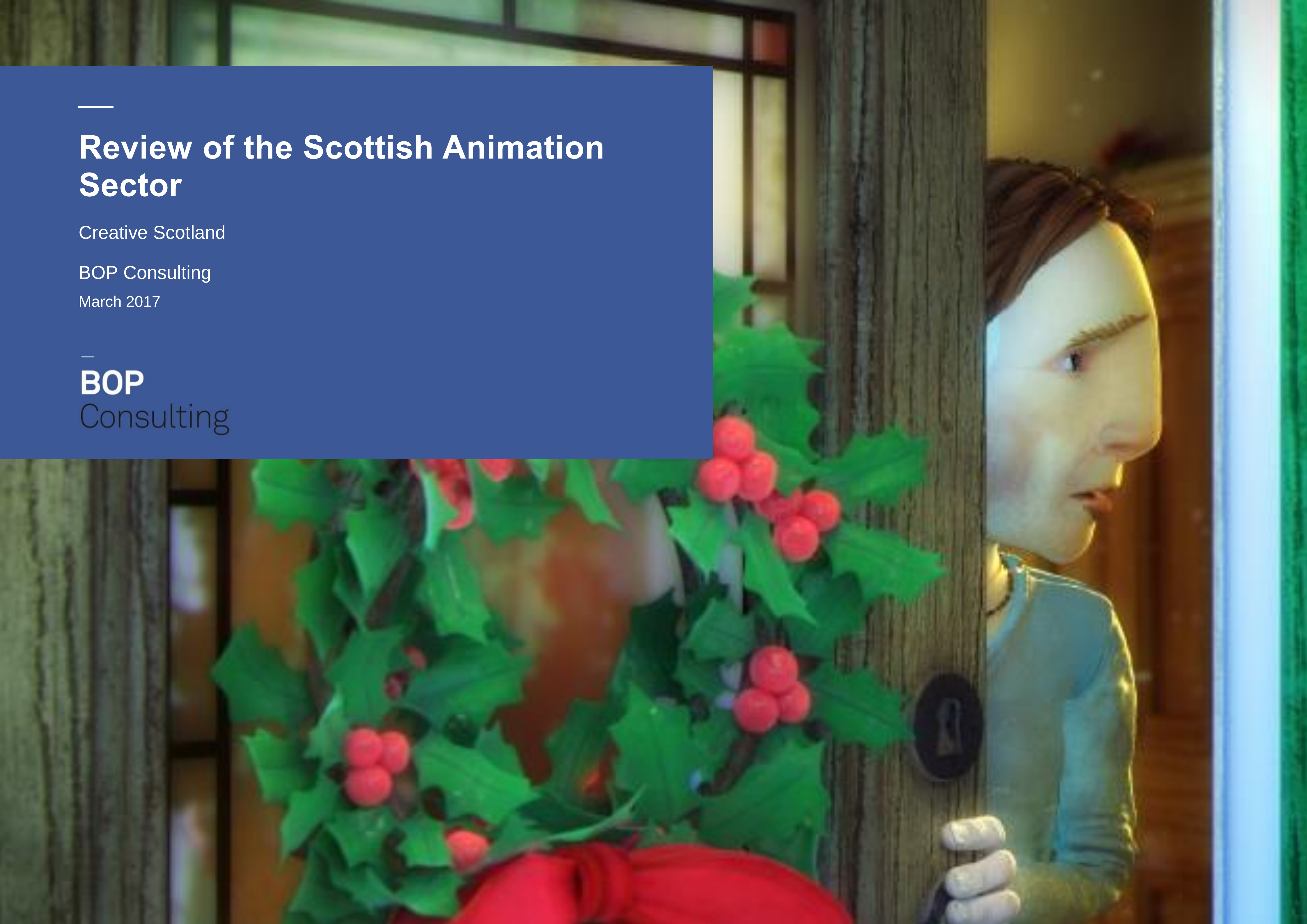

Review of the Scottish Animation Sector

Creative Scotland

BOP Consulting

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BOP Consulting

Contents

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Cover image from *Nothing to Declare* courtesy of the Scottish Film Talent Network (SFTN), Studio Temba, Once Were Farmers and Interference Pattern

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1. Executive Summary

This review of the Scottish Animation Sector develops a holistic picture of the sector across education, skills training, individual production, business development, exhibition and festivals as a driver of outputs in both a national and international context.

We find that while Scotland's animation sector produces high quality work in a range of formats it does not create a high volume of work. The sector is small and struggles to sustain itself in the face of global market competition.

While the Scottish animation sector boasts creative success stories such as a number of BAFTA winning productions, as a sector it faces significant challenges in commerciality and sustainability.

- The sector struggles to achieve a critical mass of companies, studios and individuals which support job creation, talent development and attract further business.
- Most of the Scottish animation sector faces challenges balancing production service work whilst also resourcing Intellectual Property (IP) development and undertaking production.
- The Scottish animation sector has limited international exposure with only a few active companies well-networked internationally.
- There is a perceived need for more support, and calls for a better understanding of the needs of the sector and the funding and support required to enable it to grow. Currently there is little animation specific support in Scotland or the UK. The sector struggles to compete against live action projects given its long lead times, need for co-production and high production costs.
- Scotland's universities and colleges deliver award winning and high ranking courses at a variety of levels. However, there is a training gap in developing industry-ready talent and there needs to be better collaboration and connection between higher and further education to facilitate routes into industry and promote animation as an art form and a career.

Despite these challenges, there is recognition across a range of decision makers that there is potential in the producers and talent in Scotland. To realise that potential there must be both a greater volume of production and sustainable businesses of scale. In this review we give a snapshot of the sector, setting out its positive aspects and the challenges it faces with the aim of starting to guide how the sector responds to those challenges and how Creative Scotland can support that sector response. We end the review with a series of targeted recommendations intended as practical and realistic steps towards creating a sustainable sector.

Introduction

This review responds to Creative Scotland's desire to gain a better understanding of the sector. This review is informed by Creative Scotland's Film Sector Review published in January 2014 and the 2014-2017 Creative Scotland Film Strategy, published in October 2014. Both call for closer engagement with the animation sector and the need to develop support for animation productions and encourage collaboration within the sector to further develop Scotland's wider screen sector. The Scottish Parliament's Economy, Energy and Tourism Committee also recommended that an animation sector review be undertaken.[1]

This review seeks to develop a fully informed picture of opportunities across education, skills training, individual production, business development, exhibitions and festivals set in a national and international context. We argue that the animation sector's cultural and commercial potential could be further developed and we make a series of recommendations on how to improve the sustainability and resilience of the sector.

1.1 Details of the Project

In March 2016 Creative Scotland appointed BOP Consulting to carry out this review. We used a mix of methods in the research approach, consisting of desk-based research analysing existing reports and statistics concerning animation and the wider screen sector, a large scoping workshop with a wide range of individuals involved in animation, followed by a smaller focus group and a number of individual interviews to gain further detail and perspectives on the Scottish animation sector. Participant details are found in Appendix 10.1 We have also undertaken research on international case studies in Vancouver, Denmark and Northern Ireland which have included desk-based research and individual interviews.

The review is not intended directly to determine the strategy of Creative Scotland (or any other public agency) or the Scottish Government. That is a matter for those agencies and the sectors they support. The brief for the review asked instead for an accurate picture of animation in and from Scotland, which might then be used as a basis for later policy development. Our approach is to highlight the key challenges and opportunities facing the sector and to present an accurate snapshot of the sector. The review is an independent one with recommendations developed through an extensive consultation with key stakeholders in the sector.

[1] The Energy, Economy and Tourism Committee of the Scottish Government took evidence into the economic impact of the creative industries following the report produced by the committee in March 2015.The report had a list of recommendations around creative industries, in particular the fields of film, television and computer games http://www.parliament.scot/S4_EconomyEnergyandTourismCommittee/Reports/Creative_industries_-_final_report.pdf

2. The Animation Sector

The Animation sector, both in Scotland, and globally, has a broad definition and wide scope of activities. Animators create animated films, shorts and TV, but they are also indispensable to the visual effects industry, gaming, app development and online services.

This broad scope of activities makes it difficult to clearly identify those active in the sector. A challenge encountered in this review is that there are few reports that focus specifically on animation as an art form or industry. Animation is often treated as a sub-sector of film, or is grouped alongside children's media. A direct result is that there is limited understanding of animation as a nuanced and changing sector and there are very few animation-specific funding and support programmes in the wider UK or in Scotland itself.

This review seeks to understand the animation sector in Scotland and we focus on animation in films, shorts, and television. We also touch on gaming and visual effects industries as they are important to gaining an holistic understanding of the ecosystem, but they are not central to this review.

Although the overall UK animation sector is relatively small (recent estimates place its revenues around £300m) it plays an important role in the wider creative industries.[2] In addition to creating its own content, animation supports a range of other industries including Computer Generated Imagery (CGI), visual effects and gaming. Animation generates significant ancillary income from licensed merchandise and products. Animation also provides a critical source of cultural identity particularly for children as children's film and TV content shapes and influences a child's world view.

[2] Animation UK (2011) *Securing the Future of UK Animation*

2.1 Animation in Scotland

The animation sector in Scotland is comprised of fewer than fifty companies, almost all are small with 2-3 employees and most are clustered in either Glasgow or Edinburgh (see Appendix10.2). While Scotland's animation activity cuts across the breadth of animation practices, companies tend to be working in either TV or providing production services to third parties.[3]

While small, the sector is acknowledged for high-quality output, and has been successful at collecting awards both at home and abroad. Stand out Scottish animation includes BBC Scotland / Ko Lik's multi-BAFTA award winning *Ooglies*, Red Kite's established track record of producing Children's TV series, Axis' production services work across games and animation, and Sylvain Chomet's animated feature film *The Illusionist,* produced by Bob Last, as well as a significant number of award winning short films.

The sector shows potential; there is talent and a workforce with a deep passion and commitment to animation. There has been an overwhelming interest and response to this review, demonstrating that the Scottish sector is well-connected, engaged with one another and passionate about developing their sector.

[3] Providing production services involves being engaged by a third party to undertake certain specified production services on their behalf on a project for a fee. In animation, these services can include creating and delivering animated logos, motion graphics, advertising, product animation, motion design and at times even fully animated short films, TV episodes and feature films.

The Estimated Value of Animation in the UK

The value of animation in the UK is not specifically calculated in any reports and given the spread of animation activity across various forms it is difficult to estimate.

- DCMS estimates that the UK Creative Industries as a whole generated £84.1bn GVA in 2013/14 accounting for over 5% of the overall UK economy.
- In 2013-14 the UK screen industries generated over £6bn for the UK economy.
- Of this, the Animation Programming (TV) industry (including merchandising) contributed £171m in direct GVA to the UK economy and generated 4,700 FTE jobs.
- The animation merchandise sales market in the UK was worth approximately £500m in 2013 generating £72m in GVA and 2,500 FTE jobs in the UK economy. Notably Peppa Pig and Thomas & Friends dominated the merchandise market, contributing £400m to the total market.
- Of the £1.5bn of overseas investment in UK screen industries, a small portion, only £5m was for animation programmes.

DCMS (2015) *Creative Industries: Economic Estimates*
Olsberg SPI *(2015) Economic Contribution of the UK's Film, High-End TV, Video Game, and Animation Programming Sectors*

2.2 A Global Industry

Animation in the wider UK is clustered mostly in London and the South West with a growing pocket of animation in Northern Ireland.

The animation sector in the UK has a long and successful history of producing high-quality content – from *Thomas & Friends* and *Wallace and Gromit*, to *Noddy*, *Bob the Builder* and *Peppa Pig*. These characters are world renowned and generate considerable business – Olsberg reports that the 'two leading UK animation brands, *Peppa Pig* and *Thomas & Friends*, generated a combined £400m in merchandise sales in 2010'.[4]

Many of these well-known brands are no longer exclusively produced in the UK. *Angelina Ballerina*, *Mr Men* and *Bob the Builder* are produced in the USA, while *Thomas & Friends* is now produced in Canada, where there are considerable tax advantages. An HM Treasury consultation of the visual effects industry (2013) found that while the UK sector is considered to be internationally competitive in terms of core skills, there is an increasing loss of talent to companies in Europe and the rest of the world. Some figures suggest a 23% decrease in employment in the visual effects sector.[5] There is growing concern that the UK animation sector is losing out to other countries.

Around the world, animation industries rely heavily on state subsidies. Only US giants like Disney Pixar, Dreamworks, Sony Imageworks or Fox are able to underwrite animated projects independently. Successful pockets of animation have grown up around tax credits – for example in Canada and Ireland. The introduction of tax credits in the UK for animated TV and improved film tax credits in 2013 have bolstered the sector. However, even with these tax credits, the UK stands behind other countries in the amount of state support provided for the sector. Animation is a global industry which follows value for money. Higher wages and cost of living in the UK compared to other countries also places the UK at a disadvantage.

[4] Olsberg SPI *(2015) Economic Contribution of the UK's Film, High-End TV, Video Game, and Animation Programming Sectors*
[5] HM Treasury (2013) *Visual Effects: Providing Further Support to the Industry*

2.3 The UK Animation Workforce

It is particularly difficult to quantify the size of the animation workforce, as companies grow and shrink on a project by project basis, freelancers move to follow work and there is little specific research on animation within the UK.

Creative Skillset has published some valuable resources on workforce characteristics, however only their 2012 employment census contains specific data on Scottish animation. Drawing on what sources do exist, it is still possible to gather some top-level statistics on both the context within which animation operates and the size of the animation workforce in the UK and in Scotland.

