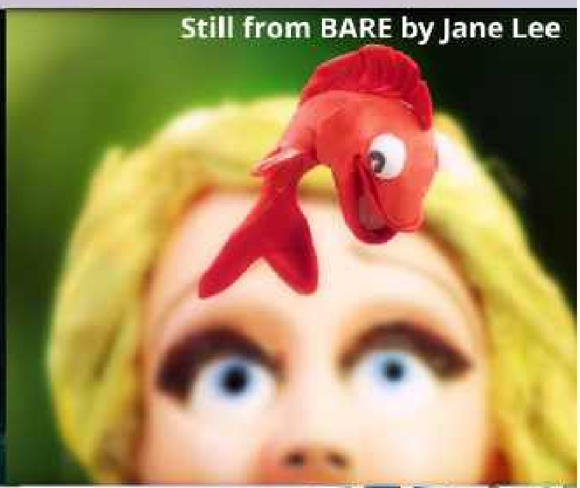
Kickstarting the Animation sector in Munster


Cliff Face Concept - Joh Armstrong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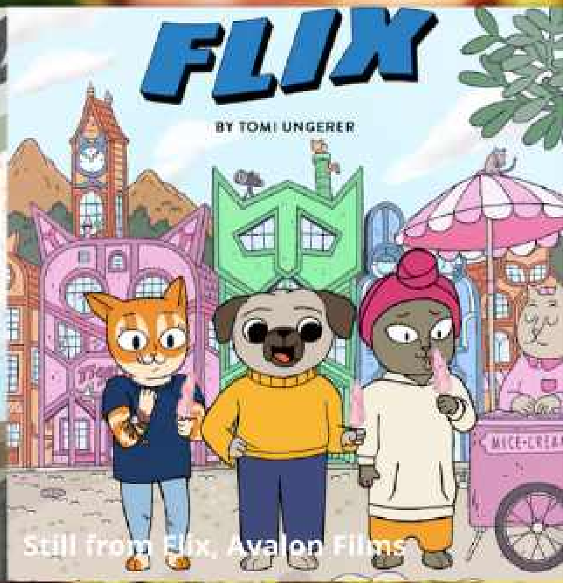

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ACRONYMS	
AR	Augmented Reality
CGI	Computer Generated Image
CLG	Company Limited by Guarantee
CMS	Content Management System
CREW	Creative Enterprise West
DAC	Defined Activity Company
FTE	Full Time Equivalents
IP	Intellectual Property
LSAD	Limerick School of Art and Design
LSAD	Limerick School of Art and Design
MASPs	Metropolitan Area Strategic Plans
NDP	National Development Plan
NDS	National Digital Strategy
NFQ	National Framework of Qualifications
NPF	National Planning Framework
RAPJ	Regional Action Plan for Jobs
REPs	Regional Enterprise Plans
REDF	Regional Enterprise Development Fund
RSES	Regional Spatial and Economic Strategy
SEO	Search Engine Optimisation
VFX	Visual Effects
VR	Virtual Reality

Oifig Fiontair Áitiúil
Local Enterprise Office

Foreword

We are delighted to share with you this feasibility study on the potential of the animation sector in Munster. This report was commissioned as result of the findings from the recently formed Munster Animation Forum. The objective of the study was to address three areas:

a) Resource audit of the industry
b) Analysis of the potential of the sector
c) Provide direction for future development

I hope you find the report as interesting as I did, and I hope you will agree that what we have on our hands is a huge opportunity to grow the animation sector in Munster. The combination of research, action planning and the provision of practical outputs will provide the Munster Animation Forum with a toolkit which will guide and inform our actions over the coming years. I've no doubt with the people involved in the Munster Animation Forum this report will not be a "shelf-warmer".

On behalf of Munster Animation Forum, we wish to acknowledge the support of all the Munster Local Enterprise Offices for their support in funding this feasibility study. We also thank the forum members for their time and input into the report. Finally, we would like to acknowledge the services of the Discovery Partnership team who completed the study, and to Ellenora Lynch for all her diligent research and writing the report.

Walt Disney said "It's kind of fun to do the impossible"

Joe Burke, Assistant Head of Enterprise, Local Enterprise Office, South Cork
February 2022

Image 1: Cliff Face Concept, Joh Armstrong, LSAD

1. Executive Summary

Drawing on initial findings from the recently formed Munster Animation Forum, this independent feasibility study has been commissioned to explore and assess the viability of the development of the animation sector in Munster. The report documents a systematic and in-depth analysis, carried out by The Discovery Partnership, over a period of five months, beginning in September 2021. It seeks to document research in relation to a resource audit of the industry, an analysis of sector potential, and the provision of direction for future development. It contextualises the proposal to enhance the sector in this particular region, and provides discussion, analyses, and recommendations based on various socioeconomic, geographic and political perspectives. In addition to a contextual analysis of the sector, the scope of this project requires the creation for a vision of the sector in Munster, and the presentation of a series of recommendations.

During the study, analysed secondary data were collated, curated and interpreted from extensive desk-based research, while qualitative primary data were obtained through industry and potential stakeholder consultations. Assessment results show a demonstrable need and desire for the advancement of animation activities across the region. A literature review provides an overview of animation currently, emphasising the signs of a new and evolving Irish industry, while also highlighting initiatives, legislation and policies that support enterprise growth, drive investment and facilitate job creation. Special attention has been given to those that address regional development in particular, for example, the Regional Uplift to Section 481 of the Finance Act, which supports the audiovisual industry by providing an extra tax credit in 'assisted regions'.

The vision of the Munster Animation Forum involves transforming Munster into a powerhouse for animation. An essential component of this, is the development of regional clusters that will attract indigenous and international talent and investment. The proposed framework for envisioned forum development, is based on the triple helix led model of innovation. This model enhances links between actors from academia, industry and government, in support of regional growth through innovation.

An objective analysis is provided through this report, of the current opportunities and challenges to growing the animation sector in Munster, and includes a SWOT matrix as part of its strategic planning. This aims to convey a better understanding of the industry's future, to address its weaknesses, and to show how it may capitalise on opportunities. Additionally, a thorough investigation into education, training and skills shows how various career pathways, accreditations, continued professional development and work-based learning will support an open, inclusive and structured sector.

In addition to the essential components of the research brief, this study has produced valuable findings that have potential for long-term and practical use within the industry, such as infrastructure assessments of physical locations and virtual spaces. An in-depth study into premises is presented, looking into studio and office space, hardware and software, availability of premises and co-working enterprise hubs. Communications issues are also addressed, with a particular focus on the creation and development of a forum website that will serve the needs of the Munster animation industry, including attracting much needed interest and investment into the province.

Important information relating to economic modelling, taxation, incentives and funding is presented within Section 9 of this report. Development of the forum and investment in animation activities in Munster in general, is likely to achieve a significant and realistic return. Economic impact within this study, focuses on job creation potential, including direct, indirect and induced employment. With three cities and an existing education and training base, the Munster animation industry has the potential to create over 600 new sustainable jobs, with a projected income to direct employees of €29.5 million, and a further €21.06 million to indirect and direct employees. General recommendations emerging from this research relate to directions on ideal structure and governance of a functional animation forum, practical advice on shared spaces and cluster development, as well as guidance with long-term funding and growth planning. Significantly, the development, retention and exploitation of intellectual property (IP) will play a key role in economic growth within the sector. Furthermore, it is also of note that as at least two-thirds of investment in animation projects in Ireland comes from abroad, it is an economic inflow and can be regarded as an export.

This feasibility study recommends the proposed development of the animation sector within Munster.

The endorsement is supported through extensive research into the current and potential position of the sector and the region, including political contextualisation and regional development, educational and employment opportunities, stakeholder support, communications development, as well as important considerations in relation to taxation, funding and financial planning.

Such a project of development has the opportunity to re-define the state and scope of the animation industry in Munster and in Ireland as a whole. It has the potential to transform culture, economy and society, through the celebration of talent and creativity, and the establishment of a skilled and sustainable workforce, while progressively contributing to the country's existing pool of critically acclaimed and globally distinguished content.

2. Introduction

2.1 Background to the Munster Animation Forum

Formed in March 2021 and led by the Local Enterprise Office South Cork, the Munster Animation Forum is a network consisting of businesses from the audiovisual industry, including animation and film, statutory agencies as well as training and education providers across Munster.

This triple helix model of innovation, with interaction between the private sector, academia and state agencies, provides an excellent foundation upon which to build the capacity and ambition of the Munster Animation Forum. As emphasised throughout this report, the growth of the Irish animation sector will require collaborative actions across all three pillars, nonetheless, it is already a significant achievement to have the Forum in place, hungry for growth and poised for action.

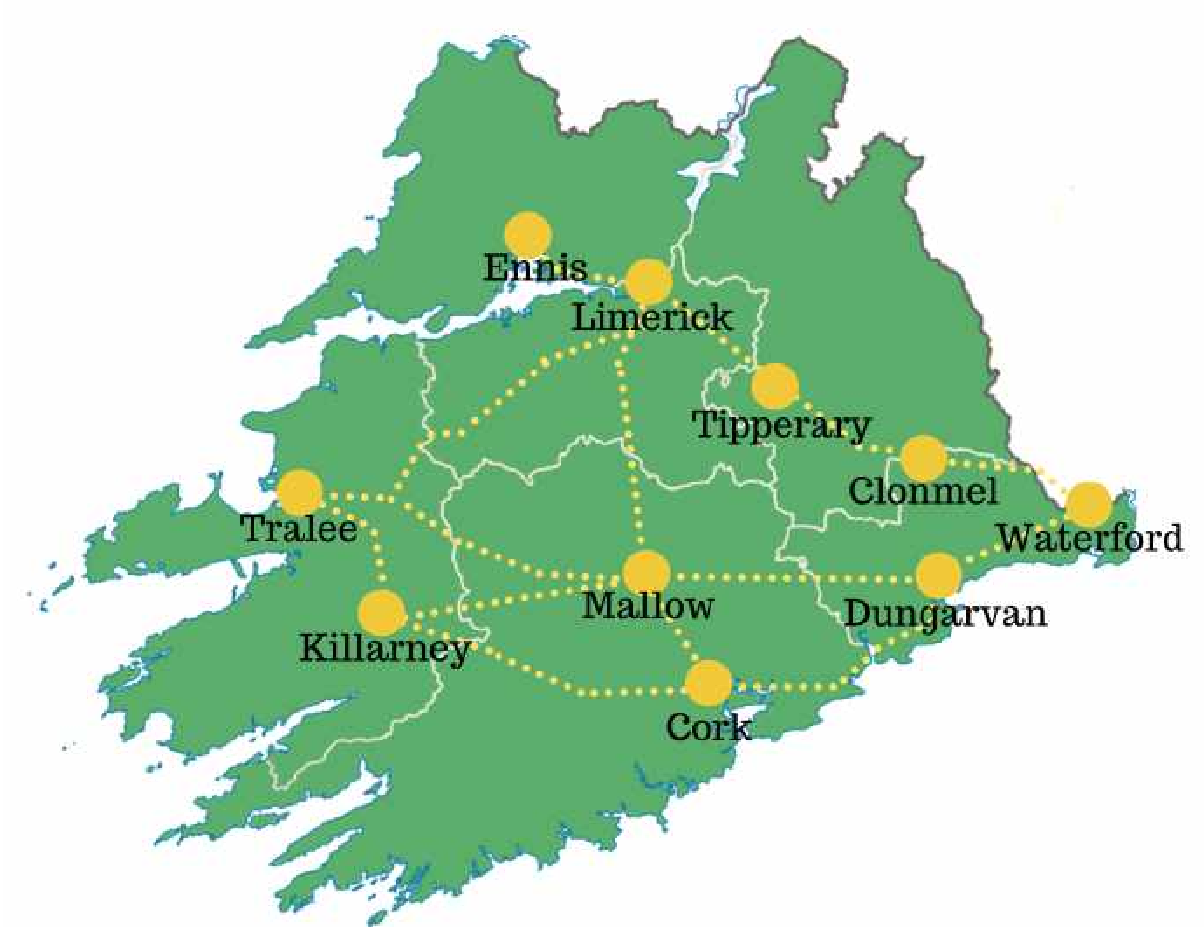

FIGURE 1: MAP OF MUNSTER

Vision

The vision of the Munster Animation Forum is to revolutionise and transform Munster into a powerhouse for animation, supporting the growth of the animation industry across the province, through the development of regional clusters, attracting both indigenous and international businesses.

Strategic Goals

The strategic goals of the forum are listed below:

- To develop infrastructure and incentives to attract and support animation companies in the province and regions
- To develop and deliver animation training programmes and initiatives, in collaboration with industry, that provide new talent with a progression to employment, as well as continuing development for employees in the sector
- To promote the creation of a supportive business environment, through an improved understanding of animation (and ancillary) businesses between industry, statutory agencies and education, training and skills providers
- To support the development of a vibrant and dynamic network of animation business across the Munster region
- To become a strong, unified representative voice for the animation industry in the Munster Region
- To develop a clear Strategic Plan (pathway/business activation plan) for the animation industry in Munster

2.2 Feasibility Study Scope

Following a procurement process, the Discovery Partnership (TDP) were appointed during September 2021 to conduct a Feasibility Study on behalf of the Munster Animation Forum. As identified by the Forum, the terms of reference are as follows:

- Conduct an analysis of the **current marketplace** for animation in Ireland and the opportunities and challenges facing the industry, to include an outline **segmentation study**
- Conduct a mapping exercise to **identify animation enterprises,** including CGI and gaming, in the Munster region, employing a data collation model that includes service studio, Intellectual Property (IP) development and access to state supports
- Research and present recommendations for appropriate **governance** models for the Munster Animation Forum, to facilitate access to Irish and EU funding supports
- Undertake a **funding review** of potential funding sources, both EU and Irish state
- Research the **education and training supports** currently available in Munster. Conduct a mapping exercise of courses/programmes and skills training. Identify stakeholders, and research international examples of best practice, to include opportunities for apprenticeships.
- Research regional infrastructure, including broadband capability and availability of suitable **premises**
- Identify minimum viable animation studio footprint (ideal mix required) including costs and equipment for setup of animation studio. Present three different models/configurations of studio that would work in Munster to suit small, medium, and large enterprises, to include a review of international models.
- Research **funding opportunities** available to animation enterprise from the state and private investors. Outline latest tax incentives/credits, and present models of funding used in the industry between state and private investors. Research the role a regional fund could play in attracting productions to Munster.

- Research what a new Munster animation forum website should entail to show-off as “powerhouse for animation” growth, including costs, examples of websites, identify at least 3 web publishers to carry out the work
- Research the **economic benefits** of a vibrant animation sector, to include direct, indirect, and induced, to the Munster region

Figure 2 on the following page demonstrates the methodologies, proposed by The Discovery Partnership, to deliver upon each element of the project brief:

It is essential to note that this Feasibility Study consists of three key elements as specified in the project scope, which are: research to set out the overall context of the animation industry, creation of a vision for the animation sector in Munster, and the presentation of a series of recommendations.

Within the overall research brief are a number of outputs which will be of practical use to the Munster Animation Forum in the future, including the development of a Website Specification. This combination of research, action planning and the provision of practical outputs will provide the Munster Animation Forum with a toolkit which will guide and inform their actions over the coming years.

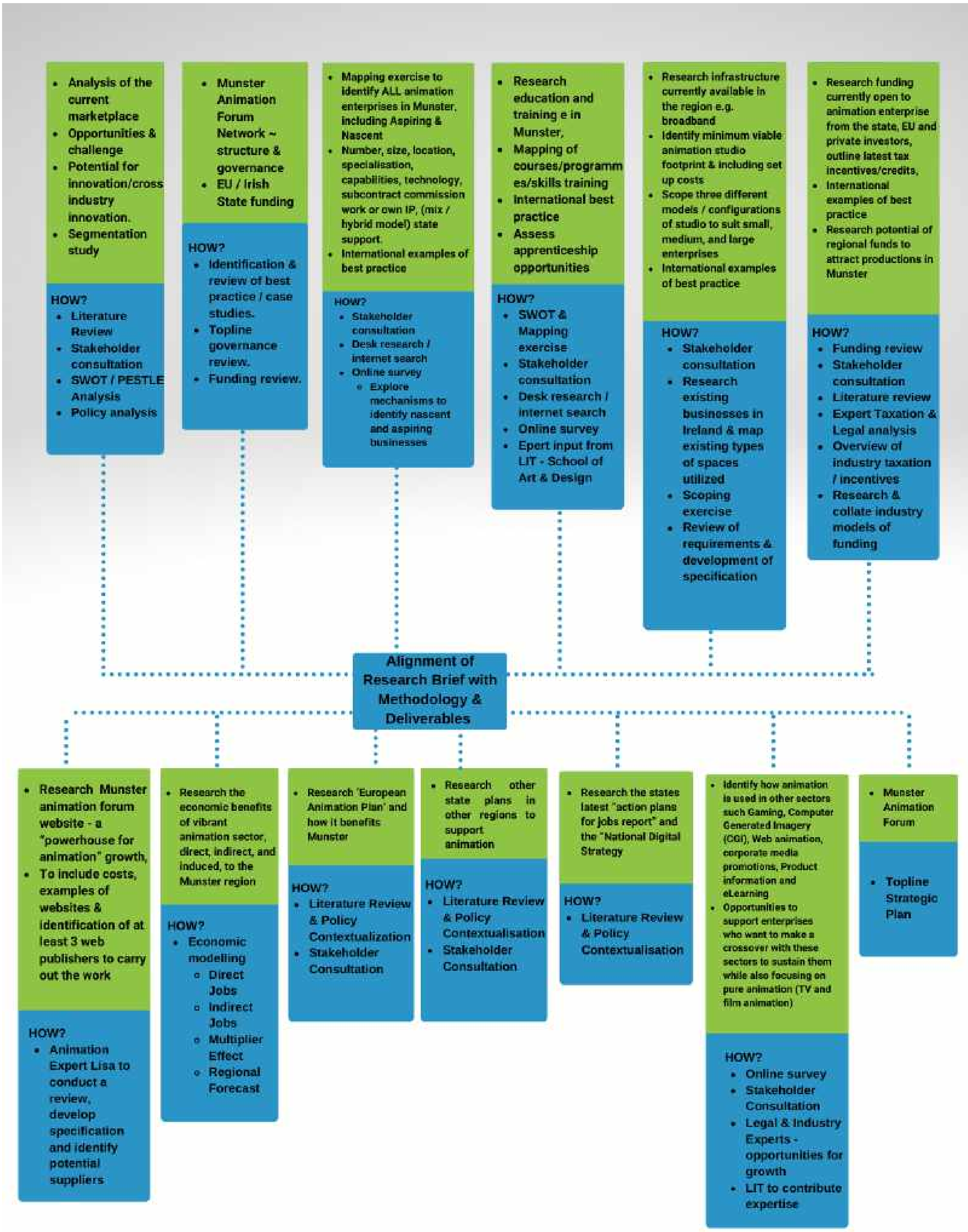

Figure 2: Methodology & Alignment

3. Research Methodology

The Feasibility Study employed both qualitative and quantitative research methods, which were agreed upon with the Local Enterprise Office South Cork at the outset of the research project. It should be noted that the primary researcher, Ellenora Lynch, is influenced by participatory/action research approaches, through which she has worked very effectively over the years.

Key steps involved in the research methodology were as follows.

1. Literature Review and Policy Contextualisation
   Drawing upon regional, national and international literature, a thorough desk review was conducted. Relevant policy and strategy documents were reviewed and summarised in order to provide a comprehensive backdrop to the sector in Ireland, and its positioning internationally.

2. Stakeholder Consultation
   Informed by the literature review, the qualitative research phase was based on the analysis of semi-structured interviews conducted with key stakeholder groups.

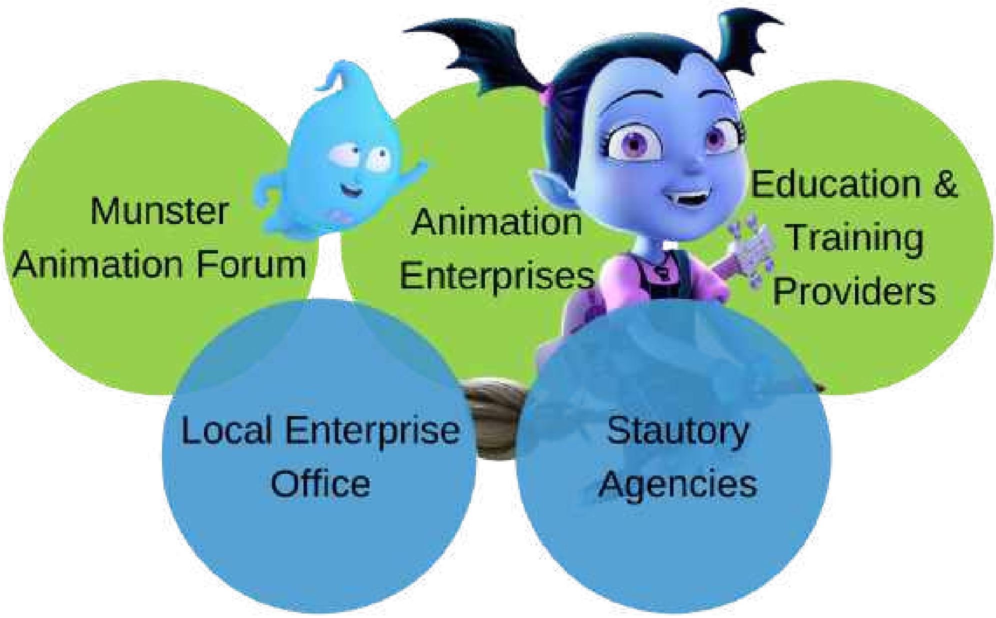

Figure 3: Stakeholder Categories

The purpose of the stakeholder consultation was to explore the animation industry, both in Munster and at a national level. Stakeholder consultation was carried out via semi-structured interviews, based upon guiding research questions. The interviews were informal and conversational in nature, and questions varied depending on the stakeholder group to which the interviewees belonged. The majority of Stakeholder Consultation meetings were conducted via Zoom or over the phone, during October and November 2021.

The Local Enterprise Office South Cork provided The Discovery Partnership with details of the Munster Animation Forum membership, which represented the initial stakeholder database. As the research progressed, many individuals, businesses and agencies were added to the stakeholder consultation, drawing upon the Snowballing Technique, whereby “samples begin from a core of known elements and are then increased” (2014). Please see Appendix I for a full list of those consulted throughout the consultation process.

3. Industry Survey
   Drawing upon the literature review, and most especially the stakeholder consultation, an industry survey was developed in close collaboration with Limerick School of Art and Design (LSAD). This survey, issued during the first week of November 2021, sought to collate information about the animation industry located in Munster, as well as those interested in locating here. Please see Section 9.2 for findings.

4. Mapping Exercises – Training and Education and Premises
   Based upon the Stakeholder Consultation and desk research, two separate but linked mapping exercises were conducted to further our understanding of the training and education framework supporting the animation industry, and the availability of office premises in the Munster region. The training and education mapping exercise was conducted with support from LSAD, whilst the initial stages of the premises mapping exercise were conducted through desk research, and then further explored through stakeholder consultation.

5. Website Scope and Specification
   With technical input from Lisa O’Connor, Brown Bag Films, a website scope and specification was developed. Please see Section 7 for full details. This exercise sought primarily to identify the key components of website including goals and target audience. A series of concise recommendations will assist the Munster Animation Forum to develop an industry focussed website when ready to make this step.

6. Facilitated meeting with Munster Animation Forum
   The Munster Animation Forum met on November 23rd 2021 to meet the research team, and to review findings to date. A number of elements of the report were reviewed with the Forum in order to inform the finalisation of the research, with a specific emphasis on job creation targets.

7. Economic Modelling
   Ciaran Lynch acted as the technical and expert lead on Economic Modelling, which was conducted based on an analysis of how economic impact will arise both directly and indirectly in the following ways:

   - From the direct jobs created by, and accommodated in the proposed development
   - From the additional induced and indirect jobs associated with the development and the multiplier effect of the employment it provides
   - From the indirect and induced expenditure arising from the direct expenditure through the multiplier effect

8. Taxation and Incentives
   Paul Mee, Tax Partner Mazars provided specialist input regarding taxation and incentives. This concise, but thorough overview of Section 481 is of critical importance to the overall report, due to the significance of this tax incentive in attracting productions to Ireland.

9. Final Review and Analysis
   This final step brings all the strands and learning together into clear thematic areas, and the development of Tactical Plans to ensure the effective execution of the actions recommended by this report. Please see Section 12 for full details.

4. Animation Industry Overview

4.1 Industry Overview

Intrinsic to Ireland's digital and creative economy, the Irish animation sector has grown rapidly, with its workforce increasing from just 70 to 1,600 full time equivalents (FTEs) in the last ten years (Screen Ireland, 2021a). Irish animation is considered a world leader in the fields of animated feature films, television series, games, short films and commercials (Audiovisual Strategic Review Steering Group, 2011). The origins of the sector in Ireland can be traced back to the late 1980s and early 1990s, primarily to the work of US companies that supported the industry with expertise and business acumen, through skills progression, technological advancements and entrepreneurial capability (Audiovisual Strategic Review Steering Group, 2011).

In recent times, Ireland's technically advanced 2D, 3D, stop motion, augmented reality (AR) and virtual reality (VR) studios have asserted themselves on the international stage, achieving global recognition with top children's animated series (including productions for Disney, Nickelodeon, Cartoon Network and the BBC) and with award winning films, programming for adults, as well as with apps and games (Screen Ireland, 2021a).

Rapid technological changes have disrupted the industry while creating opportunities for new market entrants. With advancing technologies and changing media consumption methods, Irish production companies have adapted well to capitalise on opportunities with streaming giants, such as Netflix and Amazon Prime. This has brought about the growth of successful corporations in Ireland, and is reflected in takeovers of Irish studios by major international businesses (Olsberg SPI, 2017). The new technological landscape has also blurred the lines between animation, games and film production, while the rise of social media means that vloggers and influencers are also creating and publishing animated content online (Government of Ireland, 2020a).

The Irish creative screen industry nurtures high quality employment, delivering 12,000 jobs through direct, indirect and induced appointments, with an added value of €692 million to the Irish economy. Its contribution more than doubled from €164 million in 2010 to €357 million in 2019 (Screen Ireland, 2020c). According to figures from the agency, Screen Ireland (2020c) €180 million came specifically from the animation sector in 2019, with its annual production activity increasing fourfold within ten years. Some animation companies generate diversified revenue streams through the exploitation of Intellectual Property (IP), with the retention of rights to the finished production, as well as to the underlying rights to elements such as formats for TV content and merchandising of characters and themes (Olsberg SPI, 2017).

