Ofcom and BTSR (May 2009)

¹⁴⁹ Skills Review: A Skills Review for the TV and Radio Sector: A Report for Skillset, Ofcom and BTSR (May 2009)

¹⁵⁰ Ibid

Film

Overview

The Film sector in the UK has much latent potential and is a repository of fine technical talent. Indicative findings also suggest that the sector enjoys relatively strong levels of workforce diversity: 43% of the Film Production workforce is female. This despite the reportedly long hours and intensive culture associated with film - with 43% of the sub-sector's workforce across the UK reporting that they worked between 11 and 12 hours a day. The sub-sector has a 6% representation of BAME groups across the UK Film sector (4% in Film Production). Around 3% of the UK Film Production sub-sector consider themselves to be disabled with 42% of these reportedly below 35 years of age.

The sector also appears to be holding up in face of pressures from the recession. Despite a drop in advertising budgets and a 15% fall in spending on UK productions in the first 9 months of 2009, inward investment was at an all time high, while cinema going remained buoyant. ¹⁵⁶

The nature of the Film Production sector raises concerns surrounding retention. The Film Production sub-sector is characterised by very high levels of freelance working – 89% – suggesting a highly mobile workforce. Associated with this finding, 85% of the surveyed UK Film Sector workforce stated that they had received no training over the previous year. 158

Skillset (2009) Employment Census; Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey and LFS Apr-Jun 2009

¹⁵³ Although it might be surmised that the long hours are worked for blocks of time associated with film shoots, rather than on an ongoing basis.

Skillset 2009 Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey and LFS Apr-Jun 2009

¹⁵⁵ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey.

¹⁵⁶ Skillset/UK Film Council (2008) Feature Film Production Workforce Survey

^{157.}lbid

¹⁵⁸ Ibid

Production occupations are most numerous; 24% of the workforce reportedly working in this role. Similarly, 23% work in Art and Design and 10% in Camera/Photography jobs roles giving rise to concerns that freelancing may be overly concentrated in these sub-sectors. ¹⁵⁹

Skills gaps and shortages

Data from the Skillset/UK Film Council Feature Film Production Workforce Survey 2008 revealed that First Aid/Health and Safety was the most frequently undertaken training in the UK Film Production sub-sector. 17% of the workforce undertaking training in the last 12 months, received this type of training. Art/Design, Camera and construction were all undertaken by 12% of those receiving some training. Overall, freelancers tended to undertake less training than those permanently employed, though much of this finding can be put down to regulatory/compliance and business administration training being mainly undertaken by permanent workers. For specialist technical areas, the percentages trained were broadly similar.

Of the UK Film Production sector 52% stated they needed training in the future. Of these, 19% mentioned they were looking to up-skill on core business skills – (including finance, leadership and management, marketing and management). Interestingly, the percentage of freelancers requesting training in core business skills was much higher than the percentage that had recently received training this area. Some 16% required training in art/design, 13% camera, 12% general computer/administration skills and 8% technical skills in editing/post production/digital production/visual effects. ¹⁶⁰

Further research on skills gaps and shortages has revealed that current generic skill needs in the context of the film sub-sector included: 161

Negotiation and diplomacy (with colleagues and customers);

¹⁵⁹ Skillset (2009) Employment Census and Source: Skillset/UK Film Council (2008) Feature Film Production Workforce Survey. Caution should be taking in drawing conclusions based on these findings due to sample sizes

¹⁶⁰ Skillset (2008) Creative Media Workforce Survey, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey.

¹⁶¹ Skillset (2009): Film Sector Employers Skills and Training Needs in Production, Distribution and Exhibition

- Management and leadership (for example, team motivation and conflict resolution);
- Commercial skills (commercial acumen, knowledge of the firm's value chain, finance for non-finance managers).

Moreover, current specialist skills needs include: 162

- Shortage of production accountants due to low pay relative to other sectors;
- Development executives with insight and commercial acumen;
- Location managers with up to date knowledge of legal developments;
- Producers with commercial acumen;
- Experienced crew spread throughout the UK;
- Information Management (including market analysis) using ICT;
- Business models for small businesses;
- Film buyers with commercial insight from marketing or audience perspective;
- Fundraising for small businesses;
- Exploiting new business opportunities (corporate events and lets);

It is anticipated that future skill needs within film will centre on developments in new digital technology. Specifically, this will require skills in change management and exploiting opportunities such as online and digital sales as well as dealing with threats such as file sharing. Respondents also noted the need to:

- Keep up to date in camera technology;
- Data management (particularly in relation to the logistics of tracking master materials in digital format);
- Health and safety (especially risk assessment by HoD and Producers);
- Availability of construction and lighting crew (as a result of the Olympic Games in 2012 likely to take up much of this capacity);
- Management level training around new business models

. .

¹⁶² ibid

¹⁶³ ibid

Radio

Overview

The radio industry consists of around 350 organisations, independent stations and other companies comprising BBC Radio, around 120 commercial radio groups and independent stations, 180 community radio stations and up to 50 independent production companies for radio.

The radio industry is characterised by a small number of large radio groups and a large number of smaller groups and independent stations. The BBC, Global Radio and Bauer dominate the landscape of 'traditional' larger businesses and between them now account for a high proportion of the radio sector workforce. Current trends point towards increasing listening through digital platforms, a shift in balance from public service to commercial radio at national level, and growth of community radio. The community sector contains a range of non-profit organisations offering radio services to specific communities on a local level. It includes student radio, hospital radio and British Forces Broadcasting Services

The sector's employment profile shows somewhat higher levels of diversity than that found in other parts of the Creative Media Sector with the second highest ratio of female workers at 44% of any sector. Though that falls to just 30% in the independent sector. Representation from BAME groups is around 7% Overall, a quarter of the workforce is freelance, but substantially more in radio broadcasting (37%) and production (33%).¹⁶⁴

Key developments and trends in the UK radio market include:

Falling demand and revenue: average weekly listening hours fell every year between 2003 and 2008, and in total by 9%.165 Radio's share of advertising has fallen by more than one-fifth in this period. 166

72

Skillset (2009) Employment Census; Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey and LFS Apr-Jun 2009

¹⁶⁵ OFCOM 2008 The Communications Market: Radio

¹⁶⁶ ibid

- Increased competition: across the UK with 9% more stations in the UK in 2008 than 2003.
- Increased use of Digital technology: Recommendations in Digital Britain report are for an analogue to digital 'migration' of the majority of radio services in the UK by 2015. 168 30% of UK households were thought to have DAB Digital radio in 2008 compared to 2% in 2003. 169
- Increased demand for multi platform output and content: A third of adults had listened to radio online, according to the RAJAR internet and audio services survey carried out in May 2009. This was up from 29% a year earlier and 24% 18 months ago.

All this points to future skills demand not only in relation to core roles - like sound and broadcast engineering - but also, increasingly, in relation to digital technology and multi platform / multi-media content.

Skills Shortages

The evidence indicates that craft skills remain a high priority for the sector especially in the field of digital content. T-skills are in short supply with people who are technically expert but also in possession of strong creative skills and communication skills such as teamwork. Entrepreneurialism, management and general business acumen is still lacking in much of the sector. In particular having managers who can coordinate many functions and understand all of them. Finally sales and marketing skills are missing at a sufficiently high level across much of the sector.¹⁷⁰

Skills Gaps

Two thirds (65%) of UK Radio sector employers were found to carry out some form of training or development for permanent employees.¹⁷¹ The figure was lower (52%) for freelancers. The most common mode of training for freelancers delivered by Radio employers is through in-house training sessions carried out

¹⁶⁷ OFCOM 2008 The Communications Market: Radio

¹⁶⁸ OFCOM 2008 The Communications Market: Radio

¹⁶⁹ OFCOM 2008 The Communications Market: Radio

¹⁷⁰Skills Review: A Skills Review for the TV and Radio Sector: A Report for Skillset, Ofcom and BTSR (May 2009)

¹⁷¹ Skillset (2009) TV and Radio Review Appendix 1

by another member of staff (96%). Structured support on the job by another member of staff is also a common method of training freelancers (87%). ¹⁷² Overall, 51% of the UK Radio workforce were thought to have unmet training needs. ¹⁷³. Eight in ten (79%) Radio employers offer work experience or work placement posts to potential new entrants which is larger than the proportion of Creative Media employers as a whole who do this (67%). Almost half (48%) of radio employers said that they were prevented from undertaking training/development more often. Of this group, the main reasons given for the problems faced with training was that it is too costly (78%) and that they do not have enough time (51%). ¹⁷⁴

172 Ibid

¹⁷³ Skillset (2009) Current and Future Skill Needs in the UK Television and Radio Industry

¹⁷⁴ Skillset (2009) TV and Radio Review Appendix 1

Animation

Overview

Animation is a strong sector within the Creative Media industries with Nick Park's Aardman Animations trailblazing a global reputation for the quality and craftsmanship of UK animators in recent years. The Animation sector employs around 4,300 people of which 46% are freelance, 19% female and only 2% from a BAME background. The animation workforce has healthy clusters in Wales and Scotland (9% and 12% respectively of the total UK workforce) and 20% are in London. However the greatest concentration is in the South East which has 38% of the total workforce.

Animation underpins many other sectors of the Creative Media industries – providing visual effects for post production, animated films and television. However, the sector's reliance on other Creative Media industries such as television, means it is susceptible to changes in those industries. Furthermore, the UK sector is seeing competition from low cost but increasingly highly quality producing international competitors from countries such as Malaysia and from tax-friendly regimes in other countries. ¹⁷⁷

Skills Needs

Growth in computer generated animation has opened up new markets but not adversely affected traditional techniques such as stop frame animation. However, falling advertising revenues for children's programmes – linked to new restrictions on advertising to children - have seen a reduced number of broadcasting commissions for animation. ¹⁷⁸ Indeed animation productions made in the UK have more than halved in the last five years. ¹⁷⁹

This is giving rise to demands for a highly skilled but flexible workforce able to adapt to the growing market for online content. Increased outsourcing is also

¹⁷⁵ Skillset (2009) Employment Census

¹⁷⁶ Skillset (2009) Employment Census

¹⁷⁷ http://news.bbc.co.uk/1/hi/entertainment/8225954.stm

¹⁷⁸ Ofcom and PACT

¹⁷⁹ http://news.bbc.co.uk/1/hi/entertainment/8225954.stm

likely to reduce the demand for animators and increase the demand for preproduction artists. The need for technical skills such as software development and core business skills such as client liaison – e.g. working with clients to develop briefs – financial management and marketing are also likely to continue to grow, especially as television commission for higher cost productions are being constrained by ever tighter budgets. ¹⁸⁰

Skill Shortages

There is some indicative evidence of recruitment difficulties (though not necessarily skill shortages) in respect of producer roles, and at assistant producer level as with television and radio.¹⁸¹

Skills Gaps

Some 47% of the sector had received training in the last year with 37 days training per head received. This is nearly twice as much training per head as the next sector and indicates what an resource intense industry animation is. More than 50% of training fees were paid by the employer and 99% of those trained found the training of direct benefit. Over 65% of those employed in the sector are seeking training in areas identified as needed by the sector. While the major barrier to training is the cost involved. ¹⁸²

¹⁸⁰ Skillset (2009) Employment Census; http://www.otakunews.com/article.php?story=1548

¹⁸¹ Skillset (2008) Creative Media Workforce Survey; Skillset (2005) Survey of the Audio Visual Industries' Workforce

¹⁸² Skillset (2008) Creative Media Workforce Survey

Content for Computer Games

Overview

The sub-sector employs 7,050 people with 4% being freelance, 6% female and only 3% from a BAME background. Historically the workforce has also tended to be relatively young. Interestingly with 2,150 workers the North West of England has the highest concentration of games developers of all regions followed by the West Midlands and East Midlands.

Increasing competition from (often subsidised) international competitors together with increasingly low cost of entry places significant pressure on the sub-sector. At the UK level a lack of global scale publishers, limited access to finance and skill shortages have been identified as key barriers to sectoral growth. 185

Skills Needs

Competitive companies in this sector will be seeking to recruit and/or develop a mix of very high level skills in programming and computer science with more creative skills in games art and animation. Commercial skills particularly in relation to negotiation, intellectual property, and online distribution —are also in demand, together with more traditional business skills such as those associated with managing and leading technical teams. Nesta also notes that there are currently too few indigenous UK publishers of global scale, and see this as an area for future focus. ¹⁸⁶

Skills Shortages

The proportion of graduates in the UK developer population is slowly increasing. However, only 18% of games specific graduates in 2007 succeeded in gaining

¹⁸³ Skillset (2009) Employment Census and Skillset (2008)Creative Media Workforce Survey; Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset Photo Imaging Workforce Survey 2008 and LFS

¹⁸⁴ Skillset (2009) Employment Census

¹⁸⁵ Skillset (2008) Creative Media Workforce Survey and Nesta 2008 Raise the Game: The competitiveness of the UK's games development sector and the impact of governmental support in other countries ¹⁸⁶ ibid

jobs in the industry. The quality of undergraduate programmes seems to be key: graduates from courses accredited by Skillset are nearly three times more likely to get a job in the Content for Computer Games sector than those from a non-accredited course. ¹⁸⁷ UK games companies also recruit from those with generalist degrees, favouring computer science, maths, visual arts and general science courses. However, the predicted gradual decline in UK games development staff numbers over the next five years is expected to reduce the intensity of the skills shortage.

Skills Gaps

Three fifths (59%) of the Content for Computer Games workforce had received some training, compared with 65% of the wider Creative Media workforce. Those in Content for Computer Games received fewer days training on average between 2007 and 2008 than was the case between 2004 and 2005 (8.2 days compared with 12.4 days).

The Content for Computer Games workforce were most likely to have received training in business skills (32%), management/leadership (30%), IT (24%), Online/web design/Interactive Content Design/electronic games (15%) and specific software applications (14%). ¹⁸⁸

The attraction of high wages and more stable / better financed companies has led to some 'brain drain' to North America, particularly in relation to senior developers and managers. However the UK has also benefited from immigration, particularly from eastern Europe. 189

188 Skillset (2009) Employment Census and Labour Force Survey April-June 2009

¹⁸⁹ Skillset (2008) Creative Media Workforce Survey and Nesta 2008 Raise the Game: The competitiveness of the UK's games development sector and the impact of governmental support in other countries

¹⁸⁷ Skillset (2008) Creative Media Workforce Survey

Facilities

Overview

The Facilities sector provides specialised technical equipment and services to every other audio visual sector. Key roles include post production, studio and equipment hire, outside broadcast, visual effects, special physical effects, manufacture of equipment, processing laboratories and other services for film and television. Overall UK wide estimates point to a workforce of around 43,000 people. ¹⁹⁰ Nearly 30% of the total work as freelancers (rising to 44% in studio and equipment hire,42% in other services for film and television and 40% in outside broadcast) and the Facilities workforce has just 26% female representation. Though processing laboratories at 46% and special physical effects and the manufacture of AV equipment at 36% and 34% respectively are considerably higher. While post production at 12%, outside broadcast at 9% and Visual FX at 19% are lower. There is also 7% representation from BAME groups overall with a high of 17% in processing laboratories and a low of 3% in outside broadcast. ¹⁹¹ Though caveats should be made around the relatively small sample sizes in the census in the outside broadcast sub-sector.