- The UK's Creative Industries as a whole continues to be London-centric, with 42% based in London, and only 7% in Scotland (2012).[6] 98% of the VFX workforce (59% of which are animators) is based in London. 56% of the animation workforce is based in London, with only 5% in Scotland (2012).
- DCMS estimates that the UK Creative Industries as a whole generated £84.1bn GVA in 2013/14 accounting for over 5% of the overall UK economy.[7]
- Using differing methodologies, the Scottish Government reports an overall creative industries workforce of 71,000[8] and the UK Government reports a workforce 102,000.[9]
- Creative Skillset puts the UK's "Animation" workforce at 7,750 (2015), a more detailed Creative Skillset study in 2012 identifies 6,150 Animators across all sectors (including film, VFX, TV, and gaming). This more detailed study breaks down the top occupational groups within the animation sector as 18% animators, 16% production, 16% business management, 13% strategic management in 2012.
- The sector can be difficult to break into and requires high levels of training. Across the UK, 89% of the animation workforce is educated to graduate level and 78% of the animation workforce had undertaken unpaid work experience prior to getting their first job (2014).[10]
- Most animation companies in Scotland are small. 2014 data indicates that 98% of enterprises within Scotland's Creative Industries employ fewer than 50 people; this trend was confirmed during our consultations.[11]
- Of the animators across the UK, 30% of all UK animators and 19% of Scottish animators are freelancers.[12]
- According the Creative Skillset employment census in 2012 women are well represented in the Scottish animation sector at 53%, however consultations and interviews with Scottish animators indicate that this figure may be much lower. [13]
- Scottish animation struggles to retain home grown talent, with many graduates moving to London, the South West, or abroad. For example, few of the animators (either Scottish talent or from abroad) who came to Scotland to work on the feature length film *The Illusionist* in Edinburgh stayed in Scotland once that project had ended.

2.4 Animation Businesses

As with other elements of animation, there is limited research into the specific needs and requirements of businesses in the sector. However, in common with other businesses in the creative industries, animation companies are often small businesses with fewer than 50 employees and many sole traders, partnerships

[6] Creative Skillset (2012) *Employment Census of the Creative Industries. This 2012 Census report contains more detailed breakdowns of the workforce than the subsequent 2014 Census report.*
[7] DCMS (2016) Creative Industries Economic Estimates
[8] Scottish Government reports a workforce of 71,000; the UK Government 102,000 and 174,000 in the Creative Economy as a whole. See House of Commons Scottish Affairs Committee (2016) *Creative Industries in Scotland* p11
[9] DCMS (2015) Creative Industries: Focus on Employment

[10] Creative Skillset (2014) *Creative Media Workforce Survey*
[11] House of Commons Scottish Affairs Committee (2016) *Creative Industries in Scotland*
[12] Creative Skillset (2014) *Creative Media Workforce Survey* and Creative Skillset (2012) *Employment Census of the Creative Industries*
[13] Creative Skillset (2012) *Employment Census of the Creative Industries*

and companies are headed by one or two key principals. Tables in the appendices of this review give an overview of active animation companies and individuals in Scotland.

Typically, these small companies must focus on a single major output at one time. The small size of most animation companies results in capacity issues and challenges to expanding the volume or type of work undertaken, or to developing multiple projects at a time which is necessary in order to sustain the company. Some small animation companies are led by creative directors and writers rather than creative producers, adding perhaps to capacity issues. The development of animation is costly and lengthy as additional work needs to be undertaken compared with live action, such as character design, animatic creation and storyboarding, and typically this utilises the full staff capacity of a company.

Animation requires a long lead time, careful planning and a fully developed script before production begins, the process of animating is also a time-consuming and resource intensive task. Many animation studios maintain themselves through production services work between major artistic projects; however, there are also challenges to this business model with many companies finding that they do not have the staff to maintain the drive to develop Intellectual Property (IP) work whilst at the same time engaged in delivering contracted production services work.

Animators who participated in our consultations reported a feast or famine work-cycle; when a project is underway they are too busy to line up new projects and work. Growing these companies and developing a sustainable level of projects is therefore a challenge for the sector. Unlike counterparts in Wales for example, no animation companies in Scotland are part of a bigger broadcasting group and therefore cannot benefit from the cost effectiveness of providing in-house services across the production chain. These bigger companies, often with greater assets, are also able to invest in-kind support in productions where they provide services, thus developing potential income streams from back-end revenues on release.

> “ Any studio has to be diverse and have a line of service work as well as originations
>
> *Finn Arnesen, Senior VP, Hasbro Studios*

A challenge for studios is the development and retention of IP. For many it is hard to find the time or money to develop new content. There is an identified need for more and better promoted development funding to allow businesses to grow. It could be argued that in Ireland, now acknowledged as an internationally significant centre for animation, the service sector developed first and only then did companies become sustainable enough to support development slates.

For most animation, international collaboration and co-production partnerships are vital, generating growth and viable business partnerships. With the exception of a small number of well-networked individuals, many within the sector have little experience of working with specialist lawyers and complex IP rights and this lack of expertise can lead to concern about losing control of IP in co-production relationships and therefore a loss in revenue streams. Barriers to engaging with IP appear to be around a lack of understanding of the process, and a perception that it is too costly or complicated. Not engaging with IP rights early enough in the process can lead to complications later in the development of projects.

There are a number of producers of live action films in Scotland with greater experience and networks compared with their animation colleagues, yet there appear to be few links between the two. Cross fertilisation of understanding, knowledge, and perhaps production may be worthy of exploration to build slates which strengthen Scotland’s sector by linking these to different areas of expertise.

For the animation sector, as with the other elements of the screen sector, there is a range of business development support available from Creative Scotland, Scottish Enterprise, Business Gateway, Scottish Development International, Cultural Enterprise Office, Highlands and Islands Enterprise, local authorities and Skills Development Scotland. This support is detailed in Scottish Enterprise’s report ‘Business Development Support for the Screen Production

Sector in Scotland' (October 2015). The report is not publicly available, but was commissioned to examine and map the business development support available to the screen production sector in Scotland. The main public sector agencies (Scottish Enterprise (SE), Creative Scotland (CS) and Skills Development Scotland (SDS)) worked together to produce this summary of the support landscape and to respond to specific requests from the industry body, Independent Producers Scotland (IPS).

The recommendations from that report, alongside Creative Scotland's Creative Industries Strategy, seek to address issues around accessibility and understanding the range of available initiatives.[14] During consultation for this Review, it was evident small companies would value more client focused advice systems and this more joined up approach by the variety of public funders.

Unlike the games sector where Scottish Enterprise currently account manages 22 companies,[15] direct support for the animation sector is rare - with only Red Kite, Ko Lik, Axis and Blazing Griffin account managed to date. In common with the rest of the screen sector, smaller companies find Business Gateway is not in a position to deliver creative sector-specific advice to assist small creative companies. Scottish Enterprise is working to expand access to the kind of account managing services available to the creative industries.

Highlands and Islands Enterprise also support XpoNorth, a creative festival and marketplace devoted to boosting creative careers in the Highlands and Islands. Screen HI functions as the Screen and Broadcast Industry Network for the Highlands and Islands and works to offer networking opportunities as well as valuable skills development experience to those in the Highlands and Islands.

[14] Scottish Enterprise (2015) *Business Development Support for the Screen Production Sector in Scotland*
[15] Scottish Parliament (2015) *The Economic Impact of the Film, TV and Video Games Industries*

2.5 Global Competition

> “ Offer needs to be quality, quick and nimble, with astonishing talent and reputation.
> *Alison Warner, VP of IP Sales, Acquisitions & Co-productions, Technicolor*

Scottish studios are addressing the challenge of global competition through co-production and building relationships with animation studios across Europe and further afield. Examples include Red Kite working with Ireland, Vancouver, Germany and Belgium. Across the sector there is agreement that international collaboration and partnership is vital with some favouring strong European focus and others vesting their energies in North American ventures. There are clearly merits in both approaches.

Scottish animators have lower overheads than their London counterparts, and are able to compete on price within the UK. However, animation is a global industry which follows cheap wages and low costs for production. Along with the rest of the UK, Scottish studios cannot compete on cost with studios emerging in Asia. Indeed, many Scottish productions themselves outsource labour.

> “ We look for high quality fast turnaround, produced on time and on budget. Scotland will find it challenging to compete on price so must be top quality.
> *Finn Arnesen, Senior VP, Hasbro Studios*

The introduction of the UK animation tax credit is seen as a 'game-changer' placing UK producers in a more globally advantageous position, able to attract international partners. It is worth noting (as in our Vancouver case study) that there are other countries and territories which offer more generous tax credits and publicly funded incentives to attract significant production and therefore create local jobs. This international scene is ever changing and tax incentives are likely to be one of the key considerations when deciding where to base a production. Other elements will include skills base, language (with English language an obvious bonus for the US market) and availability of production facilities.

Fluency and familiarity with the English language is a boost to UK animation production particularly because the work is easily and well received in North America. However, other countries, particularly in Europe have language preservation incentives for their screen initiatives. These offer financial incentives and support for productions in their native language as a method of cultural preservation. This creates another avenue of funding which stabilises the animation industry in those countries.

Animation UK, which is in the process of becoming a membership-based organisation, campaigns for fairer trading conditions for UK animation producers, to help protect or increase the production and ownership of IP that is of value to the UK. They have identified the need for better research and understanding of the animation sector, as its success is currently incorporated into economic figures for broader sectors, which are more able to evidence needs for targeted growth. Animation UK is currently lobbying DCMS for categorisation of animation as a distinct business sector, although this is still in the early stages.

3. Making Animation

Scotland's animation sector is part of a vibrant international scene. The market is global and animated content, for a variety of consumers, is often produced through collaboration across borders and languages. Scotland's sector produces content aimed at a range of formats and audiences – in feature films, shorts, and television and as production services work for a variety of related industries. The sector is acknowledged for high quality outputs but it does not create a high volume of work. Scotland also has an established children's publishing sector offering rich potential IP opportunities for those in the sector seeking to produce work for children.

This section outlines some of the content being produced in Scotland, before exploring the current funding opportunities and challenges facing the development and production of animation. Finally, we make recommendations.

3.1 Animated Feature Films

Globally, animated films have achieved greatest success in the market for children driven primarily by American companies. In 2006, Disney bought Pixar forming the powerhouse that has subsequently made a series of high profile films such as *Up, Toy Story 3, Brave, Inside Out* and *Frozen*. *Frozen* (2013) reached worldwide box office admissions of 113m,[16] and earned a worldwide total of $1.274bn US dollars becoming the highest grossing animated film ever and the ninth highest-grossing film of all time.[17]

The UK family film market is relatively small but has produced 26 animated feature films between 2010 and 2015. Some, including *Gnomeo and Juliet* and *Arthur Christmas*, had box office success, being in the top three worldwide non-US animations.[18] Animated films are expensive to produce and require a longer lead time than live action counterparts. Even a 'low-budget' animation feature can cost between £5m and £20m. Scotland's most recent feature-length animated film, *The Illusionist* (2010), directed by Sylvain Chomet and produced in Edinburgh by Bob Last, was nominated for an Oscar, a Golden Globe, a BAFTA, and a British Independent Film Award.

An alternative avenue to feature film production is being undertaken by Scotland's Axis Animation. US toy giant Mattel has commissioned Axis to produce two feature films from their Monster High property. Neither film is intended for a traditional cinematic release but for online broadcast and this has

[16] European Commission (2015) *Focus On Animation*

[17] "All Time Worldwide Box Office Grosses". Box Office Mojo. Internet Movie Database. Retrieved December 31, 2015

[18] European Commission (2015) *Focus On Animation*

extended the reach of the studio and its personnel in addition to establishing a new business stream.

3.2 Animated Shorts

> “ Shorts are a fantastic bridge to making longer form work.
>
> *Chris Meledandri, producer Ice Age and Despicable Me. Annecy 2015 Keynote address*

Short filmmaking is of critical importance to all filmmakers but is especially so in animation. It develops the skills required for storytelling across all platforms and filmmakers use shorts as calling cards, as well as to trial ideas for full length production aimed at all markets. Scotland has achieved success in animated shorts with several BAFTA wins and nominations.[19] However, the gulf between short filmmaking and first feature is particularly significant in animation where even low budget films command substantial budgets. Currently there are few opportunities for longer form works, such as 30 minute shorts, to bridge that gap.

Across the UK, Europe and further afield there are many festival and market opportunities for animation and many find outlets on television or web platforms. There are however, few opportunities to monetise distribution of shorts. There are also no schemes or funding streams specifically aimed at developing or producing animated shorts. Consultations for this research emphasised the critical role shorts play in the development of talent and the need for a better shorts distribution network.

[19] Most recently, Monkey Love Experiments, directed by Will Anderson and Ainslie Henderson, and produced by Cameron Fraser, was nominated for a BAFTA as Best British Short Animation in 2015.
The Making of Longbird directed by Will Anderson won a BAFTA in 2013 for Best Short Animation and the short I Am Tom Moody directed by Ainslie Henderson was nominated for a BAFTA in 2014.

3.3 Animated Television

Animated television is a worldwide market where individual shows are often co-produced across countries and continents. There is acknowledged UK expertise in character development and scriptwriting. Recent Scottish animated TV successes include *Ooglies* (Ko Lik), *Dennis and Gnasher* (Red Kite Animation), and the part-animated *Tea Cup Travels* (Plum Films).

Whilst some shows are produced entirely in the UK, established brands including *Thomas & Friends* and *Bob the Builder* are now produced outside the UK. The acquisition of successful UK productions, for example to the USA and Canada, contribute to this knowledge-sharing, as do co-development ventures. This is a success story for UK animation, however also results in less production occurring in the UK itself.

The introduction of tax credits for animated television is a significant boost for UK producers in consolidating their position both nationally and internationally. However, in this global market it must be borne in mind that other countries also offer more taxation incentives and slight differences can make a significant impact.

CBBC/CBeebies form the most significant UK market for animation aimed at young audiences. CBBC/CBeebies has a significant in-house presence in Scotland though commissioning of independent production is undertaken from their Salford base. From March 2017, a member of the commissioning team will be based in Scotland. In-house production has, to date, resulted in guaranteed amounts of production but the introduction of BBC Studios has eliminated this and Scotland’s children’s programming staff will now report to the head of CBBC/CBeebies in Salford rather than to BBC Scotland. CBeebies animation projects are more likely to be acquisitions – they received approximately 1000 commission submissions last year and funded four. Most taken forward are UK productions, and the aim is for productions to “feel British and Global”.

CITV, ITV’s network digital children’s channel also commissions and acquires animation but this is a small outlet for producers, much reduced from the scale of ITV commissioning in earlier times.