4.2 Industry Support

Animation makes up part of the larger audiovisual sector, which includes film, games, TV and advertising. Three key pieces of legislation, introduced in 1993, underpin and support the Irish audiovisual content production sector:

1. An amendment to the **Broadcasting Act** that requires RTÉ to spend a minimum amount of the annual licence fee on independently commissioned programmes
2. An amendment to **Section 481 of the Finance Act** to provide for a competitive tax incentive to encourage Irish and international film making in Ireland
3. The reconstitution of Bord Scannán na hÉireann /the Irish Film Board (IFB) under the Irish **Film Board Act (1980)** as a dedicated agency with a mandate and funding to assist in the

development of Irish film making and in the development of an industry in Ireland for the making of films. (The agency changed its name to Fís Éireann/Screen Ireland in 2018)
(Audiovisual Strategic Review Steering Group, 2011)

The film and television production sector is supported by the Department of Tourism, Culture, Sport and Media. Screen Ireland is the national development agency for the Irish film, TV and animation industry, which is funded by the Department but is completely independent in its daily operations (Department of Tourism, 2021a). Screen Ireland represents and advocates for writers, directors and production companies, investing in talent, creativity and enterprise. It provides a range of practical funding supports across development, production, distribution, promotion and skills expansion (Screen Ireland, 2021b).

Section 481 of the Taxes Consolidation Act 1997, amended by the Finance Act 2018, is a tax credit that incentivises film, TV, animation and creative documentary production in Ireland. The credit is worth up to 32% of eligible Irish expenditure, while an additional 5% applies to projects substantially produced in the regions, under the Regional Development Uplift (Amendment) (Department of Tourism, 2021a). These tax incentives ensure that the Irish audiovisual industry has a competitive advantage for international film and TV projects (Audiovisual Strategic Review Steering Group, 2011).

		Market Size	Growth Forecast
	Games	$152.1 billion (2019)	$200.8 billion (2023)
Global	Films	$136 billion (2018)	No data provided
	Animation	$264 billion (2019)	$270 (2020)
		Market Size	**Growth Forecast**
Europe	Games Software	$11.06 billion (2017)	$12.80 billion (2022)
	Animation	$45.6 billion (2018)	$46.2 billion (2020)

		Employment (2016) Full Time Equivalents (FTE)	Exports (2016)
Ireland	Film, TV & Animation	11,890	€183.8m
	Commercial Advertising	370	€3.9m
	Video Games	2040	€3.3m
	TOTAL	17370	€191m

Table 1: Snapshot Of Audiovisual Sector (Government Of Ireland, 2020)

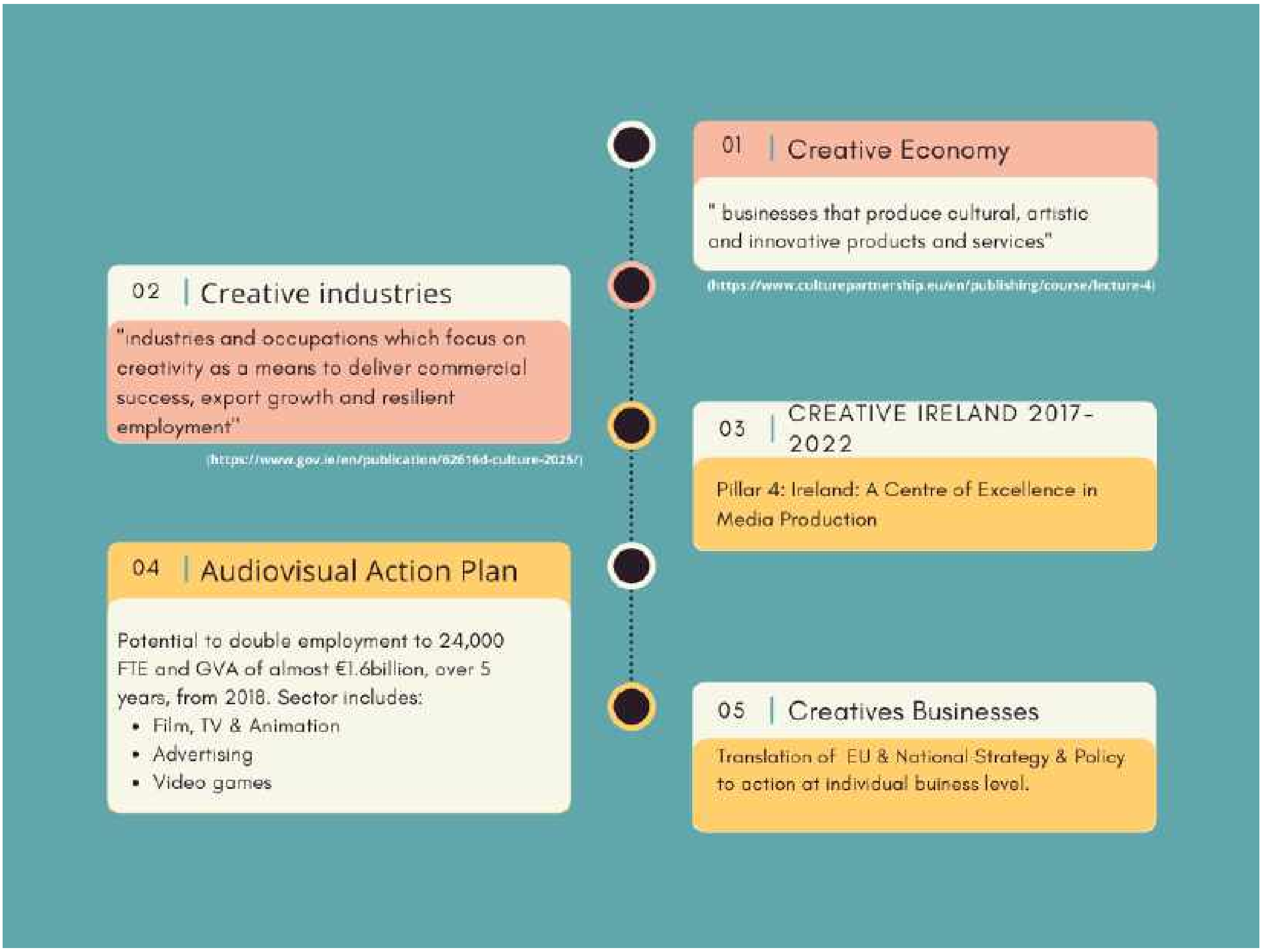

Figure 4: Translation of EU & National Strategy to Creative Businesses

4.3 Literature Review and National Context

Many government initiatives have been established to support, direct and cultivate enterprise growth, innovation, job creation and prosperity. These plans focus on job sustainability, entrepreneurship and the creation of an even spread of employment opportunities across the country. Other key objectives for government include increasing labour market participation rates and attracting talent from other countries.

Some of the most relevant plans used for this research are summarised in the table below. Additional papers relate specifically to the animation sector in an Irish and international context, and have been documented for comparative purposes and to highlight international best practice within the sector.

Key Document		Relevance
Animation Plan for Europe (2017)		The Animation Plan for Europe outlines the potential for growth and development within Europe's animation sector. It explores how the sector can upscale and face challenges. Its objectives are to: ● Foster the global reach of EU animators ● Make Europe an attractive workplace for talent ● Make finance more accessible to animation companies
Audiovisual Action Plan 2018		This industry-wide, long-term plan, under the Creative Ireland Programme, was introduced to support the Government's goal of establishing Ireland as a global hub for the production of film, TV drama and animation. The plan sets high-level strategic priorities to develop the audiovisual sector and to ensure Ireland's economic development is extended across the regions. The first progress report to the plan was published in 2019, with a second report published in 2021. Much of the plan has already been implemented, particularly in relation to reforms to tax credits, training and skills development, and an enhanced budget allocation to Screen Ireland. A games tax incentive was introduced in the October 21 budget and included in this year's finance bill subject to EU approval.
Economic Recovery Plan (2021)		Building on extensive supports in place from the start of the pandemic, the Economic Recovery Plan, sets out a new phase of supports, investment policies that work towards aiding economic recovery and renewal. The overarching aim is to exceed pre-pandemic levels and have 2.5 million people in work by 2024. These jobs should be more innovative, productive and resilient, and aligned with the government's green and digital ambitions.
Future Jobs Ireland (2019)		Future jobs Ireland sets out to ensure better standards in living and less vulnerability in employment through increased quality and more sustainable jobs. Core deliverables are set out annually and relate to areas such as innovation and technological change; SME Productivity; enhancing skills; and developing and attracting talent, as well as increasing labour force participation rates. The plan, which sought to foster economic, social and environmental growth, has been largely subsumed into the Economic Recovery Plan (2021), which shows the government's medium-term plan to rebuild the country in a post Covid-19 era.
National Development Plan 2021-2030 (NDP) (2021)		The previous National Development Plan was due to run until 2027, but was revised in 2021, in light of changes brought about by Covid-19. It incorporates an investment package of €165billion, and sets out government expenditure on infrastructure, between 2021 and 2030. It addresses challenges and opportunities arising from such issues as Covid-19, Brexit, housing, health, climate action, and population growth.
National Planning Framework (NPF) (2018)		Part of Project Ireland 2040, this high-level document is a guide to the future development of Ireland, which includes: ● Plans to cater for a population increase of one million and the creation of 660,000 new jobs by 2040

		● More people living closer to their workplaces, and a move away from commuting trends ● Environmentally sustainable growth through the regeneration of rural Ireland and greater distribution of regional growth, with regard to employment and prosperity ● The co-ordination of infrastructure and service delivery with growth through joined-up NPF/National Investment Plan and consistent sectoral plans
Project Ireland 2040 (2018)		Project Ireland 2040 is the government's long-overarching strategy to build a resilient and sustainable future. It comprises the National Planning Framework (NPF) and the National Development Plan (NDP). It plans for population growth with thousands of new homes, cultural amenities, enhanced regional connectivity and environmental stability, and it supports businesses across the country to reach their full potentials while creating meaningful and quality employment.
Regional Enterprise Plans (REPs)		Regional Enterprise plans (REPs) provide a refocus of the previous Regional Action Plans for Jobs (RAPJ). They deliver planning in light of the country's changing economic circumstances and in preparation for new challenges to enterprise growth, including Brexit, as well as the need for a greater balance in regional developments. The plans seek to realise the region's economic potential through developmental themes that include talent leverage, workforce development, SME resilience and sectoral clusters.
Regional Spatial and Economic Strategy (RSES) for the Southern Region (2020)		A regional spatial and economic strategy was prepared by the Southern Regional Assembly. It relates to the Southern Region, providing a long-term strategic development framework for the future physical, economic and social development of the Southern Region, including Metropolitan Area Strategic Plans (MASPs), that will guide development in the Region's three main cities and metropolitan areas (Cork, Limerick, Shannon and Waterford). Implemented in partnership with local authorities and state agencies, the strategy aims to achieve balanced regional development and full implementation of Project 2040 – the National Planning Framework. Its vision is to create cohesion and sustainability in the Southern Region, and includes the goal of promoting and developing the region into one of Europe's most creative, innovative, greenest and liveable places.

Table 2: Overview of Key Relevant Strategies & Plans

4.4 Regional Development

Regional Spatial and Economic Strategy for the Southern Region

The Regional Spatial and Economic Strategy (RSES) sets out the strategic regional development framework for the regions. The primary focus is to implement Project Ireland 2040 at the regional tier of government and to support NPF policy for achieving balanced regional development.

Prepared by the Southern Regional Assembly (2020), the spatial and economic strategy for the Southern Region, aims to provide a long-term strategic development framework for the future physical, economic and social development of the southern region. It includes Metropolitan Area Strategic Plans (MASPs), that guide development in the region's three main cities and metropolitan areas (Cork, Limerick, Shannon and Waterford). Implemented in partnership with local authorities and state agencies, the strategy strives for balanced regional development and full Project Ireland

2040 implementation. Aiming to create a cohesive and sustainable region in the south of Ireland, the strategy aims to:

- Nurture all places to realise their full potential
- Protect, and enhance the environment
- Successfully combat climate change
- Achieve economic prosperity and improved quality of life for all citizens
- Accommodate expanded growth and development in suitable locations
- Make the southern region one of Europe's most creative, innovative, greenest and liveable regions

Developmental plans for the region include increased connectivity, mobility and internationalisation, greener towns and cities, revitalised rural areas, inclusive and internationally competitive learning spaces and networks, as well as strengthened diversity of language, culture and heritage engagement (2020). Specific focus will be given to the areas of finance, technology, creative sectors, innovation and enterprise, and tourism. A defined objective within the approach, is to develop innovation hubs and centres of excellence, with particular opportunities for innovation in creative industries and design (2020).

The strategy recognises the importance of a vibrant cultural and creative sector, and that such a network of community arts and cultural hubs will be a key enabler of enterprise growth, innovation and regeneration within the region. The Wexford Creative Hub is given as a successful working example that features working studios, exhibition, retail and workshop space for the creative sector, providing a point of focus for a variety of creators, including artists, painters, sculptors, craft makers, photographers, writers, musicians and film makers (Southern Regional Assembly, 2020). The RSES for the Southern Region also recognises the unique attributes of the area, including the region's reputation for business friendliness. The 2014-2015 European Cities and Regions Future report identifies the value of the region's higher education institutes, the establishment of the Munster Technological University and elite research centres, its existing dynamic clusters of specialisms, leading FDI and indigenous enterprise location within Cork City, world-class digital and telecommunications infrastructure, as well as a strong creative presence in Waterford, including TV and film production (Southern Regional Assembly, 2020).

IMAGE 2: THE SOUTHERN REGION (SOUTHERN REGIONAL ASSEMBLY, 2021)

Regional Enterprise Plans

The Regional Enterprise Plans (Department of Business, 2019) bring about further regional collaboration initiated in the Regional Action Plans for Jobs (2015-2018), and are integral to the broader policy system. They aim to take advantage of an improved national economy and bring more balance to regional development. They re-focus on new challenges to enterprise development and competitiveness, including Brexit. Like other government initiatives, they envision the realisation of regional economic potential through increasing levels and quality of employment.

Powering the Regions

The Powering the Regions plan (Enterprise Ireland, 2019) is Enterprise Ireland's response to government initiatives, including Future Jobs Ireland, Regional Assemblies, Project Ireland 2040 and the Regional Enterprise Plans. In its strategy 2017-2020 (2019), Enterprise Ireland includes all regions in its drive to improve international strength and competitiveness of Irish industry. The plan's aims comprise:

- Sustaining 200,000 existing jobs
- Creating 60,000 new jobs
- Supporting new and existing start-ups to achieve scale
- Increasing the level of entrepreneurship regionally by 25%

Animation Sector and Regional Development

With the exception of studios in Kilkenny and Galway, the animation sector largely operates from the Dublin-Wicklow region. The Regional Uplift to Section 481 of the Finance Act, introduced in 2019, aims to develop the audiovisual industry in 'assisted regions' by providing an extra tax credit (in addition to the standard 32% tax credit). In order to qualify in the assisted region, companies must show that training and skills development opportunities are provided for residents in the area and address an upskill deficit. With 2021 changes to the scheme, Regional Uplift is available for 5 years with 5% additional tax credit available in 2019, 2020 and 2021, 3% in 2022, and 2% in 2023. A new gaming industry tax incentive, announced in the 2021 Budget may also have a positive effect for animation companies who work synergistically with regional gaming companies. Meanwhile, sustained remote working practices will also provide opportunities for a continued presence of skilled workers in regional areas (Department of Tourism, 2021b).

Case Study

Regional Support for Film, Television, Animation & Games

The Western Region Audiovisual Producers Fund (WRAP) is a Regional Fund committed to strategic investment on commercial terms that generates economic impact, supports local talent, creates sustainable employment, builds the audio-visual infrastructure and contributes to the culture and language of the West of Ireland.
WRAP is an initiative of the Western Development Commission and Galway Film Centre in association with the local authorities of Clare, Donegal, Galway City, Galway County, Mayo, Roscommon, Sligo and Údarás na Gaeltachta.

Source: https://wrapfund.ie/

Case Study

CREW "Creative Enterprise West" is a collaborative initiative led by Galway-Mayo Institute of Technology (GMIT) the Western Development Commission (WDC) and Galway Film Centre. CREW supports enterprises in areas such as design, film and TV production, animation, gaming, content development and AR/VR from its base at the GMIT campus at Cluain Mhuire, Galway.

CREW aims to develop an ecosystem and a suite of business and technical support services in the West for the digital creative sector. By bringing together a diverse range of skills, knowledge and resources, CREW will enable real collaboration to take place and accelerate the growth of the sector along the Western seaboard. CREW will focus on the Digital Creative Sector through the development of a Centre of Excellence providing co-working space, incubation and accelerator programmes, training, and outreach services to increase enterprise development and job growth in the West of Ireland contributing to sustainable regional economic and social development.

Commencing in January 2022, CREW will deliver a Level 9 Postgraduate Certificate in Creative Entrepreneurship & Enterprise Development, with the aim of inspiring and engaging the next generation of dynamic Creative Digital Entrepreneurs.

Source: https://https://crewdigital.ie/

CASE STUDY 2: CREW DIGITAL

5. The Animation Industry in Ireland and Munster

5.1 Animation Sector: Current Challenges

Some of the biggest challenges facing the animation sector are keeping up with an ever-evolving industry, supporting original productions and ensuring equity in how funds are distributed. The evolution of digital and entertainment technologies is rapidly transforming the animation business, and while storytelling remains at the heart of productions, next-generation audiences increasingly expect interactive and experiential connections with those stories. Ireland's ability to respond to such expectations will bring global competitive advantage (Screen Ireland, 2021b).

The shift to on-demand streaming, already causing disruption to production, distribution and consumption models, has been accelerated by the pandemic (Screen Ireland, 2021b), and the pace and nature of current change must be navigated with various national regulatory responses to global streaming competition. Nations must ensure preservation of cultural diversity and protect local industry and cultural identity (Screen Ireland, 2021b).

5.2 Strengths Weaknesses Opportunities and Threats

With consideration to data collection and analyses, reviewed and reported in this study, a list of the main Strengths, Weaknesses, Opportunities and Threats of animation in Munster, have been amalgamated and presented below.

Strengths - upon which we can build...

- **Time zone friendly** - a bridge across different global time zones.
- **English speaking,** and a favourable post-Brexit location.
- Access to **EU skilled workforce** without need for visas.
- Significant and increasing **deman**d for animated content at a global level.
- Ireland has an established **reputation** in the production of quality animated content – both as a service studio and IP development.
- Established Tax Incentives, including Section 481. Additionally, the **Regional Uplift** applies until 2024 across all counties in Munster with the exception of Cork City and County.
- Excellent contacts and working relationships: *"Hollywood is already in Ireland".*
- Excellent network of hubs, e-centres, co-working space in Munster to potentially accommodate businesses.
- Existing educational framework in the sector which could be scaled to meet the needs of a growing sector.
- Strong history and expertise in SME Incubator capability and scaling experience in Munster which is readily transferable to the animation sector.
- Strong enterprise support ecosystem & experience of business accelerator programmes, both regionally and nationally.

Weaknesses - which we can eliminate…

- Lack of **connectivity**/authentic engagement between industry and education. However this gap is not as wide as it is perceived to be by some actors. To a certain extent, this is unsolvable – graduates need to gain a set of generic skills for the industry as a whole, rather than skillsets suitable for individual businesses. Nonetheless, there is an opportunity here to create a common understanding between industry and academia.
- There is an issue over who should assume responsibility for the highly specialised skillsets: academia or industry. A whole-of-industry mind set is needed regarding talent development. Innovative solutions such as a global virtual network of mentors/trainers could address this gap, bringing with it huge potential for innovation.
- The animation industry is relatively new in Ireland, and there is a tradition of animation businesses locating in the greater **Dublin** region. A strong cluster/network approach will be needed to challenge the status quo.
- Challenge to keeping talent in smaller locations – younger age cohort attracted to larger, more vibrant cities. This needs to be considered as part of the cluster model – assess and grade locations across a range of quality of life factors.
- "Chicken and egg" situation – **skills base & industry presence** across Munster. Tactical Plans will need to strengthen both elements simultaneously.
- Many smaller operators (single operators / small companies) are very skilled in their creative profession; however they may not have the business growth and business scaling skills. Such companies would benefit from developing **collective consortium models** to scale business productivity, and competitiveness.
- Funding supports structures less developed than other countries, such as the ""Spain, Audiovisual Hub of Europe" strategy, which has an estimated budget of €1.6bn between 2021-2025.

Opportunities - which we can support…

- According to Precedence Research, the global animation market size is expected to reach around US$ 642.5bn by 2030, growing at a CAGR of 5.2% from 2021 to 2030. Animation is big business, with consumers increasingly expecting better visual effects in movies and a more immersive consumption experience. An opportunity exists to tap into what is largely an export market.
- The development of a cluster of animation business in Munster is complimentary to general government policy regarding balanced regional growth.
- Increased emphasis on **quality of life**, and **remote** working, particularly in light of changes to working norms associated with Covid 19 may encourage more businesses to locate outside of Dublin.
- Scope to increase number of skilled professionals graduating from Higher Education through improved industry engagement.
- Increased promotion of animation as a creative career pathway, with links to primary and secondary schools will also contribute to greater student numbers.

- The WRAP Regional Film Fund has developed an investment model which could be built upon for the Munster Region.
- The expansion of Section 481 to include digital gaming tax credit (pending approval by European Commission State Aid) will bring renewed interest and focus on the Irish audiovisual sector in general, and offers an opportunity for knock-on impact in the animation industry.
- Governance models needs to allow animation businesses to take on larger projects, enabling them to compete with countries such as Spain, which has more flexible, and developed models.
- Avail of funding outside of creative industries for infrastructure development in particular e.g. REDF, URDF.

Threats - which we need to mitigate…

- Attracting and maintaining senior **talent** in particular will need to be a key industry focus into the future
- Competitiveness and the need to maintain the current cost base in light of rising costs and inflation is critical. The industry must keep salary costs affordable in light of rising costs, such as housing and childcare. Keen international competition, minimum wage in Ireland is €9.80/hour, compared to a monthly minimum wage of €648.60 in Spain. Structure and cost based models in term of their economy could outpace Ireland.
- Other EU countries such as Spain are developing high level, intensively resourced strategies and funding models to support the development of the sector.
- Research indicates that senior talent/ companies seeking to locate in Ireland require quality housing and educational opportunities (particularly at second level).
- Consortia models will be needed to handle larger projects, and the Irish model needs to evolve to facilitate this.

5.3 Market Segmentation

Export of Creative Goods from Ireland

With reliable data sources regarding market segmentation proving unavailable at the time of writing this report, the data presented in this section draws primarily on the report: Creative Economy Outlook - Trends in international trade in creative industries and Country Profile (UNCTAD, 2018). It is worth noting that creative goods as defined in the Creative Outlook report includes Art and Craft, Audiovisuals, Design, New media, Performing Arts, Publishing and Visual Arts. In 2014, the main destination markets for creative goods exports from Ireland were to Europe (72%), Asia (14%) and the Americas (12%), as demonstrated below.

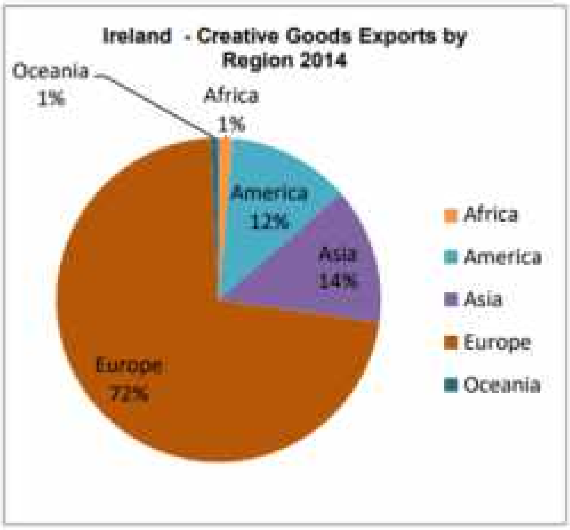

Figure 5: Creative Goods Export by Region 2005 & 2014 (Source: Creative Economy Outlook, UNCTAD)

Further analysis on the key export partners provides clear data with regards to balance of trade. Whilst this data is of interest, it is critical to note that due to the reference year, it is best interpreted as indicative. It is for this reason that data collection and further market research is included as a recommendation in Section 10.

TOP 10 EXPORT PARTNERS FOR CREATIVE GOODS FROM IRELAND IN 2014		Values in Million US $		
Rank	Partner	Exports	Imports	Balance
1	United Kingdom	374,03	828,27	-454,25
2	United States	145,58	67,85	77,73
3	Germany	126,07	54,81	71,27
4	Hungary	90,52	1,22	89,31
5	France	78,76	21,03	57,74
6	Netherlands	66,03	48,76	17,27
7	Singapore	60,93	5,91	55,02
8	Italy	35,13	37,00	-1,87
9	Czechia	33,07	30,23	2,85
10	Poland	29,63	16,85	12,78

Table 3: Top 10 Export Partners For Creative Goods From Ireland in 2014 (Source: Creative Economy Outlook, UNCTAD)Animation and VFX Market Segments

As explored further in Section 9 – Industry Survey, the following categories of animated content are produced by Irish animation businesses*:*

- 2D animation – TV/Streaming
- 3D animated movies
- 3D animation – TV/Streaming
- Computer Generated Imagery (CGI)
- Games
- Motion Graphics
- Visual Effects (VFX)
- VR/AR

6. Training, Education and Skills

6.1 Overview

Current government policy on education and skills focuses on industry-relevant skills development, including work-based learning via apprenticeships and traineeships with stress on the importance of lifelong learning and digital skills. They allow for opportunities for certification of continuous professional development and accreditation of work-based learning for the screen industry to support access routes into the sector. Defined career pathways will allow for progression opportunities that will support an open, inclusive and structured sector (Screen Ireland, 2021b).

An analysis of the QQI database indicates that a total of 93 courses are taught in Further Education and Higher Education Institutes across the island of Ireland, which include "animation" within the course descriptor. Of those entries which provided data on the NFQ Level (n=76), some 64% are NFQ Level 5 or Level 6.

Figure 6: National Framework of Qualifications – Animation

6.2 Talent Pipeline – Animation Courses in Ireland

The table below lists key courses provided by Further Education, Private Colleges and Higher Education. As mentioned above, there are substantially more courses across Ireland which include animation as a topic or subject, however, those listed below are considered to represent industry preference, as graduates from these courses have suitably specialised skillsets.

Although graduates from other degree courses also enter the animation industry, for example, from Multi-Media programmes, this would be driven to a certain extent by the individual interests of the student. It is clear from the stakeholder interviews that final year projects, portfolio and work experience can have a significant influence on the ease with which a graduate can enter the animation industry.

The number of students graduating from these courses is low, estimated to be less than 100 students per annum, of which in the region of 30-35% are thought to graduate in Munster. It is essential to note this is an estimate, and new initiatives such as the Crew Development Hubs will most likely explore this issue in detail in the next year or so. The Munster Animation Forum will need to keep graduates in the area after they leave college, as well as attracting in new graduates. This will be a challenge, and the specific needs of this cohort must be understood, if any initiatives are to succeed.

Please see National Qualification Framework in Appendix VI Training and Education for a visual representation of the 10-level system used to describe qualifications in Ireland.