In practice the sector is strongly London-centric. Some 80% of post production, 92% of Visual FX and around 45% of studio and equipment hire and other services for film and televisions are located in London. The notable sub-sector exceptions are the manufacture of AV equipment and processing laboratories which are almost exclusively found in the South East. This geographic concentration is hardly surprising given that the supportive role of the sector means that facilities companies will cluster around the main markets they serve. 192

¹⁹⁰ Skillset (2009) Employment Census

¹⁹¹ Ibid

¹⁹² Ibid

Skills Shortages

Demand for training by the workforce in this sector is varied. Two per cent of graduates and non-graduates alike wanted training in post production and 3% of non-graduates wanted training in driving and operating lifts and vehicles. Skillset has also worked with the Facilities sector across the UK to create *First Post*, a training scheme designed for new employees of Facilities sector companies. 194

- Graduate new entrants in the visual effects sub-sector lacked basic computer, visual effects and specific software skills, people skills / team working skills and a lack of basic understanding of techniques, processes and the industry as a whole;
- Severe difficulties in recruiting for engineering roles within Post Production ("There are more lucrative areas than broadcasting for engineers to work in"): 195

Skills Gaps

The 2008 Creative Media Workforce Survey and UK wide review of the First Post scheme revealed:

- Skills shortages in the Visual Effects sub-sector workforce in relation to project management, people management, and basic administration;
- A growing fear that the industry doesn't have a sufficient culture of skills development in the area of leadership and management: many managers start out as 'runners' and progress from there without having formal management training. However, there was also a level of distrust of management – many associating it mainly with cost cutting.

¹⁹³ Skillset (2008) Creative Media Workforce Survey

¹⁹⁴ Review of the First Post scheme revealed a strongly positive response from those with some involvement. However, concern has been raised about the extent to which the scheme was been promoted, particularly amongst the freelance workforce. See also Skillset (2008) Creative Media Workforce Survey

¹⁹⁵ Skillset Review of First Post scheme

Interactive Content Design

Overview

Interactive Content Design sector covers a range of specialist companies and jobs including online (e.g. mobile internet, networking sites) and offline (e.g. mobile phone audio) content and technology, interactive television and others. The sector fulfils a key support function in the wider Creative Media industry as well as other industries. This role clouds measurement of the sector's output and importance - as Skillset note: Interactive Content Design is becoming more of a discipline than a sector. ¹⁹⁶

About 34,300 people work in the Interactive Content Design sector.¹⁹⁷ Just over three quarters of all jobs in the sub-sector are in 'online content'. In terms of employment profile, the sector has 21% of the workforce working as freelancers with only 6% of the total employed being w0men and a mere 4% coming from a BAME background. This shrinks to just 1% in other Interactive Content Design.¹⁹⁸

Like the Content for Computer Games sector, the Interactive Content Design sector's workforce is also highly educated, The Interactive Content Design workforce is very highly qualified and nine in ten (88%) has an undergraduate or postgraduate degree or diploma (the highest amongst all Creative Media sectors). ¹⁹⁹

Skills Needs

Despite the recession medium term forecasts are for an ever increasing demand for online and offline output. This will be driven by, amongst other things, continuing falls in the real price of software, widening access to cheap broadband and 360 degree commissioning models – where content is commissioned for dissemination across more than one platform.²⁰⁰ In the

¹⁹⁶ http://www.skillset.org/interactive/industry/

¹⁹⁷ Skillset (2009) Employment Census

¹⁹⁸ Ibid

¹⁹⁹ http://www.skillset.org/uploads/pdf/asset_13233.pdf?4

²⁰⁰ Ibid

future it is anticipated that technical software and website design skills and project management skills will be most needed.²⁰¹

Skills Shortages

Employers report shortages in entrants with the appropriate combinations of 'hybrid' skills – a mix of specialist skills (e.g. graphic design), and core generic skills (e.g. business/commercial acumen) with cross sector awareness (the ability to provide services to clients from other sectors of the wider economy.²⁰²

Skills Gaps

These findings seem to be mirrored within organisations; UK Interactive Content Design employers state that the most common skill gaps appear to be either in industry-specific 'transient' skills (such as specific software skills that continually need to be updated to keep up with developments/advances) or in higher-level business management skills and general understanding of the relevant sector. ²⁰³

Around two thirds of the Interactive Content Design workforce had received some training over a twelve month period between 2007/08.204 Over 50% of the interactive content design sub-sector wanted training²⁰⁵, while 11% of the workforce in the broadcast, facilities, animation, Interactive Content Design and Content for Computer Games sectors stated a need for training in online, web design, Interactive Content Design or Content for Computer Games.²⁰⁶ suggest that amongst the web and internet sub-sector the most common areas of training received are on-line/web design/Interactive Content Design/electronic games (29%), specific software applications (19%) and legal (18%). In other sub-sectors as a whole, 25% of those trained in the 2007/08 received training in specific software applications. Regulatory/compliance training in

²⁰¹ Ihid

²⁰² http://www.skillset.org/interactive/industry/article_6921_1.asp

²⁰³ Skillset (2009) Interactive Content Design Sector Profile and Skillset (2008) Creative Media Workforce Survey

²⁰⁴ Skillset (2008) Creative Media Workforce Survey

²⁰⁵ Ibid

²⁰⁶ Skillset (2008) Creative Media Workforce Survey

ethics/safeguarding (25%) and health and safety (23%) was also relatively common. 207

Over half (55%) of the Interactive Content Design workforce in the UK cited a training need in 2007/08, which was lower than in 2004/05 (70%). The most commonly cited training was on-line/web design/Interactive Content Design/electronic games (27%), specific software applications (22%) and business skills (17%).²⁰⁸

Training costs and time available seem to be the main barriers to take up. 209

²⁰⁷ Ibid

²⁰⁸ Skillset (2008) Creative Media Workforce Survey

Skillset (2006) Creative Media Workforce Survey

²⁰⁹ Skillset (2009) Interactive Content Design – Labour Market Intelligence Digest

Photo Imaging

Overview

The Photo Imaging sector encompasses four main sub-sectors: Photographers; Image Producers and Photo Retailers; Picture Libraries and Agencies and Manufacturing and Support services. Currently more than 48,000 people are thought to work in the sector across the UK, Photographers comprising the largest sub-sector. Some 60% of the workforce are freelance, 43% female and 3% from a BAME background.

Skills Shortages

The small size of most Photo Imaging businesses means that recruitment to the sector is limited. One survey showed that only 5% of businesses interviewed stated that they had recruited over the previous 12 months. Moreover, few of these businesses anticipated a change in the number of staff their business employed in the following two years. ²¹² Against this background it is difficult to draw conclusions on the skills of new entrants.

Skills Gaps

Across the industry as a whole, the most significant specialist skills gaps continue to be around the use of digital technology, knowledge of digital workflow and management of digital assets.²¹³ In meeting these skills gaps the sector is likely to draw heavily upon informal approaches to training - including on the job mentoring and in-house training.²¹⁴

The Skillset Photo Imaging Workforce Survey 2007 did however reveal that 26% had received training in the last 12 months in relation to 'customer service and other retail' and 'exhibition, display and large format'. 'Specialist software' (23%), 'business skills' (21%) and 'Marketing' (18%) were also identified.

²¹⁰ Skillset (2009) Employment Census

²¹¹ Labour Force Survey Apr-June 2009

²¹² Skillset (2007) Photo Imaging Workforce Survey

²¹³lbid

²¹⁴ ibid

The same Survey also revealed that 57% of the workforce had identified a future training need. Some 25% cited as a reason for training that they wanted to keep up with the field and improve their effectiveness at work. Of those 60% stated a need for 'specialist software training'. The next most frequently identified were 'business skills' (15%) and 'minilab and printing skills' (13%). ²¹⁵

²¹⁵ Skillset (2007) Photo Imaging Workforce Survey

Publishing

Overview

The Publishing sector includes book and newspaper publishing, journals and periodicals, news agencies, publishing of directories and mailing lists and other services and activities. There are 188,000 people employed throughout publishing of whom 58,000 work in newspaper publishing, 41,000 in journals and periodical publishing, 38,000 in book publishing and 32,000 in other publishing. Some 13% are freelance, 47% female and 6% from a BAME background. Some 5% of those who work in newspaper publishing are freelancers rising to 19% in book publishing.²¹⁶

The majority of establishments in the sub sector are small with 85% having 24 employees or fewer and 95% fewer than 100 similar to the size distribution for all industries in England. There are only 204 employers (124 in newspaper publishing alone) who employ more than 200 employees.²¹⁷

Across the UK the Magazine and Newspaper Publishing sub-sectors have undergone major structural changes. This has been driven by both the recession and a longer term movement away from the traditional advertising revenue model to more online content.²¹⁸ This process is set to speed up over the next decade and will revolutionise the sub-sector, making it harder to generate revenue from content alone and emphasising the need for a multiplatform and diverse approach to delivery, marketing and promotion.

The result has been fewer titles and jobs – particularly freelance - and the loss of some functions such as sub-editing.²¹⁹ The migration to online content is however being hindered by a number of commercial challenges including how to monetize online content, ownership of content issues, and inertia amongst

²¹⁶ Labour Force Survey April - June 2009.

²¹⁷ Skillset Publishing Sector – Labour Market Profile

²¹⁸ Skillset (2009) From Recession to Recovery: an overview of the Impact of the Recession on the UK's Creative Media Industries and the Path to Recovery. Based on a sample of 262 employers

²¹⁹ ibid

some socio economic groups to access content online.²²⁰ Elsewhere, while book sales have held firm the overall value of sales has fallen.²²¹

Skills Shortages

Overall in terms of new entrants evidence points to skill shortages in relation to:²²²

- Technical skills in particular the ability to meet industry standards requirements;
- Strategic skills linked to maximising opportunities from the e-publishing business:
- Developing and implementing innovative, creative marketing using new technology;
- Multi-media journalism skills;
- Core business skills, including management and leadership, since
 Publishing sector companies tend to be editorially-driven;
- Understanding the impact of change on intellectual property rights.

Skill Gaps

Around 12% of establishments report skills gaps. ²²³ Similarly, for incumbent staff the available evidence points to skills gaps relating to:²²⁴

- Team working skills
- Technical skills including web editing;
- Marketing (especially innovative e-marketing);
- Transferable skills including business skills such as management and leadership and ICT;
- Innovation and creativity.
- Customer handling skills

²²⁰ Deloitte Media Predictions 2009

Skillset (2009) From Recession to Recovery: an overview of the Impact of the Recession on the UK's Creative Media Industries and the Path to Recovery. Based on a sample of 262 employers.

²²² ibid

²²³ Skillset Publishing Sector – Labour Market Profile

²²⁴ ibid

4 Anticipating What Lies Ahead

4.1 Growth Continues as Does Freelance Fragility

Certainly pre-recession forecasts suggested that the UK entertainment and media market would grow by 5.8% compound annual growth rate for the five years to 2012, to reach \$152 billion²²⁵. However, since then, the Creative Media industries have been subject to significant challenges as set out earlier in this report. Given the turbulence, it is difficult to source reliable future estimates of industry spend and employment forecasts. In early 2009, NESTA released a forecast that, between 2009 and 2013, the UK Creative industries, including Creative Media, would grow on average at 4%, more than double the rate of the rest of the economy, and, by 2013, would employ 1.3 million people. This is a similar trend rate of growth as for the period 1997 – 2006. In this forecast, the Creative industries are expected to contribute £85 billion to UK GVA in 2013, up from £57 billion in 2006. Globally the creative industries grew by 8.7% between 1998 and 2005 and that growth rate is expected to continue once the recovery kicks in.²²⁶

This optimistic medium-term outlook is primarily due to the opportunities for innovation as increasing numbers of creative businesses take advantage of digital technologies to develop new business models, for example the digital distribution model which has been exemplified by the success of 'iTunes' 227.

Major events such as the US Presidential election and the Olympics of 2008 saw increased use of media but mostly digital media and on these occasions television dominated in terms of viewing figures and revenue²²⁸, a phenomenon that is set to increase with major events in the short term for example the UK General Election 2010. To meet this heightened demand in terms of quantity i.e. the amount across the range of platforms and crucially in terms of the quality of and sophistication of

²²⁵ Global Media & Entertainment Outlook 2008-2012, PWC UK 2008.

²²⁶ http://www.unctad.org/Templates/webflyer.asp?docid=9467&intItemID=1634&lang=1

²²⁷ 'UK creative industry to drive significant growth to UK economy', Press release, NESTA 19/02/2009.

²²⁸ Media Predictions, TMT Trends, Deloitte 2009.

content, our digital media industry needs the associated skills and this requires investment.

Many analysts predict that traditional incumbent companies will remain dominant, sometimes through acquiring companies with a strong digital presence²²⁹. The opportunities presented by developing technology may be beyond the scope of almost all single companies, even large established multinationals or conglomerates. Alliances and partnerships will therefore be formed for opportunities to be realised, commonly with Technology companies, and sometimes with companies that will be competitors in other markets.

With the number of people employed in the Creative Media industries currently declining²³⁰, and the fact that people are likely to become freelance when faced with redundancy or the threat of redundancy²³¹, the highly skilled freelance labour pool is likely to increase, resulting in increasing pressure on already limited funds for investing in freelancers' skills and development.

However, another consequence of the present economic climate is that it is becoming increasingly difficult for individuals to secure mortgages and other types of credit without a permanent employment contract. As a result, some individuals may be likely to leave the sector entirely, taking their skills and talent with them. There is a significant danger of losing a highly skilled and experienced cohort of the workforce in whose development there has been significant investment.

4.2 A Square Peg in a Round Hole? – Creative Media and the Current VET System

If the Creative Media sector is going to maximise its future opportunities national vocational educational training (VET) policy urgently needs to better address the powerful singularity of the sector.

This is not a sector dominated by mature, large employers that can offer secure organisational labour markets replete with a full suite of in-work and off-site training provision. The strength of the sector is its diverse provision of atypical employment

²³⁰ Skillset (2009) Employment Census

²²⁹ Skillset Strategic Plan 2008-2011

²³¹ Skillset (2008) Creative Media Workforce Survey. Figures exclude film production, photo imaging and publishing.

characterised by a strong, and in some sub sectors such as film production, primary external labour market (ELM).