The 2006 Ofcom advertising restrictions on children's television impacted on profitability and therefore reduced the commissioning footprint of private broadcasters. Other broadcasters, most notably Channel 4, ITV and Sky have occasional commissions for animated content. As with live action, commissioning fees rarely cover the full cost of animation production; typically, BBC licence fees provide only 10 – 24% of a production budget.

Most animated television is aimed at children, however the ongoing success of primetime American shows such as *South Park* or *The Simpsons* (both produced by Fox), demonstrate that if the offer is correct, animation can also be attractive for adult viewers.

BBC (and other broadcasters) also commission animated content across schedules and as additional features, often for online use, to enhance live action programming. BBC ALBA acquires, often pre-buying, animation series which are dubbed into Gaelic for broadcast. MG ALBA which runs BBC ALBA in partnership with the BBC, in partnership with Creative Scotland, is developing an animated series to be originated in Gaelic and set and produced on Skye. As part of the talent development plan for this project MG ALBA, with Highlands and Islands Enterprise/Skye and Lochalsh Enterprise Board, facilitated King Rollo Productions to run a training course on Skye focusing on CelAction 2D animation.

Creative Europe funding can be a significant boost to international TV production with animation one-offs and series (minimum 24 minutes) being eligible for TV funding. Funding requires majority participation from those countries participating in the MEDIA sub-programme, with 50% funding to be in place and 3 participating broadcasters on board at the point of application.

Rights holders such as DC Thomson have an established track record as funders of TV animated series for children, exploiting the IP in characters created for other media. They have recently worked with Dreamworks to produce a magazine based on new series *Noddy, Toyland Detective*, which is to air on Channel 5's Milkshake. As a partner, DC Thomson has considerable sector experience and significant investment potential.

3.4 Service Work and Related Industries

Animation companies and studios are likely to work across a broad range of creative industries as well as developing IP work. Working on corporate videos, stings, titles, apps and websites as well as with games producers is an integral part of the VFX industry, and together with live action television and film productions, all offer routes to developing businesses and expertise.

According to the Confederation of British Industry, the UK's video games development sector contributes approximately £1bn to GDP per annum. In 2014, it projected that the development sector would grow at an annual growth rate of 6.5% between 2012 and 2016. [20] As with other sectors involving animation, clear statistics do not exist, however research group NESTA has estimated that the percentage of video game companies based in Scotland is 5% of the whole UK gaming industry.[21]

There is currently cross-over between the Scottish animation and games industries. Animation can learn from some of the successes of the gaming industry within Scotland, for instance gaming has been more successful in establishing routes from education to industry and in developing network support and advocacy. An example of this is the success of the University of Abertay's Dare to be Digital programme, a video game competition which has led to the commercial development of some of the participant entries as well as BAFTA nominations and awards[22] In this way both the animation sector and the gaming sector benefit from what is becoming known as 'creative industry spill overs' which refer to the indirect benefits of sharing new ideas and technologies and how a thriving creative sector may help foster the development of other creative industries.[23]

[20] Confederation of British Industry (2014) *The Creative Nation - A Growth Strategy for the UK's Creative Industries*
[21] NESTA (2014) A Map of the UK Games Industry
[22] Dare to be Digital was established by Scottish Enterprise Tayside, Dundee City Council and University of Abertay Dundee in 2000 as a 2-week game design competition in which students receive dedicated mentorship from industry experts. The final products are showcased at a 3-day Dare ProtoPlay event.
[23] NESTA (2010) Creative clusters and innovation: Putting creativity on the map.

3.5 Current Funding

> “ Successful animation is born global.
> *Margaret Cameron, BBC ALBA*

Pulling together project funding is a major challenge for animators, particularly those in small companies. Funding from international sources is vital in putting together co-production budgets, a complex and time-consuming process.[24] It is also difficult to gain experience raising production finance for large production budgets, which further compounds the difficulty and risk of starting up a project. Consultees state that it is difficult to find an outlet for mid-sized projects such as 30 minute shorts on which to gain experience and to develop valuable relationships with experienced executive producers or lawyers who can appropriately advise on funding strategies. A range of funding sources is typically gathered including public funding, bank loans, pre-sales to overseas broadcasters and advances on distribution or on additional revenue streams such as royalties for merchandise.

3.5.1 Public Funding from UK and Europe

Funding for animation is available via the **British Film Institute (BFI)** which offers development and production funding for animated feature films, as well as for skills, training and distribution. In 2013 their Vision Awards provided slate funding for development and included support for four animation companies (though none were Scotland based).

BFI supports short film development, production and first feature development for live action and animation indirectly via the national screen agencies. In Scotland BFI, in partnership with Creative Scotland, delegates this to the Scottish Film Talent Network (SFTN), a consortium made up of the Centre for the Moving Image (CMI), DigiCult and Hopscotch Films. SFTN represents Scotland in the UK-wide BFI NET.WORK initiative which connects the UK’s film talent development agencies working across live action and animation.

[24] Animation UK (2011) *Securing the Future of UK Animation*

BFI feature development and production support is lottery funded. BFI does not actively solicit applications, although it does actively track talent via the talent networks. Like Creative Scotland, BFI funding is rolling, with no set deadlines. Creative Scotland and BFI both report a small number of funding applications for animated feature films, however Creative Scotland has received an increasing number of applications in recent years, likely as a result of clearer signposting highlighting that funding is also available to animation projects. BFI released their strategy for 2017-2022 in November 2016 which includes a renewed emphasis on animation and includes a commitment to updating eligibility criteria to accommodate non feature-length work and a greater variety of animation and digital work.[25]

BFI (with partners including Creative Scotland) recently put out a call for applications to its Creative Clusters Challenge Fund. The fund assists in the development of a business case to highlight the growth potential of clusters of screen industry expertise outside of London and to help create a blueprint for growth of capacity, capability and talent development in the chosen region.[26]

Creative Europe MEDIA Programme, the successor to the previous European MEDIA programme, offers support to animation production and development (and all aspects of filmmaking). Britain’s recent referendum decision is likely to have a long-term impact on UK producers’ ability to participate in this funding but for the duration of the current programme this will remain unchanged. To date, the only Scottish animation that has been successful in obtaining funding via this route is *Bradley and Bee* (Red Kite Animation). There is debate within Creative Europe on the points weighting system, known as the Level Playing Field (LPF), introduced to reduce dominance by the big 5 countries[27]. This LPF weighting primarily influences development funding and would appear to have disadvantaged UK applicants. It is currently under review. There is however weighting towards films for children and a requirement to have access to a minimum of three European broadcasters. Animation projects are more likely than many other genres to meet this criterion. Pre-sales are required prior to

[25] http://www.bfi.org.uk/2022/
[26] http://www.bfi.org.uk/supporting-uk-film/funding-organisations/creative-clusters-challenge-fund
[27] The big five countries are: UK, Germany, France, Italy, Spain

approaches for Creative Europe funding. Creative Europe also offers producer training to develop both business and pitching skills.

Creative Europe also funds CARTOON, which supports the animation industry through a series of pitching events throughout the year dedicated to animation professionals. These events include:

— Cartoon Forum: A three-day network, showcasing and pitching event for TV series.[28] The 2015 Cartoon Forum had 900 participants from 30 countries pitching to 270 broadcasters and investors.

— Cartoon Movie: Like cartoon forum, Cartoon Movie is an intense pitching event over the course of two days to enable producers to find co-producers, speed up financing and negotiate deals with distributors.[29] The 2015 Cartoon Movie had 750 participants form 40 countries, 240 buyers and 60 projects pitched.

— Cartoon Masters: a series of seminars open to all animation professionals. Structured around the themes of business – developing new models of financing and revenues for animated TV series, creating entertainment to connect screens and cross-media and opportunity to pitch cross-media projects in front of digital experts.

— Cartoon Springboard: Supports young emerging talent from European animation schools to pitch their ideas in front of a panel of experts (and can include TV special or series, feature films or cross-media animated projects).

Creative Europe also supports the Annecy Festival, a renowned international animation festival.

[28] Focus on TV series projects in development, need to total at least 26 minutes and have a minimum of 50% animation. Projects should be beyond concept and pre-production phases and be ready to go into development while still looking to fully assemble all financing.
[29] Projects can be at different stages of development including: projects in concept, projects in development, films in production, completed films in sneak preview.

Animation tax relief was announced in the 2012 Budget and introduced on 1 April 2013. It 'aims to promote the sustainable production of culturally relevant animation productions in the UK'.[30]

Animation Tax Credits are available for televised animation programmes, with a series treated as one whole. Companies are eligible if at least 51% of the total core expenditure is on animation, and at least 10% of the total production costs relate to activities in the UK. Animation tax relief is subject to programmes passing the Cultural Test.

Since animation tax relief was introduced, 50 UK animation programmes claimed tax relief with 30 having completed production and drawn down funds. Of the £10.2m claimed, £5.4m has been paid out so far. By comparison, since the film tax relief was introduced in 2007 £1.5bn has been paid out in response to a total of 2614 claims for film tax relief.[31]

A 2015 review found that 'for each pound of Animation Tax Relief (ATR) granted during the first year of operation, £1 in additional GVA was created through direct and multiplier effects.[32] This equates to a taxation return for the Exchequer of £0.3 in additional tax revenues for each pound of tax relief granted.' [33]

3.5.2 Public Funding in Scotland

Public funding for animation in Scotland is provided through Creative Scotland and its funding programmes. Creative Scotland also supports the industry by providing critical funding to the Scottish Talent Film Network and previously through the Tax Credit Advance Facility. Scottish Enterprise is, in some circumstances, also a source of support through Business Gateway and other ventures.

[30] HMRC (2015) *Creative Industries Statistics*
[31] HMRC (2015) *Creative Industries Statistics* – Appendix 1.3
[32] GVA is a measure of the wealth generated and is defined as the value of output minus the value of the goods and services consumed as inputs by the production process. GVA is one of the three measures used to assess Gross Domestic Product (GDP).
[33] Olsberg SPI *(2015) Economic Contribution of the UK's Film, High-End TV, Video Game, and Animation Programming Sectors*

Creative Scotland

Development and Production funding in Scotland is primarily administered by Creative Scotland and support is provided across feature films, television drama and shorts as well as for skills and talent development, networking and festival attendance. Animation is explicitly referenced in the Creative Scotland guidelines including both animated feature films and animated television series. Creative Scotland's Film Strategy published in October 2014 places a priority on supporting the development and production of high-quality feature films, documentaries and animation.

There are three distinct funding sources available:

— **Regular Funding** – provides three-year core funding for organisations, and is one of the key means by which the ambitions, priorities and connecting themes highlighted in the Creative Scotland 10 Year Plan will be addressed. It provides stable support for a range of organisations and consortia across Scotland who make an important contribution to the development of the arts, screen and creative industries, enabling them to plan and deliver activities over a three-year period.

Currently there are four dedicated screen organisations funded through this route. These are Glasgow Film, Centre for the Moving Image, Film Hub Scotland and Regional Screen Scotland.

Puppet Animation Scotland which champions visual theatre, puppetry and animation in Scotland also receives Regular Funding. Their activities include the manipulate Visual Theatre Festival and the Puppet Animation Festival which tours a diverse programme of puppet performances, animated films and workshops across Scotland. Puppet Animation Scotland also distributes bursaries through its Creative Fund as seed funding to support exploration and testing of ideas which encourage creativity and experimentation. Awards include:

- Ainslie Henderson, 2016: £3,000
- Ainslie Henderson (to develop the short film *Stems)*, 2014: £5,000

— **Open Project Funding** - supports the arts, screen and creative industries, with projects that help them explore, realise and develop their creative potential, widen access to their work, and enrich Scotland's reputation as a distinctive creative nation connected to the world. Awards relating to animation so far include:

- Once Were Farmers – support to attend Screen Leaders, the Strategic Company Development Programme for the Screen Industries (2015/16): £3,625
- Bigmouth Audio - Cartoon Forum & Kidscreen Summit attendance (2015/16): £4,500
- Scotland Loves Animation - Scotland Loves Anime Festival (2015/16 and 2016/17): £15,000
- Interference Pattern – support for Move Summit 2017 (2016/17): £8,000

— **Targeted Screen Funding** - developed to support the conditions necessary to strengthen and sustain Scotland's screen sector. Within this funding route there are two specific funding programmes available from Creative Scotland for the screen sector, in addition to Strategic Targeted Funding, which is discretionary and is not open to applications:

1. **Screen Funding** – a £4m fund from the UK National Lottery that offers the following five funding sub-routes:

— Single Project Development Funding

- £544,819 in total awarded in 2015/16. Of this Red Kite Animation received £15,000 to develop *Princess Emmy*, and King Rollo Films received £14,000 to develop 'The Talfs'.
- So far in 2016/17 £32,710 has been awarded to Eyebolls Ltd to develop a TV pilot for *Superfairies*.

— Slate Development Funding

- £420,260 in total awarded in 2015/16 to fund four film and TV production companies. One of these was animation company Ko Lik Films, which received £75,310.
- In 2016/17 Red Kite, in partnership with Flaunt, was awarded slate funding of £150,000.

— Production Funding

- At the time of publication, two offers of production funding have been made towards animation projects.[34]

— Distribution and Exhibition Funding

To date, no awards have been made towards animation projects through this sub-route. However, it is open to animation.

— Market and Festival Attendance:

- £74,635 in total awarded in 2015/16. A number of awards have been made for animation companies to attend markets and festivals.

In 2015/16 awards included:

- Fraser McLean to take a delegation of 15 animation professionals to CTN Expo in Los Angeles: £17,400
- Ko Lik Films to attend Cartoon Movie: £1,000

In 2016/17 awards included:

- Red Kite to attend Cartoon Forum: £1,000
- Hungry Boy Productions to attend Cartoon 360: £1,000
- Red Kite to attend Cartoon 360: £1,000
- Iain Gardner to attend Annecy Annecy International Animated Film Festival: £500

[34] As the financing transactions for these productions have not closed and offers made unconditional at time of publication, they cannot yet be named.