Location	Institution	Qualification Level
Higher Education – FETAC Level 5 and 6		
Cork	St Johns Central College	Cartoon Animation (Art) - NFQ Art Level 5
Cork	St Johns Central College	Cartoon Animation NFQ - Cartoon Animation Level 6
Dublin	Ballyfermot College of Further Education (BCFE)	B.A. (Hons) in Visual Media (Animation/Game Design)*
Dublin	Ballyfermot College of Further Education (BCFE)	Higher National Diploma in Classical and Computer
Dublin	Coláiste Dhúlaigh College of Further Education (CDCFE)	Higher National Diploma in Animation – HFQ Level 7
Dublin	Coláiste Dhúlaigh College of Further Education (CDCFE)	BA (Hons) Animation – HFQ Level 8**
Dublin	Dorset College Dublin	Certificate in Animation, 3D Modelling and Game Design – NFQ Level 5
Laois	Abbeyleix Further Education and Training Centre (LOETB)	Art with Animation - NFQ Level 5

Please note FETAC Colleges can deliver Level 8 programmes accredited by UK Universities
*** BCFE B.A.(Hons) accredited by Dundee University**
**** CDCFE B.A.(Hons) accredited by the university of Wolverhampton**

Institute Awards (non QQI)		
Dundalk	Dundalk Institute of Technology	Certificate in 2D & 3D Digital Animation Production
Private Colleges		
Dublin	Pulse College & Griffith College	B.A. in Animation NFQ Level 7
Higher Education – NFQ Level 8		
Athlone	TUS: Midlands	B.A. (Hons) in Animation and Illustration
Donegal	Letterkenny Institute of Technology	B.A. (Hons) in Animation
Dublin	Dun Laoghaire Institute of Art, Design & Technology	B.A. (Hons) in Animation
Kerry	Institute of Technology Tralee	B.A. (Hons) in Animation, Visual Effects and Motion Design
Limerick/Tipperary	TUS: Midwest: Limerick School of Art & Design	B.Sc. (Hons) in Digital Animation Production

		B.A. (Hons) in Animation & Motion Design
Higher Education – NFQ Level 9		
Donegal	Letterkenny Institute of Technology	M.A. in Motion Graphics
Dublin	Technological University Dublin (TU)	Masters in 3D Design
Galway	NUI Galway - Huston School of Film and Digital Media	MA/Postgraduate Diploma in Digital Media -D and 3D Animation, 3D Modelling, Emerging Web Media, and E-Learning.
Limerick / Tipperary	TUS: Midwest: Limerick School of Art & Design	Visual Effects for Film, TV and Animation (Postgraduate Diploma, L9)

TABLE 4: ANIMATION COURSES IN IRELAND

The training, education and skills landscape is however, far wider than Further Education and Higher Education alone: as outlined on the following pages, there are a significant number of options for skills-based training for those working in the industry.

The Screen Skills Ireland Talent Academies and CREW Development Hubs will seek to address both regional skills availability and specialist skills simultaneously, both of which have been identified as critical areas for investment. As a general point, information regarding skills development in the animation industry is fragmented, and would benefit from a more centralised approach.

TRAINING & EDUCATION FRAMEWORK

FURTHER EDUCATION

Comprising education and training after secondary schooling, but which is not part of Height Education system. Located across the country, numerous ETBs provide Minor and Major Awards at NFQ Level 5.

HIGHER EDUCATION

Ireland has a long tradition in the creative arts, in excess of twenty five programmes which teach animation are available at NFQ Level 7, 8 and 9 across the country.

SKILLNET IRELAND

Animation Ireland Skillnet

- Provides regular (short and long) subsidised training courses for member companies and freelancers working in the sector.
- Specialist courses designed and delivered by industry professionals to address the needs identified by industry.
- Subsidised (up to 30%) in-house training solutions to companies (for current staff or new recruits), may include on-the-job training, placements and networking.

The Animation Ireland Skillnet also delivers work-based learning traineeships, e.g.:

- CGI Technical Artist Apprenticeship Programme
- Animation Games & VFX Graduate Traineeship Programme

Gréasán na Meán Skillnet

Based in Galway, Gréasán na Meán Skillnet supports the workforce development needs of businesses within the Media Industry.

SCREEN SKILLS IRELAND

Industry Specific Training Courses – Animation, VFX and Games e.g. Toon Boom Animation (Online).
Skills Development Events Funding Scheme - Supports for masterclasses, workshops, seminars, webinars and panel discussions as part of film festivals, which aim to explore international best practice.

SCREEN IRELAND

Crew Development Hubs

Based in Limerick, Galway and Wicklow the Crew Development Hubs will seek to support new and diverse talent from across the country within crew roles as part of a National Talent Academy for Crew Initiative.

Talent Academies

Established in 2021, the Talent Academies will be tasked with the development and nurturing of creative talent from across the country in the Animation and Television Drama industries:

- Talent Development Academy for Television Drama - Led by Galway Film Centre
- Talent Development Academy for Animation - Led by Animation Ireland

OTHER TRAINING PROVIDERS / INITIATIVES

Training and skills development opportunities are also provided by organisations such as:

- CREW "Creative Enterprise West"
- Galway Film Centre

REGIONAL SKILLS FORA

The Regional Skills Fora were created as part of the Government's National Skills Strategy, and provides an opportunity for employers and the education and training system to work together to meet the emerging skills needs of their regions.

FIGURE 7: TRAINING, EDUCATION & SKILLS FRAMEWORK

6.3 Apprenticeship Model

The Institute for Apprenticeship & Technical Education in England offers a well-established range of apprenticeships for the audiovisual industry, of particular note is the progression routes for VFX, Production and Broadcast Engineering Roles. The first animation apprenticeship – Junior Animator Level 4 – was approved for delivery in May 2020.

What must be understood is that apprenticeships have the potential to attract a cohort of students who would not go to college, thereby offering an opportunity to increase the skills base and encouraging more people into the industry. It was also observed that similar challenges are experienced in England with regards to the production cycle influencing an employer's propensity to offer apprenticeship programmes.

For further details on each of the apprenticeship courses listed below, including a table mapping the National Qualification Framework levels against the levels shown the table below.

	Level 3	Level 4	Level 5	Level 6	Level 7
Animation		Junior Animator			
Broadcast Engineering roles	Broadcast And Media Systems Technical Operator		Broadcast And Media Systems Technician	Broadcast And Media Systems Engineer (Integrated Degree)	
Production Roles	Junior Content Producer	Media Production Co-Ordinator			Creative Industries Production Manager
	Broadcast Production Assistant				
VFX		Junior VFX Artist (Generalist)		VFX Artist or Technical Director	VFX Supervisor
		Junior 2d Artist (Visual Effects)			
		Assistant Technical Director (Visual Effects)			

Table 5: Apprentice Progression Routes - Institute for Apprenticeship & Technical Education in England

6.4 Stakeholder Views

The stakeholder consultation surfaced many views and opinions regarding training, education and skills development in the animation industry, and amongst the wider creative arts from which the following thematic areas were identified:

Industry Engagement

The quality and reciprocity of industry engagement was discussed extensively during stakeholder interviews. There is a space here between industry and education which needs to be supported, balancing the needs of the individual student with the requirement of the jobs market.

A number of established mechanisms can support improvements to the engagement process, including the Regional Skills Fora and the regular Programmatic Review undertaken by education providers. However, it was a clearly expressed view that industry needed to see tangible results from their investment of time.

As with many engagement processes, it is essential that the right people from industry attend such meetings, events and consultations. It was suggested that recent graduates would be well placed to provide in-depth feedback, based on their immediate experience.

Employer Expectations

Most likely a wider issue than animation or the creative arts, the expectation of employees with regard to the jobs readiness of graduates requires further exploration.

The balancing act played by educational institutions was most apparent with extremely specialised skills e.g. animating fur; and the extent to which such skills should be taught in an educational environment, as opposed to within the workplace.

Apprenticeships / Internships

Although cited as a potential solution, it appears that the development of apprenticeship programmes would not be without challenges. The production mind-set of the animation industry does not seem to offer a clear fit with production timelines, and requires further exploration to identify a model that fits the needs of both student and employer. This also appears to be linked to a greater industry-wide issue of the positioning of animation within the creative arts sector:

“Is animation an art or a craft?”

The benefit of work placements was widely recognised, although there were many discussions around the challenges associated with securing them, whilst ensuring the learning outcomes for students were of value. The programme year within which the work placement takes place was also deemed important. However final year placements may provide industry with more advanced skills sets, there is a potential risk of losing students who elect to remain in the business after the placement has ended, rather than return to their college programme.

Positioning of the Animation Industry within the Creative Arts

Where does animation sit within the creative arts? The unique combination of art, mathematics and physics (VFX) presents challenges as to how careers in the animation industry are positioned to attract students. Early, meaningful engagement with primary and secondary school students needs to become a key focus of the industry in order to encourage increased numbers into the profession. Please also see Appendix IV for an excellent example of communications material to inform and support students who are interested in learning about career options within the industry.

Traces of elitism were observed on occasion throughout the stakeholder interviews, in that animation may not hold the same artistic value as other art forms, however, it was not possible to ascertain if this view was widespread. Cartoon Saloon and the Butler Gallery in Kilkenny recently held an exhibition of animated content associated with the launch of the Wolfwalkers feature film on Apple TV, an excellent example of effective promotion of animated content as a form of fine art (Butler Gallery, 2021)

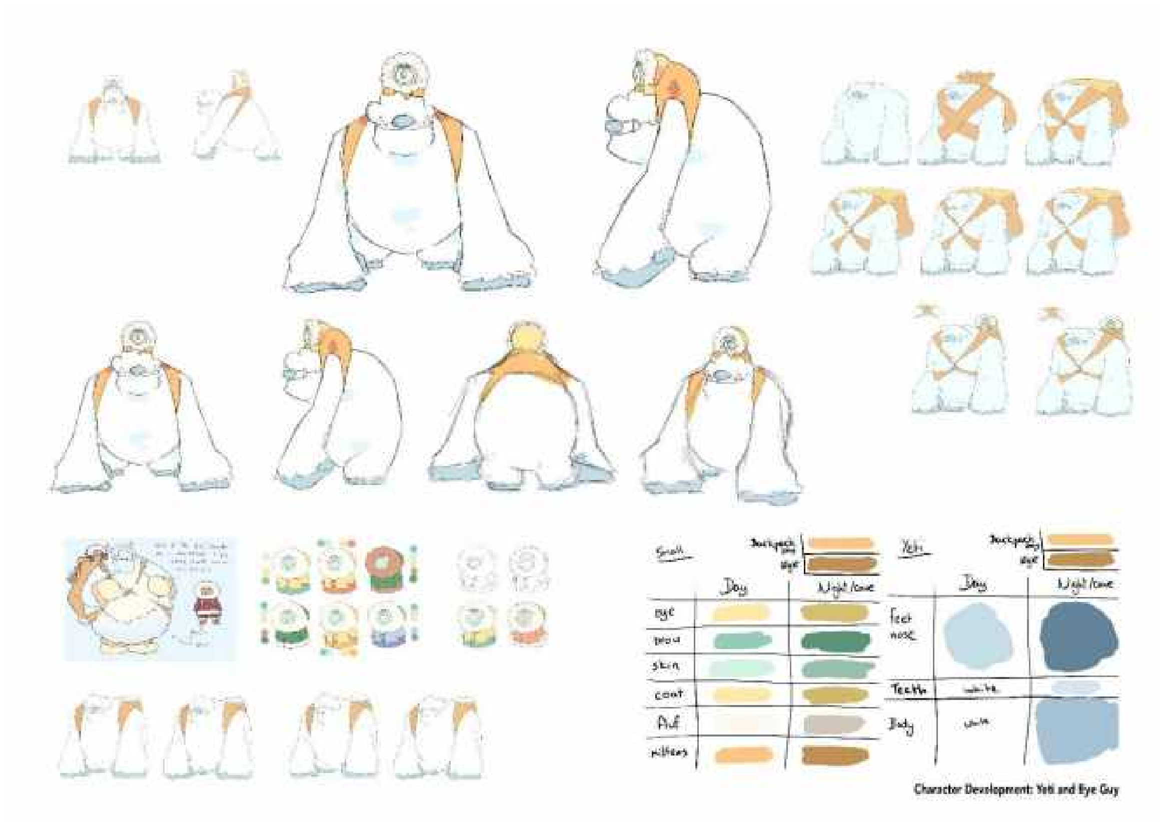

IMAGE 3: YETI & FRIEND DESIGN PROCESS, SADHBH DALY, LSAD

Section 481 – Skills Development

"In producing the film, the producer is required to develop the skills of those working on the film. This section should set out the estimated number of skills development participants likely to be upskilled in the course of the film. Detailed information relating to Skills Development and Training should be included in the Proposed Skills Development Plan". Anecdotally, it would appear that this requirement for training within Section 481 has a positive impact on trainees, although it was not possible to identify any specific data sources demonstrating outputs or impacts.

Case Study

Nordic Animation

Nordic Animation is a network consisting of the leading animation studios and producers in Denmark, Sweden, Finland, Iceland, and Norway.

Nordic Animation has one representative in each country, which changes on a bi-annnual basis. The initiative is supported by the Danish Film Institute, The Swedish Film Institute, The Norwegian Film Institute, Icelandic Film Centre, Finnanimation, Nordisk Film & TV Fond, Nordic Culture Fund, The Ministry of Foreign Affairs of Denmark, and Ministry of Culture Denmark.

In addition to the national funding schemes, the Nordic region shares two extra-national production funds. Collaboration with the Nordics also qualifies for support from Eurimage.

Nordisk film og TV Fond - supports the production of feature films, feature length documentaries, TV series and distribution. In order to be eligible for funding, the delegate producer needs to be based in one of the Nordic countries.

International Sami Film Institute - grants support for both scriptwriting, development, production, and distribution of shorts, features, and documentaries. The institute is based in Norway, but covers the Sami region in Sweden, Finland, Russia, and Norway. Films are eligible if the film has a Sami subject matter and contains Sami dialogue.

Nordic Animation acts as a central source of information on Financing, Studios+Producers, Festivals and Education. There are good links between the animation industry and education providers, with recognised progression pathways.

Source: https://nordicanimation.com/

CASE STUDY 3: NORDIC ANIMATION

6.5 Who Does What and How in the Animation Industry?

The following section of the report aims to give some oversight into the type of roles required by the animation industry, and how 2D, 3D animated content and VFX is produced. It is critical the wider statutory and support agencies become more familiar with the industry in order to more effectively support its growth and expansion in the Munster region. Please also see Section Appendix for the ScreenSkills UK Animation Industry Career Map.

FIGURE 8: ANIMATION PRODUCTION MANAGEMENT – ROLES

Content Creation Workflow in 2D Animation (Preproduction, Production, Postproduction)

- Preproduction
  - Production Design (Art Director, 2D Artist)

Content Creation Workflow in 3D Animation (Preproduction, Production, Postproduction)

- Preproduction
  - Production Design (Previsualistion Artist)
  - Writing

FIGURE 9: 2D & 3D ANIMATED CONTENT CREATION WORKFLOW

VFX Content Creation

- Preproduction
  - Production Design (Previsualistion Artist)
  - Writing
  - Storyboarding
- Production
  - 3D Modelling Department
  - FX Department
  - Matchmove Department
  - Lighting Department
  - Rigging Department
  - Texture Department
  - 2D Department
  - Animation Department
  - VFX Production
  - Supervision (2D, 3D , VFX)
  - Misc roles
    - CG Generalist
    - Matte Painter
- Post-Production
  - VFXEditor
  - Post Production VFX Manager
  - Post Production VFX Supervisor

Software: **Adobe CC suite, Autodesk Maya, Adobe Substance Painter, Tracking software** (PF Track), **Nuke, Houdini**

FIGURE 10: VFX CONTENT CREATION WORKFLOW

7. Premises

Early in the feasibility study process, this element of the project scope was identified as one of the more challenging elements of the research, partly influenced by a lack of reliable data sources.

Through the desk research and stakeholder consultation, it was quickly noted that animation businesses require extensive flexibility with regards to premises, and that ideally the premises occupied by small and medium animation businesses will offer the capacity to increase or decrease square footage in line with production. Commercial lease agreements were considered restrictive, and too long term in nature, as the standard length of a lease agreement far exceeds a production timescale. For this reason, the research focussed on enterprise and co-working spaces.

7.1 Animation Studio Footprint

In order to better understand the requirements of the animation industry with regard to premises, this topic was addressed in detail throughout the stakeholder consultation, key points are summarised below:

- Standard office premises are suitable for animation businesses, however, depending on the individual business they may require a studio space or editing bay
- High quality broadband is a prerequisite to an animation business locating in any particular area
- Ideally office premises will have capacity to expand/contract in line with production schedules, and as such standard commercial lease durations of 3 - 5 years are not considered appropriate/suitably responsive
- At start up and expansion stages, animation business may be cost sensitive and select office premises accordingly.

In developing a footprint model, the research team sought to reflect the various stages of growth through which a “typical” animation company grows, and is upon an average space allowance of 120sq ft per person.

Scenario	Business Size		Number of Employees	Sq Ft	Sq M
Scenario A	Micro	Freelance/ Subcontracted Work	1-5	600	56
Scenario B	Small	One production ongoing, others in pipeline e.g. Avalon Films	12-15	1,800	167
Scenario C	Medium	Several productions underway continuously e.g. Jam Media	50	6,000	557
Scenario D	Medium	Multiple Productions/service studio e.g. Lighthouse Studios., Cartoon Saloon	250	30,000	2,787

Scenario E	Large	Multiple simultaneous productions e.g. Brown Bag	500	60,000	5,574

Sources: Enterprise Ireland (SME Definition) and Apollio.io

Table 6: Animation Studio Footprint

7.2 Animation Studio Hardware and Software

Although an animation studio may have relatively generic requirements with regards to the premises, they tend to have very specific requirements with regard to hardware, software, networking and broadband. The industry survey outlined in detail in Section 9 of this document, indicates that respondents had invested between €10,000 and €50,000 on specialised hardware and software, and whilst this spans across a broad spectrum of content creation, it is informative nonetheless.

Recent research conducted by a member of the Munster Animation Forum indicated that the establishment of a 30 person animation studio would cost in the region of €210,000, or €7,000 per space.

Please see a below an indicative list of the hardware, software and networking setup required by a business producing animated content. It is essential to note that the exact requirements of each individual business will be determined by their business model, operational requirements and creative ethos.

General Hardware

- Standard Workstation
- PC or Mac computers
- Cintiq Creative Pen Display Tablets
- A3 Laser Printer/Scanner

Editing and Postproduction

- PC or Mac Computer for Edit
- Large Dual Monitors for Comp and Shot Approval
- DaVinci Resolve Speed Editor
- Monitor Speakers
- Monitor Headphones

Software

- Adobe Creative Cloud
- Windows/OSX (PC/Mac) OS
- Microsoft Office
- Parsec Remote software
- Toon Boom Harmony Premium (or equivalent) *
- Toon Boon Storyboard Pro
- Shotgrid Production Tracking Software
- *Adobe Animate included with Adobe CC subscription could be used instead saving costs

Network Hardware and Software

(will require electric and networking work-portions may be in place depending upon location)

- Server (PC)
- Modem
- Router
- Firewall
- Switch
- LAN Cable / Patch Cables
- Access Point
- Repeater
- Patch Panels

7.3 Availability of Premises in Munster

Surprisingly, no one source was identified that provided comprehensive data on Enterprise Centres, presenting a significant early challenge to the research team. Therefore, as an initial step, a database was collated from the following data sources:

- Regional Co-working Analysis
- Connected Hubs
- Enterprise Ireland Directory
- Local Enterprise Offices
- AEC Enterprise Hub Mapping Exercise
- Workspace Database

The data was then checked to eliminate duplicate entries, and an analysis conducted to identify the Type or Category and likely availability of office space. Please note that although the map on the following page is based upon data collated during the research process, it should be interpreted as indicative, rather than conclusive, due to challenges in the data collection process.

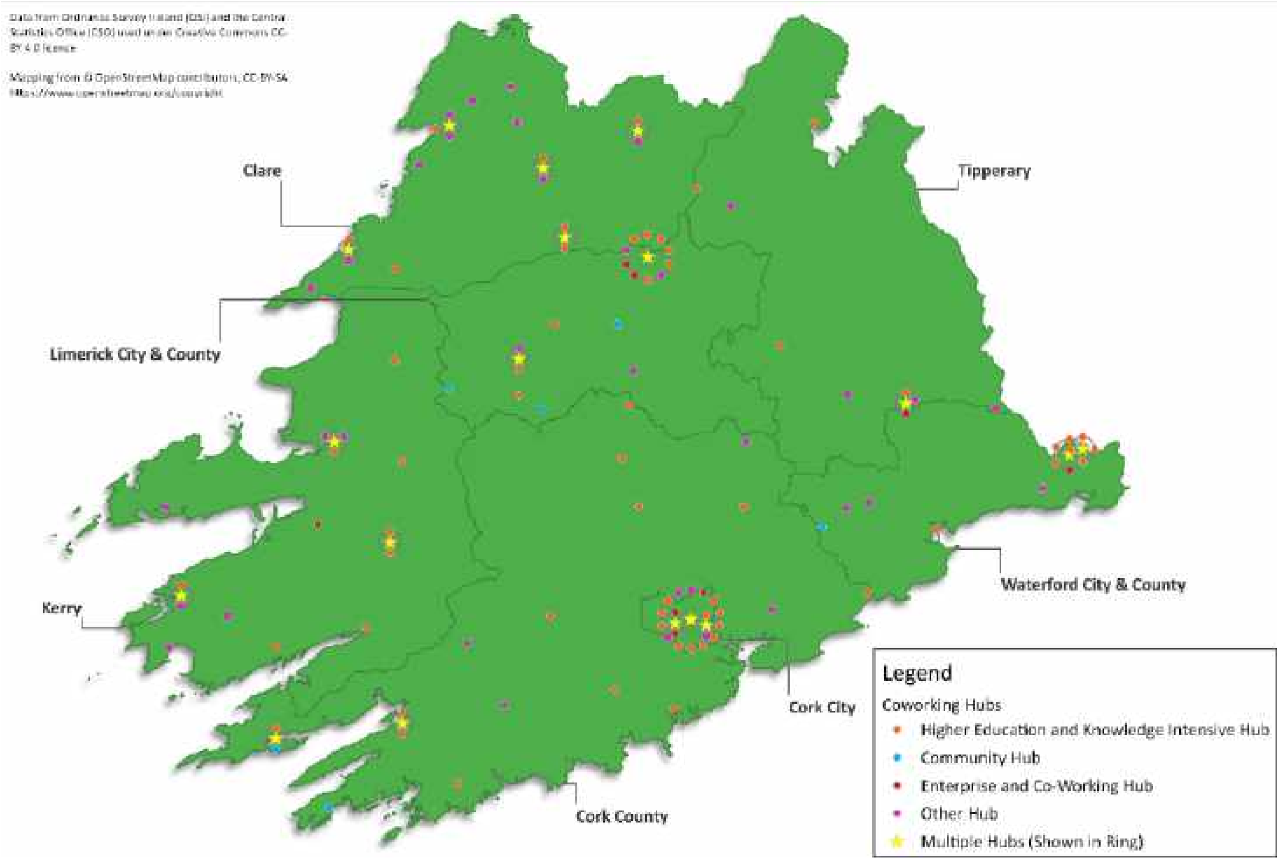

Figure 11: Enterprise & Co Working Spaces in Munster

7.4 QHubs

The QHubs Standard is a new initiative, led by the Community Enterprise Association of Ireland, which aims to lead innovation through the national network of enterprise hubs, co-working locations and flexible working spaces. When each new location signs up to the new QHubs Standard, they will go through the following process to achieve their quality standards status:

- Engage in an 'Innovation and Quality Diagnostic' process to define current status based on their strategic purpose, size, capacity and occupancy as well as services and facilities available
- With assistance from a dedicated mentor, identify their desired ambitions and goals, such as how to add value to the facility for client companies via improved services, products, experiences and upgrading business model and processes used
- A customised 'Growth Pathway' will be developed to help each participating location work towards their targets, as well as access to the support required to achieve this

There are clear synergies between the aspirations of the Munster Animation Forum and the Community Enterprise Association of Ireland which will further be explored in the Tactical Plans.

Case Study

Magpie 6 Media

Located in EASI Studios Ennis, Co. Clare, Magpie 6 Media employs approximately 15 people in Ennis, with another 5 people working remotely. The strategic focus of the business owners is on IP creation, and on the production of content with the potential for multiple seasons. Additionally, the studio is working on the development of two animated, and two live action features.

Several factors were involved in the decision to locate the studio in the mid West, including personal and quality of life factors, such as the affordability of housing. Availability of talent is an ongoing challenge, and here the studios' proximity to Limerick is critical - most of the recent graduates they employ live in the City and commute to the studio in Ennis, which is located close to Ennis train station. Additionally, the presence of Troy Studios in the City is supporting the development of artistic talent in the overall area, with the result that the skills base is growing.

EASI Studios Ennis has offered them much needed flexibility to expand and contract office space, according to production schedules. This has been made possible by the proactive work undertaken by Clare County Council and the Arts Officer to provide studios to "support artists, primarily visual artists, in making work in Clare."

Case Study 4: Magpie 6 Media

8. Communications

8.1 Munster Animation Forum Website

This element of the report focuses on the main features that a website aiming to showcase and support an animation Industry in Munster should have.

Following an investigation of options, this report recommends that the Munster Animation Forum website should focus on impactful design to grab the attention of users and potential investors. Whilst being creative and impactful, the site should not lose sight of its purpose, which is **to showcase Munster as a destination to foster business in animation and to support the existing industry to thrive in International markets**. In doing so it must contain all the relevant information that a potential investor would expect and appreciate. It must emphasise infrastructure, talent, education, government support, quality of life, business networks and transport links. Investment in good UX design is an opportunity to take a potential investor on a journey and to make Munster an attractive place to invest and grow.

Website Brief

The website brief sets outs to research what a new Munster Animation Forum website should involve, in order to represent Munster as a “powerhouse for animation” growth. The work includes:

- Reviewing, developing specification and identifying potential suppliers
- Approximating the cost of website development, including maintenance costs (back end) as well as costs associated with the initial website set-up.

Munster Animation Website Goals

The goals of a new Munster Animation Forum website are listed below.

1. Attract investment for the animation industry in Munster

A key objective of the Forum website will be to attract investment into the region. This will be driven by the findings and recommendations of this feasibility study, and supported by the work of the Forum in general.

Proposals for key areas that need to be worked, invested in, or promoted include:

- IDA/Enterprise Ireland manage a section to help new start-ups get on their feet, advice on funding options in Ireland, registering a company, Co-Partnership deals etc.
- Munster-based companies commit to provide up to date information on skills and availability to allow prospective companies to filter from a single source (Munster Animation Website) to identify co-partners. Animation Ireland (2021) notes that ‘’Foreign Direct Investment is key, as the majority of any budget for an animated production is typically sourced through FDI, with a production budget typically breaking down as being 32pc Irish investment (Via Section 481 tax incentive) and 68pc international investment’’.
- Include complimentary services like post production/VFX /audio services etc., as part of overall technology plan for Munster.

2. Promote Munster as a key location for animation in Ireland/Europe and Attract animation companies to locate in Munster

This goal relates to two key questions:

Where and why are the majority located elsewhere in Ireland?