But this strength in labour supply terms – a highly qualified, highly entrepreneurial and adaptive talent pool – means the sector is leaning into a head wind in terms of VET and broader public policy.

For example, the absence of many large firm employers, and the large number of small firms and freelancers in particular, makes it a difficult sector to influence through public policy. Employers with larger number of employees generally have greater requirements placed on them than smaller ones, and equal opportunities and other legislation applies more comprehensively. More specifically, when recruitment and promotion criteria are as informal as they are in the cultural sectors, it's sometimes difficult for public policy to gain any firm purchase on labour force development issues.²³²

Future progress will require a wider acceptance that a sector dominated in large part by external labour markets needs a far more flexible skills system. The current VET system does not work well for this sector.

As David Guile has recently noted:

"The root of the problem that Skillset and C&CS jointly face is the assumed link that the government believes exists between qualifications and access to the labour market. This is predicated on a notion that there are functioning OLMs and FILMs²³³ in the C&C sector, that these labour markets will channel the flow of highly qualified students towards their preferred occupational destinations, and that employers will use qualifications as a proxy measure for vocational practice in the recruitment process. These assumptions are, as we have seen, wide of the mark and, as a consequence, Skillset and C&CS's efforts to support aspiring entrants to gain access to the C&C sector are floundering."²³⁴

²³⁴ Guile,D (2009) Learning to work in the creative and cultural sector: new spaces, pedagogies and expertise

²³² See K. Oakley (2009) 'Art Works' – cultural labour markets: a literature review' Creativity, Culture and Education Series

²³³ OLM: organisational labour market; FILM: firm's internal labour market

Marsden (2008) has characterized this shift from occupational labour markets (OLMs) to external labour markets (ELMs) as the introduction of a 'tournament' culture in the C&C sector.

By this he means aspiring entrants are prepared to seek out a mix of unpaid internships and/or work experiences and tolerate the uncertainties of low–paid freelance work, in the hope that it will enable them to develop the appropriate mix of vocational practice and social capital to secure either a permanent position or longer contracts and better pay as a freelance worker

The Creative Media sector is therefore in urgent need of a more differentiated VET strategy that will thus enable, rather than disable, industry recognised activities that count towards the gaining of experience and social capital and the development of a personal occupational labour market as the basis for future success.

There is a range of critical commentary that suggests that the Leitch review's emphasis on driving up the UK's qualifications profile has not led to a simplified, adaptive, and demand led VET system²³⁵. It is certainly true that for the Creative Media sector, the narrow target based approach, and incentive based systems, have not served the interests of employer or employed very effectively.

These considerations, and the need to underpin more effectively the freelance nature of the talent pool, have in turn shaped the recommendations in this SSA.

4.3 A Necessary Broadening and Deepening of the Skills Base

Across all Creative Media industries, there is recognition of the dramatic changes brought about by the digital environment and the need to upskill to make the most of it. The following are of particular importance²³⁶:

 Multi-skilling: an understanding of different technology platforms and their impact on content development and digital work flow, and new approaches

_

²³⁵ http://www.policyexchange.org.uk/assets/Simply_Learning_-_Jan__10.pdf

²³⁶ Skillset (2008) Creative Media Workforce Survey; Skillset, (2009) A Skills Review for the TV & Radio Sector; Skillset/UK Film Council (2009) Feature Film Production Workforce Survey,. Figures exclude photo imaging and publishing.

- to working in cross-functional creative / technical teams within and across companies.
- Multi-platform skills: the creative and technical skills to produce content for distribution across all potential platforms, and the ability to understand and exploit technological advances.
- Management, leadership, business and entrepreneurial skills: especially
 project management for multi-platform development; the hybrid skills
 combining effective leadership with innovation, creativity and understanding
 of technology, and the analytical skills to understand audience interests and
 translate it into business intelligence.
- IP and monetisation of multi-platform content: understanding of intellectual
 property legislation to protect from piracy, and exploiting intellectual property
 internationally to take full advantage of emerging markets with particular
 focus on the ability to deal with the problem of illegal downloading and
 copyright infringement.
- Broadcast engineering: continuing to be an area of skills shortage.
- <u>Archiving:</u> archiving of digital content being an area which is attracting increased attention as a challenging issue for the future.
- <u>Sales and marketing:</u> being particularly important in commercial radio and an emerging need in other sectors.

The breadth and depth of these up-skilling requirements underline the scale of ongoing transformation the sector needs to affect in its skills base.

5. The Geography of the Creative Media Industries

5.1 Sector Employment across the UK

Each nation is producing its own Strategic Skills Assessment so the detailed analysis of differences by nation can be interrogated fully through these documents. What follows is a highlighting of the major differences by region in the ecology and shape of the Creative Media sector. What should be stressed is that skills needs do not vary greatly by nation and region but sectoral densities vary greatly as can be seen from Table 14.

Table 14: Geographic Variations by Sector

					0							
					South East				Yorks			
			N.		excl.	South	West	East	and	The	North	North
TELEVISION	Wales	Scotland	Ireland	London	London	West	Mids	Mids	Humber	East	West	East
TELEVISION	3,500	1,950	1,650	31,200	1,200	1,750	1,000	1.400	1,150	700	4,250	350
	2,000	-,	1,000		-,	1,100	1,000	.,	-,		1,200	
RADIO	750	1,650	2,050	6,650	1,050	350	750	450	1,200	1,550	3,950	450
FACILITIES	700	1,000	350	23,900	4,750	4,750	3,000	4,100	6,250	4,350	15,750	1450
FILM	200	950	350	7,200	1,650	600	150	100	50	150	150	50
ANIMATION	400	500	50	850	1,650	200	*	*	50	*	600	0
OTHER												
CONTENT CREATION	0	150	350	3,700	550	1,000	850	200	300	400	250	300
INTERACTIVE CONTENT DESIGN	3,850	1,050	1,850	6,800	5,000	4,250	1,000	900	6,400	500	1,650	200
CONTENT FOR COMPUTER GAMES	50	500	*	1,350	250	50	400	600	200	1,300	2,150	200
PUBLISHING	2,000	9,000	1,000	52,000	25,000	19,000	6,000	9,000	6,000	25,000	16,600	
PHOTO IMAGING	**	**	**	8,000	9,000	2,000	1,000	2,000	2,000	6,000	6,000	2000
Archives & Libraries	*	*	*	150	50	50	50	*	0	50	50	0

Source: Skillset (2009) Employment Census (all creative sub-sectors excluding film production, photo imaging and publishing), Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, and Labour Force Survey April - June 2009.

This table shows the populations working in each sector. London dominates every sector except animation and photo imaging where the South East has the dominant population and Content for Computer Games where the East of England region has similar densities as London due to the cluster of games developers around Cambridge. Publishing has a very strong presence in the South East and East of England with a working population combined almost the same as London's. Yorkshire and Humber has the second highest number of interactive content designers after London. Photo imaging has a strong presence in the East and North West of England, while Scotland's dominant sector is publishing and Wales's is interactive content design and television. Northern Ireland also enjoys a strong presence in interactive content design and television compared to other sectors yet has negligible numbers of Content for Computer Games workers. Photo imaging has a negligible presence in the Celtic nations and archives and libraries is also pretty non-existent there. There are few animators in the English regions of the West and East Midlands and the East of England and animation has a very modest presence in Northern Ireland and Yorkshire and Humber. Television has its lowest presence in the East of England whereas for Radio it is the South West. Film has its lowest densities in the East of England and Wales.

The profile of the workforce in each nation or region tends to reflect the profile of the dominant sectors there rather than the profile of the working population in the area. The workforce in London contains higher numbers but a lower proportion of BAMEs compared to the whole population, and many BAMEs work in lower level, generic roles – a cause for concern.²³⁷

Table 15: Top Sub-sectors by percentage of Creative Media employed in Each Nation and London

_

²³⁷ Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009 and LFS 2005. Cinema Exhibition excluded

Nation/London:	% of total
WALES – Interactive content	37%
SCOTLAND - Film	36%
NORTHERN IRELAND – Interactive content	28%
ENGLAND (including London) – Publishing	43%
All London – Publishing	37%

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009. Cinema Exhibition excluded

Publishing dominates the largest nation in the UK, England, with some 43% of total employment, 37% in London. Whereas in Wales and Northern Ireland it is interactive content and in Scotland it is film production

The Creative Media sector is largely a London and South East of England focused sector as Table 16 below shows. Some 46% of all employment is to be found in these two regions. If the South West is added to the total then the South has 54% of the total in employment. Indeed outside England the nations have only 12% of total employment – 4% in Wales, 5% in Scotland and 3% in Northern Ireland. Given the size of the populations in Scotland and Wales, and the growing need for private sector knowledge economy jobs in these countries, there would be seem to be considerable potential for growth in the Creative Media sector given the right policy and market environments. Of the other English regions the North West has the highest proportion (which would include the BBC's move of staff to Salford) at 10% of the total.²³⁸

Table 16: Work base of Creative Media Workforce²³⁹

Nation/English region	% of UK total
WALES	4%
SCOTLAND	5%
NORTHERN IRELAND	3%
ENGLAND (including London)	89%
All London	35%
South East of England (excluding London)	11%

²³⁸ Skillset 2009 Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009 and LFS 2005. Cinema Exhibition excluded

²³⁹ Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009. Cinema Exhibition excluded

South West of England	9%
West Midlands	4%
East Midlands	4%
North East of England	2%
Yorkshire & the Humber	7%
East of England	7%
North West of England	10%

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey 2008, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009. Cinema Exhibition excluded

Creative Media, like other sectors such as Finance and some types of high tech manufacturing, enjoy the benefits of clustering. There is a rich literature on why clustering occurs and why it is beneficial to businesses. Suffice to say clustering is usually endogenous and occurs due to the congruence of a number of different factors including natural resources (the light to be found in California for example that helped establish Hollywood as a centre of film-making); links to customer base; concentration of talent and proximity to research establishments; good transport by air, road and rail; ease of face-to-face contact and strong network externalities. The fact that clusters tend to be endogenous constructs creates a problem for policy-makers wishing to stimulate industrial growth in particular parts of the country. Indeed Creative Media is very much part of the new North-South divide of the knowledge economy whereby north of the Watford Gap there really is no private sector knowledge economy to speak of.²⁴⁰

There are however considerable differences between sub sectors in geographical distribution: for example, because of the prominence of regional and local radio within both the BBC and the commercial sector, and the growth of community radio, radio is distributed more evenly throughout the UK than many sectors.²⁴¹
Conversely, sectors such as independent production for television, film production, commercials and corporate production all remain very London-centric.²⁴²

²⁴⁰ Clayton,N (2008) *Enterprise Priorities to Enterprise Powerhouses: The Public Sector in the Knowledge Economy* The Work Foundation, London

²⁴¹ Skillset (2009) Current and Future Skill Needs in the UK Television and Radio Industry

²⁴² Skillset (2009) Employment Census

In recent years, there have been some major endeavours and interventions to redistribute some sectors more evenly throughout the UK. This is illustrated most clearly in the relocation of large segments of the BBC's workforce, mainly from London, to Salford Quays in the North West of England and a corresponding decrease in West London from 16% to 13%, which is reflected in Skillset's 2009 Employment Census. However laudable these efforts may be by a national public sector broadcaster to distribute more evenly its resources away from London, it is perhaps preferable to focus on how existing concentrations of talent, facilities and invested expertise are better supported.

Table 17 illustrates the geographic distribution of employment by gender and ethnic minority background. The proportion of women to men never exceeds the 38% found in London and England and this dips to a mere 22% in Northern Ireland. Outside London and the South East BAME representation stands at a high of 3% in Wales, compared with a population density of 2.1%. The figure for Scotland is 2% which corresponds to the proportion of BAME people in the population as a whole but London's figure of 11% is some 13% below the proportion of BAME people in the population as a whole.²⁴³ Given the concentration of the sector's workforce in London this is a cause for concern.

Table 17: Women and BAME as a percentage of the creative workforce

Nation/London: Women	% of UK total
WALES	29%
SCOTLAND	33%
NORTHERN IRELAND	22%
ENGLAND	38%
All London	38%
Nation/London: BAME	
WALES	3%
SCOTLAND	2%
NORTHERN IRELAND	1%
ENGLAND	6%
All London	11%

²⁴³ Skillset 2009 Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009 and LFS 2005 Cinema Exhibition excluded

Source: Skillset (2009) Employment Census, Skillset/UK Film Council (2008) Feature Film Production Workforce Survey, Skillset (2007) Photo Imaging Workforce Survey, LFS Apr-Jun 2009. Cinema Exhibition excluded

Skills delivery and development does not necessarily have to happen in each and every region or locality. What is more important is how skills strategy interfaces with regional strategies for growth. In a sector as project based as Creative Media the skills required attach to each project rather than to a particular locality per se (although some sub sectors are indeed heavily clustered in particular geographic locations). This can be seen by the differences in where people live and work. Some 7% more people work in London than live there whereas some 9% more people live in the South East than work there.²⁴⁴

Finally training varies from region to region but not by much. Northern Ireland had the highest number of people who received no training at 55% with Wales and Scotland the lowest at 43%. Yet Northern Ireland also had the highest number of people receiving between 6 and 20 days training at 19% compared with London's 13%. Wales had the highest percentage receiving more than 21 days training at 7% and London the lowest at 5%.

²⁴⁴ Ibid

6. A Preferred Vision of Future Success

The preferred vision developed below has been directly developed from a comprehensive analysis of evidence from Skillset's industry steered and endorsed research programme which draws on a range of sources, particularly Skillset's primary data and where possible those from official sources. The aim of the exercise was to model possible development scenarios for the creative media sector. And in turn derive a preferred vision of future success for the sector.

What then should be the sector's preferred vision for future success, and what are the implications of this vision for how best to support and develop skills acquisition and development across the sector?

6.1 A Freelance Friendly Sector in a more Freelance Friendly Economy

The freelance labour pool will grow rather than shrink so more must be done to support freelance training needs. As our analysis has revealed freelancers are more likely to pay for their own training than employees but less likely to go on training courses for fear of losing out on paid work opportunities. Skillset will have successfully campaigned to create a more freelance friendly Creative Media sector and economy.

6.2 Highly Skilled and Highly Geared

Despite the fact the sector's workforce is very highly skilled measured in pure qualifications terms too much of that workforce is not highly geared if measured by job readiness criteria. The sector needs more job ready graduates and thus in the future there will be more 'finishing' school type opportunities, in which graduates undertake an additional course, potentially work based and delivered by industry practitioners, to better prepare them for entering the workforce.