2. **Production Growth Fund** – a £1m fund in 2016/17 supporting productions which specifically help the screen sector in Scotland to grow economically, through the creation of new employment opportunities for Scottish-based crew and talent, and the increased use of Scottish-based production facilities. This funding comes from the Scottish Government and the UK National Lottery. To date, no applications for animation projects have been received through this funding route.

3. **Strategic Targeted Funding** – each year Creative Scotland's Screen Team has an allocation of Strategic Targeted Funding, used to address specific priorities in their *Creative Scotland on Screen: Film Strategy 2014-17* and any opportunities that arise. In addition to Film and Moving Image Education, which includes animation, these funds have also been used to support the Animation Base Camp.

— Animation Base Camp

Creative Scotland supported the Animation Base Camp 2016 with £50,000 awarded through Strategic Targeted Funding. This 8-week training workshop, hosted by Once Were Farmers in Glasgow and the Animation Centrifuge, was geared towards animation graduates and emerging animation talent to enable a smooth transition from study to employment. The workshop aimed to help participants develop creative, technical and production management skills.

The Animation Base Camp core objectives were:

- To develop the skills of emerging animation practitioners to better enable the transition from study to employment.
- To reflect a real production environment in feature animation pre-production, focusing on reactive teamwork, responding to a brief, and creative problem solving.
- To promote the Scottish Animation Industry overseas and encourage international collaboration by developing relationships with industry professionals from Sony Pictures Animation (SPA), and other

international studios and organisations; and by working in partnership with organisations from Norway and Ireland.

Participants from Scotland, Republic of Ireland and Norway worked in teams within an industry-based framework with specific roles which reflect industry approach and supported by weekly critiques provided remotely by mentors from Sony Pictures Animation. The Base Camp was widely rated as a success by both participants and industry mentors. To date, of the 15 participants, 3 have received full-time permanent positions, 2 have full-time short-term contracts and 3 have gone on to further work experience/internships.

Scottish Film Talent Network (SFTN)

Creative Scotland, along with the BFI, is a core funder of the Scottish Film Talent Network,[35] which provides support for short films, first feature films, and professional development. Additional support is provided by Creative Skillset for targeted training activities.

SFTN is a consortium made up of the Centre for the Moving Image (CMI), DigiCult and Hopscotch Films, representing Scotland in the UK-wide BFI NET.WORK initiative as it connects the UK's film talent development agencies. There are four distinct sub-routes within SFTN:

— The First Feature Development Programme provides up to £20,000 per project for teams of writers, directors and producers in the development of their first feature films. Through this programme, SFTN is currently developing *Shoegaze* with Ko Lik films, and Will Anderson and Ainslie Henderson's first feature *Dom*, produced by Noe Mendelle from Scottish Documentary Institute.

— The New Talent and Emerging Talent Shorts strands provide funding for short films. Under the New Talent Shorts programme two animated shorts have been completed, *No Place Like Home* (winner of the BAFTA Scotland Award for Best Animation) and *Dave;* and two further shorts are in production, *Nothing to Declare* and *Spindrift*.

— The Professional Development strand is designed to support writers, directors and producers to attend development programmes, talent labs, single workshops and seminars.

— SFTN recognises the importance of television for production but does not fund specific television initiatives at the moment, though is in discussion with broadcasters about partnership ventures.

Tax Credit Advance Facility

In 2015 a £2m Tax Credit Advance Facility was made available, with support from Creative Scotland. The only animation related project supported through the facility was children's TV series *Teacup Travels 2,* which received £209,795. This facility is no longer available.

Scottish Enterprise

Within the creative industries, including animation, the primary role of Scottish Enterprise is to support high growth businesses. As discussed earlier most businesses in animation are small and fall outside the remit of the agency although Business Gateway supports smaller businesses as does Highlands and Islands Enterprise through their Creative Industries Strategy. Enterprise support is discussed in Section 6.4 on business development and growth.

Although Scottish Enterprise does not provide finance for development or production the remit does include innovation and infrastructure.

3.6 Challenges and Opportunities

In 2010 when feature film *The Illusionist* was released it seemed that Scotland might have a burgeoning animation sector. It boasted not only a range of home grown expertise but also attracted talent from across Europe, drawn to the production challenge of this acclaimed film. In 2016 few of these filmmakers are still in Scotland and many consultees believe an opportunity was lost to capitalise on its success.

[35] Creative Scotland contributed £250,000 and BFI contributed £200,000 per year towards the 2014/15 and 2015/16 programmes.

Animation faces distinct funding challenges in part due to a lack of understanding of the process of making animation. The UK Film Policy Review *'It Begins with the Audience'* recommended that 'the BFI makes allowance for development funding that recognises the unique challenges of animation development.'[36]

> “ Animated features need bespoke elements in their development process which are not shared by live action features…long development cycle, low production frequency makes it difficult to build relationships with sales agents and distributors.
>
> *A Future for British Film, DCMS*

Animation is rarely supported specifically; rather animators compete for funding alongside live-action productions. However, animation is resource and time intensive, commanding higher budgets than live action equivalents. Few animation companies (particularly in Scotland) have the resource to develop a significant slate of projects at any one time, leaving producers over-reliant on single project development. Given the small hit rate for success in any creative project this leaves animation companies and talent especially vulnerable. While public support is available, it is often cited as being insufficient to support a healthy sector.[37]

In response to funding challenges, producers develop co-productions with production companies in more than one country which allows the financial resources, and crucially, the government incentives and subsidies from each country to be pooled. While this allows access to a greater funding pool it can also often mean the UK Company must surrender significant shares of IP rights to partner firms, resulting in a longer-term reduction of revenue share. Co-production has many benefits such as sharing risk, access to new sources of funding, relationship building and knowledge sharing. However, consultees also feel that it has an impact on the UK skills base, with a perceived loss of UK expertise to partner companies. The animation workforce is highly mobile and the UK skills base is compromised by employee emigration, often to partner companies where they have established a relationship from previous co-production projects. The relatively insecure UK and Scottish animation sector struggles to attract and retain skilled talent to establish a sustainable sector.

Animation UK reports that animation companies also struggle to access private finance. Animation studios attract low credit ratings, and production is perceived as high risk due to the long revenue cycle, making it difficult to attract private funding.[38] While animation has the potential to generate money downstream – particularly through license fees and franchising – long production and revenue cycles create instability and risk. Positive cash flow is a particular challenge for animation, a study by Optima argues that successful UK productions are often not cash positive until 5 years after production.

While tax credits, introduced in 2013, are going some way to correct market difficulties, animators still struggle to garner investment upfront to make a project viable. Animation studios need easier access to finance, through investment or loans, to enable them to develop IP and get projects off the ground. Creative Europe's Guarantee Facility aims to offer SMEs in the cultural and creative sectors access to interim finance, gap finance, working capital, tax incentive related products etc.[39] The initiative currently has an open call for financial intermediaries.

Broadcasting budgets for animation – as with other forms – are decreasing. Although this is a global phenomenon the effects are particularly stark in UK where producers can only typically bring approximately 20% from broadcasters whereas, for example, French counterparts can raise 55/60% from their indigenous broadcasters. Following the BBC commitment in 2008 to ensure that 50% of network spend is outside London, there has been an increased focus on production in Scotland including a centre for CBBC and CBeebies. However,

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[36] DCMS (2012) *A Future for British Film, It begins with the audience*

[37] PACT (2015) *Building a sustainable independent production sector in Scotland*

[38] Watson, Lindsay S. (2016) *Animation UK: A Review of Policies Affecting Development Funding of Independent British Animated Children's TV Series*

[39] https://ec.europa.eu/programmes/creative-europe/cross-sector/guarantee-facility_en

BBC commissioning for animation is centralised in Salford where CBBC/CBeebies is primarily located and there are no specific support streams for Scottish producers. The BBC landscape is changing further with the development of BBC Studios. For BBC Scotland's children's department, this entails reporting directly to the Head of Children's TV rather than to BBC Scotland. Independent commissioning in Scotland could be improved by the introduction of commissioner or commissioning executives based in Scotland. BBC Scotland schedules are primarily network driven making inclusion of opt-out programming (Scotland only commissioning) difficult. Broadcasting co-ventures, to increase outlets for Scottish animated shorts, might consider online or cross-broadcaster shared approaches.

Whilst BBC Scotland commissions idents/logos and other shorts from animation companies these are often through official procurement channels. Consultees for this research report that the rigours of procurement are costly and time-consuming for small pieces of work and many Scottish animation companies are ill-equipped to devote the resource required to pitch speculatively.

At the time of writing it is not possible to accurately gauge the impact of the UK's decision to leave the European Union. In the short term (until 2019 with the end of the current programme of Creative Europe funding) the situation will remain unchanged.

3.7 Conclusions

In common with the Film Sector Review for Creative Scotland, this review is not intended to provide detailed policy recommendations. However, during consultation we have gained insight into how a successful sector's production capacity might look and have some suggestions for possible steps to reach that position. The sector is small and lacks capacity and clear routes for growth. The international profile of animation in Scotland is low – unsurprising given the lack of volume. However, there is recognition across a range of decision makers that there is potential in the producers and talent in Scotland. To reach that potential there must be both a greater volume of production and sustainable businesses of scale.

Whilst production and development funding for animation is available alongside that for live action there are few initiatives which are targeted solely at the sector. As noted in the 2012 DCMS report 'It begins with the Audience' cited earlier, there are bespoke elements to animation production and it is worth considering whether these are adequately served as part of an all-screen content initiative or whether targeted funding for animation might provide the ability to tailor support to the needs of individual productions and companies.

Historically Creative Scotland has reported low application rates for animation, which likely reflects the size and lack of capacity in the sector but may also reflect a lack of focus on specific needs. However, there has been an increase of late, which is likely a result of clearer signposting and promotion of Creative Scotland avenues of support as also available to animation. Further analysis of current application rates and the merits of targeted animation funding should be considered in the future.

Commercially appropriate enterprise support, including that for talent driven micro-businesses, is needed across the sector. Scottish Enterprise's account management with tailored support is praised by those in receipt of it – a similar approach across the sector could benefit growth and development. Research has shown that many stable animation businesses have built success on production services work. Creating an environment where more animation business can be enabled by Scottish talent is vital for success.

Broadcasters do commission and develop animation projects but do not seem integrated into strategic support for the sector. There are a handful of companies in Scotland with capacity, business know-how and talent to provide strong content for the nation's broadcasters. Without targeted support those companies may cease to exist and an asset for audiences in Scotland will be lost.

An effective and well supported (by the sector) networking and lobbying organisation may be needed to drive forward industry needs. While there is an existing Scottish Animation Network, consultations reveal that in recent years it has been dormant with a lack of funding, a need for new energy and a refreshed purpose. Either a new network or a revitalised Scottish Animation Network could benefit producers by providing support in understanding and navigating the funding landscape, it could operate along similar lines to Independent Producers Scotland. A positive development is Move Summit 2017, hosted by Interference Pattern, which will provide a networking and showcasing opportunity for commercial animators and other creatives with the aim of working to support growth within the industry.

Section 9 later in this review develops this thinking and suggests specific actions.

4. Learning Animation

Scotland's universities and colleges deliver award winning and high ranking courses at a variety of levels. While there are short courses and a number of training initiatives for industry professionals, more can be done to improve training, facilitate routes into industry and promote animation as an art form and a career.

Across schools, colleges, lifelong learning and skills development there are opportunities where using animated content can provide valuable learning. Scotland's Creative Learning Plan – developed by Creative Scotland in partnership with a range of education and skills agencies, sets out a vision for a more creative Scotland: to shape the future as a country, it recognises the need to create and be creative. Learning animation and using animated content offer many opportunities to contribute to this vision.[40]

4.1 Schools

Including animation within classrooms encourages creativity, communication, self-expression and develops a wide variety of technical skills and knowledge. Animation is proven to have beneficial impacts on the children who engage with it. These include an increase in language uptake, school-readiness, understanding of societal norms and media literacy.[41]

Teaching animation is an end in itself and can also be used to support learning across a range of subjects. Inclusion of an animation component would directly fit with Curriculum for Excellence curriculum areas such as expressive arts and technology and would further overarching priorities of literacy. Teaching animation in the classroom fits well within Scotland's Curriculum for Excellence and with Creative Scotland's Time to Shine: Scotland's Youth Arts Strategy, however these benefits and links need to be made clearer to educators, schools and inspectorate. Unlike in Northern Ireland where schools offer Moving Image Arts qualifications, Scotland lacks that obvious driver and understanding of where animation fits into current priorities.

A range of animation workshops have had success in Scottish schools, though these tend to be on a one-off basis rather than a regular feature of the curriculum. The Puppet Animation Festival showcases puppet theatre, animated film and participatory workshops across Scotland every spring, touring to over 50 venues each year. The aim of the festival is to ensure that every child in Scotland has access and exposure to film and performing arts, its animation workshops are high quality and well-received. In 2014, Norman McLaren centenary celebrations, funded in part by Creative Scotland, saw over 62,000 people taking part in over 80 animation related events across Scotland and the UK. As part of these celebrations, McLaren Digital Animation Workshops were delivered in over 130 schools, reaching 3,450 children aged 7 to 9. [42] These workshops introduced the techniques of pioneering Scottish-born animator Norman McLaren and the fundamentals of animation using the McLaren Digital Workshop app (for iPad) created by the National Film Board of Canada. As a result, more than 4,000 short animated films were created.

[40] Creative Scotland (2013) What is Creativity – Scotland's Creative Learning Plan

41 Olsberg SPI (2015) Cultural and Audience Contributions of the UK's Film, High-End TV, Video Game, and Animation Programming Sectors

[42] The centenary celebrations were organised by the Centre for the Moving Image (CMI) in collaboration with the National Film Board of Canada and Creative Scotland. http://www.skwigly.co.uk/norman-mclaren-100-years-animating-world/

Some Scottish animators have made delivery of schools workshops a core part of their business. Animation Jam, for example, runs regular workshops for children and adults, frequently working with schools. While these are found to be successful and inspirational for the children participating, there is no systematic link between Scottish schools and the animation sector.