- Although further research may be required, it is clear that Dublin has an advantage with regard to the volume of companies, concentration of skilled workforce, college courses and international travel options for staff retention and client accessibility.

What are barriers to setting up in Munster? What USP's can be promoted?

- Munster has a lower cost of living and can offer more competitive budgets. Competitive commercial lettings and building purchases should also be highlighted
- Access to the same skilled workforce as Dublin due to increased remote working options, and staff actively seeking more affordable options to living in Ireland
- Promote healthy transport links to and from the capital, Shannon and Cork airport, greater frequency of flights
- Access to EU skilled workforce without visas (withdrawn from UK since Brexit)

3. Promote the animation companies based in Munster

Does the website represent each company equally?

- Consideration will need to be given to whether companies should sign up on a membership or subscription basis, in order to ensure baseline quality of information being fed into the website. Ideally this website will act as a 'one stop shop' for investors to access directory information in order to contact members directly, or to sort by criteria based on metadata from each company.

Does there need to be a threshold for companies to meet to be included?

Inclusion requirements for companies may include some of the following considerations:

- As a minimum, companies should have a piece of paid commercial animation completed, or funding in place for a project in progress
- Companies should give an accurate account of company roles on previous work. Have legal release to show and advertise complete projects or IP with clients
- Demo reels should be updated by members as needed
- Members need to commit to provide metadata and keep information current
- If supported by Screen Ireland/Irish Film Boards etc., consideration should be given to how the presence of such companies might impact on the website?

4. Support the Munster Animation Network interacting with each other/Network/Collaboration

Smaller companies could partner up to provide 'one stop shop' options to investors rather than losing opportunities due to lack of scale or cannibalising the talent pool. The section below suggestions options to encourage this:

Members-only section potential for exchange of ideas

- Forums can be expensive (e.g. Muut, Inc https://muut.com/) and take a lot of resources to curate and keep relevant

- Suggest instead a free administered Facebook or WhatsApp group for members, as well as mailing lists for regular contact
- Monthly events to increase networking opportunities
- Skilled staff focussed on specific areas. Key to companies collaborating is having accessible advice on legal and financial aspects as part of the website. Work could be showcased, for example, see Animation UK Membership area (https://www.animationuk.org/resources)
- Focus on the technological side of business. Ensuring that companies have robust pipelines that can evolve to fit the TV model, advertising model, VFX model etc.
- Open up membership to include support companies for Post Production, Audio, software etc., to increase opportunities for all and diversify as the market dictates

Recommendations for Website

The following is a list of recommendations and rationale for features and requirements for the website of the Munster Animation Forum.

- **Drive clients and investors to the website**. A targeted ad model and SEO (search engine optimisation) are essential to increase traffic. Sound analytics will ensure information regarding who is accessing, from where, and what countries. 'Munster Animation' is not going to be instantly recognised as Irish or a region of Ireland so it will need to rely heavily on links with complementary searches.
- A clear **marketing strategy and budget** should include advertising at animation and technology events, targeting visitors from complementary sites, targeting all searches that include Ireland/Europe animation etc.
- A hybrid of Animation Ireland and Failte Ireland-type website model is recommended. The Forum is selling Munster as a destination - its opportunities for better work life balance, the high quality that Ireland already has to offer, and all with a more competitive price point. It should remain unbiased to any one company and must be Munster overall focussed.
- Focus less on designing an animation website, as it needs to be an **information** hub and not 3D/2D/stop motion in its design. Nonetheless, it should be slick and of quality design as people reviewing the website are looking for creative innovation.
- **Relevant and up to date information**: updates can be managed through a CMS (content management system) where a Munster Animation Forum employee is appropriately trained, or the Forum could sub-contract this task to a developer (paid per update or monthly fee) as part of costs to do updates.
- **Transport links:** access to Dublin is a selling point as well as its own airport and train line access. Ireland is a small country when viewed from an international context. Companies can have access to full country of resources with lower cost of living/rental for businesses in this remote working world.
- Emphasise English speaking country and EU values.
- Munster based animation companies will have the opportunity to promote their location on their own websites, for example the Magpie Media demo reel, available here.
- Mechanisms to avoid **unsolicited project submissions** should be integrated into the website. Animation companies / agencies could potentially face future legal issues where ideas are automatically submitted and a project with similarities is subsequently created. Appropriately worded disclaimers and limits as to what can be uploaded to contact forms is recommended.

Website Examples

This section provides some example website structures and membership features.

Example 1: Animation Ireland

The Munster Animation Forum website needs to compliment the Animation Ireland website, and not compete with it. It is essential to note that Animation Ireland has a criteria for membership that ''The Company acknowledges that Animation Ireland is and shall be the sole industry body with responsibility for representing the interests of the Company in its capacity as an animation studio engaged in the production of animated films and television programs'' (Animation Ireland, 2021).

Key features

- Membership system, member companies can access events and industry news
- Tiered membership depending on company size, and if they are currently in production or downtime (between €300 and €700 pa.)
- Membership criteria – must have produced 10 minutes of animation or an equivalent track record to be represented by Animation Ireland
- Companies must share details on story, key team, projects etc.

Options for how Munster Animation Forum Website could differentiate itself:

- No fee for membership (may not be practical for financial reasons and stage of forum development, and will depend of Forum funding model and range of services provided)
- Provide an option for clients to contact a number of companies through one form on the website rather than through several cold calls
- Focus on being a link to or from wider the animation community in Ireland
- Provide an option for clients visiting the website to filter and sort companies based on the data provided by members. This should include facilities, services, and any areas of expertise.

Example 2: Failte Ireland / Discover Ireland

Fáilte Ireland allows inclusivity for all business that meet its criteria (Fáilte Ireland, 2021b).

Key aspects of note in this area include:

- Staffed areas for business support, separating it from the trade portal so that there are distinct areas for the members and the clients using the site
- Unbiased information and promotion of any one business

Tentative Costings

Estimated web design, development and maintenance costings are as follows. Please see Appendix III for full details of specification:

	Lower Cost Range	Higher Cost Range
Development costs	€10,000	€18,000
Design Costs	€2,000	€5,000
Hosting Costs (annual)	€800	€1,000
	€12,800	€24,000

8.2 Key Industry Festivals and Events

The following table presents a small number of key events for the industry, attendance at which should form consideration

Event	**Notes**
Animation Dingle	Animation Dingle is a 2-day Festival taking place each March. The event includes conference, awards, workshops and screenings, all within the town of Dingle. 
Annecy	For professional industry and animation fans alike. It is not a requirement to pitch in order to attend, and it is considered a more relaxed event as a result. The event hosts exhibitors, with areas to submit projects for feedback or interest. Used as a meeting point by clients and co-productions, and therefore provides opportunities to pitch and get work seen. https://www.annecy.org/home
Cartoon Forum	A Pitching and Co-production specific event http://cartoon-media.eu/cartoon-forum/cartoon-forum-2021.htm

Galway Film Fleadh	Held annually in July, the Galway Film Fleadh is a week-long international event, which includes animated content. The 2021 festival included a screening of the Cartoon Saloon Wolfwalkers animated feature, as well as Two by Two: Overboard which was co-produced by the Galway-based Irish animation company Moetion Film.
Kidscreen	A networking event with speakers and market pitching support https://summit.kidscreen.com/2022/
MipCom / MipTV	The biggest TV market in the world – a huge networking event. Industry giants set up booths (when it was a physical event, there is a hybrid model currently). Possible for any individual to book a slot with a big executive to get advice, pitch etc. It is essential to book slots in advance to make the most of the event, and it is considered hugely influential. The event is very social, and people meet extensively in bars and restaurants, so although it is best to have a slot, it is still possible to engage with people without one. https://www.mipcom.com/
Siggraph	Focusses on the technical side of the industry, but is considered valuable for recruiting, new technologies and making contact with other production companies in a non-selling environment. https://sa2021.siggraph.org/en/

Table 7: Key Industry Festivals & Events

8.3 Animation Industry Resources

Linked to the development of a Communications Strategy, and drawing upon content prepared for the Forum website, is the possibility of developing an industry specific directory, similar to **Who is Who 2021 Animation from Spain** (ICEX Spain Trade and Investment, 2021)" and **Animated in Ireland** (Animation Ireland et al., 2021), which would be a powerful industry resource.

9. Industry Survey - Key Findings

9.1 Animation in Munster

The industry survey, which was informed by the Stakeholder Consultation and Literature Review, was issued in November 2021. The content and layout of the survey was reviewed by industry experts prior to release, and sought answers to questions around the following general areas:

- Profile of businesses
- Future business plans
- Business location and premises
- Permission to add contact details to the Munster Animation Forum industry database

The survey was distributed to members of the Munster Animation Forum, in addition to regional and national networks, such as the Animation Skillnet. The research team also conducted a data mining exercise to identify potential animation businesses' LinkedIn, Upwork, Google and social media platforms, to whom the survey was also emailed directly, with a cover note.

It is critical to note that the survey was designed to capture data from all businesses located in Munster, which produce or aspire to produce animated content. At the time of writing this report, a total of 14 responses were received, a brief synopsis of key findings is outlined below.

9.2 Survey Findings

Profile of Businesses

Of the 14 respondents to the survey, one was established 25 years, whilst three were start-ups, formally established over the preceding three years. This data is of relevance to the supports required by the sector, indicating that both start up and business expansion are likely to be required. Of interest also, is the distribution of respondents across the province, with 10 in Cork and 1 each in Clare and Kerry.

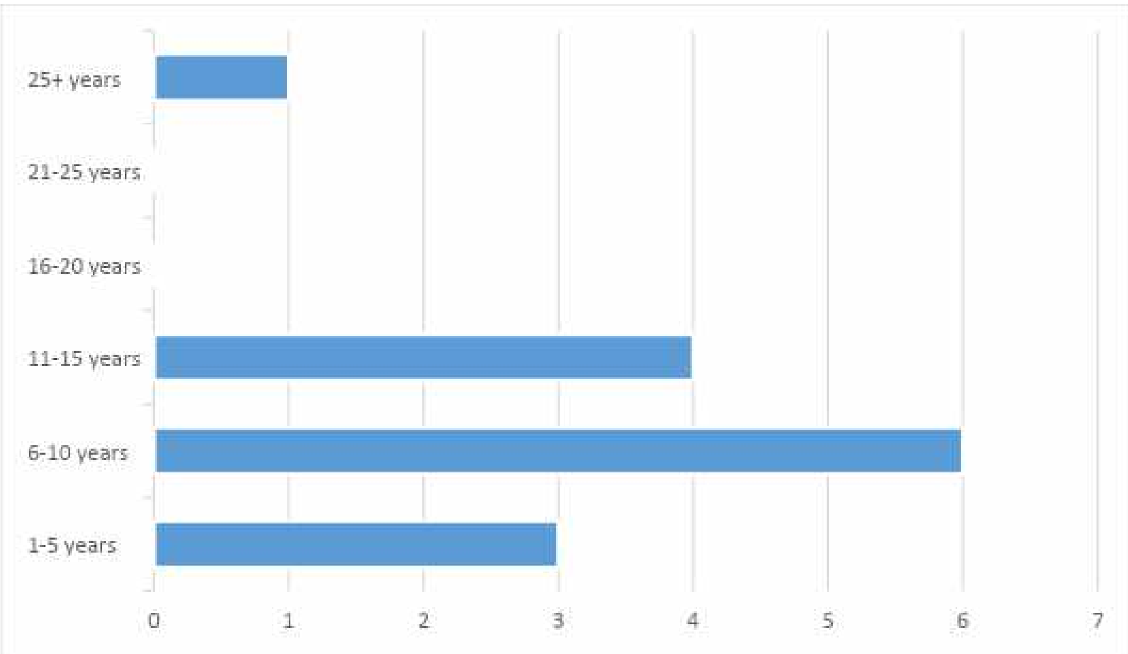

Figure 12: Number Of Years Formally Established (N=14)

A total of 35 people are employed by the respondents (n=14); as follows:

Staff Numbers	Number of Respondents
1	8
2-5	5
10-15	1

A number of respondents also observed that they worked with freelancers on a regular basis, which is consistent with the business model of the industry. It should also be noted here that an animation studio is due to be established in Tralee in 2022, which will also boost the numbers stated above.

A wide range of content is produced across the region, including 2D and 3D feature films. The other category included film production, family-friendly live action, animated shorts and products/machines for 3D animation. The breadth of the content produced is broad, offering both challenges and opportunities for growth.

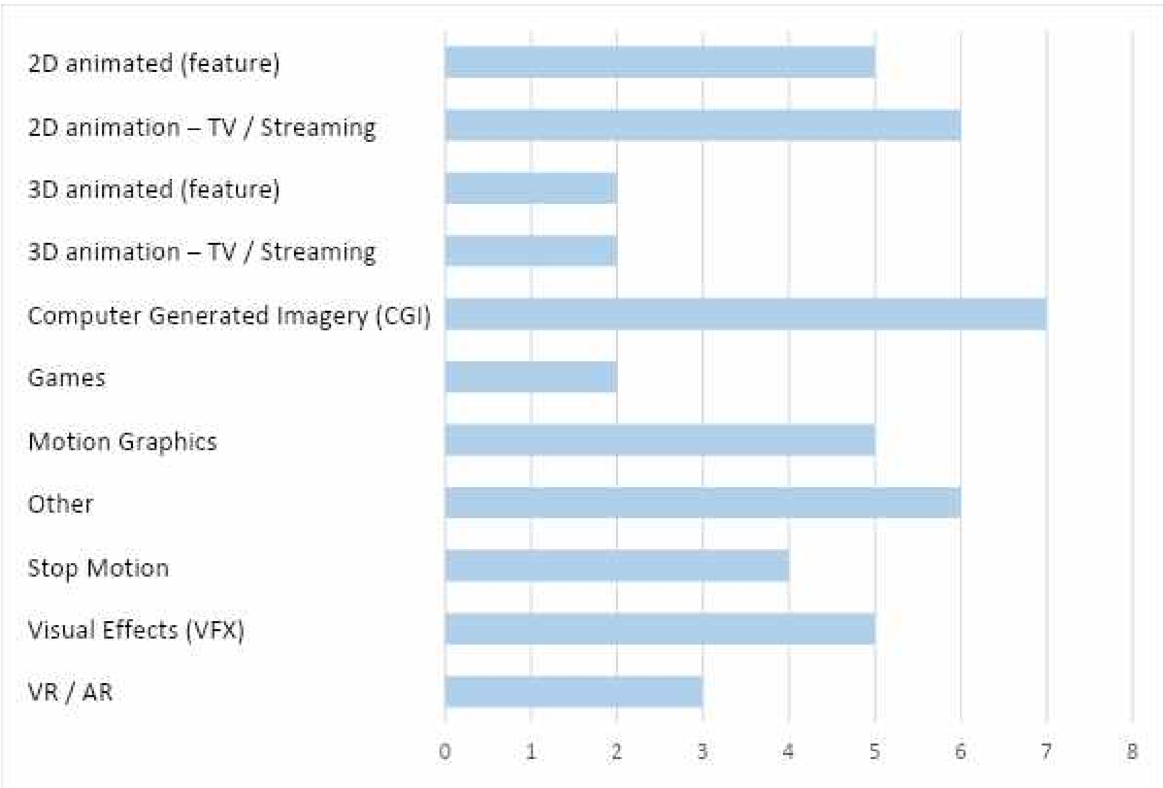

Figure 13: Content Production (=14)

As already noted, the production of the above content represents only some of the activity of the respondents. However, half of all respondents said that 100% of their turnover is linked to animated content, with a further respondent giving a range of between 80-100%.

Client base was telling: almost 60% of respondents stated that they produced animated content for clients in the advertising and marketing sector. A key take home from the survey originates from this particular question. Three companies are providing animated content for streaming services, and five for television broadcasters.

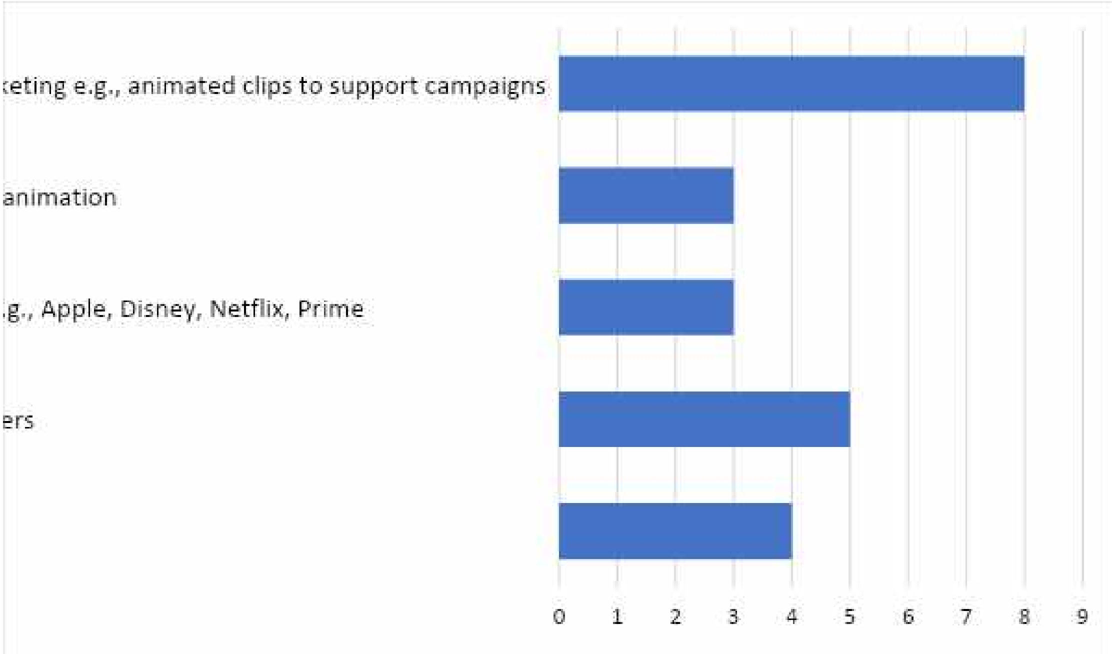

Figure 14: Client Base (n=14)

Image 4: The Wee Littles, Magpie 6 Studio

Future Business Plans

Discussed in some detail in Section 9: Taxation and Incentives, the business models in the animation industry tend to fall into three broad categories: Service Studio, Own IP and Hybrid. Interestingly, only two respondents intend to grow the development of their own IP, which is felt to be more profitable by many industry experts.

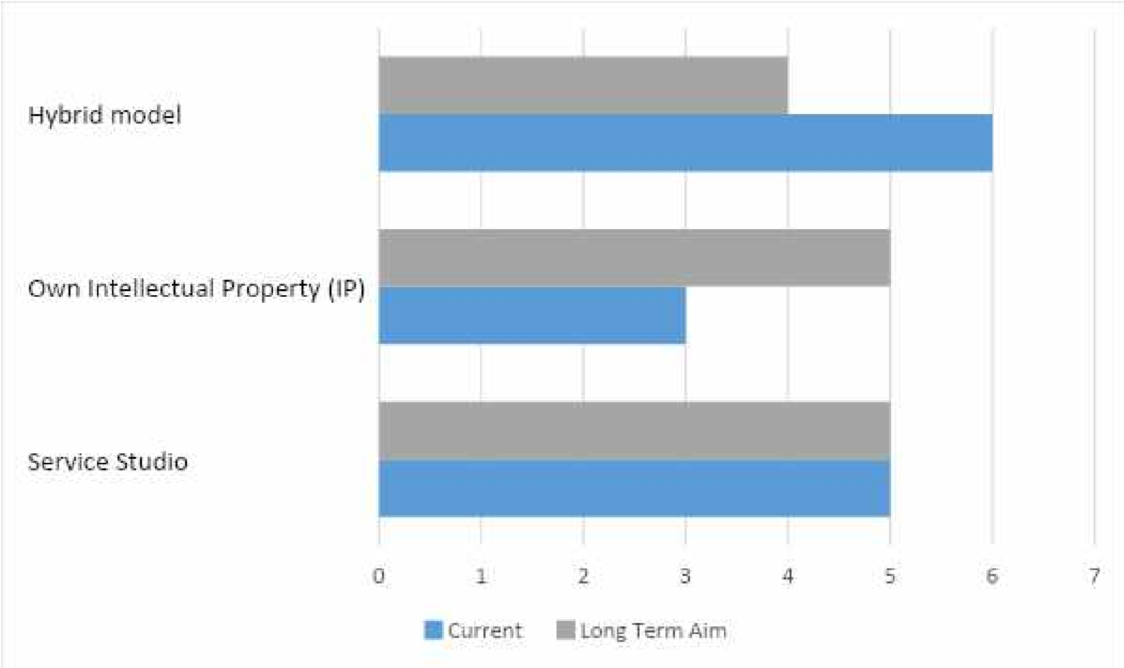

Figure 15: Business Model – Current & Long Term Aim (n=14)

Key challenges fell under the categories of training/skills, sales and route to market, and infrastructure. A further exploration of these issues should be undertaken by the Munster Animation Forum in its first year of operation, which should then inform its operational plans.

Eight respondents indicated that they would seek to expand their business over the next five years. However, with the same number of respondents indicating that they had a Strategic Plan in place. Please note that it may not be the case that the eight companies who expressed an intention to expand, are the same respondents who indicated they have developed a Strategic Plan. There was considerable variation in the number of new employees which the businesses envisaged recruiting, however, several intended to recruit between 5-15 people, over this timeframe.

Figure 16 shows the ambition in the number of businesses who are seeking to produce 3D animated content for the TV/streaming markets. Understanding their needs will help to inform not only specific supports for these businesses, but also help to create a dynamic, supportive environment in the region, in order to nurture a cluster of similar businesses.

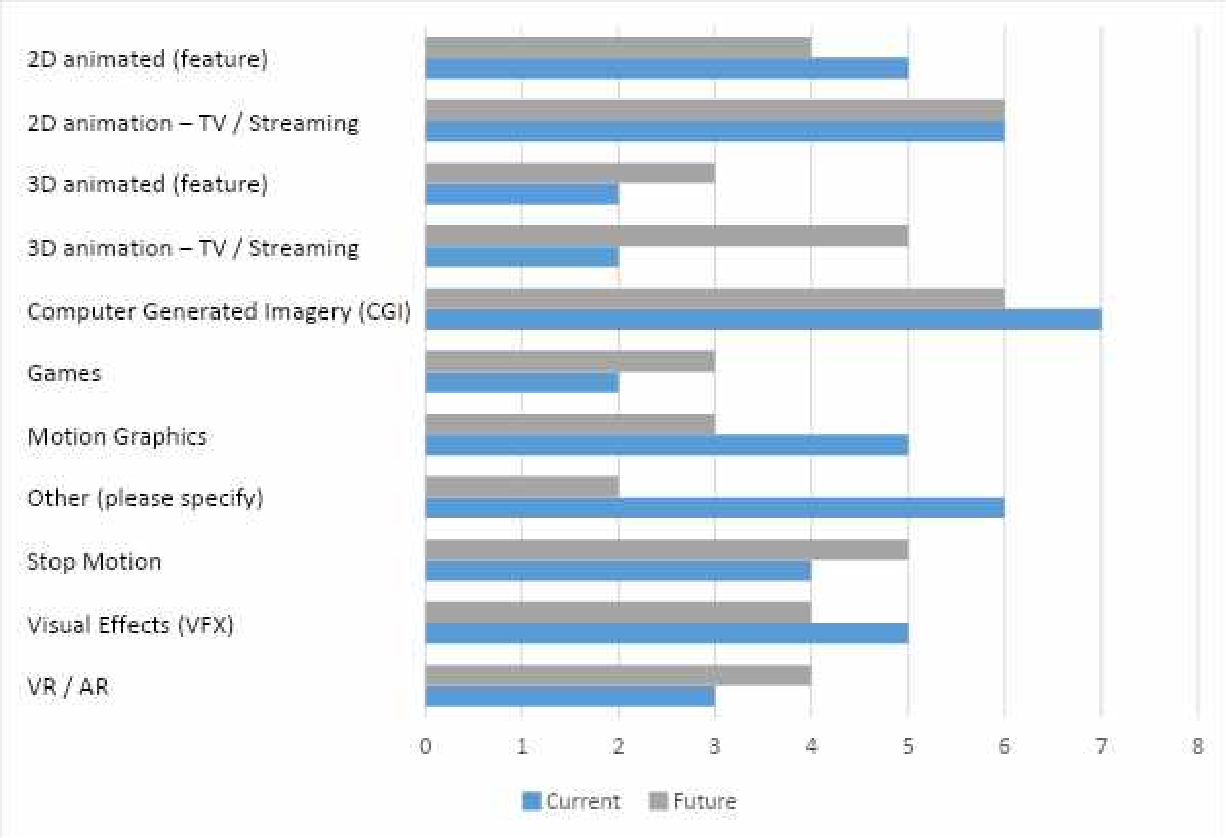

Figure 16: Current & Future Plans (n=13)

Businesses across the audio visual industry appear to be have a very good grasp of funding mechanisms, and a wide range of funding sources were indicated.

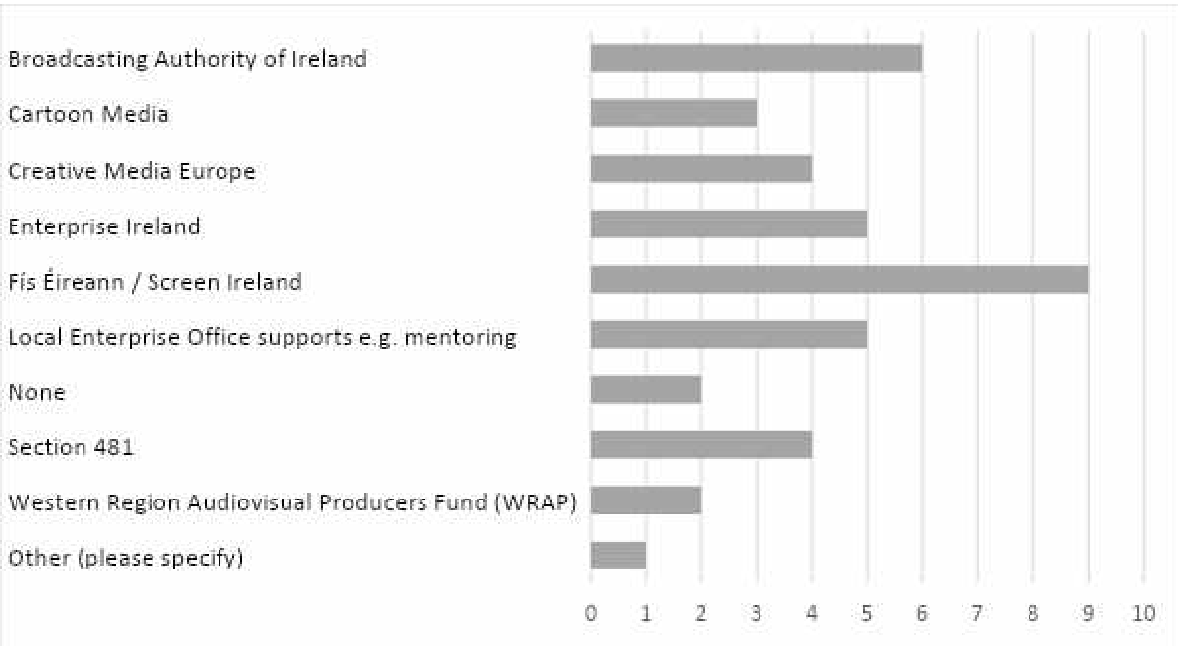

Figure 17: Funding Sources (n=13)

Business Location and Premises

Why people choose to locate their business in Munster is a critical question, which the Munster Animation Forum must understand and incorporate into its value proposition. Of the 12 businesses who responded to the question, 12 cited family connections to the area. This links clearly to the need to maintain and attract talent to the area, and should be explored in further detail, particularly with regard to how this will translate to FDI.