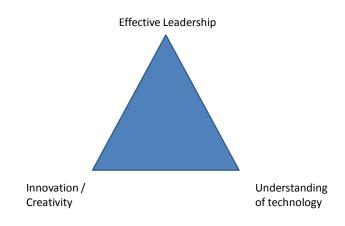
6.3 An Ever-Widening Talent Pool

The industry will have become more accessible / attractive to the black or minority ethnic (BME) population and the proportion of BMEs in the industry will have increased significantly

6.4 Creating a T-skilled Workforce

As outlined in some detail in Chapter 3, the future success of the industry is dependent on a broadening and deepening of the workforce skill profile, so a successful future sector will be underpinned by a greater degree of multi-skilling with more T-skilled workers within the labour pool, whereby a core specialism is supplemented by broader knowledge and aptitude in other areas such as business, management, and communications.

Skillset will have worked effectively to educate both employer and employee alike about these changing skills requirements, popularising powerful diagrammatic representations of key future skills needs. For example, the diagram below is a hybrid model developed by Skillset to capture the key multi-skilling requirements for talent across the industry.



Building a greater understanding of future skills needs will be matched by the growth of more professional qualifications and standards for individuals working in the industry.

6.5 A Greater Plurality of Provision and Providers

More intermediary organisations will enter the provider market, as they are better placed than traditional providers, such as FE colleges, at bringing together coalitions of SMEs, larger players, freelancers and others in partnerships.

Existing providers will display a greater flexibility and diversity of provision, with the higher and further education sectors become more flexible partners, reducing the time it takes them to develop new courses and building greater credibility with both employers and learners.

6.6 A more Flexible and Responsive VET system – that Works Harder for the Creative Media sector

The strategic importance of the sector to the UK's future economic success will have resulted in a more flexible response from the VET system to the needs of the sector. As Skillset noted in its response to the analysis in Digital Britain:

"The digital technology and media sectors should be identified by government as sectors of strategic importance, with priority strategic skills needs. Government and business should work more closely together, and government should go further in enabling differentiation of their skills offer. A more strategic, flexible approach to co-investment with employers and individuals should be established, for **all** the skills required to take this sector forward. Current policy supports the needs of more traditional lower level skills parts of the economy rather than the higher level ones required by the knowledge economy. This flexibility will be particularly critical in addressing skills needs during the recession when companies are often cutting back on their training investment."

Skillset welcomes this new focus on identifying and supporting key growth sectors across the knowledge economy, which requires the VET system to respond in turn, successfully emphasising the role of high skills over low skills.

6.7 Delivering this Vision of Future Success

For progress to be made towards delivering this vision of future success, it would require as a minimum the following interventions and changes:

- More targeted and better government investment in supporting the growth of demand-led professional qualifications and systems of accreditation
- A freelance friendly environment with finance institutions that treat the selfemployed as equal in status to the employed; that offers favourable tax treatment balanced against the enhanced risk of such occupations; and ways and means of accessing more venture capital.
- A more diverse industry that genuinely celebrates all the talents of all the people of the United Kingdom
- More professional recruitment processes that are based on fairness and accessibility and not just the ability of the favoured few to survive periods of unpaid internship
- An education system from cradle to grave that enables people to join the sector more job-ready and more attuned to the demands of employment
- A geographic distribution of opportunities that builds on the sector's strengths
- Continuing support for public sector trainers such as the BBC and a greater willingness to train from all levels of employer
- New mechanisms that will enable more people to gain the network capital essential for success in the sector
- Career information that is clear, accessible and available to all

6.8 Possible Development Paths for the Sector

This is a challenging list of necessary transformation and improvements. How might the sector and its key partners respond to the requirements of this future vision of success?

Our analysis suggests that there are two possible response scenarios for the sector and its partners – namely steady state evolution – or accelerated growth and diversity. The steady state scenario will not deliver this desired future vision of

success – but rather restrict the sector to a highly path dependent future development trajectory.

By contrast the accelerated growth and diversity scenario would move the sector decisively towards its preferred future vision and offer the possibility for a step change in the performance and contribution of the sector.

6.9 Steady State Evolution

Steady state evolution assumes that there will be major break-throughs in the policy and practice of the sector. This will not stop the Creative Media sector improving its overall performance. After all the industry grew by twice the rate of the whole economy in the very recent past despite a largely unfavourable policy environment against which it was set. However such a policy of inertia is deeply unattractive when set against the analysis laid out above as it would mean that opportunities for the UK as a whole would not be maximised.

In particular the steady state scenario would see:

- No transformation in the VET infrastructure
- No significant shift in employer behaviour
- Not tackling significant barriers and obstacles to training
- Overall levels of skill acquisition do not dramatically improve
- The mismatch between graduate skill sets and employer expectations are not narrowed
- No specific interventions made to support the freelance talent pool driving the sector
- Jobs growth in line with, but not exceeding, current growth predictions
- GVA contribution growth in line with, but not exceeding, growth predictions

- Growth in international market share secured by domestic producers in line with, but not exceeding, growth predictions
- No improvement in the diversity and equality performance of the sector
- No maximisation of spillover effects from innovation into the wider economy
- External Labour Markets remain ignored in the structural analysis of the sector and the formation of the VET response
- Poor fit between schools, FE and HE remains

6.10 Accelerated Growth and Diversity

The more enticing prospect for the sector is that its strategic importance to the UK economy, Skillset's maturing understanding of how best to deliver to the sector, and concerted action by Government and other key partners, helps to transform the operating environment and performance of the sector.

If the sector is to fully capitalise on its enormous potential for itself and for UK plc, only an accelerated growth scenario based on recognition and celebration of the diversity inherent in the sector can properly deliver. Such a scenario will require government, employers and others to create a more favourable operating environment, requiring new ways of thinking, new models of delivery, and higher levels of funding and commitment.

In particular the accelerated growth and diversity scenario would see:

- 3. A transformation in the VET infrastructure so that it has a better strategic fit with a predominantly ELM driven sector
- 4. Substantive shifts in employer behaviour so that more engagement would follow with a new VET system enabled for the smallest organisations through new 'mutual' intermediary institutions

- A narrowing in the mismatch between graduate skill sets and employer expectations by creating a closer link between HE/FE and employers actively facilitated by Skillset
- 6. A range of specific interventions made to support the freelance talent pool driving the sector (on which more below)
- 7. An acceleration in the rate of jobs growth through targeted investment using the full panoply of Government agencies
- 8. Aggressive growth in GVA contribution through improved general business and management practices
- 9. A significant increase in the international market share secured by domestic producers exceeding current growth predictions
- 10. Rapid improvements in the diversity and equality performance of the sector through a number of direct intervention across the system
- 11. Formal interventions to maximise the spill-over effects from innovation into the wider economy
- 12. A stronger emphasis on the importance of ELM in the accepted structural analysis of the industry, with a more widespread understanding of the resultant advantages and disadvantages for the sector
- 13. A major improvement in the 'fit' between schools, FE and HE and the ongoing skills needs of the sector.

What then are the suite of policy recommendations required to ensure that the future trajectory of the sector is not that of steady state evolution, but rather accelerated growth and diversity?

7 Towards A Fit for Purpose Creative Media Skills Ecology

7.1 The Policy Context

Before we detail the policy recommendations that are required to transform the performance of the sector, it is helpful to briefly review where we have reached in the current VET settlement for the creative media sector and broader economy.

Much of today's policy stance emanates from the broad direction drawn by the Leitch Review of skills which reported in 2006. The report argued that the UK needed a genuinely demand-led revolution in skills provision, qualifications, institutional support and future direction. The UK needed to aim high and seek to become a world class provider of skills and vocational education in order to become a world class economy.²⁴⁵

The Government responded to Lord Leitch's report with alacrity and established a plethora of new institutions. A new UK Commission for Employment and Skills (UKCES) was established to manage the new demand-led infrastructure focused on the network of Sector Skills Councils, bodies that represent the employers in their sectors charged with delivering a new demand-led system reflective of employer's skills needs. The Learning and Skills Council was deemed surplus to requirements and is being replaced with the Skills Funding Agency, Young People's Learning Agency and National Apprenticeship Service. Further Education colleges have been thoroughly shaken up and funding streams simplified along the principle that funding should follow the learner or demand. So Skills Accounts have been established for individuals to access funding, largely through FE college provision. For employers Train to Gain has been the main vehicle for accessing funds to ensure that all employees are qualified to level 2. Funding for Train to Gain in the current year is scheduled to be just under £1 billion. Basic skills training is also seen as a core priority delivered through the Skills for Life programme.

²⁴⁵ World Class Skills: Leitch Review of Skills (2006) Department of Business, Innovation and Skills

The focus of policy since 2006 has continued to see skills as a prime lever for growing the economy. For example the 2008 Creative Britain²⁴⁶ report included eight recommendations out of 26 on skills or talent. In its latest report²⁴⁷ the UKCES has concluded that, "Despite significant progress in skills over the last decade, the UK is not world class in skills, and not yet on a trajectory to be so by 2020.' Their analysis identified three root causes as why the UK is falling short:

- Relative to other industrialised nations, we have too few businesses in high skill, high value added industries, too few high performance workplaces and are creating too few high skilled jobs. Comparative to our ambition, we don't have enough employer demand for skills
- Too many young people in the UK fail to gain the basic, employability and lower level skills needed to progress in work. As a result, too few adults possess the skills to succeed in tomorrow's labour market, or the motivation, confidence and opportunity to gain them
- Current employment and skills systems in the UK are neither fully integrated, nor sufficiently aligned to labour market needs. They are also excessively complex because they do not empower customers to drive demand, performance or quality improvement."

What is perhaps striking is that three years after the Leitch Review the UKCES is repeating many of the same criticisms. Its analysis highlights high degrees of inertia in the system despite the almost continual whirl of reform; slow take up by the demand side; persistent so-called 'low road' business models with low demand for skills and a failure of the formal education system to equip young people with basic skills – the building blocks of a functioning skills ecology.

The UKCES argues for the following changes:

247 http://www.ukces.org.uk/upload/pdf/skills_jobs_growth_finalpdf_231009.pdf

²⁴⁶ http://www.culture.gov.uk/images/publications/CEPFeb2008.pdf

- individuals are inspired and motivated by the enhanced work and life opportunities that lifelong learning provides, have the confidence and skills to participate and succeed, and therefore invest more in their own learning and development;
- The content of learning and qualifications is shaped by the relevant sector, and up-to-date with emerging industry needs; whilst choice in provision is aligned to local labour market needs and informed customers drive supply, performance and quality
- Government's role is principally to empower individuals, employers and providers to make the right decisions, 'nudging' the system to work better by providing information, pricing signals, incentives and strategic leadership to encourage a more skills intensive economy;
- Public funding is prioritised towards (i) basic skills, employability, lower level skills and those facing significant disadvantage in the labour market; and (ii) stimulating greater co-investment with employers and individuals in higher level and strategic skills;
- Providers' success is defined and measured in terms of the outcomes from their provision(progression in learning or work, wage gain, learning achievement, customer satisfaction and quality) and their responsiveness to their community's labour market needs;
- Colleges, universities and learning providers are more trusted, and have the
 responsibility and authority to understand and better serve the labour market
 needs of their communities, cities and regions directly, with less Government
 intervention, oversight and bureaucracy.

This latest UKCES analysis cuts with the grain of much of this report – but crucially is not sufficiently differentiated to address all of the needs of the creative media sector.

Our recommendations seek to fill some of those gaps, and are informed by the view that government funding can, and should, do more than just 'nudge' people towards co-investment in their skills and training.

Skillset is already heavily engaged in a variety of initiatives that are moving towards delivering the outcomes desired by both employers and the government in this area, particularly in response to the challenges set out in Digital Britain²⁴⁸. A new diploma in creative and media has been developed for 14-19-year olds that has tried to cater for the latent demand for creative content courses among young people of secondary school age. Skillset's careers service is becoming better used and better known. Its training funds are oversubscribed and the media academy network is beginning to establish itself as a user-led system of excellent HE and FE provision. Skillset has been developing new creative and digital media apprenticeships beginning at age 14 and has been building an involved and engaged approach to the problems of recession among the industry through its digital business support programmes and its rapid response digital media skills programme. Finally Skillset has been busy developing a digital content market place and providing broader awareness of intellectual property rights, management skills and appropriate legal frameworks in order to help the industry exploit new business opportunities.

More broadly, Skillset has developed a broad suite of research that is beginning to provide an evidence base worthy of the sector's strategic importance and potential. This has been achieved despite very limited resources and in sub-sectors that have been notoriously difficult to measure by the use of standard industrial classifications. A new level of urgency and commitment is required from all concerned parties to ensure that such vital intelligence gathering is not allowed to wither due to budgetary pressures. It remains chilling that we still know relatively little about a workforce that is said to be vital to our future economic prosperity and cultural well being.

What follows is therefore a set of policy recommendations designed to create a new set of demand-led priorities for the Creative Media sector in delivering an accelerated growth and diversity scenario. These policies are designed to build intelligently on existing investments and new initiatives. They also reflect the tacit

_

²⁴⁸ http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf

assumption that Skillset, like other sector skills councils, will not be able play the active and dynamic role required to deliver them without increased funding and greater clarity about its role and focus within the framework provided by this analysis.²⁴⁹

The sectors at the heart of the creative economy should continue to receive attention as sectors of strategic importance, with priority placed on their skills needs. Building on the policies set out in 'Higher Ambitions' and 'Skills for Growth', government and business should work more closely together, with employers having increased influence and investment in the skills system and with government policy enabling greater tailoring of skills strategies to meet the high level skills needs of these sectors. A more strategic, flexible approach to co-investment with employers and individuals should be established for all the skills on which the creative economy depends.

Our policy recommendations reflect those ambitions, and Skillset's enduring aim to work closely and energetically with Creative and Cultural skills and the HE and FE sectors to ensure the UK has the world's best suite of Creative Media training courses thus helping to attract and retain the best creative talent.

_

²⁴⁹ http://www.policyexchange.org.uk/assets/Simply_Learning_-_Jan__10.pdf

7.2 Policy Recommendations

In Chapter Six we outlined the key interventions required to deliver Skillset's vision of future success. The recommendations that follow below have been framed to help deliver those necessary interventions, in particular the need for:

- More targeted and better government investment in supporting the growth of demand-led professional qualifications and systems of accreditation
- A more diverse industry that genuinely celebrates all the talents of all the people of the United Kingdom
- More professional recruitment processes that are based on fairness and accessibility and not just the ability of the favoured few to survive periods of unpaid internship
- An education system that enables people to join the sector more job-ready and more attuned to the demands of employment
- Continuing support for public sector trainers such as the BBC and a greater willingness to train from all levels of employer
- New mechanisms that will enable more people to gain the network capital essential for success in the sector
- Career information that is clear, accessible and available to all

Within that intervention frame, our policy recommendations cluster under four core themes – entry level skills development; CPD and professional development; wider fiscal and business support for the sector; and Investment in Industry specific research and LMI.