4.2 Further and Higher Education

Scotland has a good variety of further and higher education animation courses at Undergraduate and Masters Levels with Duncan of Jordanstone, Abertay, Glasgow Caledonian University (GCU), Glasgow School of Art, and Edinburgh College of Art (ECA) all seen as developing internationally recognised talent.[43] These well-regarded schools take different pedagogical approaches. Edinburgh College of Art works to develop talented animation auteurs, underpinned by a "pragmatic, non-prescriptive approach to production technique, research and theory".[44] Graduates are award-winning and courses are recognised as competing internationally with like-minded educational institutions. Offering an alternative approach is Duncan of Jordanstone in Dundee which attempts to "echo current industry studio practices as much as possible" as part of the delivery of its high-quality art school experience.[45]

Most universities and colleges in Scotland offering animation have for the most part chosen not to seek Creative Skillset accreditation "ticks" for their courses, feeling perhaps that it does not enhance their course offering or marketing to prospective students. University of Abertay offers the only accredited animation courses in Scotland.

ECA and Duncan of Jordanstone compete internationally, but during the consultation when those working in the industry were asked to reference which world leading institutions were likely to attract US talent scouts, they were more likely to cite MOPA (Arles), Gobelins (Paris) and Animation Workshop (Viborg).

[43] For a full list of available courses, see appendix 10.4
[44] http://www.eca.ed.ac.uk/school-of-design/postgraduate/taught-degrees/animation-mfama
[45] http://www.dundee.ac.uk/study/ug/animation/

> “ We have the whole food chain before and after the education component…we are hatching companies for the whole world.
>
> *Morten Thorning, Center Director, The Animation Workshop*

Consultations revealed an ongoing debate on the role and purpose of formal animation education. For some, animation education should reflect a traditional art school approach, providing a place of creativity and artistic exploration and developing the independent auteur. Others stress the need to prepare students for industry and to create a skilled workforce which can support the Scottish animation sector. The animation sector is not alone in this conversation, indeed there is an ongoing debate globally on the changing role of art education and its ability to provide value for money and industry readiness.[46]

> “ There is really good talent coming out of Scotland but, in common with the rest of the UK, more focus on business savvy would be good
>
> *Beth Parker, Disney EMEA*

With GCU and Duncan of Jordanstone we see the beginnings of alternative thinking and efforts to support development of industry-ready talent but overall there is much disquiet in the industry that there are significant gaps and graduates have not developed key technical skills, communication and team-work skills.

Work placement schemes, internships and apprenticeships offer solutions to developing industry-ready new entrants (including graduates), however most small companies do not have the time or resources to support and appropriately train a placement student. Existing animation courses in Scotland need support to diversify and expand their offer to develop industry-ready talent.

[46] https://www.theguardian.com/education/2013/oct/21/alternative-art-schools-threaten-universities

4.3 Talent Development Initiatives

There are a range of individual initiatives aimed at developing skills and talent within the screen sector, some directly focused on animation.

Scotland's national skills body, **Skills Development Scotland** leads skills planning to make skills development work for employers and employees. There is an industry led Creative Industries Sector Skills Investment Plan (SIP) which recognises the need for practical work based learning on training courses as well as a need, at senior level, for strong leadership, business and innovation skills. The Investment Plan acknowledges the paucity of data on skills gaps in the Creative Industries and the need to work with employers to ascertain workforce needs. The skills gaps discussed during this consultation (including software understanding and business skills) are identified as issues across the Creative Industries, impacting on product development and business growth. The SIP Action Plan offers four work streams for developing and retaining a talent pool to support growth.

Graduate, Modern and Foundation Apprenticeships offer potential for the animation sector with on-the-job training for industry readiness. For these provisions to work within the animation sector it is vital they recognise the freelance and short term nature of most animation employment opportunities.

In 2014, the UK Government launched the Skills Investment Fund (SIF) matching industry investment pound for pound up to £16million in the film, TV, children's TV, animation, games and VFX sectors.[47] This fund is administered by Creative Skillset which also provides several training programmes, including a Producers course as part of Encounters Short Film and Animation Festival and the Edinburgh International Film Festival.

Scottish Film Talent Network is tasked with fostering skills in the film sector, including animation. Alongside funding for short films, they offer a talent bursary to support writers, directors and producers to attend development programmes, talent labs, single workshops and seminars.

Additionally, there have been a number of initiatives:

- **Animation Base Camp:** Funded by Creative Scotland in association with Sony Pictures Animation, this 8-week workshop launched in summer 2016. Geared at new animation graduates and emerging talent, participants from Scotland, Republic of Ireland and Norway were recruited for specific roles in an animated feature pre-production pipeline and received regular detailed critiques by mentors from Sony Pictures Animation in Los Angeles.
- **Screen Skills Fund, Creative Scotland:** This fund ran in 2015 and aimed to address skills gaps across the entire screen sector. £1m of funding has been awarded to a range of programmes – of them only one, Fix Visual Effects, was animation specific. Ongoing funding has not been confirmed.
- **MG ALBA/King Rollo Productions:** CelAction 2D Animation Course offered on Skye, funded by Highlands and Islands Enterprise. This course ran as a forerunner to King Rollo's proposed TV series production on Skye to address local skills gaps.
- **BFI Aardman Development Lab:** Launched in 2014 and designed to give professional hands-on experience to storytellers with a passion for family feature films. It provided regular meetings, mentoring and development support. The project is not currently active.

4.4 Talent and Skills Gaps

There is a desire within the sector to develop professionally however there are few training or professional development schemes available in Scotland. Although technical fluency and skill is essential, software-focused training quickly becomes irrelevant as technology changes quickly and each studio develops bespoke processes and company pipelines. Instead, it is crucial for

[47] http://creativeskillset.org/who_we_help/creative_businesses/skills_investment_funds

animators to develop transferable skills, be adaptable, and open to working with new products.

Our consultations highlighted some key skills or talent gaps for the Scottish animation workforce:

- **Pipeline-ready talent:** New graduates from Scottish animation courses are often talented but unprepared for work in an industry context with a lack of skills and experience**.**
- **Producers:** Scotland's animation sector boasts successful producers – but only a handful have experience of securing industry finance. New and emerging producers are even fewer and opportunities to be trained are production dependent. Between productions, even successful producers scale down operations and struggle to support trainees. This lack of producers and producer support was stressed across consultation and is keenly felt. In Scotland, there are a number of established live action producers with greater experience and capacity than most animation colleagues – it may be that synergies between these groups could enhance available skills through shared training, possibly through use of executive producer skills and through on-the-job training for new producers.
- **Writers and Directors:** There is a lack of specific training for animation directors and writers. While the National Film and Television School (NFTS) offers an MA in Directing Animation, there are no courses north of the border specialising in writing or directing for commercial production (but rather focusing on the auteur led approach cited earlier). Whilst the auteur approach has evident success (in awards etc.) there is a need, perhaps at post graduate level, for further more commercially focused approaches.
- **Developing Intellectual Property:** Overall, a lack of understanding on how to develop, retain and sell IP has been identified as a key gap within the sector.
- **Pitching work:** Promoting and selling work and opportunities is an essential skill to the sustainability of the sector.

4.5 Conclusions

The higher education sector in Scotland provides world class animation education. There is debate within the sector on the role higher education should play in developing industry-ready talent. Different perspectives and teaching approaches were reflected in our consultations. The approach epitomised by ECA is valuable and respected. Its ability to develop and support award winning world class talent is to be encouraged and supported. An industry focused approach to higher education which is quick to respond to technological innovations is also valuable. A strong and sustainable animation sector needs both approaches to develop a range of talent and skills in Scotland.

In addition to the differing approaches to undergraduate education, there should be consideration of post graduate development (potentially in conjunction with industry) of Scottish talent. The pilot Animation Base Camp has been a success and initiatives with international partners should be encouraged and supported. There are opportunities to strategically link with studios in the UK and Europe both for similar entry level initiatives and for producer development. Initiatives with European studios (for example, Cartoon Saloon in Galway) might have the potential to enhance career development, generate ideas and create jobs in a way that is harder to broker with US partners due to distance and lack of freedom of movement of workforce.

A joined up and coordinated approach across FE and HE to ensure skills training is responsive to industry needs is vital. This will enable the Action Plan of SDS Skills Investment Plan to play a central role in animation sector growth and sustainability. To enable skills training relevant to animation it will be important for initiatives to recognise the freelance and short term nature of employment. Only this way can the Modern and Graduate Apprenticeship Schemes play an active role beyond the tiny number of large employers in the sector.

Teaching animation in the classroom brings a number of benefits including developing creative expression and gaining confidence and skills in a range of skills and technologies which are part of animation. Teaching animation also fits well with Curriculum for Excellence outcomes. However, these benefits and the positive role animation could play in the classroom need to be more clearly communicated to educators, schools and the inspectorate to encourage a wider uptake of animation in schools.

5. Watching Animation

Film is known to have an important formative influence on the way we see the world. The BFI has found that the majority of people feel film is educational, exposes us to new cultures, helps us learn about people who are different to us, and makes people think about sensitive issues.[48]

Film is also crucial to shaping our national, cultural identity. 84% of Britons agree that British films are an important part of our culture.[49] Animation is central to this – especially as animation has a particular impact on young minds. PACT has found that 70% of parents agreed that UK animated productions contributed to cultural identity.[50] Animated figures like *Thomas & Friends* and *Wallace and Gromit* have become part of the British collective consciousness.

5.1 Animation on Screen

The BFI's 2011 report – *Opening our Eyes, how film contributes to the culture of the UK* – places animation as the third most popular kind of film, at 7%, behind blockbusters (49%) and films with a famous cast but less big budget effects (18%).[51] In 2013, animated films topped the UK genre tables, grossing 21% of box office receipts from 5% of releases.[52] Nonetheless, animation in the cinema is dominated by US releases, with UK animated films taking only 0.8% of the box office among other UK releases, and 2.5% among UK independent releases.[53]

There is increasing concern in the sector about the relative lack of distinctly Scottish content being produced. Pixar's *Brave* (2012), set in Scotland, was successful globally, winning academy awards, and achieving worldwide box office admissions of 64.9million.[54] However, it was produced exclusively in the USA. Scottish shorts, often featuring distinctly Scottish content, rarely find outlets in cinemas – even those with an arthouse focus. Film Hub Scotland does not have an explicit focus on promoting animation through its activities, rather it takes a broader approach to increase and broaden film audiences and create more opportunities for audiences to engage with and learn about film.

Foreign content also dominates animation on the UK's televisions. While UK-originated children's content accounts for only 20% of total air time, it comprises 45% of actual viewing which suggests a strong appetite for UK original content.[55] This is borne out by CBeebies preference for productions which "feel British and Global" and their preference for UK originated production. It may suggest that there would be a market for further such production, though funding opportunities within UK broadcasters, even CBBC, are small. It may also be, in part, owing to a greater affinity with British storytelling norms. MG ALBA/BBC dub purchased content into Gaelic but would like to see Gaelic stories originated in the language rather than in English.

In the last few years the global trends of animation consumption have changed significantly along with live action film and television. Animated television and film is increasingly being consumed through online portals such as Netflix, and viewed on demand – 66% of people in the UK use an online service to watch TV or films every week (81% watch online every month).[56] In addition, the high degree of smart phone use (66% of Britons and 63% of Scots use a smart phone)[57] suggests there is untapped potential for animated content to be consumed interactively across a range of devices. Commissioners on new platforms offer future business opportunities for Scotland's animation producers

[48] BFI (2011) *Opening our Eyes, how film contributes to the culture of the UK*
[49] BFI (2011) *Opening our Eyes, how film contributes to the culture of the UK*
[50] Ofcom (2007) The future of children's television programming
[51] BFI (2011) *Opening our Eyes, how film contributes to the culture of the UK*
[52] BFI (2014) *BFI Statistical Yearbook 2014*
[53] BFI (2014) *BFI Statistical Yearbook 2014*

[54] European Commission (2015) *Focus On Animation*
[55] Olsberg SPI (2015) *Cultural and Audience Contributions of the UK's Film, High-End TV, Video Game, and Animation Programming Sectors*
[56] OFCOM (2015) *International Communications Market Report*
[57] OFCOM (2015) *Communications Market Report: Scotland*

and may therefore indicate that a broadening of participation in, for example, the Edinburgh International Television Festival or Kidscreen, may be beneficial in terms of networking and development of business links.

5.2 Animation Festivals

Festivals remain an important outlet for animators to show their work. Festivals are particularly crucial for showing shorts, which can garner international attention and unlock funding.

Unlike the documentary sector, where Sheffield International Documentary Festival has established the UK as a successful place for international screenings, markets and networking, the animation sector has no such flagship event featuring both screenings and a market. Even London International Animation Festival does not present that opportunity. The Children's Media Conference in Sheffield has potential to fill that slot in business development terms, but not as an international celebration of animated films and programming.

Scotland has a strong tradition of festivals and hosts a range of popular animation festivals:

— Scotland Loves Anime festival focuses on Japanese animation (October, Scotland-wide)

— Puppet Animation Festival which is aimed primarily at children (March-April, Scotland-wide)

— Both the Edinburgh International Film Festival (June), and the Glasgow Film Festival (February) have streams for animated content, and continue to be popular with both audiences and animators.

Scottish animated films are also represented in festivals outside of Scotland – from the London International Animation Festival and Bristol's Encounters Festival to festivals all over the world such as the Toronto International Film Festival, Annecy International Animation Film Festival, the Kidscreen summit and the Children's Media Conference.

5.3 Conclusions

Audiences – of all ages – are most likely to see animation on television. This means that most animation viewed in Scotland will be imported and little culturally specific content will be available. There are however a number of acclaimed short films that could be given higher profile in an attempt to introduce greater audiences to local product. The Royal Television Society (RTS) and BAFTA both recognise the importance of animation to the industry yet these high profile and quality films, often garnering success internationally, are unknown outside festival and industry audiences. This is a lost opportunity and the potential presented by broadcaster and online platforms, among terrestrial broadcasters and newer services such as Netflix, are worthy of exploration. Broadcasters in Scotland (MG ALBA, BBC Scotland and Scottish Television (STV)) may present screening opportunities; though opting out of network scheduling is particularly difficult for mainstream channels. Consideration of broadcaster web platforms as showcases for Scotland's short animations could be explored.

