SUBMISSION FROM NESTA

Economy, Energy and Tourism Committee

Economic impact of the Creative Industries

“To consider how Scotland can grow sustainable TV and film, and video games industries.”

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1. Introduction

The Creative Industries are at the core of Scotland’s economy. But as we argue here, more can be done in Scotland to promote both creative industries such as TV and film, and video games and the broader creative economy, as defined by Nesta in Beyond the Creative Industries: Mapping the Creative Economy in the United Kingdom¹ and A Manifesto for the Creative Economy² and the Department for Culture Media and sport in their economic estimates³.

Creative industries are defined by the Department for Culture Media and Sport (DCMS) as ‘...those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property.’⁴ As such, TV and film, and video games industries are archetypal industries to focus on when looking to address the role of public and private sector bodies in supporting their growth and skills.

2. The role of public sector agencies and the effectiveness of the support they provide

2.1 Creative Innovation System Framework

There is no single policy that will drive innovation and growth in creative industries like TV, Film or Video Games. Rather, there is a complex system of programmes, interventions and bodies that provide resources and infrastructures supporting creative organisations operating in highly competitive, fast changing markets. In A Manifesto for the Creative Economy, we used the idea of the ‘Creative Innovation System’ to identify the elements needed in order to grow sustainable creative industries.

A strong Creative Innovation System should:

I. Have an education system – including schools as well as universities, colleges and training providers – which supplies talent with the right mix of skills. In the case of the creative economy, this includes the technical and artistic skills to do creative work, but also the commercial and management skills needed to realise commercial value from it. The education system must also produce consumers with an appetite for innovative goods and services.

II. Incentivise research and development in the creative industries, just as it does in other sectors through fiscal incentives and funding programmes. In the creative economy, where innovation often involves the creative deployment of new technologies (not just their production), research in disciplines such as the Arts and Humanities and Social Sciences becomes central.

III. It is hard to overstate the importance for innovation in the creative economy of risk finance and the institutions that supply it.

¹ Higgs, Cunningham and Bakhshi (2008) Beyond the Creative Industries: Mapping the Creative Economy in the United Kingdom
⁴ Culture, Media and Sport Committee (2013) Third Report: Supporting the creative economy [Available at: http://www.publications.parliament.uk/pa/cm201314/cmselect/cmcumeds/674/67404.htm]
IV. It has a balanced copyright regime which does not pit rights owners against technology companies and users, and which recognises that monetising content on the Internet and allowing access to the public need not be mutually exclusive.

V. A unique component of the creative innovation system is the publicly subsidised arts and cultural sector. Public support enables it to take artistic risks that might not be possible in a wholly commercial environment. But partly sheltered as it is from commercial competitive pressures, this sector may need incentives from its funders to undertake digital innovation to maximise audience reach and value. It may need further support to augment any beneficial spillovers it generates into the commercial creative economy (e.g. by acting as a source of new ideas and talent).

VI. Invest in public digital infrastructure where the market might otherwise under-invest, and procures digital services to support innovative delivery of public services and the more effective functioning of government.

There is currently an insufficient understanding of the state of the creative innovation systems in Scotland. To address this, the Scottish Government should undertake a strategic mapping of the Scottish Creative Innovation system in order to identify key actors, bottlenecks and areas where this creative innovation system fails to sufficiently support growth and innovation in the Scottish creative industries, and policy options to address this situation. This was done for the UK as a whole in the Nesta report A Manifesto for the Creative Economy.

2.2 Data sharing

Public sector organisations have an immediate responsibility regarding data sharing and transparency, which will provide access to information, and generate benefits through greater understanding within and outside of government about creative economy needs.

The Scottish Creative Industries Partnership (SCIP) should pioneer this move to greater transparency of public data on creative industries and the creative economy. Scotland has the opportunity to lead in this area, with a much less challenging and bureaucratic process for data sharing to better support creative companies in a joined-up approach.

Data sharing between Scottish public agencies that support the creative industries should be promoted. This information should be gathered, anonymised and made public to encourage transparency and collective learning.