Entry Level Skills Development

1. Launch a Professional Apprenticeship and Internship Programme for the Creative Media industries to incentivise employers to recruit and train graduates and grow the UK's pool of experienced Creative Media professionals. This programme should, for these strategically important sectors, enable graduate entrants to undertake employer-designed Apprenticeships and shorter-term Internships and also provide for flexible training content designed for professional level jobs. It would help remove barriers for SME participation and enable different employers through cross industry collaboration to operate a pooled approached to internships.

- 2. Urge the film and television industries to provide more equal access to training and skills-based career development through greater use of apprenticeships and graduate internships. Skillset will continue its work on developing codes of conduct for internships and will seek to play a greater role in the coordination of apprenticeships and on-the-job training.²⁵⁰ Skillset will also keep developing relevant new offerings, including the development of a digital media apprenticeship.
- 3. Continue to support and invest in Skillset's Media and Screen Academy network and accredited courses in their development of fit for purpose Undergraduate and Foundation degree provision, including new delivery models such as Summer Schools and Hot Houses. Skillset's longer term aim here is to re-wire the curriculum through developing new models of undergraduate provision, driven by the full use of digital hubs at key institutions.

Skillset will also work with partners to ensure that they are recruiting new students as widely and imaginatively as possible to attract the brightest and the best and to encourage a truly diverse range of candidates to enter the Industry. As part of those efforts Skillset will help create strong feeder links through from the increasing variety of courses already available for 14 to 19 year olds, including for example the new Diploma qualifications in England and the Welsh Baccalaureate.

4. The Creative Media industry needs a vibrant, well-skilled recruitment pool to underpin its growth and development. This means that young people must be

-

²⁵⁰ For supporting arguments here please see - House of Lords Communications Committee (2010) – 'First Report: The British Film and Television Industries' (www.parliament.the-stationery-office.co.uk)

equipped to leave the education system with the full complement of skills and knowledge that are required by industry and with a clear idea of the progression routes available to them. Skillset will therefore work to secure ongoing investment to a refreshed approach to an online careers and mentoring provision designed to help people get on and get into the Creative Media industries.

More broadly given the transformation in the media ecologies of young people

– the sector itself should be reformulating how education and learning is

delivered to key workers in the sector through new media platforms.

5. Publish new guidelines to help galvanise the Industry to do more to tackle the widespread use of unpaid work experience, which while developing skills, discriminates against those who cannot afford to work unpaid.

CPD and Professional Development

6. Launch a 'Digital Professional' Skills Development Fund as part of a policy decision to accelerate the growth of the knowledge economy. This fund should leverage public funding to trigger increased investment in the development of content skills by employers, and should support high level skills development (graduate and post-graduate level). This would rapidly increase the scale and impact of the UK network of Skillset Screen and Media Academies, and enable greater participation of Higher Education in continuing professional development, while also supporting the development of new short courses and bite-sized online learning to up-skill the existing workforce and re-skill career changers entering digital careers. It would enable pioneering programmes of creative and technical work-based study to address cross platform content development and the underpinning emerging collaborative processes and models which can be used to inform the

development of HE provision and the change in culture required for effective delivery.

It is vital that the new BIS/SSC Joint Investment Fund for growth sectors of the economy, announced in the Skills White Paper, supports such high level skills needs as well as intermediary needs.

- 7. Undertake a feasibility study to explore how effective a formal membership body could be in underpinning the ongoing professionalisation of the sector. The idea here would be to test the feasibility of creating a 'Creative Media Industries Institute' which existing practitioners and new entrants could join in the same way that HR and Marketing professionals can join their long established professional bodies. Such an initiative would help with information asymmetries, and enable the industry to co-produce vital facilitating outcomes such as courses, training standards etc. It could be paid for by a mix of modest membership fees, industry levy and government support through the tax system if it was a registered public interest or charitable body.
- 8. Continue to invest in and grow the wider role that Skillset's Screen and Media Academies play in offering CPD business support, Postgraduate provision, Incubation schemes and other development activity.
- 9. Endorse the recent recommendations of the House of Lords Communications Committee urging the Government to encourage PSBs to revive their investment in training²⁵¹. Skillset will support and help further develop the central industry training role of the BBC and Channel 4 as public realm actors. In addition the UKFC should continue to see developing the skills and talent of the workforce as key to the health and wealth of the British film industry and continue its investment. These efforts are a good use of public monies for a sector characterised by an unusually long tail of sole traders and SMEs

-

²⁵¹ House of Lords Communications Committee (2010) – 'First Report: The British Film and Television Industries' (www.parliament.the-stationery-office.co.uk)

without the profit margins to sustain large amounts of external training provision.

Fiscal and Business Support

- 10. Investigate whether a new architecture of fiscal incentives can be created for the larger employers in the sector to employ people from more diverse backgrounds in larger numbers.
- 11. Create a new architecture of engagement for SMEs and sole traders. Skillset and other key agencies will work to create new ways of communicating with the sector through roadshows, social networking sites, twitter, and streamed events.

Invest in Research and LMI

- 12. Continue and increase investment in a current evidence base that provides the strategic intelligence to routinely inform;
 - o the ongoing development and currency of all the other policy recommendations listed above and
 - o the introduction of other essential interventions yet to be determined based on new evidence.

Skillset has developed a suite of research that is steered by industry and Government representatives²⁵² and this is beginning to provide an evidence base worthy of the sector's strategic importance and potential. This has been achieved following a build up of research expertise specific to the Creative Media industry, and despite very limited resources and in sub-sectors that

²⁵² http://www.skillset.org/research/committee/

have been notoriously difficult to measure. A new level of urgency and commitment is required from all concerned parties to ensure that such vital intelligence gathering is not allowed to wither due to budgetary pressures. With increased resources and the continued support of industry and Government, Skillset's Research programme can help underpin the ongoing growth of the sector by efficiently providing the greater level of granularity required to drive first class policy making and delivery.

Annex A Creative Media and Gaps in Official Data Sources

Official data sources that rely on Standard Industrial and Standard Occupational Classifications are broadly effective for photo imaging and publishing for the purpose of collecting and representing employment and some skills data but less useful for capturing data for the rest of the industry. As noted earlier,

- Key elements of the Creative Media industry sit in broad classifications that include activity outside of Creative Media preventing any discrete and crucial analysis e.g. Interactive Content Design, Content for Computer Games and Facilities.
- Official data sources to a greater or lesser extent systematically exclude the
 discrete and increasing freelance labour pool required to create and distribute
 the creative content upon which our digital economy is becoming increasingly
 reliant.
- In some cases sample sizes are too small to enable discrete analysis of data contained within SIC that do exist, particularly to the 5-digit SIC level.

The Creative Media industry and DCMS with Skillset first reviewed data available for this part of the industry from the ONS and other sources in 1999 and concluded that additional data are required to measure as a priority the size, shape and specific skills demand of the Creative Media industry its constituent sectors and large freelance labour pool to a granular and commonly understood sub-sectoral level, using bespoke methodologies to ensure adequate sample sizes,. In some cases equivalent data cannot be generated eg. GVA and GDP and so these measures exclude contributions from elements not served well by SIC eg Interactive Content Design, facilities (excl. post production), Content for Computer Games and freelancers.

In some cases, the SIC and SOC systems simply do not provide the level of detail required, as noted above. In other cases within the SIC system, whilst the system itself provides the level of detail required, the sample size of surveys that underpin the key data sources, such as the ABI which measures productivity, are in fact too small to offer robust detailed analysis. As well as systematically excluding sole traders, as far as business activity goes, little data are available at 5-digit SIC level and for example production and distribution activity cannot be disaggregated.

The table below provides a full breakdown of employment in the Creative Media industry from Skillset's primary research compared with estimates from official data sources. This is followed by a detailed comparative analysis.

For more detail on the methodologies adopted please refer to: www.skillset.org.

Table 18 Labour Force Survey and Skillset Creative Media Employment Estimates

	LABOUR FORCE SURVEY ²⁵³			SKILLSET ²⁵⁴		
INDUSTRIES			INDUSTRIES			
SIC	Description	Total	Main Sector	Sub-sector	Total	
2007		Employed			Employed	
60.2	TV Programming & Broadcasting activities	49,000	Television	Broadcast TV	15,750	
59.11/3	TV Programme Production activities	23,000		Cable and Satellite	12,700	
59.13/3	TV Programme Distribution activities	n/a		Independent Production	21,700	
	Sub-total	72,000		Sub-total	50,150	
60.1	Radio Broadcasting	13,000	Radio	Broadcast Radio	19,900	
				Independent Production	1,000	
	Sub-total	13,000		Sub-total	20,900	
59.12	MP, V, and TV Programme Post-Production	3,000	Facilities	Post production	7,450	
				Studio and Equipment Hire	5,900	
				Outside Broadcast	300	
				VFX	6,900	
				Special Physical Effects	700	
				Manufacture of AV Equipment	2,900	
				Processing Labs	300	
				Other Services for Film and TV	18,600	
	Sub-total	3,000		Sub-total	43,050	
59.11/1	Motion Picture Production activities	19,000	Film	Film Production ²⁵⁵	11,300	
59.13/1	Motion Picture Distribution activities	n/a		Film Distribution	1,200	
59.14	Motion Picture Projection activities	15,000		Cinema Exhibition	17,650	
				Moving Picture Archives and Libraries	300	

²⁵³ONS Labour Force Survey April-June 2009.

²⁵⁴ Skillset 2009 Employment Census except for Publishing, Photo Imaging, Creative Occupations outside the industry and where otherwise stated.

²⁵⁵ Secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K.

LABOUR FORCE SURVEY ²⁵³		SKILLSET ²⁵⁴			
	Sub-total	34,000		Sub-total	30,450
59.11/2	Video production activities	7,000	Other Content	Animation	4,300
59.13/2	Video Distribution activities	n/a		Commercials and Pop Promos	4,100
				Corporate Production	3,950
	Sub-total	7,000		Sub-total	12,350
			Interactive Content	Interactive Content Design	34,250
			Design		
				Sub-total	34,250
			Content for Computer	Content and Development	7,000
			Games		
				Sub-total	7,000
			Additional Available		50,000
			Freelancers		
74.2	Photographic activities		Photo Imaging ²⁵⁶	Photographic activities	
74.20/1	Portrait Photographic activities	17,000		Portrait Photographic activities	17,000
74.20/2	Other Specialist Photography not Portrait	2,000		Other Specialist Photography not	2,000
74.20/3	Film processing	3,000		Film processing	3,000
74.20/9	Other Photographic activities; n.e.c.	26,000		Other Photographic activities; n.e.c.	26,000
	Sub-total	48,000		Sub-total	48,000
58.11	Book Publishing	38,000	Publishing ²⁵⁷	Book Publishing	38,000
58.12	Publishing of Directories & Mailing Lists	3,000		Publishing of Directories & Mailing	3,000
58.13	Publishing of Newspapers	56,000		Publishing of Newspapers	56,000
58.14	Publishing of Journals & Periodicals			Publishing of Journals & Periodicals	
58.14/1	Publishing of Learned Journals	n/a		Publishing of Learned Journals	n/a
58.14/2		41,000		Publishing of Consumer, Business	41,000
	Publishing of Consumer, Business and			and Professional Journals and	·

Professional Journals and Periodicals

²⁵⁶ONS LFS April-June 2009.

²⁵⁷ Ibid.

	LABOUR FORCE SURVEY ²⁵³			SKILLSET ²⁵⁴	
63.91	News Agency activities	7,000		News Agency activities	7,000
63.99	Other information Service activities n.e.c.	9,000		Other information Service activities	9,000
58.19	Other Publishing	32,000		Other Publishing	32,000
	Sub-total	186,000		Sub-total	186,000
	TOTAL	352,500		TOTAL	482,850
OCCU	PATIONS OUTSIDE THE CREATIVE MEDIA INI	DUSTRY ²⁵⁸	OCCUPATIO	NS OUTSIDE THE CREATIVE MEDIA INDUS	STRY ²⁵⁹
SOC	Description	Total	SOC 2000	Description	Total
2000		employed			employed
3432	Broadcasting Associate Professionals	12,000	3432	Broadcasting Associate Professionals	12,000
5244	TV, Video and Audio Engineers	8,000	5244	TV, Video and Audio Engineers	8,000
3434	Photographers & Audio-Visual equipment	23,000	3434	Photographers & Audio-Visual	23,000
3431	Journalists, Newspaper & Periodical Editors	21,00	3431	Journalists, Newspaper & Periodical	21,000
5421	Originators, Compositors & Print Preparers	2,000	5421	Originators, Compositors & Print	2,000
				Preparers	
3421	Graphic Designers	85,000	3421	Graphic Designers	85,000
	TOTAL	151,000		TOTAL	151,000
	INDUSTRIES + OCCUPATIONS ²⁶⁰			INDUSTRIES + OCCUPATIONS ²⁶¹	
TOTAL		482,500	TOTAL		633,850

NB: 'n/a' indicates data not available. All LFS data include all people working and not just those of working age.

²⁵⁸ Skillset's contract with UKCES does not include responsibility for these occupations outside the Creative Media industry. Due to the nature of the Creative Media labour pool it is likely that people working in these occupations will work in the Creative Media industry at some point and will benefit from the service Skillset provides.

²⁵⁹ Ibid.

²⁶⁰ bid.

²⁶¹ bid.

Table 18 shows employment estimates from the Labour Force Survey (April-June 2009) using SIC 2007 against those from Skillset sourced employment data where there is significant incompatibility, using the Skillset coordinated and industry endorsed classification system. Figures from both sources have been grouped in ways that differ slightly from their 'natural' organisation within the two respective systems in order to enable comparison: in other words, the sectors as defined within SIC are not listed in chronological order, and the broad sector groupings used for Skillset data do not in every case reflect how the sector is usually mapped, defined or presented by Skillset. The sector groupings used here are intended purely to illustrate where definitions are compatible and where they are not, and what is and is not included within each dataset.