For animators at all career stages, festival screenings are of vital importance. Whilst globally there are a range of acclaimed festivals there is little opportunity in Scotland (and not many across the UK) to bring significant profile to animation from Scotland. In the documentary sector the arrival and flourishing of Sheffield Documentary Festival has increased the international standing and co-production potential of UK product but no such opportunity of that calibre, with both screening and market potential, exists for animation. The Children's Media Festival in Sheffield might be the focus upon which to build a new festival – which could offer potential for Scotland. The London International Animation Festival (LIAF) could also provide a greater platform for Scottish animators in London, as could further links with Glasgow and Edinburgh's established and renowned film festivals, particularly the industry sections of their programmes (perhaps linking, for example, European and local animation producers and talent)

6. Case Study: Vancouver

6.1 Introduction

Vancouver has one of the largest clusters of animation and post-production studios in the world and has grown out of the strong Vancouver film industry. In 2015 the total level of overall film and television production in British Columbia was worth $2.27bn (£1.76bn) in production volume, generating over 34,000 jobs.[58,59]

Vancouver animation studios are prolific – Creative BC reports that the dollar value of salary and wages resulting from digital projects supported by animation tax credit programmes in 2014/15 was an estimated $355m (£276m).[60] The region's film and video animation credits include *Cloudy with a Chance of Meatballs*, *Life of Pi*, and children's shows such as *Dr Dimension Pants*. It has been estimated that over 80% of U.S. productions with animated content have been produced, at least in part, in British Columbia.[61] Canadian animation is dominated by productions in the children's and youth genre, accounting for 92% of total production in 2014/15. The majority of this (88%) was production for television.[62]

6.2 Education

Vancouver is acclaimed for the quality of its specialist animation and VFX education. The city, and its surrounding metropolitan area, is host to a range of institutions providing high quality animation education at an undergraduate and post graduate level. Foremost of these is Vancouver Film School, ranked in the top five animation programmes in the world. [63] Vancouver Film School places a strong emphasis on developing industry-ready students who work in a team environment. Students meet regularly with industry mentors and work from a Production Studio that is set up like a professional animation or visual effects facility. This allows industry experts to connect directly with students and results in effective knowledge transfer of current industry approaches and practice. The Film School also runs a full course on career preparation, résumés and interview skills.

Other particularly successful schools include the Think Tank Training Centre, ranked 3rd in the world in the Computer Graphics Student Awards in 2015, and The Lost Boys School of Visual Effects.[64] The latter specialises in VFX – its courses are geared to industry and boast a 98% graduate placement rate. In addition to the diploma-level animation courses, most colleges also provide professional short courses. The city is also home to a range of research centres and labs that work to enhance digital graphic technology, developing skill and talent in all aspects of animation.

6.3 Training and Skills Development

Every year, 3,000 graduates from British Columbia's post-secondary programmes enter the wider media industry.[65] While this influx of talent is a boost to the sector, it has also created high competition for jobs which pushes entry-level wages down and creates an environment where new graduates are taking on poorly paid internships in order to break into the sector.[66] New talent also often travels south to seek the job pool in the United States, which is focused around Hollywood.

58 Canadian Media Producers Association, CMPA (2015) *PROFILE 2015*, production volume refers to the sum of production budgets
59 Skilled Immigrant Infocentre (2015) *Fastest Growing Industries: Digital Entertainment/Interactive Media*
60 Creative BC (2015) *Activity Report 2014 – 2015*
61 British Columbia (2015) *Creative Industries Converge Here*
62 Canadian Media Producers Association, CMPA (2015) *PROFILE 2015*

63 Animation Career Review - Top 100 International Animation Schools
64 http://www.cgstudentawards.com/
65 British Columbia (2015) *Creative Industries Converge Here*
66 http://vancouveranimationindustry.tumblr.com/ (accessed May 27th 2016)

6.4 Public Sector Support

Canada provides strong support for the creative industries. In 2014/15, 41% of total film and television financing came from public sources, including public broadcasters.[67]

Tax Credits

Canada has a particularly generous system of tax credits supporting the digital and creative industries. In Canadian film and television production, 28% of funding comes from tax credits – either provincial or federal sources.[68]

Productions in British Columbia may be eligible for a combination of:

- Film Incentive Tax Credit (35% of qualified labour)
- Production Services Tax Credit (33% of qualified labour)
- Digital Animation, Visual Effects and Post Production Tax Credit (DAVE) (17.5% of qualified labour – must be claimed in conjunction with film and television tax credits)
- Interactive Digital Media Tax Credit (17.5% of qualified labour).
- A production could also claim national tax credits, at up to 25% of qualified labour. [69]

In addition, British Columbia boasts one of the lowest corporate tax rates in the G7, no provincial payroll taxes or corporate capital tax, and the lowest personal income tax in Canada for individuals earning up to $121,000 (£74,000).[70]

While Canada's generous tax system has clearly enabled the growth of the creative and digital industries over the past 20 years, there is growing evidence that tax credits attract fickle businesses which follow the most lucrative government benefits. Large corporations operate on a scale that allows them to relocate with little notice – in 2013, Pixar Canada notified both staff and the media the same day it closed its Vancouver studios.

Public Funding

Creative BC offers development support through four distinct programmes: The Project Development Fund, The Slate 2.0 Development Fund, The Interactive Fund and The Arts Innovation Fund. In 2014/15 Creative BC provided $400,000 (£244,950) in development funding to 39 BC companies to help them create new content for film and television under the Project Development Fund. These projects had total development budgets of $2m (£1.2m).[71] None of the slate funds are animation specific, but animated projects regularly apply and are successful in obtaining funding through the slate funds.

Creative BC also provides funding, in the form of a sponsorship, to support industry initiatives that provide education, training, networking, career development and export marketing opportunities for BC's creative sector. In 2014/15 funding was received by a range of forums, workshops, events and festivals, including a course run by Spark Animation, and Toronto International Film Festival (TIFF). Creative BC also provides funding for travel and attending conferences through their Passport to Market programme.

6.5 Conclusion

The Vancouver film industry receives well-coordinated support from all levels of government in a concerted effort to support and grow the film industry. Relying heavily on generous tax credits and continual public support, Vancouver has made the most of its close proximity to Hollywood and attracts a range of international companies who bring jobs, expertise, and growth to the sector.

However, even with this public support, generous tax credits and well established schools producing high quality talent, Vancouver must work to stay competitive in an industry which will quickly follow better value for money in another location.

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67 Canadian Media Producers Association, CMPA (2015) *PROFILE 2015*
68 Canadian Media Producers Association, CMPA (2015) *PROFILE 2015*
69 PWC (2015) *Big Table of Film and Video Incentives in Canada 2015*
70 British Columbia (2015) *Creative Industries Converge Here*
71 Creative BC (2015) *Activity Report 2014 – 2015*

7. Case Study: Denmark

7.1 Introduction

Denmark's cultural and creative industries are thriving with the creative industries representing 6-7% of total revenue for Danish industry and employing over 85,000 people in 2010.[72] Denmark's total population is 5.6 million people, making it a close comparator to Scotland (with a population of 5.4 million people).

In 2010, Danish film was worth approximately DKK 4bn (£456m)[73] and the film industry has experienced an increase of 32% between 2009 and 2014.[74] While on average 25 Danish films are produced per year, Danish viewing is dominated by international content.[75] Of the 14 million annual paid admissions to Danish cinemas, 4 million were for Danish films.[76]

The Danish games industry has recently encountered a period of rapid growth. The number of games companies increased from 58 in 2008 to 190 in 2014, and now publishes more than 200 games annually.[77] The games industry had an annual turnover of DKK 1.7bn (£195m) in 2014, a growth of 35% from 2013.[78]

Danish animation is characterised by a range of companies that work across film, TV, service, as well as gaming. The industry is arguably dominated by Egmont who produce, distribute and market films and TV series in the Nordic countries through Nordisk Film and the co-owned company Zentropa. Of the Danish feature films produced each year, only a few are ever animated feature films intended for theatrical release. [79] Danish animated features have some success internationally, but are still seen as niche content, of the top ten Danish animated features only three had been circulated in more than 10 territories. The top grossing Danish animated film – *Disco ormene* (2008) – was distributed in 20 territories with total box office admissions of 739,000.[80]

Within the global animation industry, Denmark is renowned primarily for world class education. The nation has built an industry fed by skills. While it is unlikely that Scotland can compete with the level of public funding available in Denmark, the strong links between education and industry, and Denmark's focus on research, are important lessons.

7.2 Education

Denmark has become renowned for its animation education, which is well supported by public funding. The nexus for animation education is The Animation Workshop in Viborg, which provides animation training to everyone from school children through to Higher Education students, and professionals. The Animation Workshop is industry focused at tertiary level and above, and has built a strong professional network in Denmark and beyond.

7.2.1 Animation in Schools

Animation in schools is considered extremely important in Denmark, and there are a range of initiatives aimed at integrating animation into the curriculum.

Film X is a studio programme run by the Danish Film Institute (DFI), and targeted at schools and families. The studio provides the facilities for young people to experiment with live action filming alongside animation and VFX. Young people can shoot, animate, and edit their own films, making use of

[72] Danish Government (2013) *Denmark at Work: Plan for Growth in the Creative Industries – Design*
[73] Danish Government (2013) *Denmark at Work: Plan for Growth in the Creative Industries – Design*
[74] Producent Foreningen (2015) *Dansk Indholdsproducenter 2014*
[75] Cineuropa County Profile: Denmark
http://www.cineuropa.org/cf.aspx?t=cfocusprofile&l=en&tid=1667&did=62862#cl (accessed 27th May 2016)
[76] Statistics Denmark: http://www.dst.dk/en/Statistik/emner/film-boeger-og-medier/biografer-og-film (accessed 12th May 2016)
[77] Producent Foreningen (2015) *Dansk Indholdsproducenter 2014*
[78] Interactive Denmark: http://interactivedenmark.dk/article/danish-digital-industries-0?language=en (accessed 27th May 2016)

[79] European Commission (2015) *Focus On Animation*. The European Commission *Focus on Animation* report records that annual Danish feature film animation production for theatrical release was 2 (2010), 4 (2011), 2 (2012), 3 (2013), 1 (2014).
[80] European Commission (2015) *Focus On Animation*

professional studio and editing facilities. Complementing the physical offering is a range of online Animation stop motion tools to encourage young people to get inspired by animation. The DFI has a budget of DKK 268,000 (£30,688) for Children and Youth activities (2016).[81]

The Centre for Education and Animation (CAP), based at The Animation Workshop, promotes animation as an alternative learning and communication tool. The Centre works to integrate animation within learning, promoting an animation pedagogy, and working with schools and children of all ages. Animation in the classroom is inclusive and the centre particularly works on rehabilitation projects, and with children who have learning difficulties.

The Visual HF course, delivered by The Animation Workshop in partnership with a local school, is a 3-year programme for young people. The course gives pupils the equivalent of a GCSE, allowing them to work visually alongside the core curriculum.

7.2.2 Animation in Higher Education

The Animation Workshop is Denmark's flagship animation school. Based in Viborg, and part of VIA University College, the school has become world renowned, and offers a range of courses for people of all ages, specialising in technical skills for industry. Degree programmes include Character Animation (3.5 years), Computer Graphic Arts (3.5 years) and Graphic Storytelling (4 years). Tuition is free for students within the European Union, and otherwise €7,087 (£6105) per term.

The National Film School in Copenhagen (Den Danske Filmskole) is funded by the Danish Ministry of Cultural Affairs. The school is small, taking approximately 100 students spread over its four programmes: film, TV, scriptwriting and animation directing. The courses are over four years (with the exception of scriptwriting). The school focuses on developing and supporting artistic talent while retaining a professional focus, and its animation directing course is well-regarded.

[81] Danish Film Institute (2016) *Facts and Figures 2016*

These two main schools are complementary and cooperate to build the industry.

DADIU is the forerunning game design school, with an innovative year-long programme, and a 'Greenhouse' incubation scheme.

TrueMax: Copenhagen Academy of Games, Animation and Visual Effects offers a 3.5 year '3D Digital Artist' programme. The school collaborates with industry and runs a variety of short courses and workshops.

7.3 Training and Skills Development

Danish animators have access to a range of professional learning and development opportunities. Danish workforce and industry development is also unified and enhanced by a range of hubs, networks and research programmes, facilitating innovation and collaboration.

Professional training is offered at a number of universities; the best-known programme is at The Animation Workshop. The department draws on a large network of industry experts to deliver high quality short courses. Since 1997, they have also offered classical drawing courses under The Drawing Academy. Courses range in duration from two days to one semester, and aim to elevate traditional drawing skills – skills that will feed into any creative industry.

The Open Workshop, based at The Animation Workshop, offers artist residencies and talent development support. The project is aimed at young artists (both pre- and post-graduate) as well as career break professionals, and provides the space, time, equipment, and financial support for artists to complete personal projects, or work on their first big production. The Open Workshop fosters collaboration – artists work on their own projects and together in an open creative atmosphere. Artists gain access to industry mentorship and workshops on pitch and presentation training. The programme is supported by the Danish Film Institute and Viborg Kommune.

AniDox is funded by the Danish Film Institute and Creative Europe. It is both a Lab and now a residency programme. The training project brings together animators and documentary directors to collaborate and explore new forms.

Arsenalet is 'the home of animation, games and new media'. Located in Viborg, Arsenalet provides office space for around 30 creative companies, including a range of animation studios. Founded in 2012 with support from the Animation Workshop, the organisation supports the industry through providing studio and meeting space, business advice, matchmaking and networking opportunities. They run a 9-month game incubation programme, helping to kick-start companies particularly in the games and service industries.

Animation Hub is an open network of companies and knowledge institutions. They facilitate connections between people and projects; share knowledge and experiences; help develop new ideas; and promote animation as a communication, tuition, marketing, and innovation tool. It is funded by Ministry of Science, Innovation and Higher Education, and is part of broader series of innovation networks in Denmark.