3. Supporting creative clusters in Scotland

3.1 The rationale for identifying and supporting clusters

It has long been recognised that industrial clustering benefits businesses by giving them access to skilled staff and shared infrastructures, and the opportunity to capture valuable knowledge spillovers. This is equally true of creative businesses, as exemplified by visual effects in Soho, digital media in Brighton or video games in Leamington Spa. Moreover, some creative sectors, such as Advertising, Design and Software, provide inputs and skills that are crucial to the innovation processes of businesses in other sectors.
Nesta’s 2010 report, *Creative Clusters and Innovation*\(^5\) maps the UK’s creative clusters, showing where they are based, which sectors form them, and what their role is in the systems of innovation where they are embedded. It makes a case for a new approach to local economic policy as it relates to the creative industries: one that goes beyond ‘urban branding’ rationales, and acknowledges their great potential as active players in local innovation systems.

### 3.2 Creative and video games clusters in Scotland

When studying creative clustering at the regional/national level, we found that *Architecture* and *Arts and Antiques* have a stronger concentration in Scotland than the UK as a whole. When we drilled further (down to the Travel to Work Area, capturing local labour markets), we found hotspots of creative activity across Scotland, including a strong concentration of Architecture firms in Aberdeen, Radio and TV and Publishing firms in the north of Scotland. Our analysis revealed that Edinburgh is the main ‘creative hub’ in Scotland, with a strong presence of a variety of creative sectors including Advertising, Architecture, Arts and Antiques, Video, Film and Photography, Publishing, and Software, Computer Games and Electronic Publishing.

More recently, Nesta carried out research to map the UK video games industry. This sector is recognised as a highly innovative part of the Scotland’s creative economy, but hard data about its economic performance and geography are difficult to come by. In this respect, the sector is partly a victim of its relative youth and dynamism: it didn’t get dedicated Standard Industrial Classification (SIC) codes until 2007, and many of its companies are hard to classify using standard codes.

In Nesta’s *A Map of the UK Games Industry*\(^6\), we used an experimental ‘Big Data’ approach to bypass some of these limitations. Specifically, we leveraged the web footprint of the sector to create a new list of UK video games companies. We combined this with official data to measure how the sector clusters across the UK, and explore the drivers of this clustering.

This analysis has helped us identify 96 games companies in Scotland (5% of the total in the UK). 13 areas (again, measured at the Travel To Work Area level) in Scotland have at least one game company. Our analysis reveals that 2 out of the 12 UK 'hotspots' with superior levels of activity in the games industry in terms of entrepreneurial activity and employment, are located in Scotland – they are Dundee and Edinburgh.

While Dundee has for long been recognised as a hotspot of games-making activity in the UK (it was in fact identified by former Minister for Universities and Science David Willetts MP as a ‘cluster exemplar’), Edinburgh has started to gain prominence in the sector more recently, partly as a consequence of the new creative opportunities afforded by digital distribution and smartphone gaming platforms.

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3.2 How the issues that hinder the growth of creative industries can be overcome and how to capitalise on opportunities: Supporting creative clusters in Scotland

The Scottish Government should support the development of stronger creative clusters in Scotland.

Recently, Nesta called for a concerted effort to boost creative clusters in England using a £100m fund from the Regional Growth Fund. This initiative would be informed by the 7 point plan to build creative clusters that we set out in A Manifesto for the Creative Economy, targeting locations that have measurable levels of creative activity that can be scaled up, using a data-driven approach to identify local opportunities and challenges to be addressed using targeted interventions, and leveraging local networks and anchor institutions. This way, we hope to reduce the risk of spending funds on areas that have low probability of developing scalable clusters, and of implementing ‘cookie cutter’ cluster policies that are not adapted to the local reality, while strengthening the local networks that act as conduits for collaboration and beneficial spillovers.

We believe that a similar fund should be set up in Scotland, where this could be achieved using competitive matched funding from organisations such as Creative Scotland and Innovate UK.

The Scottish Government should, in parallel, support infrastructural development. Ensuring that clusters have access to the right infrastructure is also critical – for example, some preliminary analysis in A Map of the UK Video Games Industry suggests that there is a link between a stronger broadband infrastructure and games clustering. A targeted demonstrator programme to support ultra high-speed broadband adoption in these creative clusters should be established, on the basis that these neighbourhoods are best placed to be the earliest to exploit these speeds. Adopters would be tracked, with the advent of any benefits acting as a trigger for consideration of wider spread roll out.