Television

The LFS estimate of employment in television is considerably higher than Skillset's (81,000 compared with 50,150). There are a number of likely explanations for this. Analysis of the data at sub sector level shows a close fit between the LFS estimate for 59.11/3 (TV Programme Production Activities) and Skillset's estimate for Independent Production for TV (23,100 against 23,000). The LFS estimate is a little higher as it probably includes some in house production staff employed by broadcasters. The real disparity is between the LFS estimate for SIC 60.2 (TV Programming & Broadcasting Activities) and Skillset's combined estimate for Broadcast TV and Cable and Satellite (49,000 against 28,450). The main reason for this is likely to be the diversification of activities now undertaken by broadcasters, and difference in the modes of classification between the LFS and Skillset's Employment Census. Specifically, the BBC (by far the largest employer in this area) now undertakes activity not only in television broadcasting, but also radio, interactive content design and facilities (eg post production and outside broadcast). In the absence of suitable alternative classifications, it is likely that all or most individuals employed, say by the BBC, who respond to the LFS will be classified within 60.2. By contrast, the BBC provides Skillset with employment returns for the four sectors separately (television, radio, interactive content Design and facilities). Employees and freelancers working in generic roles across the business are apportioned according the relative size of each main area of business. Thus some of the workforce represented within 60.2 is counted by Skillset's research within the categories of radio, facilities and interactive content design rather than television.

Radio

In contrast to television, Skillset's estimate for radio comes out considerably higher than that of the LFS – 20,900 compared with 13,000. In large part, this is likely to be due to the phenomenon, already noted, of BBC employees across all areas of activity being classified as within 60.2 (TV Programming and Broadcasting Activities) by the LFS, but within the specific area by Skillset.

Facilities

The facilities sector encompasses a wide range of activities that provide support to television, film and related areas. The only of these areas captured by a discrete category within SIC is 59.12 (motion picture, video, and television programme post-production activities). The LFS reports 3,000 people to be employed in that activity, compared with 7,450 recorded by Skillset as working in post production. This will be due in part to the classification by the LFS as some individuals in post production within TV Programming and Broadcasting (60.2), as already noted. Some other individuals classified in other sub sectors of facilities by Skillset (eg Outside Broadcast and VFX), may also be classified by the LFS as within 60.2. However, many, employed in areas such as Studio and Equipment Hire and Other Services for Film and TV, are almost certainly excluded completely from LFS data cut to capture the footprint as they are probably counted within SICs that are 'core' to another SSC. This cohort of people almost certainly accounts for part of the overall discrepancy between the LFS and Skillset data.

Film

The overall estimate of employment in film from the LFS is 34,000, slightly higher than Skillset's figure of 30,450. While Skillset's estimates of exhibition/projection and distribution are slightly higher, the LFS estimate of employment in film production is considerably higher (19,000 compared with 11,300). The likely explanation for this is the classification by LFS of some individuals in film production who are recorded by Skillset in areas such as commercials or animation (see below – Other Content Creation).

Other Content Creation

The sum of these areas as recorded by Skillset comes in higher than the LFS estimate (12,350 compared with 7,000). As noted above, this is probably due to some of those classified here by Skillset being counted within Film Production by the LFS.

Interactive Content Design

Interactive content design accounts for employment of 34,250 people but is not classified as a discrete sector within SIC and therefore does not show up in official data estimates of Skillset's footprint from sources such as the LFS

Content for Computer Games

Content for Computer Games accounts for employment of 7,000 people but is not classified as a discrete sector within SIC and therefore does not show up in official data estimates of Skillset's footprint from sources such as the LFS.

Reconciling the Data

As has been noted above, there are some differences between the LFS and Skillset sources in how sectors are classified within and between television, radio, film, other content creation, and post production, but the overall estimates for combined employment in areas covered by SIC fit very closely.

Annex B Sector Overview

In <u>TV and Radio</u>, the UK is particularly recognised for the quality of its public sector broadcasters alongside regulated subscription services such as BSkyB and Virgin Media). Exploiting broadband infrastructure to offer users 'on demand' services, the BBC launched iPlayer in 2007, and similar offerings have since been released by ITV, Channel 4 and Sky. TV has had particular challenges as advertising revenues shift online (see below), and the sector has seen a shift from employment in big organisations such as the BBC and ITV to the independent production sector.

Undoubtedly, the TV and radio industries are going through one of the most profound periods of restructuring and challenge in its history, in the face of convergent media and changing audience tastes and behaviour. As content created for television broadcast is increasingly available on, and viewed via, the internet 'content is king' and audiences seek programmes and content rather than channels and schedules. This convergence and change is happening at a faster rate than predicted, adding structural challenges to those posed by the downturn in the economic climate. Falling advertising revenue has already impacted directly on the sector, with significant job losses and reductions of commissioning and training budgets.

The UK has a strong heritage in IP creation in <u>Video</u>, <u>Film and Photography</u> – in the Film sector alone over the period 2001-2007, 30 of the top 200 films globally were based on stories and characters created by British writers, and British films account for 31% of UK box office receipts. ²⁶² We have one of the most prodigious and highly respected <u>Film</u> industry's in the world which brings with it innumerable secondary economic opportunities and benefits. The current economic climate has posed challenges as it has across the whole economy and 2008 was a mixed year for the industry. The UK box office grew to a record £850 million. UK films took 31% of the UK box office and internationally UK films accounted for 15% of the global box office. The upward trend in the performance of UK film in the global market was reflected in the 2007 export figures, which saw UK film exports reaching a record £1,050 million. This figure captures the exports of production services and income from royalties, underlining the UK's international competitiveness. ²⁶³

²⁶² Statistical Yearbook, UK Film Council 2009.

²⁶³ Statistical Yearbook, UK Film Council 2009.

In total, the global market for all forms of <u>Animation</u> is currently estimated to be worth \$300 billion per annum. The UK has a significant position in this market, but the UK's animation industry faces a number of challenges and opportunities that will affect its various sub-sectors in different ways. In particular, the decline in commissions from commercial broadcasters and their advertisers presents a major threat to traditional 2D animators who are already affected by the growth of off-shoring to low cost centres of production.

The <u>Facilities</u> sector supports and underpins the creative talent in the field of television and moving image production in the UK, and to a growing extent the creative talents of overseas producers, by providing specialised technical services, technology and their associated skilled personnel. The sector faces profound changes in its technology and overseas competition. Those involved in the sector, directly and indirectly, must ready themselves to compete globally and find new opportunities in the global digital market place. The lack of available financing due to the recent economic situation is causing increasing damage to the sector, with many companies unable to raise capital to invest in new equipment.

The <u>Interactive Content Design</u> industry, in particular, which has grown at twice the rate of the economy as a whole over the last decade and forecasts continued growth and demand, is now worth several billions of pounds annually; and is becoming ever more sophisticated. Bringing technical and creative talent together; to understand each other's language and skill-sets, to explore new types of content development, business models, legal and collaborative frameworks is the greatest challenge for industry.

The <u>Content for Computer Games</u> industry in the UK has the largest number of Content for Computer Games studios in Europe, and is the third largest produced in the world after US and Japan²⁶⁴.

The <u>Publishing</u> industry, particularly newspapers, is adversely affected by the impact of the recession on advertising and consumer spending. At the same time, Publishing companies are key players in the information age, as drivers of the e-economy²⁶⁵ and are making information available on an unprecedented scale. Google has made over half a million public domain books searchable online or downloadable. Creative

_

²⁶⁴ Raise the Game. NESTA December 2008

²⁶⁵ BIS, 2009 http://www.berr.gov.uk/whatwedo/sectors/publishing/index.html

Media distribution to electronic devices is growing, with content starting to appear for an ever widening set of devices - from the Kindle and Sony e-Book reader, to the publishing of Harper Collins' 100 Classic Book Collection for Nintendo DS.

Annex C Limitations of Official Data Sources for Creative Media

The system for classifying industries used by official data - Standard Industrial and Standard Occupational Classifications (SIC and SOC) - is broadly effective for photo imaging and publishing but less useful for classifying the rest of the industry. As noted earlier,

- Key elements of the Creative Media industry sit in broad classifications
 that include activity outside of Creative Media preventing any discrete
 and crucial analysis e.g. Interactive Content Design, Content for
 Computer Games and Facilities.
- Official data sources to a greater or lesser extent systematically exclude the discrete and increasing freelance labour pool required to create and distribute the creative content upon which our digital economy is becoming increasingly reliant.
- In some cases sample sizes are too small to enable discrete analysis of data contained within SIC that do exist, particularly to the 5-digit SIC level.

In addition, sample sizes for Scotland, Northern Ireland and Wales are far too small to be published by official data sources for most SIC.

The Creative Media industry and DCMS with Skillset first reviewed data available for this part of the industry from the ONS and other sources in 1999 and concluded that additional data are required to measure as a priority the size, shape and specific skills demand of the Creative Media industry its constituent sectors and large freelance labour pool to a granular and commonly understood sub-sectoral level, using bespoke methodologies to ensure adequate sample sizes,. In some cases equivalent data cannot be generated eg. GVA and GDP and so these measures exclude contributions from elements not served well by SIC eg Interactive Content Design, facilities (excl. post production), Content for Computer Games and freelancers.

In some cases, the SIC and SOC systems simply do not provide the level of detail required, as noted above. In other cases within the SIC system, whilst the system itself provides the level of detail required, sample sizes of surveys that underpin the

key data sources such as the ABI which measures productivity are in fact too small to offer robust detailed analysis. As well as systematically excluding sole traders, as far as business activity goes, little data are available at 5-digit SIC level and for example production and distribution activity cannot be disaggregated.

The table below provides a full breakdown of employment in the Creative Media industry from Skillset's primary research compared with estimates from official data sources. The table clearly shows the paucity of official data for the Creative Media industry in Scotland where as noted earlier interactive content design and Content for Computer Games and most of facilities are not included at all, and reliable figures for those sectors that are included are only provided for TV (programming and broadcasting) and book and newspaper publishing. The official data substantially underestimates the scale of employment within the Creative Media industry in Scotland, only accounting for a proportion of employment as illustrated by Skillset's industry endorsed primary research.

For more detail on the methodologies developed lease refer to: www.skillset.org.

Table 19 Labour Force Survey and Skillset Creative Media Employment Estimates _ Scotland

	LABOUR FORCE SURVEY ²⁶⁶			SKILLSET ²⁶⁷		
	INDUSTRIES		INDUSTRIES			
SIC	Description	Total	Main Sector	Sub-sector	Total	
2007		Employed			Employed	
60.2	TV Programming & Broadcasting activities	3,000	Television	Broadcast TV	950	
59.11/3	TV Programme Production activities			Cable and Satellite	0	
59.13/3	TV Programme Distribution activities			Independent Production	1,000	
	Sub-total	3,000		Sub-total	1,950	
60.1	Radio Broadcasting	*	Radio	Broadcast Radio	1,650	
				Independent Production	*	
	Sub-total	*		Sub-total	1,650	
59.12	MP, V, and TV Programme Post-Production	*	Facilities	Post production	100	
				Studio and Equipment Hire	250	
				Outside Broadcast	50	
				VFX	*	
				Special Physical Effects	50	
				Manufacture of AV Equipment	*	
				Processing Labs	*	
				Other Services for Film and TV	550	
	Sub-total			Sub-total Sub-total	1,000	
59.11/1	Motion Picture Production activities	*	Film	Film Production ²⁶⁸	650	
				Film Distribution	300	

59.13/1 Motion Picture Distribution activities

²⁶⁶ONS Labour Force Survey April-June 2009.

²⁶⁷ Skillset 2009 Employment Census except for Publishing, Photo Imaging, Creative Occupations outside the industry and where otherwise stated.

²⁶⁸ Secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K.

LABOUR FORCE SURVEY ²⁶⁶		SKILLSET ²⁶⁷			
59.14	Motion Picture Projection activities	*		Cinema Exhibition ²⁶⁹	-
				Moving Picture Archives and Libraries	*
	Sub-total			Sub-total	950
59.11/2	Video production activities	*	Other Content Creation	Animation	500
59.13/2	Video Distribution activities	*		Commercials and Pop Promos	*
				Corporate Production	150
	Sub-total	*		Sub-total	650
			Interactive Content	Interactive Content Design	1,050
			Design		
				Sub-total	1,050
			Content for Computer	Content and Development	500
			Games		
				Sub-total	500
			Additional Available		2,800
			Freelancers		
74.2	Photographic activities	-	Photo Imaging ²⁷⁰	Photographic activities	-
74.20/1	Portrait Photographic activities	*		Portrait Photographic activities	*
74.20/2	Other Specialist Photography not Portrait	-		Other Specialist Photography not Portrait	-
74.20/3	Film processing	*		Film processing	*
74.20/9	Other Photographic activities; n.e.c.	*		Other Photographic activities; n.e.c.	*
	Sub-total Sub-total	*		Sub-total	*
58.11	Book Publishing	2,000	Publishing ²⁷¹	Book Publishing	2,000
58.12	Publishing of Directories & Mailing Lists			Publishing of Directories & Mailing Lists	-
58.13	Publishing of Newspapers	7,000		Publishing of Newspapers	7,000

58.14 Publishing of Journals & Periodicals

Publishing of Journals & Periodicals

²⁶⁹ Data for Cinema Exhibition are not available by nation or region.

²⁷⁰ONS LFS April-June 2009.

^{*} Figures suppressed due to unreliable estimates

²⁷¹ Ibid.

	LABOUR FORCE SURVEY ²⁶⁶			SKILLSET ²⁶⁷	
58.14/1	Publishing of Learned Journals	*		Publishing of Learned Journals	-
58.14/2	Publishing of Consumer, Business and Professional	*		Publishing of Consumer, Business and	*
	Journals and Periodicals			Professional Journals and Periodicals	
63.91	News Agency activities	*		News Agency activities	-
63.99	Other information Service activities n.e.c.	*		Other information Service activities n.e.c.	*
58.19	Other Publishing	*		Other Publishing	-
	Sub-total Sub-total	9,000		Sub-total Sub-total	9,000
	TOTAL	12,000		TOTAL	19,550
OCC	UPATIONS OUTSIDE THE CREATIVE MEDIA INDUS	STRY ²⁷²	OCCUP	ATIONS OUTSIDE THE CREATIVE MEDIA INDUSTR	RY
SOC	Description	Total	SOC 2000	Description	Total
2000		employed			employed
3432	Broadcasting Associate Professionals	*	3432	Broadcasting Associate Professionals	*
5244	TV, Video and Audio Engineers	*	5244	TV, Video and Audio Engineers	*
3434	Photographers & Audio-Visual equipment operators	2,000	3434	Photographers & Audio-Visual equipment	2,000
3431	Journalists, Newspaper & Periodical Editors	*	3431	Journalists, Newspaper & Periodical	*
5421	Originators, Compositors & Print Preparers	-	5421	Originators, Compositors & Print Preparers	-
3421	Graphic Designers	2,000	3421	Graphic Designers	2,000
	TOTAL	4,000		TOTAL	4,000
	INDUSTRIES + OCCUPATIONS			INDUSTRIES + OCCUPATIONS	
TOTAL		16,000	TOTAL		23,500

NB: '-' indicates data not available. All LFS data include all people working and not just those of working age. '*' indicates figures are suppressed due to unreliable estimates.