7.4 Public Sector Support

Public funding from the Ministry of Culture is administered by the Danish Film institute (DFI), who have a total budget of DKK 500m (£57.9m) for 2016.[82] In 1982 the Danish Film Act was revised, stipulating that at least 25% of government funding for film production must be allocated to films for children and young people. In practice, this means substantial state funding for animation production although there are no quotas in place.

In 2015, DFI supported the production of 23 feature films, 31 shorts and documentaries, and 8 international co-productions. The average subsidy allocation to a Danish feature film is 45%.[83] Other film funding is available through FilmFyn, the West Danish Film Fund and the Copenhagen Film Fund.

Copydan is the agency responsible for collecting and administering tax credits and license fees from public use of creative content. It distributes the money to creators, via the ANIS (the union of the Danish Animation Industry) who are responsible for distributing the funding to the animation industry.

7.5 Conclusions

The Danish Film sector receives substantial public funding through the Danish Film Institute. Denmark places a strong emphasis on integrating film and animation into education from an early age. This feeds in to top quality education at tertiary level, with strong industry links. In combination with a focus on networks, incubators, and research labs, this fosters a sector centred on knowledge, innovation, and talent development.

[82] Danish Film Institute (2016) *Facts and Figures 2016*
[83] Danish Film Institute (2016) *Facts and Figures 2016*

8. Case Study: Northern Ireland

8.1 Introduction

Northern Ireland has become a centre for TV Drama focused largely around the global hit *Game of Thrones* which is based in Titanic Studios, Belfast. With a range of studio facilities and expansion under discussion the focus is largely on live action production. The digital media sector in Northern Ireland is comparatively small (4.2% of GVA compared to 5.6% UK average) and there are an estimated 250 active media production companies in Northern Ireland, although most are clustered in or around Belfast.[84] Northern Ireland's small population of 1.8 million limits the development of a critical mass of companies and supply of quality propositions.[85]

Animation studios in Northern Ireland cluster in Belfast with Derry showing potential as a second cluster of several animation associated companies.[86] Northern Ireland based animation studios have become internationally known and recognised in the recent past. In 2013 Flickerpix (Belfast) received a BFI Vision Award. The mixed animated/live-action TV series *ROY*, produced by Jam Media (Belfast and Dublin) received two BAFTA nominations in 2014. Many companies in the animation sector in Northern Ireland made their start by providing animation services to other fields and only subsequently expanded to develop and produce IP work alongside production services work.

Animation is a priority sector for Northern Ireland Screen and Invest Northern Ireland has identified potential for growth in the sector.[87] On these grounds a priority has been placed on investing in animation education and skills development.

[84] http://www.investni.com/invest-in-northern-ireland/sectors-and-opportunities/creative-industries.html
[85] Invest Northern Ireland (2013) Taking digital further… The growth strategy for the Digital Media Sector in Northern Ireland, 2013-15.
[86] Honeycomb (2015) *That's not all folks: Developing the Animation Sector.* p. 11
[87] Honeycomb (2015) *That's not all folks: Developing the Animation Sector. p. 4*

8.2 Education

To overcome a lack of skilled workforce there has been a push to establish formal animation and film education schemes.

Tertiary level education in animation is focused in Belfast, although a further creative hub may be developed in Derry. The University of Ulster, which has campuses in Belfast, Derry and Coleraine, founded a department for animation offering a BDes Hons Animation and the first graduates of that programme graduated in summer 2016. Belfast Metropolitan College offers a two year full-time course in visual effects and animation culminating in a PEARSON BTEC Level 5 HND Diploma Art and Design.

Programmes have also been developed to facilitate closer links between graduate and animation companies. In June 2015, 2D Animation Academy launched a 16-week programme for 16 individuals to acquire skills and experience required to work in the animation sector. Following an intensive training course, participants completed a six-week employer placement. Participants are paid a £150 weekly training allowance. The Academy received support from the Department for Employment and Learning, Invest Northern Ireland and Belfast Metropolitan College.

Northern Ireland Screen also funded The Game Animation 2015, a paid placement scheme organised in partnership with the University of Ulster's Belfast School of Arts. The programme is designed for animation students to gain practical experience and develop networks in the local animation sector.

In 2013, Armstrong Learning provided an animation qualification in conjunction with the main animation companies in Northern Ireland. The qualification was open to unemployed young people between the age of 18 and 24. The training was delivered in Armstrong Learning's creative design studio in Belfast City Centre one day per week. This training period was followed up by a 6-9 month placement opportunity in an animation studio in Northern Ireland.

8.3 Talent and Skills Development

Northern Ireland Screen recognises that the process of creating character based animation is lengthy and expensive, limiting opportunities for less established talent to do so. In collaboration with established companies Northern Ireland Screen is targeting development through the Creative Animation Scheme, designed to support resident junior creators and animators to develop their own ideas. Using Lottery Funding and with support via the BFI NET.WORK, the scheme will support production of at least one, maximum two, animated shorts each financial year. The maximum cash contribution from Northern Ireland Screen is £30,000 with production companies expected to contribute 25% of the overall budget, in kind or via third party finance.[88]

Northern Ireland based animation companies can recommend emerging talent working in their company to receive funding to develop and create a short character based animation (no longer than 10 minutes). Priority is given to ideas that could spin off into a series and are generated by the animator/creator (rather than adaptations of existing properties).

Northern Ireland Screen also offers a skills development bursary for individuals working in Northern Ireland's screen sector. The grant supports them financially in undertaking training and development courses. The funding may be awarded for up to 75% of the applicant's total budget or £2,000, whichever is the lesser amount.[89]

The skills development programme Animation 2011 was run by Northern Ireland Screen and provided one training opportunity in an animation company for a junior freelancer or recent graduate.

[88] Invest Northern Ireland (2015) 'New 2D Animation Academy Launched'. Online: http://www.investni.com/news/new-2d-animation-academy-launched.html

[89] Northern Ireland Screen (2016) *Skills Funding.* Online: http://www.northernirelandscreen.co.uk/sections/46/skills-funding.aspx

8.4 Support for Production

Northern Ireland Screen supports local animation companies to create original work and provides support to incoming projects. Northern Ireland Screen actively looks for projects – from international partners as well as local companies - that contribute to building a sustainable animation industry in Northern Ireland and demonstrate direct economic benefit to the region. It provides development and production funding, advice on skills development opportunities and help to find complementary partners. The aim is to make Northern Ireland an attractive place for international animation companies to be based.

Research shows that domestic support provided through *The Opening Doors Strategy* is of high importance to the practitioners of the sector.[90] This strategy proposes an overall added value target of £250m including a doubled budget for development funding for animation projects increasing from an average of approximately £110,000 per annum to £250,000 per annum. [91]

Animation production companies in Northern Ireland benefit from the UK tax relief incentives for the TV, film and animation sector of up to 25% of expenditure for qualifying animation programme.[92] As noted in previous discussion in this review, the sector reports severe cash flow problems when accessing this funding.[93]

Northern Ireland Screen offers production funding in various forms (e.g. recoupable loan, or a grant, together with profit participation). The objective is to assist in completing budgets on productions which have already secured most of their funding. Thus, they will not support production which has less than 65% funding confirmed from other sources. The maximum investment is the lesser of £800,000 or 25% of the overall project budget. Development funding for scripts

[90] Honeycomb (2015) That's not all folks: Developing the Animation Sector. p. 42.

[91] Northern Ireland Screen (2014) *Opening Doors: A Strategy to Transform the Screen Industries in Northern Ireland: Phase 1 2014-18. p. 48.*

[92] Northern Ireland Screen (2016) *Tax relief.* Online: http://www.northernirelandscreen.co.uk/sections/209/tax-relief.aspx

[93] Honeycomb (2015) *That's not all folks: Developing the Animation Sector. p. 43*

is available to individuals as well as companies. For script development, individuals can be awarded a maximum of £2,250, companies can receive £40,000 or 50% of the total development costs, whichever is the lesser amount.[94] Project development funding can cover 90% of the project budget for projects with a budget up to £10,000, moving to 50% of the budget for projects budgeted over £20,000 up to a maximum of £200,000.[95]

In 2015 Northern Ireland Screen signed a partnership agreement with BBC, which obliges BBC to invest a minimum of 2.9% of its 2016 network television spend in Northern Ireland. BBC committed to investing an average of £2m per year in children's content produced in Northern Ireland. Northern Ireland Screen agreed to co-develop and co-finance with the BBC scripted live action, animation, interactive and games content with international potential. BBC will provide targeted children's commissioning briefings for companies based in Northern Ireland covering both live and animation opportunities. Furthermore, it was agreed that Northern Ireland Screen and BBC will work together to identify and support animation projects aimed at non-children's audiences, including for BBC Three and the international market.[96]

8.5 Conclusion: Lessons to be learnt from Northern Ireland's animation sector

A lack of skilled workforce was identified as an obstacle for the promising development of the sector in Northern Ireland. As a response, educational programmes were expanded and support provided to stimulate a closer relationship between animation studios and students of animation.

The Creative Animation Scheme is an industry targeted scheme designed with the dual functions of enabling talent development and creating production through established companies by developing short films that have the potential to spin off into series.

Northern Ireland Screen actively seeks animated production from across the world to work with companies in Northern Ireland. Presence at markets and publications highlighting the support available send out the message that Northern Ireland is actively interested in welcoming animation production and that local companies are supported in seeking to develop international ventures.

[94] http://www.northernirelandscreen.co.uk/sections/16/development.aspx
[95] http://www.northernirelandscreen.co.uk/sections/16/development.aspx
[96] http://www.bbc.co.uk/mediacentre/latestnews/2015/bbc-ni-screen-partnership

9. Future Vision & Next Steps

This review has considered the making of animation, learning with and about animation and watching or viewing animation. Developing a cohesive vision which unites these elements is important for the future development of the sector. Initiatives to support the sector cannot be driven by funders alone – they must also be industry driven.

The political and economic drivers of success must be understood to put the sector in context. Consideration of good practice in other countries offers understanding of factors that have nurtured a successful animation culture and industry. These include:

- Sustained high level and joined up support – at Government and agency level with integration of support in development, production, appreciation and availability.
- Successful strategies such as those adopted by the Nordic countries and, closer to home, Northern Ireland and Ireland recognise that the most effective policy support must be long-term, sustainable and based on cultural as well as economic indicators. For public agencies with annually agreed budgets, to commit to specific growth measures is difficult – but strategic agreement about sectoral growth priority could be sought at governmental and agency level.
- Government leadership to deliver across agencies and agendas is required. In Ireland for example, Screen Training Ireland, Animation Ireland and Irish Film Board together facilitate delivery of industry needs to fill skills gaps.
- Broadcasters play their part in talent development, development and production and distribution through transmission. Television business is crucial to success. It offers jobs, potential business diversity and growth.
- Networks across the sector facilitate development among practitioners and understanding across public agencies.

This review is not intended to provide detailed policy recommendations for Creative Scotland, rather the following recommendations attempt to look beyond Creative Scotland to the future vision for the sector as a whole.

Recommendations:

For the Sector:

- The sector looks to Creative Scotland to advocate on its behalf. Within Creative Scotland's Screen Team there is a team member with dedicated animation sector responsibility and this should be maintained.
- Scottish animation needs a united voice and clear international profile - a new animation forum or revival of the Scottish Animation Network or strengthened Children's Media Network Scotland (though this would only cover part of the sector) could connect the workforce and facilitate exchange of talent and ideas across formal education, skills development and the industry. The network could promote, advocate and facilitate networking and collaboration at home and internationally.
- In addition to a broad representative network it may be advantageous to establish a distinct business-focused network – perhaps along the lines of, or as a division of, Independent Producers Scotland (IPS). This would link studio heads and producers and address animation-focused capacity and business issues as well as fostering links to established live action producers to share knowledge and networks. The recent changes to Animation UK (becoming membership based and part of trade body UK Screen Alliance) may offer opportunities for both a broad network and an industry focus.[97]

[97] Broadcast Magazine, 18th November 2016

For Development, Production and Business Development:

- During consultation, there was discussion about the establishment of production targets for the sector. There are arguments for and against quotas. We suggest that the establishment of animation specific funding – for development and production across all media – is a priority. This could be delivered through partnerships, possibly between broadcasters and public funders. These might include:
  - A production initiative to bridge the gap between shorts and long form production in partnership with broadcasters such as BBC Scotland, CBBC/CBeebies or a conglomeration of broadcasters in Scotland (BBC/C4/STV). Longer form production provides opportunities for skills development from script to screen as well as offering potential to trial ideas and concepts for feature length or series production. Partnership support from public sources in Scotland, alongside that of BBC Scotland, might focus CBBC/CBeebies support for the sector in Scotland.
  - Broadcast avenues outside of programming for children should be explored – for online content, for apps, for idents and inserts and should include STV, Channel 4, and Sky as well as the BBC.
  - CBBC/CBeebies commissioning in Scotland is currently undertaken from Salford. A stronger commissioning presence in Scotland could improve the understanding and opportunities for the independent sector.
- Financing:
  - Although screen funding from the public sector and particularly Creative Scotland welcomes animation applications, few are received. Signalling this desire to support animation could be more overt, with publications and online marketing announcing Scotland's desire to attract more animation production locally and internationally. This is the approach undertaken in Northern Ireland.
  - Creative Scotland to consider reintroducing the Tax Credit Advance Facility and continue to investigate ways to support access to the UK Animation Tax Credit. Creative Europe's Guarantee Scheme offers potential for Scotland's producers but is still at the early stage of inviting financial intermediaries to participate.
  - The sector to lobby the Scottish Investment Bank to provide long-term funding that would include development, production financing, distribution funding and potentially participation in Creative Europe's Guarantee Scheme.
  - Creative Scotland and other industry partners such as the BFI and/or broadcasters might establish a production scheme (informed by understanding of the Creative Animation Scheme as discussed in Section 8.3 in the Northern Ireland Case Study). This scheme would offer funding to established companies in collaboration with new talent to develop animated shorts and might prioritise those with potential to spin off to TV series. This responds to industry desire for stronger links between talent development and industry as well as having potential to develop producer skills.
- BFI currently supports animated features and shorts, and its new strategy specifically encourages applications for animation projects. Animators should take advantage of these funds, which could significantly enhance the opportunities of BFI involvement in animation projects from Scotland.
- BAFTA New Talent and RTS recognise the animation sector with specific award categories. However, there remain few outlets in Scotland for these nominated and award winning shorts to be shown. Outlets for these proven shorts could form the backbone for an animation strand, perhaps online, with a broadcaster in Scotland.