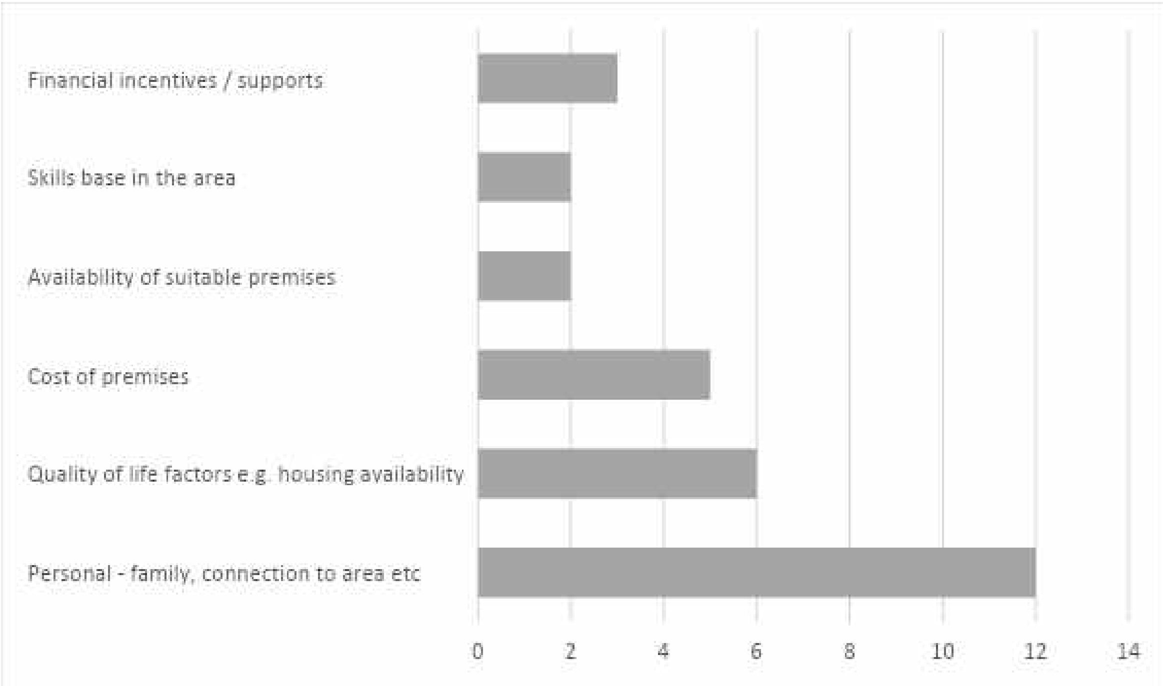

Figure 18: Reason to Locate Business in Munster (n=13)

Over half of respondents worked from home, and two had both a studio space and editing bay within their premises. This highlights the need for a dialogue about shared technical equipment, and skills pools.

Finally, it appears that the Covid-19 Pandemic has had an impact of working patterns. Although it was clear during the Stakeholder Consultation that certain tasks such as final sign off need to happen in a collaborative manner in an office environment, no respondents envisaged returning to a solely office based model, and over 50% of respondents indicated that a hybrid model between home and office will be adopted.

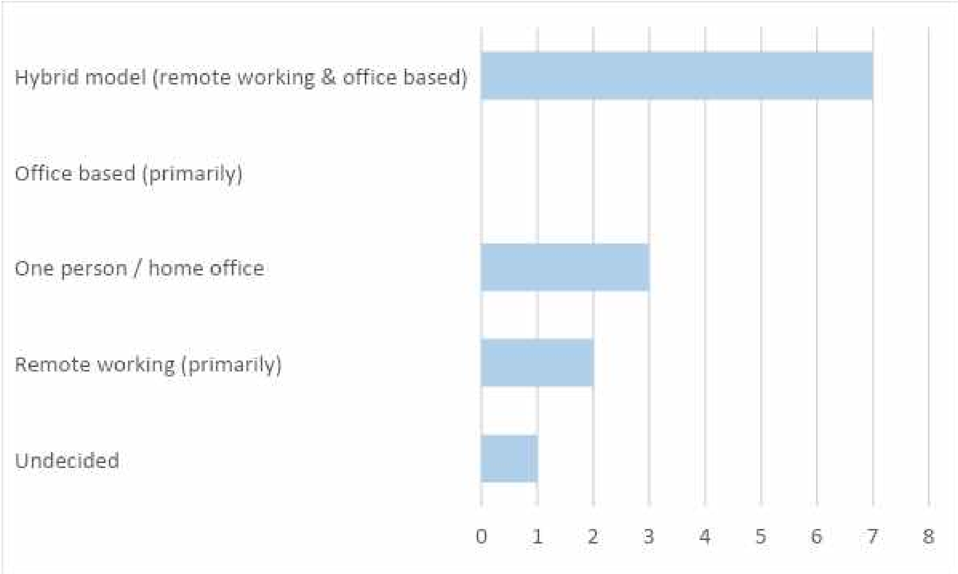

Figure 19: Likely Future Work Patterns (n=13)

Stakeholder Responses

The Survey and its interpretation were designed specifically to glean and assess information from animation-related and animation-interested businesses in the Munster region. This section has sought to provide an overview and evaluation of the most pertinent data collected.

10. Economic Modelling, Taxation, Incentives and Funding

10.1 Economic Impact of Munster Animation Network

Assumptions

In order to assess the potential economic impact of the proposed network, a certain number of assumptions must be made. These assumptions may be regarded as targets of the project and assume interventions which will change the shape of the industry in Munster from what it is at present.

The implications of the assumptions, which are set out in detail in Appendix II, relate to the following:

a) The **number and types of companies** that are envisaged. In this regard, small, medium, large and very large companies are envisaged.

b) The **number and type of staff members** to be employed in each company type. This has been assessed using the findings from this report, including consultations with industry experts.

c) The **pay levels** which can be anticipated for each category of employee. These are based upon the IDA's 'Animation and Ireland' report (IDA Ireland, 2021).

d) The **indirect and induced employment** which can be anticipated to arise from the direct employment generated. This uses figures set out in a Technical Annex of *Economic Analysis of the Audiovisual Sector in the Republic of Ireland* prepared for Screen Ireland, (Olsberg SPI, 2017), using 2016 data. An alternative approach which uses an IDA figure of 8 indirect and induced jobs for every direct job is also used. The difference between the two figures is relatively small at about 3.5%.

e) The **wage income that can be attributed to that indirect employment**. Since this report is operating at a high level and it would be inappropriate to try to develop a fine-grained review of this element of the model, a conservative assumption of the average industrial wage is applied to the indirect and induced employment.

Employment Impacts

The economic impacts are set out primarily in terms of employment potential and the income which would flow to those employments. The types of employment are direct, indirect and induced.

The level of direct employment is set out as a target rather than a projection. This assumes that, in order to reach the target, a number of interventions will be required and these are set out in the recommendations and Tactical Actions of this report.

The target for direct employment is related to the current and anticipated scale of the animation industry globally and in Ireland. At present Ireland is not seen as a major contributor to the animation sector in European terms with Russia, France, Germany and the UK being among the major producers at present. Ireland can seek to expand its share of this market and a small share increase would have a significant impact. In addition, the global animation market is expected to continue to expand significantly which will, again offer opportunities to Ireland. Finally, the Irish animation sector has been expanding rapidly over recent years. It was estimated by Screen Ireland, that over 2,000 people were employed by it in the year 2000 while an intention exists to grow the industry to at least 3,200 employees by 2023 (Olsberg SPI, 2017).

In the light of all of this, it is not unreasonable for the Munster network to set a target of about 20% of those employees which is over 600 people. This is based on the extent of the country which is involved, the fact that it includes three of the country's cities, that there is an existing animation training and education base in the region, as well as an existing, if relatively small, industry there at present and that there is the intent by a network of agencies to bring such an outcome about. This target will not, however, be achieved without effort. As has been noted, while the region has strengths and opportunities it also has weaknesses and faces challenges. One of the key purposes of this report is to see how these might be overcome.

Summary of employment impacts

The overall employment-based economic impacts are set out in Appendix II. These impacts are conservative as they do not account for retained earnings which are over and above input costs and which will be remitted to Irish-based company owners and investors. However, they also do not take account of remittances abroad by international workers who are based in Ireland. They also do not take account of the potential rental income to companies from foreign markets which could be considerable but are very difficult to estimate as much of the intellectual property of animation produced in Ireland is owned by foreign-based entities.

Overall, if **685 employees** were employed in the sector (please see Appendix II – Economic Modelling for a breakdown), it would be expected to generate income to employees of **€29.5 million**. The indirect employment anticipated would be **363** and the induced employment **105** which, between them would be expected to generate further income of **€21.06 million** giving an overall impact of **€50.57 million**. It must be remembered that this will happen by the end-state and smaller amounts will be generated each year as the sector grows.

It is also worth noting that at least two-thirds of investment in animation projects in Ireland comes from abroad and that, while this means that much of the income associated with sales and rental is remitted abroad, **the investment income which comes from abroad** is an economic inflow and **can be regarded as an export**.

While there are far too many factors at play to enable a reliable forecast to be made of the precise timing of the establishment of different animation enterprises, having regard to the time it takes to establish an enterprise and for it to gain a reputation, the period it takes to commission and deliver significant animation projects and the volatile nature of the international economic environment, a timeline such as the following would not be an unreasonable expectation:

	At full development (No. of Enterprises)		
Firm size	Year 1 -3	Year 4 - 6	Year 7 - 10
Small	10	5	
Medium	3	5	2
Large		2	3
Very large			2

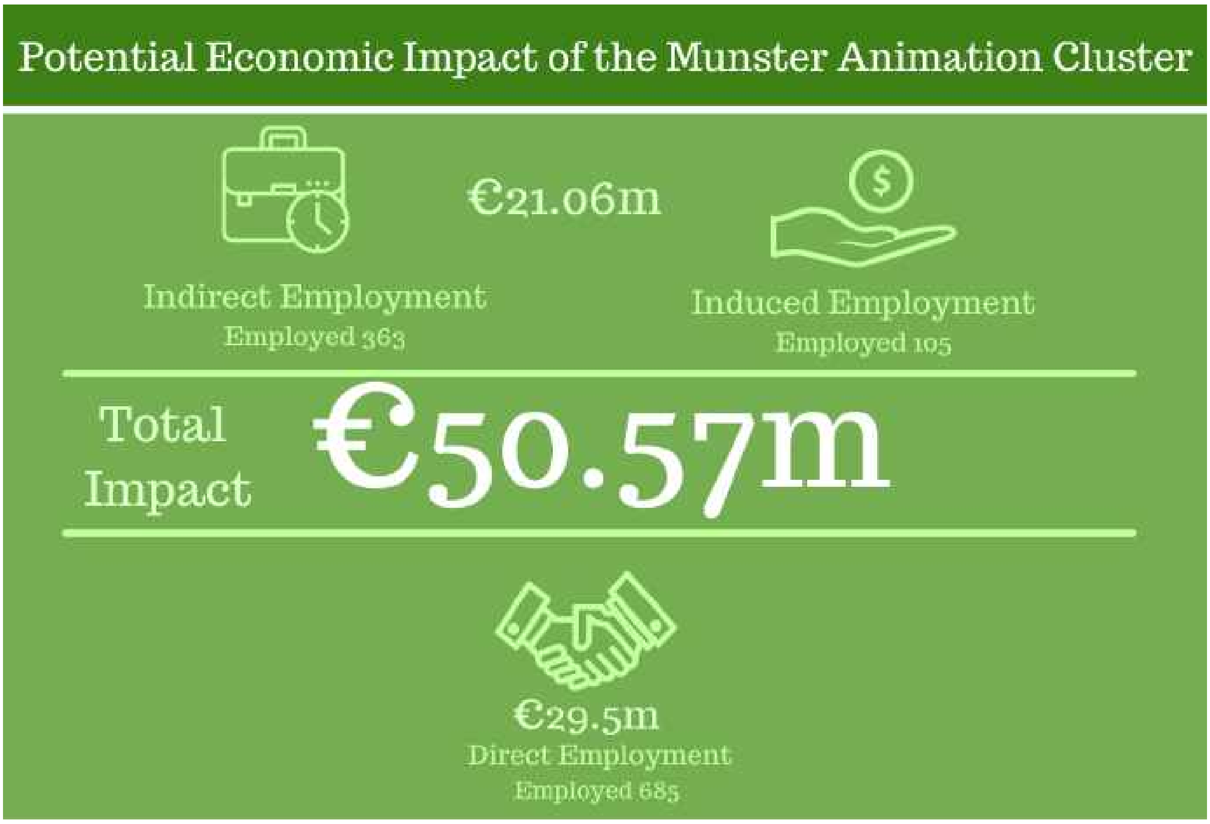

Figure 20: Potential Economic Impact

Side-effect impacts

In addition to the employment benefits associated with animation productions in Ireland, there is the potential for other, side-effect benefits to arise. While these are real, however, they are difficult to quantify, so these benefits are set out in a narrative format in this report.

- Tourism development
- Conference activity
- Festivals and events
- Growth in creativity and innovation in the local economy
- Sustainability of enterprise centres

- Commuting reduction
- Population maintenance
- Community sustainability

Depending on distribution model

Tourism Development

Tourism is an activity which is associated with film and TV production. This arises from visitors who wish to visit iconic film locations, those who wish to visit the studios where productions are made and those who are attracted to visit a country or an area by the way in which it is depicted in a film or TV production. A report by PWC (2020) suggested that, while it is difficult to estimate for Ireland, in the UK nearly 20,000 jobs have been estimated to be associated with screen tourism, so there is significant potential in the area.

It must be acknowledged that the impact of animation is likely to be less than that of live film and TV in this area since the context is more imaginary and creative then real-life. However, there is potential in terms of visits to production facilities and to locations which may have been the inspiration for a successful animation film.

Conference Activity

Academic and practitioner conferences are part of all areas of activity. There are many of these conferences run internationally and such business could be brought to Munster by a well-established network in the future. The principal centres where it is proposed that major clusters would be based have the capacity to accommodate such conferences.

Festivals and Events

Already a number of animation festivals are held in Munster, with the event held in Dingle probably the most well-known. There is potential to expand this market and to host animation events in Munster, either as parts of larger cultural festivals or as stand-alone events in their own right. These types of events give rise to many forms of expenditure in the travel, hospitality and entertainment industries, as well as the animation sector itself.

Growth in Creativity and Innovation

The PWC report referred to earlier states that 'a core proposition of the Department's 'Creative Ireland Programme' is that engagement with and participation in arts and culture drives personal and collective creativity with significant implications for individual and societal wellbeing and achievement.' Having a strong creative sector in an area has a spill-over effect into society in general and this leads to innovation and personal well-being which all have economic benefits even if they are difficult to measure precisely.

Sustainability of Enterprise Centres

Another indirect benefit of the development of an animation cluster in Munster could be the sustainability of enterprise centres. Such centre are a potential location for small to medium animation enterprises which would have levels of income and activity which would allow them to pay a reasonable rent for space within such centres. They would be likely to be attracted by the fact that many such centres are recently constructed, have very good broadband connectivity and have other services which newer and smaller companies would not wish to have to provide for themselves.

Commuting reduction, population maintenance, community sustainability

While it is anticipated that the larger of the animation enterprises will be located in the larger centres, some may well be located in smaller settlements nearby. If such a situation were to arise, then a series of benefits which have both social and economic elements would result. These would generally be in line with national goals and objectives and would include reducing commuting to larger centres, the maintenance of the population and therefore the viability of service businesses in smaller settlements, which would in turn, give rise to more sustainable communities in those areas.

Distribution of clusters

An initial review was carried out of how the network might be distributed throughout Munster. This is, of course, an initial view only and would be subject to many influences and drivers over the years. There is, however, a logic to the distribution as set out below. It should be noted also that where a larger location is mentioned, animation enterprises might be located in smaller settlements in the vicinity of the larger area, depending on a variety of factors such as the availability and cost of premises, housing availability, as well as owner and employee preferences.

Cluster	Structure	Rationale
Cork	3 Small 2 Medium 1 Large 1 Very Large	• City of scale • Arts community • Third level institutes • ETB Animation Programme • Airport with good services • Small existing animation sector
Limerick	3 Small 2 Medium 1 Large 1 Very Large	• City of scale • Arts community • Third level institutes with a focus on animation already • ETB Animation Programmes • Airport with good services • Troy Studios
Waterford	3 Small 2 Medium 2 Large	• Slightly smaller city • Creative Quarter in the city • Third level institute with a focus on animation already • Smaller and less well-serviced airport • Links to Kilkenny • No significant animation industry in the city
Tralee	2 Small 1 Medium 1 Large	• Large town but smaller than a city • Third level institute with a focus on animation already • ETB Animation Programme • Small animation sector in the town • Dingle Animation Festival part of eco-system
Clonmel	2 Small 2 Medium	• Large town but smaller than a city • Third level institute with a focus on animation already • No animation industry in the town

		• Links to Kilkenny
Ennis	2 Small 1 Medium	• Existing firm in the town • Proximity to Limerick • Third-level institute in the town but no animation focus

TABLE 8: DISTRIBUTION OF CLUSTERS

10.2 Section 481/Financial Models/Incentives

Irish State Aid for Film Production in Ireland – Benefits for Producers

The scheme commonly known as 'Section 481 film tax credit' was introduced to promote the Irish film industry, by encouraging the production of Irish made films and TV series, which make a significant contribution to the national economy and Exchequer and act as an effective stimulus to the creation of an indigenous film industry in the State.

Summary of Section 481 Film Tax Credit Scheme

The 481 Film Tax Credit Scheme provides a tax credit for expenditure incurred in Ireland on the cost of production of certain films. The calculation of the amount of expenditure on which the tax credit may be claimed against requires the following steps:

- Calculate the total amount of expenditure, incurred to produce the film in both the State and globally: the "qualifying expenditure"
- Analyse the "qualifying expenditure" incurred both globally and in the State, to determine the expenditure incurred "wholly, exclusively and necessarily" in the production of the film, the "total cost of production"
- Analyse the "total cost of production" incurred in the State only, as regards individuals employed in the production of the film and certain goods, services and facilities, to determine the "eligible expenditure"

The production cannot qualify for a film tax credit if the value of the total cost of the production is less than €250,000 or if the "eligible expenditure" is less than €125,000.

A claim for the film corporation tax credit is calculated as 32% of the lowest of

- Eligible expenditure
- 80% of the total cost of production of the film
- €70,000,000

According to the PWC Report published in April 2021: Film/TV Industry & Ireland's Economy: Insights report on the contribution of Section 481 Film Tax Credit - "Film, TV and Animation productions supported by the Section 481 tax credit scheme delivered over €469 million in total economic contribution to Ireland in 2019, representing a return on investment of €3.80 for every €1."

Please see a worked example in Appendix V, which demonstrates clearly how a net financial benefit arises.

Qualifying Film

A producer company shall not make a claim for the film corporation tax credit unless the Minister for Tourism, Culture, Arts, Gaeltacht, Sports and Media has issued a certificate in respect of that film.

The Minister, in considering whether to issue a certificate to the producer company in relation to a film, will examine the anticipated net contribution that the Section 481 Scheme and other State Aid Schemes will make to the project and will consider whether the film will either or both:

I. Be of importance to the promotion, development and enhancement of the national culture including, where applicable, the Irish language (referred to as 'the Culture test')
II. Act as an effective stimulus to film making in the State through, amongst other things, the provisions of quality employment and training and skills development opportunities (referred to as 'the Industry development test')

Producer Company

The film corporation tax credit can only be claimed by a producer company. A producer company must

a) Be resident in the State or an EEA State other than the State and carries on a business in the State through a branch or agency
b) Be carrying on a trade of producing films on a commercial basis with a view to the realisation of profits that are made for exhibition to the public in cinemas or by means of broadcast
c) Not be a broadcaster or a company whose business consists wholly or mainly of transmitting films on the internet, nor can it be connected to a broadcaster or to a company whose business, taken together with all companies to which it is connected, consist wholly or mainly of transmitting films on the internet
d) Hold all of the shares in the subsidiary set up to make the film
e) Have filed the required CT1 return with the Collector-General in Revenue within 21 months of trading as a producer company
f) Not be part of an undertaking which would be regarded as an undertaking in difficulty

A producer company is required to be operating the trade of producing films on a commercial basis in order to qualify for the credit. A further requirement of the legislation is for that producer company to continue in that trade of producing films for a period of 12 months after the date of completion. A producer company must, at the time of application to the Minister for a culture certificate, be carrying on the trade of producing films. Therefore, it is not commercially possible for a foreign producer to make a film in Ireland and claim the film tax credit without engaging with an Irish producer.

Please also see Screen Ireland's - Ireland Tax Credit Section 481 - at Appendix IV, for further information.

10.3 Overview of Potential Funding Sources

Numerous funding streams were reviewed at National and European level, from which it appears that the Creative Communities Economic Action Fund may offer a potential good fit. Additionally, it is critical that the Munster Animation Forum continues to monitor the Creative Europe and Horizon Europe Programme, as future opportunities may arise.

It is the view of the authors of this report that the Forum must only peruse funding where the benefits of participation are very clear, and where the fund aligns clearly with the aims, objective and strategic actions of the Forum. All too often initiatives similar to that proposed within this report secure funding which is not suitable, with the end result that the funders' requirements are delivered upon, with limited benefit to the programme deliverer. The Munster Animation Forum must be strategic in how and why it enters into funding agreements, ensuring that there is clear alignment between the requirements of the funding agency and the strategic goals of the network.

The funding scope was conducted using online and secondary sources, including relevant webinars, institutional and government information (both EU and national), and analysis of call documents relevant to the aims and aspirations of the Munster Animation Forum. It aimed to provide relevant information regarding work programmes, eligibility criteria and if applicable, past awardees and references of that specific grant programme. Both past and future calls were included in the review in order to create a clear understanding of potential funding sources.

The EU calls are based on two specific programmes called the Horizon Europe Framework Programme (HORIZON) and the Creative Europe Programme. Having researched Creative Europe, it appears that there may be one open call which is relevant to the aims of the Munster Animation Forum, although this should be reviewed on an ongoing basis, should a new and relevant call be announced.

Whilst European funding streams focus on a specific topic, there may also be opportunities to collaborate with regional clusters and develop animation networks. Depending on the call, there may be an opportunity to develop regional partnerships with businesses in another EU country or increasing the awareness of that topic within Europe.

Please see below details of three potential sources of funding:

	Description	**Eligible / Type of Projects Supported**	**Budget**	**Key Dates**
Creative Communities Economic Action Fund	The Creative Communities Economic Action Fund seeks to strategically target the development of the creative economy and investment in related research and insights, to support evidence-based policy and planning, locally and regionally	**Eligible projects may include:** • Data & Insights • Ecosystems & integration • Strengthening Investment	Minimum funding €50,000. Maximum funding €75,000.	Closing Date Friday 11th March 2022

Creative Europe Programme (CREA) [MEDIA 360° (CREA-MEDIA-2022-MEDIA360)]	The objective of the MEDIA 360° support is to exploit synergies among existing ecosystems, to develop further cooperation potential, to reach economies of scale across different supported activities, create impact across the value-chain.	**Possible alignments:** ● Focus on improvement of skills & competences. In particular training, mentoring and capacity building activities should aim at "Enabling access to European and international professional markets, developing new business models and strengthening international cooperation in the audiovisual sector."	Budget 2022 - €20,000,000	Opening Date 3rd February 2022 Closing Date 12th April 2022
Horizon Europe [Research and innovation on cultural heritage and CCIs - 2022 (HORIZON-CL2-2022-HERITAGE-01)]	Proposals should identify and pilot innovative, scalable and sustainable business models, which will enable the creators to make better use of digital and other technologies and further widen their audience	**Possible alignments:** ● New knowledge on the needs and developments of the European filmmaking industry, including its various sub-sectors of pre-production, production, post-production and distribution ● Promote European cultural activity and cultural diversity.	Budget 2022 - €12,000,000	Opening Date 20th January 2022 20th April 2022

TABLE 9: SUMMARY OF FUNDING REVIEW

It should also be noted that any future calls under the Regional Enterprise Development Fund should also be considered, if and when announced.

Please see Appendix VII for further details of Horizon Europe funding opportunities which may be of relevance to the Forum.

Case Study

Clermont Content Creation Enterprise Hub

Clermont Content Creation Enterprise Hub is currently under construction at the Wicklow County Campus. Build costs of approximately €3 million are being funded by the Regional Enterprise Development Fund through Enterprise Ireland, and Wicklow County Council.

Due to be completed during 2022, Cathaoirleach of Wicklow County Council, Clr Pat Kennedy *has stated that "This hub will support our unique audio-visual industry, which was hard hit by the lockdown, to internationalise and grow and will be a very welcome addition for the businesses working in and supporting this sector. This project is good news for the development of the campus as a centre of excellence in education, innovation and job creation, and shows the commitment of the council to develop the campus in partnership with other agencies".*

The content creation hub is ideally located close to key actors in the audio-visual industry, such as Ardmore Studios. Seen as a close fit with the economic development of the overall area, the new content creation hub will also deliver an upskilling and bridging course for work ready graduates along the East Coast.

Source: https://www.localenterprise.ie/Wicklow/News/

Case Study 5: Clermont Content Creation Hub

11. Recommendations

These recommendations are designed to create the opportunity for a significant animation industry to be developed in the Munster Region. This is the intention of those who have commissioned this report. The report proposes an achievable target for animation jobs which would realise that intention. However, that target is unlikely to be achieved without significant intervention. The location decisions of animation companies and those working in the animation industry are influenced by many considerations. Some of these considerations are individual to the enterprise involved. However, some of them respond to the supports and the eco-system which exists, the assurances about the nature and extent of that support, the reliability of the pipeline of skilled employees and the availability of the basic physical and technical resources required by the industry.

In order to develop this supportive environment, action is recommended in four key areas and each of these is discussed further below.

1. Governance, structure and operational framework of the forum which will provide a stable and effective support framework
2. Cluster development which will provide part of the eco-system which will be attractive to enterprise in the industry
3. A sustainable funding model for the network which will ensure that its function continues into the future and that the necessary support and stimulus does not evaporate with an unknown but likely detrimental effect on the industry
4. The preparation of a business development strategy for the network and the industry. An outline of the key components of such a strategy is included here but further work will be required once the principal framework of the network is in place.