Skillset's contract with UKCES does not include responsibility for these occupations outside the Creative Media industry. Due to the nature of the Creative Media labour pool it is likely that people working in these occupations will work in the Creative Media industry at some point and will benefit from the service Skillset provides.

Table 20 Labour Force Survey and Skillset Creative Media Employment Estimates _ Northern Ireland

	LABOUR FORCE SURVEY ²⁷³			SKILLSET ²⁷⁴		
INDUSTRIES			INDUSTRIES			
SIC	Description	Total	Main Sector	Sub-sector	Total	
2007		Employed			Employed	
60.2	TV Programming & Broadcasting activities	*	Television	Broadcast TV	500	
59.11/3	TV Programme Production activities			Cable and Satellite	0	
59.13/3	TV Programme Distribution activities			Independent Production	1150	
	Sub-total	*		Sub-total Sub-total	1,650	
60.1	Radio Broadcasting	-	Radio	Broadcast Radio	2050	
				Independent Production	0	
	Sub-total	-		Sub-total Sub-total	2050	
59.12	MP, V, and TV Programme Post-Production	-	Facilities	Post production	50	
				Studio and Equipment Hire	250	
				Outside Broadcast	0	
				VFX	*	
				Special Physical Effects	0	
				Manufacture of AV Equipment	0	
				Processing Labs	0	
				Other Services for Film and TV	50	
	Sub-total	-		Sub-total Sub-total	350	
59.11/1	Motion Picture Production activities	*	Film	Film Production ²⁷⁵	300	
59.13/1	Motion Picture Distribution activities	-		Film Distribution	0	
59.14	Motion Picture Projection activities	*		Cinema Exhibition ²⁷⁶	-	
				Moving Picture Archives and Libraries	*	

²⁷³ONS Labour Force Survey April-June 2009.

²⁷⁴ Skillset (2009) Employment Census except for Publishing, Photo Imaging, Creative Occupations outside the industry and where otherwise stated.

²⁷⁵ Secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K.

²⁷⁶ Data for Cinema Exhibition are not available by nation or region.

LABOUR FORCE SURVEY ²⁷³			SKILLSET ²⁷⁴			
	Sub-total	*		Sub-total	*	
59.11/2	Video production activities	-	Other Content Creation	Animation	50	
59.13/2	Video Distribution activities	-		Commercials and Pop Promos	300	
				Corporate Production	50	
	Sub-total	-		Sub-total	400	
			Interactive Content Design	Interactive Content Design	1,850	
				Sub-total	1,850	
			Content for Computer Games	Content and Development	*	
				Sub-total	*	
			Additional Available Freelancers		3,050	
74.2	Photographic activities	-	Photo Imaging ²⁷⁷	Photographic activities	-	
74.20/1	Portrait Photographic activities	*		Portrait Photographic activities	*	
74.20/2	Other Specialist Photography not Portrait	-		Other Specialist Photography not Portrait	-	
74.20/3	Film processing	*		Film processing	-	
74.20/9	Other Photographic activities; n.e.c.	*		Other Photographic activities; n.e.c.	*	
	Sub-total	*		Sub-total	*	
58.11	Book Publishing	-	Publishing ²⁷⁸	Book Publishing	-	
58.12	Publishing of Directories & Mailing Lists	-		Publishing of Directories & Mailing Lists	-	
58.13	Publishing of Newspapers	1,000		Publishing of Newspapers	1,000	
58.14	Publishing of Journals & Periodicals	-		Publishing of Journals & Periodicals	-	
58.14/1	Publishing of Learned Journals	-		Publishing of Learned Journals	-	
58.14/2	Publishing of Consumer, Business and Professional Journals and Periodicals	*		Publishing of Consumer, Business and Professional Journals and Periodicals	*	
		-			-	

63.91 News Agency activities

²⁷⁷ONS LFS April-June 2009.

News Agency activities

^{*} Figures suppressed due to unreliable estimates

²⁷⁸ Ibid.

LABOUR FORCE SURVEY ²⁷³			SKILLSET ²⁷⁴		
63.99	Other information Service activities n.e.c.	-		Other information Service activities n.e.c.	-
58.19	Other Publishing	-		Other Publishing	-
	Sub-total	1,000		Sub-total	1,000
	TOTAL	1,000		TOTAL	6,000
000	CUPATIONS OUTSIDE THE CREATIVE MEDIA INDUS	STRY ²⁷⁹	OCCUPA	TIONS OUTSIDE THE CREATIVE MEDIA INDUSTR	Y ²⁸⁰
SOC	Description	Total	SOC 2000	Description	Total
2000		employed			employed
3432	Broadcasting Associate Professionals	*	3432	Broadcasting Associate Professionals	*
5244	TV, Video and Audio Engineers	-	5244	TV, Video and Audio Engineers	-
3434	Photographers & Audio-Visual equipment operators	*	3434	Photographers & Audio-Visual equipment	*
3431	Journalists, Newspaper & Periodical Editors	-	3431	Journalists, Newspaper & Periodical	-
5421	Originators, Compositors & Print Preparers	-	5421	Originators, Compositors & Print Preparers	-
3421	Graphic Designers	2,000	3421	Graphic Designers	2,000
	TOTAL	2,000		TOTAL	2,000
	INDUSTRIES + OCCUPATIONS 281			INDUSTRIES + OCCUPATIONS ²⁸²	
TOTAL		3,000	TOTAL		10,350

NB: 'n/a' indicates data not available. All LFS data include all people working and not just those of working age.

Skillset's contract with UKCES does not include responsibility for these occupations outside the Creative Media industry. Due to the nature of the Creative Media labour pool it is likely that people working in these occupations will work in the Creative Media industry at some point and will benefit from the service Skillset provides.

²⁸⁰ Ibid.

²⁸¹ Ibid.

²⁸² Ibid.

Table 21 Labour Force Survey and Skillset Creative Media Employment Estimates _ Wales

	LABOUR FORCE SURVEY ²⁸³			SKILLSET ²⁸⁴			
	INDUSTRIES			INDUSTRIES			
SIC	Description	Total	Main Sector	Sub-sector	Total		
2007		Employed			Employed		
60.2	TV Programming & Broadcasting activities	4,000	Television	Broadcast TV	1,000		
59.11/3	TV Programme Production activities	*		Cable and Satellite	*		
59.13/3	TV Programme Distribution activities	-		Independent Production	2,500		
	Sub-total	4,000		Sub-total	3,500		
60.1	Radio Broadcasting	-	Radio	Broadcast Radio	750		
				Independent Production	*		
	Sub-total	-		Sub-total	750		
59.12	MP, V, and TV Programme Post-Production	-	Facilities	Post production	100		
				Studio and Equipment Hire	100		
				Outside Broadcast	*		
				VFX	*		
				Special Physical Effects	*		
				Manufacture of AV Equipment	*		
				Processing Labs	*		
				Other Services for Film and TV	500		
	Sub-total	-		Sub-total	700		
59.11/1	Motion Picture Production activities	-	Film	Film Production ²⁸⁵	200		
59.13/1	Motion Picture Distribution activities	-		Film Distribution	*		
59.14	Motion Picture Projection activities	*		Cinema Exhibition ²⁸⁶	-		
				Moving Picture Archives and Libraries	*		

²⁸³ONS Labour Force Survey April-June 2009.

²⁸⁴ Skillset (2009) Employment Census except for Publishing, Photo Imaging, Creative Occupations outside the industry and where otherwise stated.

²⁸⁵ Secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K.

²⁸⁶ Data for Cinema Exhibition are not available by nation or region.

LABOUR FORCE SURVEY ²⁸³			SKILLSET ²⁸⁴			
	Sub-total	*		Sub-total	*	
59.11/2	Video production activities	-	Other Content Creation	Animation	400	
59.13/2	Video Distribution activities	-		Commercials and Pop Promos	0	
				Corporate Production	0	
	Sub-total	-		Sub-total	400	
			Interactive Content Design	Interactive Content Design	3,850	
				Sub-total	3,850	
			Content for Computer Games	Content and Development	50	
				Sub-total	50	
			Additional Available Freelancers		2,100	
74.2	Photographic activities	-	Photo Imaging ²⁸⁷	Photographic activities	-	
74.20/1	Portrait Photographic activities	*		Portrait Photographic activities	*	
74.20/2	Other Specialist Photography not Portrait	-		Other Specialist Photography not Portrait	-	
74.20/3	Film processing	-		Film processing	-	
74.20/9	Other Photographic activities; n.e.c.	*		Other Photographic activities; n.e.c.	*	
	Sub-total Sub-total	*		Sub-total	*	
58.11	Book Publishing	-	Publishing ²⁸⁸	Book Publishing	-	
58.12	Publishing of Directories & Mailing Lists	-		Publishing of Directories & Mailing Lists	-	
58.13	Publishing of Newspapers	2,000		Publishing of Newspapers	2,000	
58.14	Publishing of Journals & Periodicals	-		Publishing of Journals & Periodicals	-	
58.14/1	Publishing of Learned Journals	-		Publishing of Learned Journals	-	
58.14/2	Publishing of Consumer, Business and Professional Journals and Periodicals	*		Publishing of Consumer, Business and Professional Journals and Periodicals	*	
		*				

63.91 News Agency activities

²⁸⁷ONS LFS April-June 2009.

News Agency activities

^{*} Figures suppressed due to unreliable estimates

²⁸⁸ Ibid.

	LABOUR FORCE SURVEY ²⁸³			SKILLSET ²⁸⁴	
63.99	Other information Service activities n.e.c.	*		Other information Service activities n.e.c.	*
58.19	Other Publishing	*		Other Publishing	*
	Sub-total	2,000		Sub-total	2,000
	TOTAL	6,000		TOTAL	12,550
OCO	CUPATIONS OUTSIDE THE CREATIVE MEDIA INDUS	STRY ²⁸⁹	OCCUPA	TIONS OUTSIDE THE CREATIVE MEDIA INDUSTR	Y ²⁹⁰
SOC	Description	Total	SOC 2000	Description	Total
2000		employed			employed
3432	Broadcasting Associate Professionals	-	3432	Broadcasting Associate Professionals	-
5244	TV, Video and Audio Engineers	-	5244	TV, Video and Audio Engineers	-
3434	Photographers & Audio-Visual equipment operators	-	3434	Photographers & Audio-Visual equipment	-
3431	Journalists, Newspaper & Periodical Editors	-	3431	Journalists, Newspaper & Periodical	-
5421	Originators, Compositors & Print Preparers	-	5421	Originators, Compositors & Print Preparers	-
3421	Graphic Designers	*	3421	Graphic Designers	*
	TOTAL	*		TOTAL	*
	INDUSTRIES + OCCUPATIONS ²⁹¹	L		INDUSTRIES + OCCUPATIONS ²⁹²	
TOTAL		6,000	TOTAL		12,550

NB: '-' indicates data not available. All LFS data include all people working and not just those of working age.

²⁸⁹ Skillset's contract with UKCES does not include responsibility for these occupations outside the Creative Media industry. Due to the nature of the Creative Media labour pool it is likely that people working in these occupations will work in the Creative Media industry at some point and will benefit from the service Skillset provides.

²⁹⁰ ibid.

²⁹¹ Ibid.

²⁹² Ibid.

Table 22 Labour Force Survey and Skillset Creative Media Employment Estimates _ England

LABOUR FORCE SURVEY ²⁹³			SKILLSET ²⁹⁴		
	INDUSTRIES		INDUSTRIES		
SIC	Description	Total	Main Sector	Sub-sector	Total
2007		Employed			Employed
60.2	TV Programming & Broadcasting activities	41,000	Television	Broadcast TV	13,250
59.11/3	TV Programme Production activities	21,000		Cable and Satellite	12,700
59.13/3	TV Programme Distribution activities	*		Independent Production	17,050
	Sub-total	62,000		Sub-total	43,000
60.1	Radio Broadcasting	12,000	Radio	Broadcast Radio	13,900
				Independent Production	1,000
	Sub-total	12,000		Sub-total	14,900
59.12	MP, V, and TV Programme Post-Production	3,000	Facilities	Post production	7,200
				Studio and Equipment Hire	5,400
				Outside Broadcast	200
				VFX	6,900
				Special Physical Effects	600
				Manufacture of AV Equipment	2,950
				Processing Labs	300
				Other Services for Film and TV	17,550
	Sub-total	3,000		Sub-total	41,100
59.11/1	Motion Picture Production activities	19,000	Film	Film Production ²⁹⁵	8,800
59.13/1	Motion Picture Distribution activities	*		Film Distribution	900
59.14	Motion Picture Projection activities	13,000		Cinema Exhibition ²⁹⁶	-
				Moving Picture Archives and Libraries	300

²⁹³ONS Labour Force Survey April-June 2009.

²⁹⁴ Skillset (2009) Employment Census except for Publishing, Photo Imaging, Creative Occupations outside the industry and where otherwise stated.

²⁹⁵ Secondary analysis of unit lists for 2006 feature film productions (80 minutes or longer and minimum budget of £500K.

²⁹⁶ Data for Cinema Exhibition are not available by nation or region.

LABOUR FORCE SURVEY ²⁹³			SKILLSET ²⁹⁴		
	Sub-total	31,000		Sub-total	10,000
59.11/2	Video production activities	6,000	Other Content Creation	Animation	3,350
59.13/2	Video Distribution activities	*		Commercials and Pop Promos	3,750
				Corporate Production	3,800
	Sub-total	6,000		Sub-total	10,900
			Interactive Content Design	Interactive Content Design	27,600
				Sub-total	27,600
			Content for Computer Games	Content and Development	6,450
				Sub-total	6,450
			Additional Available		42,000
			Freelancers		
74.2	Photographic activities		Photo Imaging ²⁹⁷	Photographic activities	
74.20/1	Portrait Photographic activities	15,000		Portrait Photographic activities	15,000
74.20/2	Other Specialist Photography not Portrait	2,000		Other Specialist Photography not Portrait	2,000
74.20/3	Film processing	2,000		Film processing	2,000
74.20/9	Other Photographic activities; n.e.c.	25,000		Other Photographic activities; n.e.c.	25,000
	Sub-total Sub-total	44,000		Sub-total	44,000
58.11	Book Publishing	36,000	Publishing ²⁹⁸	Book Publishing	36,000
58.12	Publishing of Directories & Mailing Lists	3,000		Publishing of Directories & Mailing Lists	3,000
58.13	Publishing of Newspapers	48,000		Publishing of Newspapers	48,000
58.14	Publishing of Journals & Periodicals	-		Publishing of Journals & Periodicals	-
58.14/1	Publishing of Learned Journals	n/a		Publishing of Learned Journals	n/a
58.14/2	Publishing of Consumer, Business and Professional Journals and Periodicals	39,000		Publishing of Consumer, Business and Professional Journals and Periodicals	39,000
63.91	News Agency activities	7,000		News Agency activities	7,000

²⁹⁷ONS LFS April-June 2009.