4. Supporting creative entrepreneurship in Scotland

4.1 The role of private sector investment in supporting the video games and the TV and film sectors.

Access to Early Stage Finance is an issue in Scotland. There are few informal investors (business angels) who invest in content development, so a prototype fund should be established in Scotland to encourage content development with a focus on video games. Startup and early stage funding platforms should be established with assistance from government to promote a landscape that enables scalable small businesses to grow and exploit their intellectual property. This could, for instance, build on the model used by Abertay University, where a successful prototype fund investing in over 70 companies was run. Games trade bodies UK Interactive Entertainment (Ukie) and The Independent Games Developers Association (TIGA) called for a government backed UK fund to be run independently of a Higher Education Institution, but this was not fulfilled in latest budget statement, despite the support of DCMS. Scotland could pioneer the roll out of this model for early stage creative companies to support games companies with a content fund.

Even though the Scottish games industry is significant, and locations like Edinburgh have benefited from an explosion of activity thanks to new platforms like smartphones, there are still no games publishers of scale. In the cases of the Scottish made and world renowned...
Grand Theft Auto V from Rockstar games (a subsidiary, Rockstar North is located in Edinburgh) and Minecraft for Microsoft Xbox and Sony PlayStation, the combined sales are multi-billion dollar but since they are not incorporated in Scotland, there is limited revenue return - despite potentially being on a par with the whisky industry in export terms. It is recommended that further research be conducted in this area on the barriers for scalable games publishers in Scotland and the support mechanisms that would enable SMEs to grow to scale and fully exploit their intellectual property.

4.2 How to support those in the TV and film and video games industries to develop business skills.

There is a need for enterprise support for creative startup businesses in Scotland. Critically, this begins with acknowledging enterprise education within the Higher and Further Education curricula as a core subject, not simply a bolt-on course elective as in the current system. Nesta has experience in supporting this through our successful work on Starter for 6\(^7\), our Creative Enterprise Programme with creative entrepreneurs delivered internationally in partnership with the British Council, and our Train the Trainer programmes in the UK and overseas. We would be pleased to collaborate with partners in Scotland to support a programme of tutor development in creative enterprise at Higher and Further Education. Additionally, through Nesta’s Creative Business Mentor Network\(^8\) experienced mentors offered both industry specific mentoring advice for creative businesses, and often added the benefit of alternative national expertise.

There is a fundamental need for creative businesses to be peer supported - through mentoring initiatives like the Creative Business Mentor programme and the previous Nesta Games Mentoring programme (which were both very successfully evaluated industry-led mentoring programmes). A Scotland programme should ensure that the mentors are selected from across the UK to ensure a wide talent pool.

Scottish institutions should build enterprise education into their Higher and Further Education courses to promote graduate commercialisation of creative products and services.

4.2.1 Illustration: Creative Enterprise Toolkit

Support for commercialisation of creative ideas like the Creative Enterprise Toolkit\(^9\) are essential for creative businesses, which are often content rich, but lack the business and entrepreneurial expertise to take products or services to market. These tools, that should be hosted and promoted by third sector and public organisations such as Nesta or Creative Scotland, enable exploration of value and how they align with business ideas, identification of customers and the relationships to build, blueprint modelling to visually map how the business will function, development of marketing messages, and financial tools to enable control of business finances.

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\(^8\) See [http://www.nesta.org.uk/blog/hard-work-plus-mentoring-recipe-success](http://www.nesta.org.uk/blog/hard-work-plus-mentoring-recipe-success) for a case study of how this worked and the impact the programme had on a creative business

\(^9\) The Toolkit can be downloaded free of charge at [http://www.nesta.org.uk/publications/creative-enterprise-toolkit](http://www.nesta.org.uk/publications/creative-enterprise-toolkit)
5. How to retain in Scotland those with the necessary creative skills.

The skills debate in Scotland should be refocused to look at both the production and retention of creative skills. This will involve changes to the education system to promote arts and creative subjects within the mainstream education pipeline.

5.1 Support arts and technology crossover in the Scottish education system

One of Creative Scotland’s 3 year priorities is to strengthen the talent and skills needed to develop sustainable careers through sectoral partnerships, including with higher education. To achieve this, it is important to remove disciplinary silos in the education system. Employers are crying out for talent with a mix of arts and science and technology (‘fused’) knowledge. Government should remove the perverse incentives that currently deter young people from combining arts and science subjects, and also find ways to reward universities that succeed in developing rigorous, multi-disciplinary courses valued by industry.