11.1 Animation in Munster Animation Forum - Governance, Structure and Operational Framework

A critical first step in delivering upon the aspirations of this report is the forging of a shared understanding of the strategic vision of the Munster Animation Forum, and the actions through which this vision will be delivered. In essence, the purpose of the Munster Animation Forum must be agreed and understood by its members.

This Feasibility Study seeks to scope and understand the potential of the animation sector in Munster, and it is clear that the targets set out in Section 10 will only be achieved using a joined up, sustainable business approach. The social and political capital of the members of the Munster Animation Forum is extensive, and is one of the key strengths of the Forum in its existing form.

The most appropriate governance model for the Munster Animation Forum is a Company Limited By Guarantee (CLG) or a Designated Activity Company (DAC), with membership comprising the key statutory agencies involved, using a similar model to that of Innovate Limerick.

It is recommended that such a company would have a clear objective linked to the Animation industry but that it would have very wide powers to do almost anything required in the pursuit of those objectives. It is recommended that it would have a nominee Board representative of key bodies with responsibility for enterprise development, the industry, education and other relevant representative bodies. It is also recommended that the Board have the capacity to co-opt members to ensure diversity and specific skills in the Board membership. It is further recommended that a

Sub-Committee system be provided for and that individuals external to the Board be eligible for appointment to Sub-Committees. This will facilitate the development of a larger body of people contributing to the work of the network, as well as the putting in place of a pipeline for new Board members.

The Board of Munster Animation Forum will then be responsible for the recruitment of the Network Manager and Network Administrator to and commit to the provision of agreed supports. It would also have the corporate personality which would enable it to participate in collaborative projects, make funding applications to national and European programmes and enter into contracts for service as required.

The Animation Forum CLG or DAC would then be the hosting body for the network of which the Individual animation businesses would become members. This network would be somewhat less formal than the Company itself. It is recommended that it would have Terms of Reference, criteria for membership, conditions of membership and a clear purpose. Membership of the network could, in time, require the payment of an annual membership fee on foot of which certain services would be made available. The members of the network could have nomination rights to a number of seats on the Board of the forum so that there would be a positive feedback loop between the network members and the Forum governance structure.

The Forum will need to deliver results in order to grow and maintain the membership base, and the time invested by animation business in the work of the Forum will also need to be recognised in terms of actions and deliverable.

These are the basic structures which are envisaged. The impact of these structures might be measured in different ways such as but not limited to the following:

1. The number of new animation enterprises established in the Munster area
2. The number of people employed in animation in the Munster area
3. The number of members of the Forum network
4. The value of the animation business delivered through the work of the Forum
5. The overall value of the animation business in Munster
6. The number of new animation graduates from education bodies in the Munster region
7. The number of enquiries to the Forum in respect of facilitating new business opportunities
8. The number of overseas contacts developed by the Forum

11.2 Cluster Development: Hub and Spoke Model

Animation businesses need Talent. Talent needs businesses to work in.

This reports makes clear that enterprises of a similar type have a preference for clustering together. This enables them to benefit from synergies, cost effective service provision and the development of a talent pool which can be accessed by different enterprises at different times. This a particularly important approach in the context of an industry such as animation where activity is so project driven with cycles of higher and lower activity for many firms. This is also reflected in the comments of The European Cluster Observatory which states that, "strong clusters emerge in open markets where intense rivalry and cooperation within and between clusters coexist**. Clusters emerge where competition across regions enables companies, entrepreneurs and financial actors to choose the location of their activities based on the attractiveness of regions**, not in response to artificial barriers for cross-border trade and investment." It also identifies "the need to combine strong internal dynamics within the cluster, with solid linkages to clusters and markets located elsewhere. This leads to cost advantages (lowered costs, including transaction costs), flexibility advantages (high mobility of labour and other resources) and innovation advantages (knowledge spill-overs and cooperation)" (Euractiv, 2019).

It is recommended, therefore, that a proactive approach taken by the Forum to develop a "hub and spoke" cluster model, with Cork at its centre as the hub, linking with five regional hubs, as outlined in the map below and upon which the economic modelling is based. These are not the only possible locations, of course, and further investigation may suggest a modified approach.

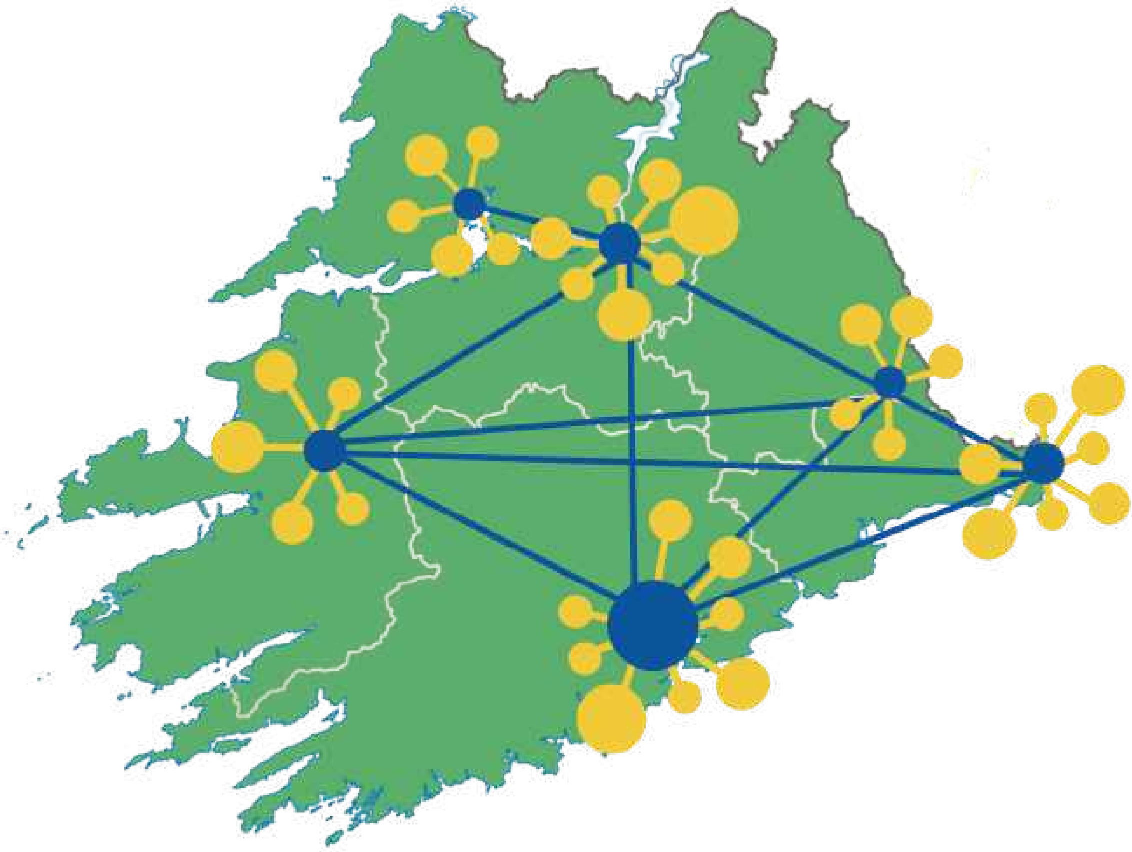

Figure 21: Munster Animation Forum Cluster

To make the animation cluster work across Munster, a number of companies will need to be located in each of the spokes or sub clusters, as reflected in the Economic Modelling methodology.

Munster will need to both attract new talent to the area, as well as maintaining the talent who already live there. It is the view of the authors that additional research is required to explore what younger professionals in particular want from their local area. The outcome of this research may well impact on the final cluster model which is adopted.

Whatever the model, however, it is recommended that a series of proactive steps be taken to make the clusters a reality. This might be in the form of cluster branding within the overall network branding; the development of engagement between the relevant HEIs and their adjacent clusters; the provision of proactive marketing of the cluster areas as the place to come to for animation enterprises; the identification and maintenance of a register of suitable premises within the cluster areas; and so on.

The fundamental point is that the clusters must mean something real and there must be a perceived and an actual benefit to animation companies locating within the cluster areas. Such an approach will help both to attract new talent to these areas and keep the talent which is developed within them.

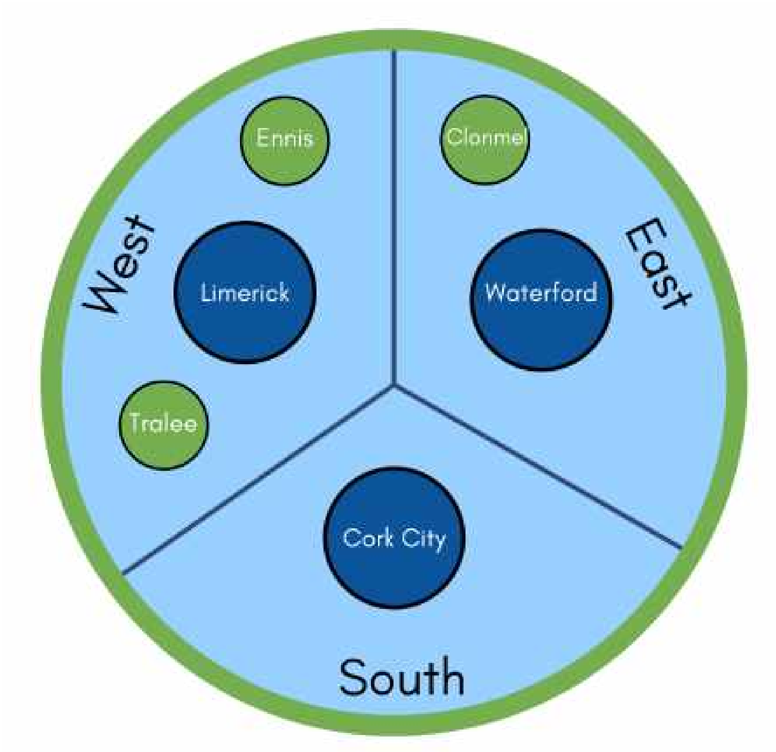

Figure 22: Schematic Representation of the Proposed Munster Animation Forum Hub and Spoke Model

11.3 Sustainable Funding Model

No network can operate without resources. Voluntary networks rarely survive and those that do are often nothing more than information exchanges. Therefore, it is important to consider how the Munster Animation Forum can be financed into the future. It is proposed that there should be three phases to this:

Phase 1 – Funding provided by the key partner agencies

Phase 2 – Funding provided through a funding programme such as the REDF, Creative Europe or Horizon Europe Programmes, with some funding provided also by the partner agencies

Phase 3 – Funding provided by the animation enterprises, some commercial services provided by the Forum and some additional funding provided by the partner agencies

The seed funding for the early work of the Forum, its establishment as a CLG or DAC, its strategic planning and so on will be included in Phase 1 as will its application for funding to some appropriate funding programme. The funding for this phase of work will need to come from the partner agencies. It is anticipated that this will require upwards of €100,000 a year for a period of two years. However, given the number of potential partners involved this should not be an undue burden on any individual partner.

Phase 2 will commence when funding is received from a funding programme. Many of these programmes provide funding for a 3 to 5-year period and such funding can be quite substantial. It should be adequate to employ a number of staff, to commence marketing, the development of networks and contacts and the establishment of the network. It would also fund overseas trips, involvement in conferences and trade fairs and so on. A certain amount of co-funding will be required and it is recommended that this again come from the partner agencies. Once again, given the number involved the contribution from any partner agency should be small.

Phase 3 is the steady-state stage and, in many ways, the most difficult to predict and for which to identify funding mechanisms. However, by this phase it is anticipated that the network should be strong enough to generate a significant amount of funding in its own right in order to support the Forum's activities.

An informed estimate for annual running costs for the Munster Animation Forum is in the region of €250,000 - €300,000 when established and fully operational. This sum makes allowance for two staff members, a network manager and network administrator, in addition to a substantial budget for travel expenses. The large and very large companies included in the Economic Modelling section are most likely to come about through Foreign Direct Investment, drawing upon the social and political networks of Forum members, and in close collaboration with key agencies, including the IDA and Enterprise Ireland. The cultivation and nurturing of such relationship will involve international business trips, which cannot be undertaken with limited finances. Whilst it is understood the estimated annual budget is not insignificant, it must be weighed against the potential future economic impact of the sector across the region.

It is anticipated that the industry will contribute a significant proportion of the costs at this stage. The scale and number of companies which have been targeted for this stage of development are as follows:

Small	Medium	Large	Very Large
15	10	5	2

Assuming it was proposed that two-thirds of the funding would be generated through this mechanism, the following contributions might be anticipated:

Size	Small	Medium	Large	Very Large
Number	15	10	5	2
Annual Contribution	€2,500	€5,000	€12,500	€25,000

Annual Total	€37,500	€50,000	€62,500	€50,000

For the nature and level of service to be provided and the scale of turnover involved, this does not seem to be an unreasonable contribution. It would, however, mean that the services would need to be tangible and beneficial.

It would also require a small annual contribution to be made by the relevant agencies but, again, given the number involved, such contribution would be small. As the industry grew further, it might also be anticipated that it could, in time, sustain the network itself.

11.4 Business Development for the Animation Sector in Munster – Collectively & Individually

The fourth recommendation is that the Forum would facilitate business development for the network, which would form a key aspect of its function from the start. Such business development would be in respect to both individual companies and collectives of companies, where required.

These business development functions would include the following:

- **Strategic development of contacts / network**
  One of the business development functions would be the development of strategic contacts both at home and abroad. These contacts would be with those who commission significant animation business and would be used to facilitate engagement between individual animation enterprises in Munster as well consortia of such enterprises and those considering animation projects, particularly those located abroad.

- **Brand to attract diaspora and others**
  The Munster Animation Forum would develop and promote a distinct and recognisable animation brand in its own right, through which it is hoped it would become recognised as a key participant in the industry over time. Efforts would be made to include the brand as part of the credits in those productions which it facilitated to increase its recognition.

  The brand would ultimately be used to attract business to the Munster Animation Network and to attract talent to work in Munster and for the Network. This could be targeted both at the diaspora with animation and related skills and other mobile talent from abroad which could be attracted to the Munster area.

- **Strategic training for businesses**
  The Forum would also be used to provide strategic training for the animation network members. Some of this training exists at present but it is very fragmented. Working with the HEIs and ETBs in the region and engaging with Skillnet, the Forum would put in place a comprehensive, integrated and flexible programme of learning which would be delivered in a manner that would suit the needs of the enterprises and which would increase their business and enterprise capacity, particularly in their early years, This is particularly important for industries such as animation which are driven by the creatives in the sector who do not necessarily have the skills to turn their creative talents and capacity into a viable

business. In addition to the training provision, the Forum would be in a position to provide mentoring to the members of the network. Mentoring is often as important as training as it facilitates the application of the training which is not always something that can be guaranteed.

- **Develop and provide insights into the purchasing behaviour and drivers of those who commission animation work.**
  The Forum would, particularly in its early days, carry out and make available the results of research and investigation into the parameters which are used by those who commission animation work. This is something which few firms will have the capacity to do on their own, yet it may be critical in ensuring business development, as the way in which a pitch for business is configured can be the difference between being commissioned or not. This work would be carried out during the funded phase in particular, as the resources would be available to facilitate this work.

- **Maintenance of a register of resources in the area which could be accessed by Network members**
  Such a register could include skillsets, facilities, premises, equipment and similar and would make it easier for Network members to put together the resources necessary for a particular project in a timely manner.

12. Tactical Plans

	Short-term deliverables (less than a year)	Resources to develop actions	Challenges / Barriers
Communications, including website	Develop Communications Strategy to include: • Munster Animation Forum identity, brand, logo etc • Agreement on key messages • Munster Animation Forum Website • Production of high level digital or print brochure, similar to "Animated in Ireland" or "Who is Who - Animation from Spain" • Attendance at international festivals & events • Sponsorship of VIP, or other similar event at Dingle Animation Festival	• Staffing resources • Marketing & Communications budget	• Cost / access to financial resources • Development of clear mission, vision and strategic goals for the Forum.
Munster Animation Forum Governance **Strategic Plan**	Agree remit and of the Munster Animation Forum in particular whether the forum focuses solely on Animation, or include other audio visual industries.	• Facilitator meeting, drawing upon report findings	• Absence of consensus • Cost / access to financial resources
	Agree governance structure, and establish CLG, or other legal structure as agreed.	• Legal & Financial specialist input	• Lack of engagement / strategic commitment
	Secure funding for network and cluster management and administration, with responsibility to stimulate demand, manage website etc.	• Staffing resources • Specialist input for funding applications	• Cost / access to financial resources • Availability of suitable funding

	Development of a Strategic Plan 2022- 2026 and tactical action plans outlining the ambition and supports for the sector in Munster	• Consultancy support • Staffing resources	• Cost / access to financial resources
Networks and Clustering	Develop a network and clustering strategy for the animation sector in Ireland /Munster outlining governance models, potential commercial collaboration and consortium models	• Strongly linked to Strategic Plan	• Cost / access to financial resources • Absence of consensus
Premises	Under the auspices of the Forum, establish premises and Co Working Taskforce to identify suitable premises and support structures in the region. Secure commitment, supports and potential funding.	• Staffing resources • Time commitment from Forum members	• Lack of data sources
Training, Education & Skills	Under the auspices of the Forum, establish an Education & Skills Task Force, with the key aim of linking industry and education providers	• Staffing resources • Time commitment from Forum members	• Critical not to duplicate existing fora / consultative structures
Business Incubation Strategy (linked to Clusters)	As part of the Strategic Plan for Munster Animation Forum, identify regional potential SME Business incubator locations and supports	• Linked to Strategic Plan • Clear mandate	• Cost / access to financial resources • Absence of consensus
Incentives & Taxation	Extend / reintroduce Section 481 Regional Uplift - for two years. Dublin / Wicklow can't meet demand - they need the regions as much as the regions need them Training element and extend the 45km zone for trainees.	• Time commitment from Forum members	• Fragmented political representati on of animation sector
Statutory Agencies	Forum to engage with local Supportive regional environment - local authority / statutory agencies - a need to understand the sector and support accordingly, drawing upon report findings.	• Time commitment from Forum members	• May be challenging to encourage priority action

	Medium-term deliverables (1-3 years)	Resources to develop actions	Challenges / Barriers
Communications, including website	Rollout of communication strategy, including regular review.	• Staffing resources • Marketing & Communications budget	• Clear mandate & messaging
Munster Animation Forum Governance	Implementation of the Strategic Plan 2022- 2026 and tactical action plans to achieve the ambition for the sector in Munster	• Staffing resources • Time commitment from Forum members	• Commitment / drive / leadership
Networks and Clustering	Implement a network and clustering strategy for the animation sector in Munster Ireland outlining governance models, commercial collaboration and consortium models- this would include fund sourcing	• Staffing resources • Network budget	• Cost / access to financial resources
Premises	Implement Premises and Co Working Strategy including marketing plan (Ireland and abroad) to attract companies to locate in Munster.	• Staffing resources • Network budget • Social & political capital of members	• Cost / access to financial resources
Training, Education & Skills	Links between industry & training - look to shorter industry focussed courses e.g. Springboard / Industry Masterclasses.	• Time commitment from Forum members	• Prioritisation
Business Incubators (part of rollout of network and cluster strategy)	As part of the Strategic Plan for Munster Animation Forum, launch regional SME Business incubator/s including supports and funding supports	• Appropriate funding sources	• Cost / access to financial resources
Incentives & Taxation	Promote the Film Office / Film Commissioner in each county in Munster – consider overarching structure.	• Forum members / stakeholder consultation	• Political will / prioritisation of sector • Financial resources
Statutory Agencies	Supportive regional environment - local authority / statutory agencies - a need to understand the sector and support accordingly, drawing upon report findings.	• Staffing resources • Forum members / stakeholder consultation	• Political will / prioritisation of sector • Willingness to embrace change

	Medium-term deliverables (3+ years)	Resources to develop actions	Challenges / Barriers
Communications, including website	Sponsorship of VIP, or other similar event at Dingle Animation Festival	• Staffing resources • Marketing & Communications budget	• Maintaining momentum & focus
Networks and Clustering	Sustainability model for network and clustering strategy for the animation sector in Munster /Ireland	• Staffing resources • Appropriate funding sources	• Cost / access to financial resources • Maintaining momentum & focus
Premises	Develop marketing plan (Ireland and abroad) to attract companies to locate in Munster.	• Staffing resources	• Cost / access to financial resources
Training, Education & Skills	Links between industry & training - look to shorter industry focussed courses e.g. Springboard / Industry Masterclasses.	• Time commitment from Forum members	• Prioritisation • Maintaining momentum & focus
Incentives & Taxation	Regional Film Fund e.g. WRAP - also a need to explore to look at the administrative structure of such a fund	• Forum members / stakeholder consultation • Staffing resources	• Political will / prioritisation of sector • Financial resources
Statutory Agencies	Supportive regional environment - local authority / statutory agencies - a need to understand the sector and support accordingly	• Forum members • Staffing resources	• Maintaining momentum & focus
Business Incubators (part of Network and Clustering Strategy)	Further development of Business Incubators, with KPI targets for regional SME Business starts/accelerations with supports and funding model	• Staffing resources • Network budget	• Cost / access to financial resources

Credit: Michael Kiely, Limerick School of Art & Design

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14. Appendices

Appendix I

Stakeholder Consultation

Please note, the researcher was led in her questioning by the participant, therefore not all questions were asked in all interviews. This flexibility allowed the researcher the space to explore different aspects of the participants' experience as they arose.

Dingle Animation Festival	Enterprise Ireland
Animation Skillnet	Department of Social Protection
MTU Crawford College of Art and Design (CCAD)	MTU Kerry Campus
Emotionise Media	Local Enterprise Offices
Community Enterprise Association of Ireland	Benchspace
Film in Limerick	Looks Loud
Great Island Films	Regional Skills Forum, Mid West & South West
LightHouse Studios	The Rubicon Centre
Limerick Schoool of Art and Design	Screen Kerry
Magpie 6 Media	Screen Skills Ireland
Avalon Films	Media Services UCC

Galway Film Centre	Arts Office, Clare County Council
Screen Skills UK	Studio Meala
Western Development Commission	IDA Ireland
CREW Digital	Kerry Screen Commission
Republic of Work	Cork County Council
Innovate Limerick	

Appendix II

Economic Modelling

		Number of Employees by Company Type				Total Value of Payments to Employees			
Unit Cost		***Small***	***Medium***	***Large***	***Very Large***	***Small***	***Medium***	***Large***	***Very Large***
	Roles								
€85,000.00	General Manager				1	€0.00	€0.00	€0.00	€85,000.00
€75,000.00	Manager	1	1	1	2	€75,000.00	€75,000.00	€75,000.00	€150,000.00
€30,000.00	Admin	1	2	3	5	€30,000.00	€60,000.00	€90,000.00	€150,000.00
€60,000.00	Finance			1	2	€0.00	€0.00	€60,000.00	€120,000.00
€50,000.00	HR			1	1	€0.00	€0.00	€50,000.00	€50,000.00
€50,000.00	Technician	1	1	1	2	€50,000.00	€50,000.00	€50,000.00	€100,000.00
€50,000.00	Computer Technician			1	2	€0.00	€0.00	€50,000.00	€100,000.00
€70,000.00	Producer	1	1	2	4	€70,000.00	€70,000.00	€140,000.00	€280,000.00
€70,000.00	Creative Director	1	1	3	4	€70,000.00	€70,000.00	€210,000.00	€280,000.00
€45,000.00	Art Director		1	2	4	€0.00	€45,000.00	€90,000.00	€180,000.00

€54,000.00	Animation Directors	1	1	3	4	€54,000.00	€54,000.00	€162,000.00	€216,000.00
€41,000.00	Lead Animator		1	3	4	€0.00	€41,000.00	€123,000.00	€164,000.00
€31,000.00	Animators	2	3	9	40	€62,000.00	€93,000.00	€279,000.00	€1,240,000.00
€32,000.00	Designers	1	2	6	20	€32,000.00	€64,000.00	€192,000.00	€640,000.00
€32,000.00	Compositer		1	2	10	€0.00	€32,000.00	€64,000.00	€320,000.00
Total Employees /Company		9	15	38	105	€443,000.00	€654,000.00	€1,635,000.00	€4,075,000.00
No of Companies		15	10	5	2	€6,645,000.00	€6,540,000.00	€8,175,000.00	€8,150,000.00
Overall Total Employees by Company Type		135	150	190	210				
Total All Employees					**685**				**€29,510,000.00**
		Indirect and Induced Employees					**Total Value of Payments to Employees**		
Indirect Staff	Multiplier .53				363.05				
Induced Staff	Multiplier .1				104.805				
Total Indirect and Induced		Average wage €45,000			468	548			€21,060,000

or									
Total Indirect and Induced	Multiplier .8	Average wage €45,000							€24,660,000
Grand Total All Employees									**€50,570,000**
or									
Grand Total All Employees (II)									**€54,170,000**

Appendix III

Website Considerations and Estimates

Average costs from three creative and development agencies.

Development costs ~ €10-€18k

- Planning
- Prototyping
- UX design
- Front end development
- Back end development
- Content development/editing and uploading
- Analytics integrations
- Ad campaign integration (if we want to advertise on MAW)
- SEO (search engine optimisation)
- SSL and security
- Testing
- Deployment

Design costs ~ €2-€5k

- Custom images, fonts and or backgrounds
- Customized maps
- Design and colour expertise
- Logo & branding

Hosting costs ~ €800 - €1k pa

- Google cloud hosting
- 99.9% uptime
- High speed servers

Marketing of website

- TBD

Technical support and training

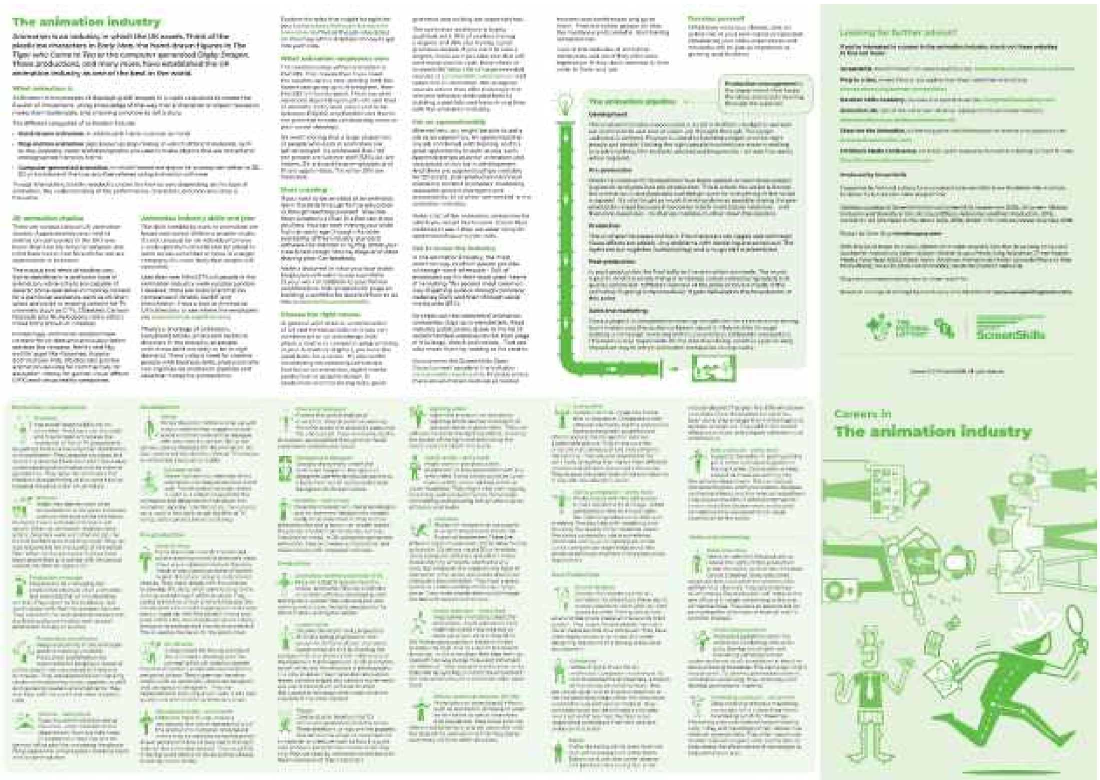
- TBD

Ongoing development and maintenance pcm, pa charges.