For Business Development:

- Animation talent is itinerant – it follows production. Businesses established in Scotland need support to develop sustainable enterprises that can attract this talent.
- Account management by enterprise agencies is beneficial. Given the profile of most animation companies in Scotland, support for small companies to develop mixed business models (production services and IP work) could introduce some stability to the sector and encourage growth.
- A joined-up approach to public sector support would benefit small companies, particularly those without account managers, where there can be difficulty in navigating across agencies.
- Clustering offers potential for sharing and co-working between small companies. Exploration of how to encourage and develop this type of working should be investigated, for instance through future iterations of the BFI's Creative Clusters Challenge Fund
- Strong provision of CPD training for animation professionals (including producers) could be developed to support small business development
- In addition to the work of Market Leaders, a new animation network (such as a reinvigorated Scottish Animation Network) should support individuals and companies within the animation sector to identify potential festivals to attend both in Europe and worldwide.

For Education and Training:

- Skills Development Scotland/Creative Skillset should consider approaches to address the identified training gap in developing industry-ready talent.
- To address concerns among industry and education professionals about the role of education in training pipeline ready graduates, a forum coordinated by an industry network (discussed in Recommendations for the Sector above) would enable regular and ongoing discussion to promote mutual understanding.
- Explore the development of industry-focused post-graduate and CPD courses within existing animation programmes at Scotland's universities and colleges.
- Creative Scotland was a core supporter of the first Animation Base Camp. Industry led training courses such as Base Camp tap into the industry's desire for further links between skills development and themselves and initiatives such as this should be built upon to sustain growth and develop further post-graduate training. Looking towards European studios in addition to the Base Camp pilot approach of a US focus would help both individual training and job potential but also link to potential co-production partners.
- Creative Scotland's support for Markets and Festivals, as well as the Market Leaders Programme, is recognised as crucial for development of new and established producers. However, given the lack of new producers developing their own IP it may be worth consideration of targeted bursary support to fast-track the business strength of the sector.
- Skills Development Scotland and broadcasters to lead development of student internships and Modern/Graduate Apprenticeship schemes within the sector. For these to flourish the freelance nature of the business must be recognised.

- Advocate for ongoing support to integrate animation into the classroom at an early age through a series of workshops for students as well as teacher training to support use and promotion of animation as an art form.

For Watching Animation:

- Greater engagement by the sector with Scotland's existing festivals (such as EIFF, GFF, Scotland Loves Anime) and with UK festivals (such as LIAF) would build on their international recognition and strengthen their relevance to sector needs. This could be coordinated by the industry network (linking to industry sections of festivals and encouraging co-production) and would benefit from further links with education regarding shorts.
- 2020 is the Harryhausen centenary and also the 30th anniversary of the ECA and McLaren awards. That year might offer an opportunity for a major focus on animation in schools, at festivals and on television. Working towards that by building audience development, in conjunction with Film Hub Scotland, would build interest, and for UK and international audiences offer potential for a Focus on Scotland.
- Development of a platform for viewing shorts, especially those with proven appeal (i.e. BAFTA and RTS nominees and award winners), possibly in conjunction with broadcaster, would extend the reach of these successful productions and offer audiences the opportunity for continuing engagement with local talent and their output.

10. Appendices

10.1 List of Consulted Groups, Individuals and Companies

Individual	Organisation
Andrew Partridge	Scotland Loves Anime Festival
Andrew Pearce	Axis Animation/Flaunt
Ben Gray	DC Thomson
Bob Last	Producer, 'The Illusionist'
Brendan Body	Duncan of Jordanstone College of Art
Cameron Fraser	Ko Lik
Catherine Hehir	Cartoon Saloon, Ireland
Claudia Yusef	Scottish Talent Film Network
David Martin	Skills Development Scotland
Erica Darby	Spider Eye, Cornwall
Elaine McElroy	Scottish Animation Network
Fraser MacLean	Penciltown Animation
Helen Brunsdon	Creative Skillset/Aardman
George Falconer	Scottish Enterprise
Iain Gardner	EIFF/McLaren Award
Ignacio Ferreras	Writer & Director
Jackie Edwards	CBeebies - Animations & Acquisitions
Jared Taylor	Edinburgh College of Art
Jason Wagner	Ping Create
Jen White	Puppet Animation Scotland
Jon Rennie	Cloth Cat, Cardiff
Julia Bond	BBC - Children's Scotland
Ken Anderson	Red Kite Animation
Kenny Mitchell	Disney Research
Leslie McKenzie	West Highland Animation
Mark Flood	Mark Flood Animations
Margaret Cameron	MG Alba/BBC Scotland
Matt Bett	University of Abertay
Morten Thorning	The Animation Workshop, Denmark
Natalie Usher	Creative Scotland
Natasha Wharton	BFI
Naysun Alae Carew	Blazing Griffin
Neil Jack	Ko Lik
Oli Hyatt	Animation UK/Blue Zoo
Richard Scott	Axis Animation
Richard Williams	Northern Ireland Screen
Ross McKenzie	Creative Scotland
Scott Donaldson	Creative Scotland
Selina Wagner	Blobina
Sian Pavel	King Rollo Productions, Devon
Simon Haslett	Glasgow Caledonian University
Tom Bryant	Interference Pattern
Will Adams	Once Were Farmers

10.2 List of Animation Companies in Scotland [98]

Location	Company
Dunblane	Blobina
Dunblane	Ping
Dundee	Amphibian Animations
Dundee	Vivomotion
Dundee	4J Studios
Edinburgh	Iain Gardner Animation
Edinburgh	Interference Pattern
Edinburgh	King Rollo
Edinburgh	Ko Lik Films Ltd
Edinburgh	Muckle Hen
Edinburgh	Penciltown Animation
Edinburgh	Rockstar North
Edinburgh	Show Them Pictures
Edinburgh	The 2D Workshop
Edinburgh	The Gate Films
Edinburgh	Visible Ink
Edinburgh	Werewolf
Edinburgh	White Robot
Edinburgh & Glasgow	Blazing Griffin
Glasgow	Axis Animation
Glasgow	Digimania
Glasgow	Flaunt
Glasgow	Mark Flood Animations
Glasgow	Me and the Giants
Glasgow	Morphic
Glasgow	Once Were Farmers
Glasgow	Playdead TV
Glasgow	Red Kite Animation
Glasgow	Smudge
Glasgow	Toad’s Caravan
Glasgow	Winduna
Perthshire	West Highland Animation
Stirlingshire	Pomegranate Films
Stirlingshire	Super Umami
Other	Am Bocsa Ltd
Other	Colliderscope

[98] Efforts have been made to identify as many companies as possible, but some may have been missed

10.3 List of Animation festivals in Scotland [99]

Location	Festival
Touring Festival	Puppet Animation Festival Scotland Loves Animé AniJam – 48 hour Animation Challenge
Dundee	Discovery Film Festival
Edinburgh	Edinburgh International Film Festival Edinburgh Short Film Festival Edinburgh International TV Festival Manipulate Festival
Glasgow	Glasgow Film Festival Glasgow Short Film Festival
Inverness	Inverness Film Festival Xpo North

[99] This list does not include film festivals that are predominantly live action.

10.4 List of Higher Education provision in Scotland [100]

University	Undergraduate	Postgraduate
University of Abertay Dundee	BA (Hons) Computer Arts BSc (Hons) Computer Game Application Development; BSc (Hons) Computer Games Technology	MProf Games Development
Duncan of Jordanstone College of Art and Design	BDes Animation	MSc Animation and Visualisation
Edinburgh College of Art	BA (Hons) Visual Communication (Animation)	MA and MFA in Animation MSc (research) in Digital Animation
Glasgow Caledonian University	BA/BA (Hons) 3D Computer Animation BSc (Hons) 3D Animation & Visualisation BSc (Hons) Computer Games (Art & Animation) BSc (Hons) Computer Games (Software Development)	MA 3D Design for Virtual Environments
SAE Institute (Glasgow Campus)	BA/BSc Game Art Animation	n/a
University of Glasgow	Offers modules in Animation and Screen Animation (equivalent of SCQF Level 4)	n/a
University of the West of Scotland	BA and BSc (Hons) Computer Animation (options in Digital Art)	n/a

[100] Practice-based courses offered in Scotland, efforts have been made to identify as many of these courses as possible, but some courses may have been missed

10.5 List of public agencies and networks with influence on the Scottish animation sector

Animation UK advocates for the animation industry, campaigning for tax credits and fairer trading conditions for UK animation producers. It seeks to protect or increase the production and ownership of IP that is of such value to the UK.

Animation Alliance UK is a broad, informal association of independent animation professionals. The network advocates and lobbies on behalf of independent animation and cultural film.

Animation Europe is an online resource for European animation producers, distributors and investors. The site has a comprehensive list of all full-length animated feature films produced and theatrically released in Europe, including those currently in development and production.

Animation World Network provides readers with a wide range of interesting, relevant and helpful information pertaining to all aspects of animation.

Animated Women UK supports, represents, celebrates, and encourages women in animation and VFX across the UK through mentoring and networking opportunities.

Association for Media Education in Scotland (AMES) is a registered Scottish charity representing the interests of film and media teachers in schools and further education colleges to public sector agencies, holds an annual conference, delivers CPD and publishes Media Education Journal.

British Academy of Film and Television Arts (BAFTA) is a registered UK charity that supports, promotes and develops the art forms of the moving image – film, television and video games - by identifying and rewarding excellence, inspiring practitioners and benefiting the public.

British Animation Awards runs every two years, celebrating the best of British animation.

British Film Commission (BFC) is the UK government's national agency responsible for supporting the production of international feature film and television in the UK.

British Film Institute (BFI) combines cultural, creative and industrial roles, being the home of the national archive for film and television, a centre for film exhibition and festivals, and a publisher of film-related materials. In 2011 the BFI became the lead organisation for film in the UK and the distributor of National Lottery funds for film. BFI’s mission is to ensure that film is central to the UK’s cultural life, by supporting and nurturing the next generation of filmmakers and audiences. It has a strategic relationship with Creative Scotland.

Business Gateway provides free business support services to small and growing Scottish businesses, including animation businesses, through online support, a programme of workshops and events, expert advice from a network of experienced business advisers.

CARTOON supports the European animation industry through organising pitching events, seminars, conferences and awards. At CARTOON Forum and CARTOON Movie animators can pitch to find co-producers and funding. CARTOON 360 features animated transmedia projects, and CARTOON Springboard features young talent. Cartoon also runs business seminars, and connection sessions with animators in Canada and Asia.

Creative Scotland is the public body that supports the arts, screen and creative industries across Scotland. Creative Scotland enables people and organisations to work in and experience the arts, screen and creative industries in Scotland by helping others to develop great ideas and bring them to life and distributes funding from the Scottish Government and The National Lottery.

Creative Skillset is the sector skills council for the UK’s creative media industries. It works alongside the film industry to create jobs, strengthen and build skills and ensure world-class film education. It also conducts research into its industries. The agency focuses on craft and technical skills and offers career and business support as well as developing writers, producers and directors.

Creative Europe is the European Union's programme to support the cultural, creative and audiovisual sectors. The MEDIA subprogramme provides funding to film, TV, new media and games.

Cultural Enterprise Office provides business support services which help creative micro-businesses based in Scotland build their skills and knowledge.

Children’s Media Foundation advocates for Children’s Media practitioners in the UK. The group organises the annual Children’s Media Conference.

Children’s Media Network Scotland organises a range of workshops and networking events. The network is allied to the Children’s Media Foundation.

Highlands and Islands Enterprise is the Scottish Government's economic and community development agency for the north and west of Scotland. It works extensively with the creative sector, reflecting the importance of creative industries to the region.

Producers Alliance for Cinema and Television (PACT) is the UK trade association representing and promoting the commercial interests of independent feature film, television, digital, children's and animation media companies.

Puppet Animation Scotland nurtures and promotes puppetry and animation in Scotland. They provide a range of practical support to help the career development of Scottish puppeteers and animators.

Scottish Animation Network has been the hub to connect animation practitioners in Scotland and raise the profile of all animation produced in Scotland, from graduate films to studio production.

Scotland's Creative Industries Partnership (SCIP) brings together Scottish local government, Creative Scotland, Scottish Enterprise and Highlands and Islands Enterprise, Scottish Funding Council, Skills Development Scotland and Scottish Government in a partnership that sets out recommendations for supporting creative industries.

Scottish Development International aims to assist in the growth of the Scottish economy, by encouraging inward investment and helping Scottish-based companies develop international trade.

Scottish Enterprise aims to identify and exploit opportunities for Scotland’s economic growth by supporting Scottish companies to grow. Scottish Enterprise supports businesses in the creative industries via Interactive Scotland, a specialised service for digital media companies, which is available to film companies. It provides market intelligence, strategic guidance on content distribution, signposting, networking and events. Through Interactive Scotland, Scottish Enterprise works with some 15 companies who are active in (or closely related to) the film sector.

Scottish Film Talent Network offers funding and support to new and emerging filmmakers. Their programmes are targeted at individual film projects and professional development. SFTN is jointly managed by Centre for the Moving Image (CMI), DigiCult and Hopscotch Films. It is funded by Creative Scotland and Creative Skillset, in partnership with BFI NET.WORK.

Scottish Games Network is an umbrella organisation providing relevant information and support to the interactive entertainment sector in Scotland.

Screen HI is one half of Creative Highland (the other half is goEvents). It was set up as a not-for-profit organisation to provide unique job, training and networking opportunities and to encourage local economic activity within the Creative Industries across the Highlands and Islands, specifically in the music, screen and broadcast sectors.

Skills Development Scotland is the national skills body for Scotland. It is the lead agency on the development of the Creative Industries Skills Investment Plan and its particular relationship to the screen industries. SDS also funds several significant screen training initiatives.

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