Despite the success of the Scottish Baccalaureate in promoting Expressive Arts, and the fusion of Mathematics, and arts; more remains to be done to improve the take up of this multidisciplinary approach - this includes increasing demand for students with such profiles among universities that by and large remain organised along disciplinary silos, and in some cases discourage students from taking subjects that are relevant for creative industries by publishing preferential subject lists that rarely include arts and cultural subjects.

There has in recent times been a growing acknowledgement of the severity of these issues and of the need to address them. This is reflected, for example, in the education and skills recommendations in the Creative Industries Council’s Create_UK Strategy, and in the movement calling for a shift in schools from STEM to STEAM (Science, Technology, Engineering, Arts and Maths), spearheaded in the UK by the Cultural Learning Alliance. Meanwhile, the Bacc for the Future campaign has been pursuing a greater recognition of creative subjects in school league tables. Furthermore, changes should include design subjects, to reflect Scotland’s traditional strengths in this area.

Our recommendations should be viewed as part of a wider programme of educational reform to equip children with the skills needed to succeed in a high-tech economy, including greater use of project work and workplace simulation approaches in schools, as well as extra-curricular activities such as coding and digital making clubs – all changes that Nesta has championed through research, policy and practical programmes including Next Gen\textsuperscript{11}, A Manifesto for the Creative Economy\textsuperscript{12}, Decoding Learning\textsuperscript{13}, Make Things Do Stuff\textsuperscript{14} and One Day Digital in Scotland\textsuperscript{15}.

The Scottish Government should enter a dialogue with universities, including The Russell Group (with the Universities of Edinburgh and Glasgow), to ensure they do not discourage students from selecting a mix of science, technology and arts

\textsuperscript{10} See Nesta’s full recommendation at http://www.nesta.org.uk/blog/fix-pipeline-steam-talent-creative-economy

\textsuperscript{11} Nesta (2010) Next Gen [Available at: http://www.nesta.org.uk/publications/next-gen]

\textsuperscript{12} Nesta (2013) A Manifesto for the Creative Economy [Available at: http://www.nesta.org.uk/publications/manifesto-creative-economy]

\textsuperscript{13} http://www.nesta.org.uk/publications/decoding-learning

\textsuperscript{14} http://makethingsdostuff.co.uk/

\textsuperscript{15} http://vimeo.com/64233905
Disciplinary silos in academia are a secular, complex problem, and addressing them goes beyond the scope of our recommendations here. Nonetheless, impactful, short-term corrective actions can be taken to increase fusion in university syllabuses, including boosting the technological capabilities of Scottish Art Schools (and their demand for students studying a mix of arts and science in schools) by setting up centres based on the ESRC and Nuffield Foundation’s Q-Step model\(^6\) which aim to improve quantitative skills in the social sciences in the UK. These centres, funded by the Scottish Funding Council, Creative Scotland and other UK Research Councils, would develop innovative approaches for science and technology training in art and design schools, and collaborate with industry to identify opportunities for internships and placements.

Last, but not least, we need to increase the supply and visibility of major/minor and joint honours degrees that combine science, technology and artistic disciplines in ways that create value for the creative economy. We call for all sector skills bodies to work with industry to identify areas of ‘fused’ excellence within further and higher education, so that young people understand which are the courses offering a fused – as opposed to confused – education, and ones that employers value. One way to encourage such effort might be to adopt Creative Skillset’s successful kitemarking model to award a ‘creative fusion’ kitemark to those joint honours/major-minor courses that best fulfil the multidisciplinary needs of industry, therefore raising the visibility of such courses among students.\(^7\)

6. Conclusions

The Creative Industries are at the core of Scotland’s economy. Scotland has a number of leading creative institutions and clusters, more can be done to support further growth. There is a role for public and private sector organisations in supporting sustainable growth in the TV and film, and video games industries in Scotland. This submission has identified some options to do this through cluster development, business support, and Education and Skills.

7. References


Nesta (2010) Next Gen: Transforming the UK into the world’s leading talent hub for the video games and visual effects industries (A Review by Ian Livingstone and Alex Hope) [Available at: \texttt{http://www.nesta.org.uk/publications/next-gen}]


\(^6\) \texttt{http://www.nuffieldfoundation.org/q-step}

\(^7\) \texttt{http://courses.creativeskillset.org/pick_the_tick_degree_courses/what_is_the_tick}