- TBD

Appendix IV

ScreenSkills Career Map



The animation industry

Careers in
The animation industry

Source: https://www.screenskills.com/starting-your-career/career-maps/

Appendix V

Ireland's Tax Credit Section 481

Worked Example

How it works for a Producer

The best way to demonstrate how a producer can benefit from section 481 is by way of an example.

An animation production company in Ireland is making a children's animation series that will be initially shown on TV in Ireland, the UK, the US and Australia but has worldwide potential. It has secured potential funding from a UK TV Channel, a US network, an Australian network and TG4. This funding amounts to €8,500,000. However, the total production budget is €10,000,000 and the Irish company is struggling to source the €1,500,000 unless it signs a deal with an international distributor for the worldwide rights excluding the territories that deals have already been signed for, effectively losing all of its intellectual property rights in the series.

The budget is €10,000,000, of which €7,000,000 could be incurred in Ireland with the balance to be incurred in the UK. It can claim the film tax credit on the lower of:

a) Eligible expenditure €7,000,000;
b) 80% of the total cost of production of the film €8,000,000

In this case the film tax credit can be claimed on €7,000,000 which at 32% is €2,240,000 (this assumes that the regional tax credit does not apply).

The Irish producer does the following:

- The Irish producer sets up a 100% subsidiary, Filmco Limited, to undertake the Irish work on the series
- It is advised that in order to secure 90% of the section 481 film tax credit in advance, it needs to place €4,760,000 of funds in an account that can be only used to fund the Irish production work on the series and it provides for this in the financing deals
- The net funding plan is:
    - Section 481 net benefit €2,240,000
    - Other sources €7,760,000

The Irish producer can now sign deals to provide finance of €7,760,000, thus allowing it to make the series and crucially retain some intellectual property rights in the series. **The retention of intellectual property rights is key to building a secure animation cluster in the region.** A business model of acting as a subcontractor for foreign producers is fine to kick start the process of establishing a business but local producers will, in the medium term, need to move to creating their own content through intellectual property development. This will allow them to sign co production deals that allow them to retain rights going forward, which is key.

Ireland's Tax Credit Section 481

32%–37%* Tax Credit

What is 'Section 481'?
'Section 481' is a tax credit, incentivising film and TV, animation and creative documentary production in Ireland, administered by Ireland's Department of Culture and the Revenue Commissioners (Revenue).

What is the 'Section 481' benefit worth?
The rate of tax credit is worth 32% of all eligible Irish expenditure.

Eligible expenditure criteria.
The payable tax credit is based on the cost of all cast and crew working in Ireland, and all goods and services sourced in Ireland. This includes post production and/ or VFX.

What types of projects qualify?
The incentive applies to feature film, television drama (singles or series), animation (excluding computer games) and creative documentary.

Projects must satisfy the Culture Test and the Industry Development Test. For further information about these tests visit www.screenireland.ie.

Who is eligible to apply?
Applications to the Department of Culture (for a qualifying film certification) and then the Revenue (for payment), is made by the 'Producer Company'.

The 'Producer Company' must:
— Be Irish resident or trading through a branch or agency
— Be trading for at least 12 months as a production company and have filed a corporation tax return with Revenue
— Not be connected to a broadcaster
— Cannot be an "undertaking in difficulty" (EU state aid rules)
— Hold 100% shareholding in the 'Qualifying Company' which must be resident in the State and exists solely for the purposes of the production of only one qualifying film.

Is there a cap on the incentive?
There is no annual cap or limit on the funding of the programme. The tax credit has a 'per project' cap of up to 32% of the lower of:

1. All eligible expenditure
2. 80% of the total cost of production
3. €70 million

When is the rebate paid?
—
Option A – Single instalment:
On delivery of the project, submission of a qualifying film certificate and a compliance report to Revenue, payment of 100% of the tax credit may be paid by Revenue.

Option B – Two Instalments:
First instalment being 90% of the tax credit due, upon:

1. Financial Closing, including proof that 68% of eligible expenditure is lodged to the project's production account;
2. Screen Ireland approval (SI funded projects only); or
3. Broadcasting Authority of Ireland (BAI) approval (BAI funded projects only); or
4. An equivalent EEA state established body;
5. Submission of a qualifying film certificate as issued by the Department of Culture; and

Second and final instalment being 10% balance on delivery of the project, and submission of a compliance report to Revenue.

How is payment made by Revenue?
Payment of the relief may be claimed against the producer company's corporation tax (CT) liabilities. In the event the relief due is greater than any tax due by the producer company, then a payment of the excess will be made by Revenue.

Is there a minimum spend level?
Projects are excluded from the incentive if their 'eligible expenditure' is less than €125,000, or the total cost of production is less than €250,000.

How are applications made?
An application by the producing company for the tax credit must be made to the Department of Culture 21 working days before the start of production in Ireland. Ireland's film and television tax credit is administered by the Department of Culture and then Revenue. Payment is made by Revenue. Applications should be made to: section481@chg.gov.ie

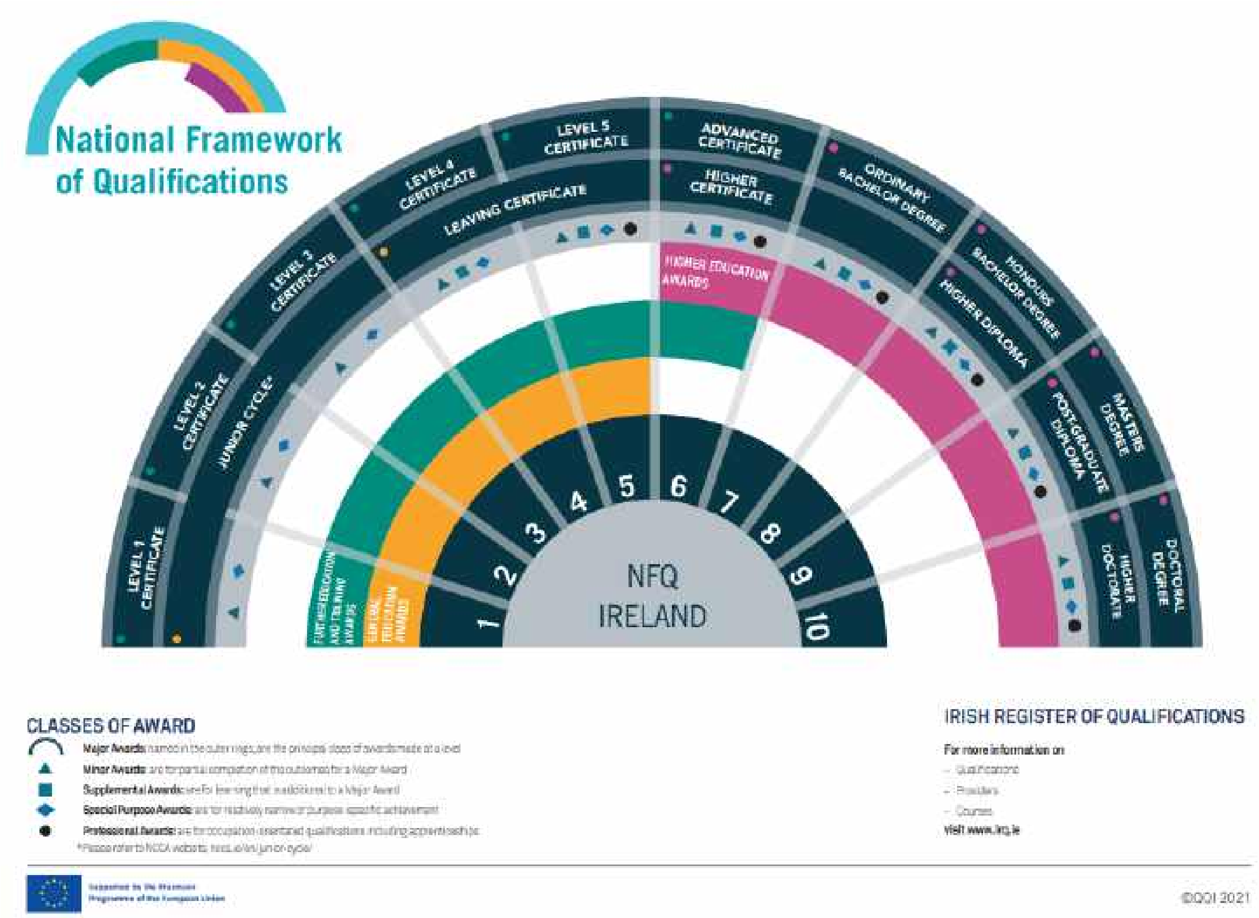
Skills Development Plan
Projects with eligible expenditure in excess of €2 million must submit a Skills Development Plans to Fís Éireann/ Screen Ireland 20 working days in advance of applying to the Department of Culture for qualifying film certification. Proposed plans should set out likely number of employees' upskilled in the course of the film. Plans should also include equality, diversity and inclusion initiatives and a sustainability plan. Applications should be emailed directly to section481@screenireland.ie. Applications with eligible spend under 2 million must go directly to the Department of Culture.

*5% Regional Uplift
Projects substantially produced in the regions (outside Dublin/Wicklow and Cork City and County) are able to benefit from or up to a 5% uplift subject to specific requirements. The 5% uplift applies in 2019 and 2020, 3% in 2021 and 2% in 2022.

Find out more here →
www.screenireland.ie

Appendix VI

Education, Training



National Framework of Qualifications

	Level	Link for Further Details
Junior Animator	Level 4	https://www.instituteforapprenticeships.org/apprenticeship-standards/junior-animator-v1-0

VFX	**Level**	**Link for Further Details**
Junior VFX Artist (Generalist)	Level 4	https://www.instituteforapprenticeships.org/apprenticeship-standards/junior-vfx-artist-generalist-v1-0
Junior 2d Artist (Visual Effects)	Level 4	https://www.instituteforapprenticeships.org/apprenticeship-standards/junior-2d-artist-visual-effects-v1-0
Assistant Technical Director (Visual Effects)	Level 4	https://www.instituteforapprenticeships.org/apprenticeship-standards/assistant-technical-director-visual-effects-v1-0
VFX Artist Or Technical Director	Level 6	https://www.instituteforapprenticeships.org/apprenticeship-standards/vfx-artist-or-technical-director-v1-0
VFX Supervisor	Level 7	https://www.instituteforapprenticeships.org/apprenticeship-standards/vfx-supervisor-v1-0

Production Roles	**Level**	**Link for Further Details**
Junior Content Producer	Level 3	https://www.instituteforapprenticeships.org/apprenticeship-standards/junior-content-producer-v1-0
Broadcast Production Assistant	Level 3	https://www.instituteforapprenticeships.org/apprenticeship-standards/broadcast-production-assistant-v1-0
Media Production Co-Ordinator	Level 4	https://www.instituteforapprenticeships.org/apprenticeship-standards/media-production-co-ordinator-v1-0
Creative Industries Production Manager	Level 7	https://www.instituteforapprenticeships.org/apprenticeship-standards/creative-industries-production-manager-v1-0

Broadcast Engineering roles	**Level**	**Link for Further Details**
Broadcast And Media Systems Technical Operator	Level 3	https://www.instituteforapprenticeships.org/apprenticeship-standards/broadcast-and-media-systems-technical-operator-v1-1
Broadcast And Media Systems Technician	Level 5	https://www.instituteforapprenticeships.org/apprenticeship-standards/broadcast-and-media-systems-technician-v1-0

Broadcast And Media Systems Engineer (Integrated Degree)	Level 6	https://www.instituteforapprenticeships.org/apprenticeship-standards/broadcast-and-media-systems-engineer-integrated-degree-v1-0

Apprenticeship Pathways - The Institute for Apprenticeship & Technical Education, England

Typical HE Qualification within each level	Framework for Higher Education Qualifications in England/ Northern Ireland (FHEQ) Level	NFQ Ireland
Doctoral degree	8	10
Master’s degrees (including Integrated Master’s)	7	9
Postgraduate diploma	7	9
Postgraduate certificate	7	9
Bachelor's degree with honours	6	8
Irish Higher Diploma	6	8
Bachelor's degree ordinary	6	7
Foundation Degree	5	6
Diploma of Higher Education	5	6
Higher National Diploma	5	6
Higher National Certificates	4	6
Certificate of Higher Education	4	6

Qualifications Framework Comparison Ireland & England

Appendix VII

Horizon Europe Framework Programme

Increase the Potential of The International Competitiveness of the European Filmmaking Industry

Fund	Increase the potential of the international competitiveness of the European filmmaking industry
Funding Body	Horizon Europe Framework Programme (HORIZON)
Grant	HORIZON-CL2-2022-HERITAGE-01-06
Call Name	HORIZON-CL2-2022-HERITAGE-01-06: Increase the potential of the international competitiveness of the European filmmaking industry
Type of Funding	HORIZON Action Grant Budget-Based [HORIZON-AG]
Website	HORIZON-CL2-2022-HERITAGE-01-06
Type of Actions	Research and Innovation
Key Details	**Expected Outcome:** Projects should contribute to at least two of the following expected outcomes: ● New knowledge on the needs and developments of the European ● filmmaking industry, including its various sub-sectors of pre-production, production, post-production and distribution. ● Provide innovative policy scenarios and tools, including digital ones, for the economic recovery of the sub-sectors affected by the economic recession and the COVID-19 crisis, as well as ways to prevent unemployment in the sector. ● Increase (further) the competitiveness of the European filmmaking industry in the international arena. ● Provide evidence of the users/viewers preferences on filmmaking, as well as limitations to identifying their preferences, in order to widen and diversify audiences. ● Identify a methodology to better understand the users/viewers preferences on filmmaking. Promote European cultural activity and cultural diversity. Scope: The filmmaking sector encompasses a considerable number of small and medium-size enterprises, which contribute with sizeable revenues to European GDP. The sector's presence in the international arena is dynamic. Although it is in third position on the global market, certain sub-sectors, such as the European animation sector, have a rapidly increasing capacity. However, the lack of large and vertically integrated groups able to compete internationally, in combination with the nationally-based companies that were seriously affected by the COVID19 crisis, will make it difficult for several EU companies to remain competitive in the international filmmaking industry.

	The Proposal for the research should include: ● Assessment of needs and developments of the European filmmaking industry and address potentialities for further development. ● Study of the dynamics (e.g. activity, progress) of different sub-sectors of the filmmaking industry, including the sub-sectors of pre-production, production, post-production and distribution, and analyse the reasons why some sub-sectors are less advanced than others. ● The relevant legal framework that the filmmaking industry must comply with and comparative assessment of the international competitiveness of the European filmmaking industry. ● Identify and pilot innovative, scalable and sustainable business models, which will enable the creators to make better use of digital and other technologies and further widen their audience. ● Identify how the COVID-19 pandemic, the counter measures and the economic recession have affected those sub-sectors and their workforce, including creators and artists. ● Provide policy scenarios on how the filmmaking sector could face the impacts of an economic recession/crisis, in a cost efficient and effective manner, and by providing fair and sustainable working conditions. ● Investigate the way in which the filmmaking sector can be organised to afford efficiently future economic recession/crisis and unemployment. This might include the identification of technologies that use data lakes, AI, block-chain and other technologies to build new, user friendly and efficient revenue models around advertising, subscriptions and IPR protection. In this frame, research might consider collaborative platforms, collaborative advertising systems, IPR/copyright tracking systems, common metadata standards, solutions for vertical integration, content aggregation models, common Video on Demand platforms, etc. ● Evidence on the users/viewers preferences on filmmaking and on limitations to identify their preferences should be provided; Identify methodology on assessment of user/viewers preferences on filmmaking. ● Cover the activity of cinematography, as well as the wide domain of filmmaking, including TV, documentary, animation, scientific films, etc. ● Recommendations for the increase of the competitiveness of the European filmmaking industry at the international arena, thus promoting the European cultural activity and cultural diversity.
Amount of Funding	Total indicative budget for the topic is EUR 12.00 million. Expected EU contribution per project is between EUR 3.00 - 4.00 million. Therefore, 3 to 4 projects will finally be funded.

Key Dates	20 April 2022 17:00:00 Brussels time

Europe's Cultural Heritage and Arts - Promoting our Values at Home and Abroad

Fund	**Europe's cultural heritage and arts - promoting our values at home and abroad**
Funding Body	Horizon Europe Framework Programme (HORIZON)
Grant	HORIZON-CL2-2022-HERITAGE-01-02
Call Name	Research and innovation on cultural heritage and CCIs - 2022 (HORIZON-CL2-2022-HERITAGE-01)
Type of Funding	HORIZON Action Grant Budget-Based [HORIZON-AG]
Website	[Research and innovation on cultural heritage and CCIs - 2022 (HORIZON-CL2-2022-HERITAGE-01)]
Type of Actions	Research and Innovation
Key Details	Expected Outcome: Projects should contribute to at least one of the following expected outcomes: ● Better awareness and understanding of European arts, culture and values within the EU and internationally by leveraging the creativity of arts and cultural heritage partners in Europe. ● Wider exposure to the diversity of European art, culture and values for European and international partners, by strengthening links with creative industries and other parts of the economy. ● Reinforced common European action to promote Europe's culture and economic interests internationally, hence contributing to strengthen European competitiveness. Europe is in global competition for markets and investments, where industrial and service competitors use every available tool including cultural policy and cultural diplomacy in their international promotion efforts. European research, in cooperation with cultural and creative sectors and a wide range of stakeholders, should contribute new knowledge as well as identifying ways of reinforcing common European action to promote Europe's culture, values and interests for the benefit of our societies and prosperity. Digital solutions and cutting-edge technologies should be considered. In order to draw lessons for policy, it is important to assess the actions of competitors, while evaluating the effectiveness of the common European action and its potential. Research should contribute to identifying ways of more effectively promoting common European interests at a global level, leveraging resources and forging closer cooperation between cultural, creative and economic partners.
Amount of Funding	The total indicative budget for the topic is EUR 9.00 million
Key Dates	20 April 2022 17:00:00 Brussels time

Games and Culture Shaping our Society

Fund	**Games and culture shaping our society**
Funding Body	Horizon Europe Framework Programme (HORIZON)
Grant	HORIZON-CL2-2022-HERITAGE-01-09
Call Name	HORIZON-CL2-2022-HERITAGE-01-09: Games and culture shaping our society
Type of Funding	HORIZON Action Grant Budget-Based [HORIZON-AG]
Website	[Research and innovation on cultural heritage and CCIs - 2022 (HORIZON-CL2-2022-HERITAGE-01)]()
Type of Actions	Research & Innovation
Key Details	Projects should contribute to at least two of the following expected outcomes: ● Evidence of the impact of games on European society, including their cultural value and risks. ● Evidence of the innovation potential of games and play (on-line or other). ● New knowledge on the role of the games industry and non-commercial creative practices in the EU to benefit society. ● Improved knowledge of legal and intellectual property rights issues linked to the gaming population and games industry in the international markets. ● Proposals for improving games in terms of positive impact on education, skillsets, responsible business models, employment chances, social cohesion, and creativity The call for proposal is to see the impact of games on European culture and society, as well as on its cohesion and values that have not been thoroughly researched. Research should address these gaps in knowledge, which include possible differences between age groups, gender and socioeconomic backgrounds, the current situation in game literacy or the digital divide. Proposals should address the role of games in culture and in shaping European societies, their cohesion and values, with the objective of developing new knowledge and evidence for policymaking. Proposals should address legal and IPR issues linked to the gaming population and its creative work. Relevant stakeholders, including CCIs, other creatives, non-commercial interests and policy makers, should be involved to ensure the research and results respond well to the needs. This

	new knowledge and evidence should provide input for policymaking and for improved practices.
Amount of Funding	The total indicative budget for the topic is EUR 9.00 million.
Key Dates	20 April 2022 17:00:00 Brussels time

Partnerships for Innovation - Forward-Looking Projects - Cross-Sectoral Priorities

Fund	**Partnerships for Innovation - Forward-Looking Projects - Cross-sectoral priorities**
Funding Body	Erasmus+ Programme (ERASMUS)
Grant	ERASMUS Lump Sum Grant [ERASMUS-AG-LS]
Call Name	Partnerships for Innovation - Forward Looking Projects (ERASMUS-EDU-2022-PI-FORWARD)
Key Details	The aim is to foster innovation, creativity and participation, as well as a social entrepreneurship in different fields of education and training, within sectors or across sectors and disciplines. Forward-Looking Projects are large-scale projects that aim to identify, develop, test and/or assess innovative (policy) approaches that have the potential of becoming mainstreamed, thus improving education and training systems. They will support forward-looking ideas responding to key European priorities and that have the potential of becoming mainstreamed and giving input for improving education, training, and youth systems, as well as to bring a substantial innovative effect in terms of methods and practices to all types of learning and active participation settings for Europe's social cohesion. The goal is to support transnational cooperation projects implementing a coherent and comprehensive set of sectoral or cross-sectoral activities that either: ● Foster innovation in terms of scope, ground-breaking methods, and practices, and/or ● Ensure a transfer of innovation (across countries, policy sectors or target groups), thus ensuring at European level a sustainable exploitation of innovative project results and/or transferability into different contexts and audiences. The partnerships should be composed of a mix of public and private organisations combining researchers, practitioners and partners with the capacity to reach policymakers. Forward-Looking Projects should therefore be implemented by a mixed partnership of organisations: based on excellence and state of the art knowledge, having the capacity to innovate, and be able to generate systemic impact through their activities and the potential to drive the policy agenda in the fields of education and training.

	Supported projects will aim at achieving systemic impact at European level by having the capacity to deploy their innovative outcomes on a European scale and/or by being able to transfer them into different thematic or geographical contexts. Lot 1: Cross-sectoral priorities Projects under Lot 1 can address different educational sectors or bridge educational sectors. Proposals submitted under Lot 1 must address one of the two following priorities that are detailed under 'Setting up a project': − Priority 1: Supporting high quality and inclusive digital education, in line with the Digital Education Action Plan − Priority 2: Supporting education and training systems to adapt for the green transition The general objectives are as follows: ● Innovative initiatives with a strong impact on education and training reforms in specific strategic policy areas. ● Contributing to the strengthening of Europe's innovation capacity by promoting innovation in education and training. ● Creating systemic change through fostering innovation at both practice and policy-level. Support forward-looking ideas focusing on key topics and priorities at EU level, with a clear potential to be mainstreamed in one or more sectors. ● As fully innovative, ground-breaking educational methods and practices and/or transfer of innovation: ensuring at EU level a sustainable exploitation of innovative project results and/or transferability into different contexts and audiences.
Amount of funding	The maximum EU grant per project is as follows: • For Lot 1 - Cross-sectoral priorities: EUR 800,000
Key Dates	15 March 2022 17:00:00 Brussels time

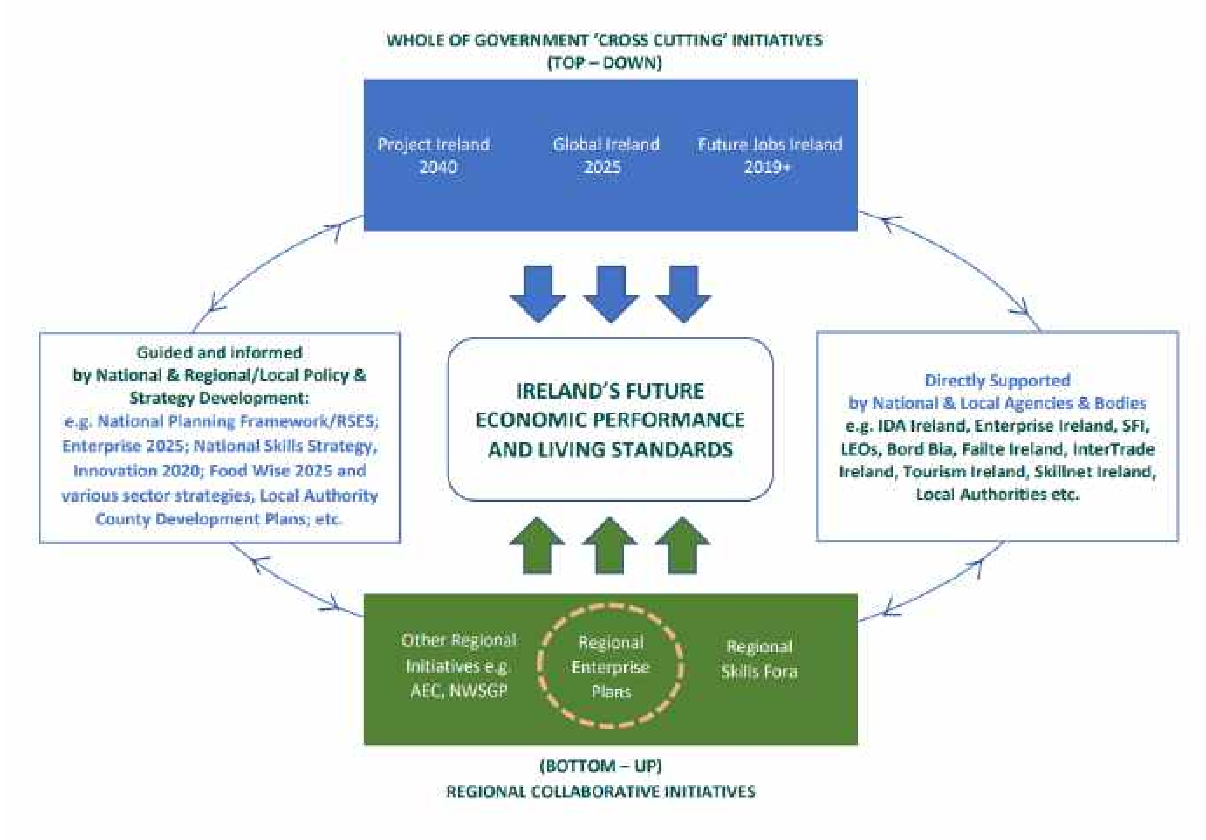
Appendix VIII

Policy Contextualisation

National and European Policy Context

Several interconnected government initiatives have been put in place to ensure future socio economic development for the country of Ireland as a whole. Overarching national level policies and programmes, and 'bottom up' regional initiatives complement each other in order to drive job creation, support enterprise and strengthen productivity (Please see Table 7 below).