^{*} Figures suppressed due to unreliable estimates

²⁹⁸ Ibid.

LABOUR FORCE SURVEY ²⁹³			SKILLSET ²⁹⁴		
63.99	Other information Service activities n.e.c.	8,000		Other information Service activities n.e.c.	8,000
58.19	Other Publishing	31,000		Other Publishing	31,000
	Sub-total	172,000		Sub-total	172,000
	TOTAL	330,000		TOTAL	418,950
OC	CUPATIONS OUTSIDE THE CREATIVE MEDIA INDUS	STRY ²⁹⁹	OCCUPA	TIONS OUTSIDE THE CREATIVE MEDIA INDUSTR	Y ³⁰⁰
SOC	Description	Total	SOC 2000	Description	Total
2000		employed			employed
3432	Broadcasting Associate Professionals	11,000	3432	Broadcasting Associate Professionals	11,000
5244	TV, Video and Audio Engineers	7,000	5244	TV, Video and Audio Engineers	7,000
3434	Photographers & Audio-Visual equipment operators	21,000	3434	Photographers & Audio-Visual equipment	21,000
3431	Journalists, Newspaper & Periodical Editors	21,000	3431	Journalists, Newspaper & Periodical	21,000
5421	Originators, Compositors & Print Preparers	2,000	5421	Originators, Compositors & Print Preparers	2,000
3421	Graphic Designers	80,000	3421	Graphic Designers	80,000
	TOTAL	142,000		TOTAL	142,000
	INDUSTRIES + OCCUPATIONS ³⁰¹			INDUSTRIES + OCCUPATIONS ³⁰²	
TOTAL		472,000	TOTAL		560,950

NB: 'n/a' indicates data not available. All LFS data include all people working and not just those of working age.

²⁹⁹ Skillset's contract with UKCES does not include responsibility for these occupations outside the Creative Media industry. Due to the nature of the Creative Media labour pool it is likely that people working in these occupations will work in the Creative Media industry at some point and will benefit from the service Skillset provides.

³⁰⁰ Ibid.

³⁰¹ Ibid

³⁰² ibid.

Table 21 shows employment estimates from the Labour Force Survey (April-June 2009) using SIC 2007 against those from Skillset sourced employment data where there is significant incompatibility, using the Skillset coordinated and industry endorsed classification system. Figures from both sources have been grouped in ways that differ slightly from their 'natural' organisation within the two respective systems in order to enable comparison: in other words, the sectors as defined within SIC are not listed in chronological order, and the broad sector groupings used for Skillset data do not in every case reflect how the sector is usually mapped, defined or presented by Skillset. The sector groupings used here are intended purely to illustrate where definitions are compatible and where they are not, and what is and is not included within each dataset.

Television

The LFS estimate of employment in television is considerably higher than Skillset's (62,000 compared with 43,000). There are a number of likely explanations for this. Analysis of the data at sub sector level shows a fairly close fit between the LFS estimate for 59.11/3 (TV Programme Production Activities) and Skillset's estimate for Independent Production for TV (21,000 against 17,050). The LFS estimate is a little higher as it probably includes some in house production staff employed by broadcasters. The real disparity is between the LFS estimate for SIC 60.2 (TV Programming & Broadcasting Activities) and Skillset's combined estimate for Broadcast TV and Cable and Satellite (41,000 against 25,950). The main reason for this is likely to be the diversification of activities now undertaken by broadcasters, and difference in the modes of classification between the LFS and Skillset's Employment Census. Specifically, the BBC (by far the largest employer in this area) now undertakes activity not only in television broadcasting, but also radio, interactive content design and facilities (eg post production and outside broadcast). In the absence of suitable alternative classifications, it is likely that all or most individuals employed, say by the BBC, who respond to the LFS will be classified within 60.2. By contrast, the BBC provides Skillset with employment returns for the four sectors separately (television, radio, interactive content Design and facilities). Employees and freelancers working in generic roles across the business are apportioned according the relative size of each main area of business. Thus some of the workforce represented within 60.2 is counted by Skillset's research within the categories of radio, facilities and interactive content design rather than television.

Radio

In contrast to television, Skillset's estimate for radio comes out considerably higher than that of the LFS – 14,900 compared with 12,000. In large part, this is likely to be due to the

phenomenon, already noted, of BBC employees across all areas of activity being classified as within 60.2 (TV Programming and Broadcasting Activities) by the LFS, but within the specific area by Skillset.

Facilities

The facilities sector encompasses a wide range of activities that provide support to television, film and related areas. The only of these areas captured by a discrete category within SIC is 59.12 (motion picture, video, and television programme post-production activities). The LFS reports 3,000 people to be employed in that activity, compared with 7,200 recorded by Skillset as working in post production. This will be due in part to the classification by the LFS as some individuals in post production within TV Programming and Broadcasting (60.2), as already noted. Some other individuals classified in other sub sectors of facilities by Skillset (eg Outside Broadcast and VFX), may also be classified by the LFS as within 60.2. However, many, employed in areas such as Studio and Equipment Hire and Other Services for Film and TV, are almost certainly excluded completely from LFS data cut to capture the footprint as they are probably counted within SICs that are 'core' to another SSC. This cohort of people almost certainly accounts for part of the overall discrepancy between the LFS and Skillset data.

Film

The overall estimate of employment in film from the LFS is 31,000, higher than Skillset's figure of 10,000. Skillset's estimates does not include cinema exhibition/ projection and distribution is slightly higher, the LFS estimate of employment in film production is considerably higher and the likely explanation for this is the classification by LFS of some individuals in film production who are recorded by Skillset in areas such as commercials or animation (see below – Other Content Creation).

Other Content Creation

The sum of these areas as recorded by Skillset comes in higher than the LFS estimate (10,900 compared with 6,000). As noted above, this is probably due to some of those classified here by Skillset being counted within Film Production by the LFS.

Interactive Content Design

Interactive content design accounts for employment of 27,600 people but is not classified as a discrete sector within SIC and therefore does not show up in official data estimates of Skillset's footprint from sources such as the LFS.

Content for Computer Games

Content for Computer Games accounts for employment of 6,450 people but is not classified as a discrete sector within SIC and therefore does not show up in official data estimates of Skillset's footprint from sources such as the LFS.

Reconciling the Data

As has been noted above, there are some differences between the LFS and Skillset sources in how sectors are classified within and between television, radio, film, other content creation, and post production, but the overall estimates for combined employment in areas covered by SIC fit very closely.

Annex D Data Sources

Skillset sources:

- 'Archives Skills Strategy', 2009
- 'A Skills Review for the TV & Radio Sector', 2009 (internal report).
- 'Balancing Children and Work in the Audio Visual Industries', 2006.
- 'Creative Media LMI Digests', 2009.
- 'Creative Media Workforce Survey', 2008 (in press), 2005, 2003.
- 'Employment Census', 2009 (in press), 2006, 2004, 2003, 2002, 2001, 2000.
- 'Employer Survey', 2006 (internal report).
- 'Feature Film Production Workforce Survey', Skillset/UK Film Council, 2008.
- 'Film Sector Employers: Skills and Training Needs in Production, Distribution & Exhibition, Skillset 2009 (in press).
- 'Final Summary Report from the M.TEST Project and Recommendations, Skillset/IABM, February 2009 (internal report).
- 'From Recession to Recovery, 2009.
- 'Photo Imaging Workforce Survey, 2007 (internal report).
- 'Sector Qualifications Strategy', 2008.
- 'Strategic Plan, 2008-2011'.
- 'Submission to the Development of MAC Shortage Occupation Lists', 2009.
- 'Survey of the Audio Visual Industries' Workforce', 2005.
- 'Understanding the Impact of Online Trading on the Occupations and Skills within the UK's consumer facing business sectors', IFF Research on behalf of Skillset, e-skills UK, Skillsmart Retail, People 1st, GoSkills and Financial Services, 2008.

Third party sources:

- Baumol, W. J. (2002) *The Free Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*, Princeton University Press.
- DCMS (2008) Creative Britain New Talents for the New Economy.
- OFCOM 2008 The Communications Market: Radio
- OFCOM Annual Report, 2009.
- NOMIS (2008) Annual Population Survey April 2007 March 2008. Residents aged
 16-Retirement
- Berger, S. et al (2005), How We Compete, Currency/Doubleday, New York, NY

- BTSR (2008) Training and Skills Report
- Clayton, N. (2008) Enterprise Priorities to Enterprise Powerhouses: The Public Sector in the Knowledge Economy The Work Foundation, London
- DBIS (2009) Business Innovation Survey'.
- DCMS (2009) Creative Industries Economic Estimates Statistical Bulletin.
- DCMS (2009) Digital Britain Final Report.
- Deloitte (2009) Media Predictions, TMT Trends 2009.
- Department of Business, Enterprise and Regulatory Reform (2009) Building Britain's Future: New Industry, New Jobs.
- DTI Occasional Paper No. 6. Innovation in the UK: Indicators and Insights, July 2006.
- Guile, D. (2009) Learning to work in the creative and cultural sector: new spaces, pedagogies and expertise
- Higgs, P. Cunningham, S. and Bakshi, H. (2008) Beyond the Creative Industries:
 Mapping the Creative Economy, NESTA, London
- HM Government (2009) Building Britain's Future: Jobs of the Future.
- Interview in the September 2009 issue of Prospect magazine
- IPA (2008) User Generated Content, Social Media and Advertising, IPA.
- Leadbeater, C. (2008) We Think Profile Books, London
- London School for Economics and Political Science (LSE) and the Information
 Technology and Innovation Foundation (ITIF) (2009) The UK's Digital Road to Recovery.
- Miles, I. and Green, L. (2008) Hidden Innovation in the Creative Industries, NESTA,
 London
- NESTA (2008) Attacking the Recession: How Innovation Can Fight the Downturn -Discussion Paper.
- NESTA (2009) UK creative industry to drive significant growth to UK economy (Press release).
- NESTA (2008) Raise the Game.
- NESTA (2008) The New Inventors: how users are changing the rules of innovation
- NESTA (2009) Annual Review.
- NESTA (2009) Demanding Growth.
- Oakley, K. (2009) 'Art Works' cultural labour markets: a literature review' Creativity, Culture and Education Series
- Ofcom (2009) Annual Report.
- PWC UK (2008) Global Media & Entertainment Outlook 2008-2012'.

- Technology Strategy Board (2009) Creative Industries Technology Strategy 2009-2012'.
- The Advertising Forecast, Advertising Association statistics published by www.WARC.com. Nielsen Media Research, World Advertising Research Centre.
- Tiga (2008) State of the UK Video Game Development Sector.
- UKCES (2009) Almanac.
- UK Film Council (2008) Statistical Yearbook.
- Warwick Institute for Employment Research (IER) and Cambridge Econometrics,
 (2008) Working Futures 2007-2017.
- Work Foundation (2009) Investing in the Creative Industries; A Guide for Local Authorities.

Web only sources:

- BIS, 2009 http://www.berr.gov.uk/whatwedo/sectors/publishing/index.html.
- http://www.nesta.org.uk/areas of work/creative industries.
- https://almanac09.ukces.org.uk/
- http://www.culture.gov.uk/images/publications/CEPFeb2008.pdf
- http://www.ukces.org.uk/upload/pdf/skills_jobs_growth_finalpdf_231009.pdf
- http://www.policyexchange.org.uk/assets/Simply_Learning_-_Jan___10.pdf
- http://news.bbc.co.uk/1/hi/entertainment/8225954.stm
- www.skillset.org/careers.
- http://www.universitiesuk.ac.uk/Publications/Documents/Facts_creative%20sector09.
 pdf
- http://www.emeraldinsight.com/Insight/viewContentItem.do?contentType=Article&hd Action=Inkhtml&contentId=872020
- http://innovationzen.com/blog/2007/05/07/the-benefits-of-a-diverse-workforce/
- http://www.skillset.org/uploads/pdf/asset_14113.pdf?1
- http://www.innovateuk.org/ assets/pdf/creative%20industries%20strategy.pdf
- http://www.cipd.co.uk/subjects/Irnanddev/general/ learning and development sum mary?vanity=http://www.cipd.co.uk/subjects/Irnanddev/general/_Irngdevsvy.htm
- http://www.hm-treasury.gov.uk/prebud_pbr09_repindex.htm

- Knowledge Workers and Knowledge Work, The Work Foundation, March 2009
 (http://www.theworkfoundation.com/assets/docs/publications/213_know_work_survey_170309.pdf)
- http://www.berr.gov.uk/files/file44332.pdf#26
- http://www.theworkfoundation.com/research/keconomy.aspx
- http://www.cabinetoffice.gov.uk/media/227102/fair-access.pdf
- http://www.ikt.org.uk/resource/files/2009/11/02/creative%20industries%20strategy.pd
 f
- http://www.contracteye.co.uk/contractor_numbers_uk.shtml
- http://www.ccskills.org.uk/Qualifications/CreativeApprenticeships/tabid/82/Default.aspx
- http://www.statistics.gov.uk/cci/nugget.asp?id=1238
- http://www.indiabroadband.net/india-broadband-telecom-news/11682-india-register-500-growth-broadband-services-within-5-years.html
- http://www.pcworld.com/businesscenter/article/148851/china_mobile_phone_subscribers_pass_600_million_mark.tml
- http://www.statistics.gov.uk/statbase/TSDdownload2.asp
- http://news.thomasnet.com/IMT/archives/2009/02/united-states-buy-american-clause-economic-stimulus-package-sparks-protest-from-trade-partners.html
- http://blogs.reuters.com/columns/2009/10/07/a-green-industrial-policy-for-europe/
- http://ipsnews.net/news.asp?idnews=34128
- http://www.unctad.org/Templates/webflyer.asp?docid=9467&intItemID=1634&lang=1
- http://www.incgamers.com/News/18919/tiga-on-irish-tax-break-proposals
- http://www.incgamers.com/News/20017/
- http://www.statistics.gov.uk/cci/nugget.asp?id=1163
- http://www.faqs.org/abstracts/Retail-industry/UK-COST-OF-REPLACING-STAFF-INCREASES-UK-WORKERS-LOSING-OUT-ON-HOLIDAY-ENTITLEMENT.html
- http://www.ldpcreative.co.uk/2010/01/gaming-industry-repeats-tax-re.html
- http://www.otakunews.com/article.php?story=1548

Annex E Acknowledgements

Skillset would like to thank the following for their involvement in this SSA:

All those who participated in the studies cited.

Skillset's Research Committee which guides the development of Skillset's Research Programme

Corporate Agenda

Intelligence Agency