Key National initiatives, deemed relevant to the nature of this study, include Project Ireland 2040, Future Jobs Ireland 2019, Enterprise 2025 Renewed, and various initiatives under the Programme for Government. Many of the discussed plans and programmes were devised in a time of healthy employment levels, which has called for reviews and renewals to existing policies and plans, as well as the introduction of new initiatives, in order to focus on rebuilding Ireland's economy in the aftermath of the global Covid-19 pandemic. These initiatives, together with some key legislation and policies, and industry-related reports and plans, set the context for this study.



Interconnected National and Regional Government Initiatives

(Department of Enterprise, 2019, p. 6)

Animation Plan for Europe

Launched in 2017, the Animation Plan for Europe (Creative Europe Media et al., 2017) sets out the growth potential within the sector in Europe. This collaborative report between Creative Europe, Cartoon, Animation in Europe, and Annecy Festival MIFA, expresses the views of industry players, who explore the challenges and identify how the sector can build scale and flourish in years to come. The plan identifies three objectives over five years:

1. Foster global reach of EU animation
2. Make Europe an attractive workplace for local and international talent
3. Make finance more accessible to animation companies

Challenges identified in the plan include talent seeking opportunities outside Europe where key industry players operate; anecdotal evidence of a specialist skills gap; and access to lifelong learning within Europe (Creative Europe Media et al., 2017). The plan also notes issues with Intellectual Property (IP) and the need for studios to retain IP both locally and globally. Importantly, IP rights retention builds the studio brand, monetises work and allows for merchandising. Content franchising allows for easier addition of seasons or sequels. A second challenge highlighted in the plan (Creative Europe Media et al., 2017), is the current fragmented distribution of animation via cinema, TV and VOD. The European animation group recommends greater upfront marketing and promotion and co-ordinated releases, as a way to reach greater audience numbers and make for more successful projects.

The European animation industry has the potential to be at the forefront of the European and global audiovisual industry, if it can scale appropriately, retain existing talent and attract back the talent that has already left (Creative Europe Media et al., 2017). With increased numbers of viewers switching to media platforms such as YouTube and VOD, monetising content is critical. Long-term negative effects may come from giving up IP rights to generate cash, which means that studios will need access to debt finance, especially for cash-flow management. Accessible finance is also crucial to attracting talent (Creative Europe Media et al., 2017). The plan also notes that additional work is needed to assess market trends and opportunities for the purpose of adjusting public funding or creating investment vehicles for animation in Europe. Equity financing, according to the report, may be the right solution, with a clear business model and an ambition for growth.

The needs of the animation sector are summarised succinctly within the plan: talent and skills are essential to success; success is dependent on promotion and increased audiences; and access to finance will help keep all the individual elements running smoothly. With regard to talent and skills, Europe needs to train its people and ensure they have access to employment within their area of expertise. Recommended steps to achieve this are described within the plan and include: sound relationships with academia; collaboration and innovation; matching curricula to industry needs; linking technology and content; and encouraging incubators for experimentation and talent discovery (Creative Europe Media et al., 2017).

Raising the profile of the European animation industry, and increasing its audience, can be achieved through 'Created in Europe' branding, increased investment in subtitling and dubbing, early promotion efforts, and incentivised co-productions through EU Media funding (Creative Europe Media et al., 2017).

The animation sector in Europe is an important part of the audiovisual landscape and is quickly evolving. Animation remains ahead of the curve in adopting new technologies and in testing new business models, and a culture of collaboration between studios and disciplines across the industry has laid solid foundations for an ever-evolving and strengthening industry (Creative Europe Media et al., 2017).

Animation Sector: Covid-19 Impact and Recovery

The film, TV and animation industry began 2020 in robust health (Department of Tourism, 2021b) but, like most other areas of enterprise, was disrupted significantly at the beginning of the pandemic. An early response within production companies was to redirect project development to remote working, while workers took on upskilling and training opportunities. The animation sector, together with the games and AR/VR sectors proved particularly well adapted to working remotely. They continued to operate despite restrictions, offering resilient and versatile employment opportunities and growth, from early stages of the 'lockdown' (Department of Tourism, 2021b).

Government departments and agencies funded and supported the industry to ensure its recovery into the latter half of 2020, positioning its sustainability well into the future. Budget 2021 promised to develop a tax incentive for the digital gaming sector, coming into effect from early 2022, which will attract international studios to invest and allow indigenous developers to scale up business. The audiovisual industry is also included in the Arts and Culture Recovery Taskforce, whose research and recommendations will serve to sustain arts and culture generally as part of the preparations for the national recovery plan (Department of Tourism, 2021b).

Irish animation has proven itself to be adaptable and resilient to Covid-19-related challenges, but it will need to strengthen itself further in the face of international competition, skills gaps and diversified content streams. Screen Skills Ireland aid animation training and development while Screen Ireland explores new technologies and platforms to secure a long-term future for this global-facing industry. In December 2020, a €1 million investment support package provided for two strategic concepts and creative initiatives within the animation sector (Department of Tourism, 2021b). Animation Ireland (the trade association for Irish studios) and Screen Ireland, under the Concept and Creative Innovation Development Fund allocated a €400,000 investment into high concept business growth opportunities within the animation sector, and €600,000 towards a new Talent Development Academy for Animation. Both initiatives have a strong emphasis on business development. The goal is to highlight and strengthen Ireland's position in animation as a centre of excellence, and invest in a diverse range of talent, genres, formats and growth potentials in order to achieve national and international success (Department of Tourism, 2021b).

The Concept & Creative Innovation Development fund will focus on new areas of content development, workflows and technologies (new media platforms, immersive technologies, AR and gaming. Eligible proposals for funding include:

- Preparation of new hybrid formats
- Introduction of new technological workflows
- Extending genre ambitions outside the current workflow
- Supporting new business models and plans for growth within the sector
- Targeting new areas of artistic and creative endeavour

(Screen Ireland, 2020a)

The Talent Development Academy for Animation will address crucial skills gaps, grow a diverse and creative talent base, and ensure educational and professional opportunities for new and established sector employees (Screen Ireland, 2020a). Key priority areas for skills development might relate to areas such as:

- Providing funded placements for a broad range of talent
- Investing in new entrants with diverse, creative talent
- Supporting established talent with further opportunities to advance and develop skills
- Offering other talent growth opportunities from other industries and art forms, supporting the exploration of innovative workflows and new development opportunities

(Screen Ireland, 2020a)

The medium to long-term future of the audiovisual sector is dependent on how cost-effective and timely companies can turnaround new projects. This means Irish SMEs will need to improve provision and delivery through smarter operations, processes and workflows, and reduced operating expenses. Companies that remain relevant and adapt quickly to next generation technologies (such as AR/VR, 5G and NextGen TV) will be better placed to succeed on the international stage (Government of Ireland, 2020a).

Throughout the pandemic, Screen Ireland created 20 separate funding measures in direct response to the impact of COVID-19, which were designed to support talent through the lockdown and to anticipate the challenges that production during a pandemic brings. These supports provided the conditions for recovery and were reliant on additional stimulus support provided by the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, specifically the Production Continuity Fund, to get independent film and television back into production (Screen Ireland, 2020b). This fund covers the costs where production was halted because of the pandemic. The fund totals €5million with a maximum allowance of €500,000 per production.

In terms of economic, social and cultural benefits, Screen Ireland's latest Strategic plan (Screen Ireland, 2021b) envisions a bright future for the screen industry, but recognises that careful planning, and commitment to sustainable growth is needed, to meet the challenges the industry faces, including Covid-19, rapidly changing distribution models and a hyper-competitive market.

Arts and Culture Recovery Taskforce

In 2020, the Arts and Culture Recovery taskforce was established by the government, as a Covid-19 policy response. It recognises the significant impact of Covid-19 on all areas within the arts and culture sectors, and has prepared a report (The Arts Council, 2020) that serves as a roadmap for creative sector recovery. A key recommendation of the taskforce's report was that the Audiovisual media service directive should be transposed into Irish law immediately to create new funding streams for the creation of original Irish content. The report also recommends the transposition of the European Union (EU) Directive on Copyright in the Digital Single Market into Irish law without adjustment or dilution of the intention of the directive as it relates to rights holders (The Arts Council, 2020). This directive allows creators and rights holders to receive a fair share of the value generated by use of their work; imposes transparency obligations to platforms in licencing negotiations; allows contract adjustments for fairer remuneration; allows creators and performers to revoke a licence relating to their work should it not be exploited in a reasonable timeframe; and obliges hosting providers to prevent users from violating copyright.

Creative Ireland Programme: Audiovisual Action Plan

The Audiovisual Action Plan (2018) outlines the potential for employment in film, television, and animation to over 24,000 FTEs, with a value add of €1.4billion (Government of Ireland, 2020a). It comprises a five year initiative and is an industry-wide long-term plan, under Pillar 4 of the Creative Ireland Programme.

It aims to improve the audiovisual sector across eight policy areas. In doing this, it is planned that the number of full time industry employees will reach an estimated 24,000 and the gross value of the sector will increase to almost €1.4 billion. Policy areas are:

1. Oversight of Industry by Steering Group
2. Section 481 Film Tax Relief
3. Strategic Review of Feature Film Funding
4. Funding
5. Skills Development
6. Regulatory Reform
7. Marketing
8. Other Supports and Reform

It is the government's ambition to make Ireland a global hub for the production of film, TV drama and animation, promoting positive growth in the sector. In addition to the Section 481 tax credit, the sector has been supported by:

- International film co-production treaties
- Funding for Screen Ireland, the development agency for the Irish film, television and animation industry
- Support for skills and training initiatives in the sector

Central to the plan is the ambition to create a global centre of excellence, with a focus on high-end TV and animation. The plan addresses the SPI report recommendations (Olsberg SPI, 2017), which measures the current value of the Irish industry and proposes policy changes for support and growth within the sector. Budget 2021 announced a tax incentive for the digital gaming sector, coming into effect from early 2022 and this has been included in this year's finance bill, subject to EU approval

Economic Recovery Plan 2021

With the full impacts from Covid-19 and Brexit still unclear, the Irish government's intention through the Economic Recovery Plan (Department of the Taoiseach, 2021) is to prepare a pathway to build a renewed economy for the future, so that policy decisions and investments made in the short-term, will be consistent with long-term goals for the economy and society. Building on Future Jobs Ireland and pandemic supports, the plan sets out a new phase of supports, investments and policies for a renewed economic recovery.

Its main focus is to get people back to work. The ambition is to exceed pre-pandemic levels and have 2.5 million people in employment by 2024. As with the goals of Future Jobs Ireland, many of these jobs should be more productive, innovative, resilient and in new areas, aligning with government's green and digital ambitions (Department of the Taoiseach, 2021). The plan recognises the work of spatial and planning policies, including Project 2040 and its associated initiatives, such as the National Planning Framework and the National Broadband Plan.

Enterprise 2025 Renewed

The focus of Enterprise 2025 Renewed (Department of Business, 2018) is to deliver quality sustainable employment that will bring about productivity-led wage increases and higher standards of living. Targets for 2020 relate to:

- At least 2.3 million people in employment
- An employment rate of no more than 5.5%
- Regional unemployment rate within 1% of national average
- 6-8 % growth rate in indigenous exports to reach €26 billion, with greater geographic and market diversification
- Ireland as a Global Innovation Leader with 2.5% of GNP invested in research, development and innovation
- Expenditure in the Irish economy of €29 billion by agency supported enterprises
- Rank in the top 5 most competitive small countries in the world, with a business environment that supports entrepreneurship, scaling of Irish owned enterprises and is attractive for the next wave of foreign direct investment

Priorities include:

- An emphasis on developing Irish owned enterprises
- Harnessing the foreign and indigenous enterprise mix through collaboration and clustering
- A focus on innovation and talent, leveraging strengths in disruptive technologies to increase enterprises developing new products, services and solutions
- Realising regional potential through place-making (the development of places that are attractive to investors and for people to live and work in).
- Developing international relationships to raise Ireland's visibility, protect its reputation and provide opportunities for enterprise

Jobs creation is not only related to target numbers, but to ensuring high quality, high productivity jobs in positive working environments:

- Ensuring opportunities for workplace advancement
- Ensuring education and training that meets enterprise needs, availing of a range of tertiary, apprenticeship and training options
- Recognising entrepreneurship as an alternative career path
- Ensuring a system of flexibility without exploitation

The enterprise strategy also places a spotlight on innovation, talent and disruptive technologies, recognising the Irish government's key role in promoting an environment of innovation, creativity and entrepreneurial discovery (Department of Business, 2018).

Future of Media Commission

The Future of Media Commission (2020) consists of a panel established in 2020 under the Programme for Government, which seeks to examine public service broadcasting, print and online media. It aims to support the creative and cultural sectors into the future, in relation to challenges with funding sources, changes in audience behaviour and technological transformations. The commission is independent of the government, with nine expert members from across the media sector.

Future Jobs Ireland 2019

Future Jobs Ireland (2019) was developed and launched in response to future needs of Irish businesses and workers, and is based on the implementation of innovation and technological transformation; improving SME productivity; enhancing, attracting and developing skills and talent; increasing participation in the labour force; and transitioning to a low carbon economy. As the country approached full employment, the focus for government moved away from quantity of jobs (as in the Action Plan for jobs 2012-2018), towards the development of a productive and skilled workforce and in creating highly productive and sustainable businesses. The plan includes 26 medium-term ambitions for the Irish economy, under 5 pillars:

1. Embracing innovation and technological change
2. Improving SME productivity
3. Enhancing skills and developing and attracting talent
4. Increasing participation in the labour force
5. Transitioning to a low carbon economy

Details of objectives applicable to this research are provided below.

Pillar 1. Embracing innovation and technological change

With regard to Pillar 1, Ireland, as a small country, must focus on a small number of areas of enterprise and research innovation. These areas must be strategically important and present market opportunity where there is already a proven combination of enterprise relevance and research strength. Investment will necessarily be targeted at these prioritised and specialised areas. Future jobs Ireland builds on progress made through Innovation 2020 (Ireland's five year strategy for research and development, science and technology) and provides a review and update of priority themes. Opportunities comprise those from cutting edge technologies which include Artificial Intelligence (AI) and augmented, virtual and mixed realities. These immersive technologies are singled out for their impact on many industries with relevant applications that include storytelling, gaming and entertainment. Their rapid adoption will put Ireland at the frontier of global technological developments. To achieve this, the plan recognises the need to:

- Enable and increase innovation across sectors and firms
- Increase investment in research, development and innovation
- Promote strong links between enterprise and research communities
- Ensure SMEs make the most of knowledge gained from working with multinational enterprises (MNEs)

Ambitions linked to this pillar of the future jobs plan will:

- Position Ireland as a leading pioneer in technology adoption, through the investment in demonstrator sites and the development of enabling frameworks and standards
- Implement a strategic approach to maximise the benefits from digitalisation
- Position the Public Service as a leader in technology adoption and innovation
- Establish Top Teams to realise opportunities presented by technological changes and the move to a low carbon economy
- Increase the capacity of SMEs to engage in research, development and innovation
- Incentivise SMEs to invest in new technologies
- Develop Transition Teams to assist workers and sectors likely to be most challenged by our changing economy

Deliverables set to achieve these ambitions aim to develop Ireland as a centre for developing and testing new technologies, including AR and VR tools; issue a call under the Disruptive Technologies Innovation Fund (DTIF) and develop further incentives to innovate; deliver policy initiatives including an Industry 4.0 Strategy, a National Digital Strategy and a National Artificial Intelligence Strategy

Targets include a significant increase in Gross Expenditure on Research and Development intensity from 1.4% to 2.5% of GNP by 2025, as well as a substantial increases in the share of SMEs introducing product or process innovations, and with marketing or organisational innovations.

Pillar 2. Improving SME productivity

Ambition 2.1 (Diversify our enterprise base to ensure the Irish economy is more resilient and adaptable) recognises Ireland's strength in creativity and the demonstrated potential and capacity to the audiovisual sector to create quality jobs for the future

Market success and growth is dependent on high productivity and improved competitiveness, especially with international markets. This pillar of the future jobs plan aims to reverse the decline in productivity in SMEs in recent times. Ambitions include:

- Strengthening links between SMEs, multinational enterprises and tertiary education institutions
- Diversification of enterprise base to ensure the Irish economy is more resilient and adaptable
- Encouraging enterprises to exploit technology and business process improvements to increase productivity
- Promotion of enterprise productivity as a driver of economic prosperity
- Enhancing business framework conditions for firm creation and growth
- Improving leadership and management skills in SMEs

Deliverables aimed at realising these ambitions are to:

- Encourage the growth of clusters where industries can grow and help each other and deepen linkages between foreign and Irish owned businesses
- Increase the impact of Local Enterprise Offices (LEOs)
- Increase SME take-up of Enterprise Ireland (EI) and LEO productivity supports
- Develop a new investment funding facility to assist indigenous Irish companies in scaling their businesses
- Drive productivity growth in the construction and retail sectors
- Strengthen the impact of the National Competitiveness Council through its role as the National Productivity Board
- Deliver a new female entrepreneurship strategy

Pillar 3. Enhancing skills and developing and attracting talent

With regard to enhancing skills and developing and attracting talent, Future Jobs Ireland (Government of Ireland, 2019) aims to double lifelong learning by 2025, and at least reach the EU average in terms of the percentage of the population with basic digital skills, and target a substantial increase in investment in training in Irish enterprises. Ambitions linked to this pillar include high quality and timely education, with training in response to evolving enterprise and skills needs, and SMEs taking part in upskilling for the first time. A strategic and cohesive approach will be developed across the audiovisual sector, and companies will be supported in retaining and fully exploiting Intellectual Property (IP).

Other deliverables include the development of appropriate solutions that will ensure the new regional uplift in tax relief (5% in 2020 and 2021; 3% in 2022 and 2% in 2023), which will deliver highly skilled audiovisual workers in the regions.

A further ambition is to foster participation in apprenticeship and traineeship programmes. These will offer a valuable alternative to traditional third level education. The programmes will be enhanced and participant numbers will increase, in particular in areas where skills needs have been identified, or in response to arising opportunities in sectors or subsectors. These programmes will prepare apprentices and trainees with skills and occupations and provide a continued pool of talent to enterprise. The audiovisual sector is one area that has been identified as being in need of talent from such programmes.

National Digital Strategy (NDS)

Part of Pillar one of Future Jobs Ireland, The National Digital Strategy (Department of Communications, 2013) maps the path to digital advancement for the benefit of Irish citizens, communities and businesses. Phase one of the NDS was launched in 2013, focusing on digital engagement and how Ireland can benefit from becoming digitally empowered. The document contains a vision and outlines some actions to increase digital engagement in society, in industry and enterprise, and in education. A new digital strategy will be built on this phase and will respond to further technological changes and manage changes inclusively. The focus is on creating a digital and creative society and economy, connecting citizens and businesses with high speed broadband (via the National Broadband Plan) and a technologically skilled workforce (Department of Communications, 2013).

Programme for Government: Our Shared Future (2020)

The Programme for Government (2020b) has committed to updating the Future Jobs Ireland Framework, which seeks to stabilise the economy, to improve living standards and increase quality and sustainable jobs. The Government's July Jobs Stimulus Package of 2020 contains specific measures to support the audiovisual sector. Through this package, Screen Ireland received an additional €3million in support of large scale productions and to attract investment, and another €2million was secured for the Sound and Vision fund (Department of Tourism, 2021b) .

Project Ireland 2040

Project Ireland 2040 is a long-term over-arching strategy that plans for economic, social and cultural development of the country as a whole. The strategy consists of two plans: the National Planning Framework (NPF) which sets out a vision and developmental strategy, and the National Development Plan (NDP) which provides the enabling investment to implement that strategy. The NPF is a blueprint for spatial planning in Ireland to 2040 and the NDP will support its delivery for the first ten years (from 2018). The objective of the project as a whole is to prepare for an extra one million people living in Ireland by 2040, the provision of housing, enhanced regional connectivity, improved environmental stability and the creation of more than 660,000 additional jobs in the country.

Screen Ireland: Building a Creative Future 2024

The Irish screen sector is showing a strong recovery. In 2020, despite a five month pause due to pandemic restrictions, the sector contributed €213million to the economy, and despite disruption and challenges, Screen Ireland has reported strong production levels within Irish TV, film and animation, predicting that 2021 could break production activity records, and is on track to beat the previous production contribution pre-pandemic record of €358million in 2019 (The Irish Film & Television Network, 2021). Screen Ireland's latest Strategy, 'Building a Creative Future 2024' (2021b), created in consultation with key stakeholders in Irish Screen industry, addresses the main challenges and opportunities for Irish screen sector.

This strategic plan (Screen Ireland, 2021b) sets out a five pillar approach, aligned to government initiatives and industry ambition and potential for growth, with vision, mission and strategic objectives for the three years up to 2024. It recognises that Ireland is already home to a dynamic and prolific animation sector, and that success for the industry requires a whole-industry approach with stakeholders working collaboratively towards a shared ambition. Screen Ireland, through its three year strategy, commits key stimulus measures to drive sustainable growth, and includes investment of €3million into the broader TV and film sector to address growing demand for talent and crews and to support jobs in production, acting, writing, special effects. Important areas highlighted for investment include:

1. Talent development and skills training
2. Increased diversity and mentoring opportunities
3. Focus on regional development
4. Support for the post-Covid era
5. Further development and production funding
6. Increased promotion of Ireland internationally
7. Support for attending festivals and markets

(Screen Ireland, 2021b)

Screen Ireland recognises that a focus on growth within the animation industry will be a key dynamic for driving change in the wider sector, while reaching younger audiences with appropriate content will also play a critical goal in its evolution. Other identified recommendations and requirements for the industry include the development of a supportive culture of sustainability, diversity, equity and inclusivity, which will attract talent and future investment. Additionally, greater alignment, partnerships and collaborations with third-level institutions and streaming services should be explored and developed in order to respond to future needs within the industry (Screen Ireland, 2021b).

Strategic objectives within the plan are summarised below:

1. Develop a global reputation for innovative and creative storytelling across all genres and forms. A key priority for Screen Ireland, is to encourage content innovation, achieve further scale globally, while including intellectual property (IP) incubation.
2. Invest in talent and skills while supporting diversity, equity and inclusion
3. Create opportunities for global audiences to be able to enjoy culturally rich Irish screen stories through collaboration with strategic partners. This includes building the international market reputation and audience recognition as Ireland as a global leader in animation.
4. Champion industry development that is national and sustainable, supporting Irish companies, a competitive fiscal offering and an expanded workforce
5. Ensure screen Ireland is appropriately resourced, agile and sustainable to effectively support the ambitious vision for the creative screen industry.

(Screen Ireland, 2021b)

Some of the initiatives for skill and talent development include:

- The setting up of three new regional 'crew hubs' across the country to target a national approach to crew development
- Two 'Screen Ireland National Talent Academies for Film and TV Drama and Animation' to build talent and skills regionally
- A scheme to enable new entrants to gain paid work experience opportunities on film and television productions
- A platform called 'Where to Watch' to help audiences all over the world to discover Irish productions
- A Creative Futures Fund (CFF) to build additional development capabilities and to support high-quality creative projects
- And a new support fund for Irish distribution companies designed to help offset the challenges that have been created by Covid-19

The National Development Plan (2018-2027)

The NDP (Government of Ireland, 2018b) is the ten year national investment plan that has been published alongside the NPF. Through this plan, Project Ireland's key objectives are supported by investment priorities. The NDP accounts for the €116 billion that underpins the NPF and will drive its implementation until 2027. Some key project objectives deemed pertinent to this study, are discussed below, under the headings: Enterprise, innovation and skills; Regional enterprise; commuting patterns; clusters and clustering initiatives.

Enterprise, innovation and skills

One important strategic outcome of Project Ireland 2040 is the achievement of a strong economy that is backed by enterprise, innovation and skills. This objective is dependent on attracting investment and talent towards spaces that cultivate innovation and enterprise. The national policy goal is to:

- Achieve sustainable full employment
- Bring unemployment rates down to within 1% of national average in all regions
- Achieve regional productivity convergence, so that all regions are within 10% of the average outside Dublin and with international comparators

(Government of Ireland, 2018a)

Regional enterprise

A focus on the regions aims to offset unbalanced growth in Dublin, relieving pressure on the capital by making other cities and towns attractive places for employers and employees. The establishment of competitive and innovative regional enterprise is central to bringing economic and employment growth to the regions, and new investments will be encouraged and secured through the local availability of skills and talent. This will require investment in education and training and nurturing of skills in each region. Entrepreneurialism is supported under the NDP, along with building competitive sectoral clusters and activities at regional and local level. There will be a focus on enterprise performance in innovation, export potential and productivity.

Commuting patterns

The framework also recognises that commuting patterns are unsustainable as they are major causes of traffic congestion and are environmentally unfriendly, while also impacting negatively on workers' wellbeing and life-work balance.

Clusters and clustering initiatives

One of the most successful methods of developing and supporting innovation in SMEs is through the promotion of networked clusters.[1] Clusters are regional ecosystems of related industries with a broad array of interdependencies. They consist of groups of firms, economic actors, and institutions that are closely located and have reached a sufficient scale to develop specialised expertise, services, resources, suppliers and skills – best practice and knowledge-sharing (European Cluster Collaboration Platform, 2019). Cluster policies and initiatives strengthen existing clusters and facilitate the development of new ones. Project Ireland 2040 commits to building regional clusters and promotes internationalisation in the regions. It aims to support enterprise potential and performance and narrow the gap in regional productivity levels (Government of Ireland, 2018b).

National Development Plan 2021-2031

A revised National Development Plan (Department of Public Expenditure and Reform, 2021) aims to provide a sustainable and regional balanced post-pandemic recovery. It commits €165billion expenditure to capital projects that will support economic, social, environmental and cultural development across the country. As the National Planning Framework continues to set the overarching spatial strategy, the revised National Development Strategy works in alignment with it, strengthening a unified and coherent approach for the country, sharing the same strategic objectives for rural, regional and urban development. The new NDS will ensure the continued implementation of the NPF through investment levels which will reach beyond the EU average (Department of Public Expenditure and Reform, 2021).

The National Planning Framework

The NPF (Government of Ireland, 2018c) contains a set of national objectives and key principles. It aims to guide development and investment as an overarching framework. It does not detail how development should occur but instead, it empowers each of three regions (Northern and Western; Southern; and Eastern and Midland Regional Assembly areas) to lead the planning and development for their own communities.

Fundamental objectives of the NPF are to:

- Guide the future development of Ireland, including the creation of 660,000 additional jobs to reach full employment by 2040
- Manage sustainable growth of compact cities, towns and villages to achieve effective density and consolidation
- Enhance regional accessibility between key urban areas and their regions
- Implement a better distribution of regional growth in terms of employment opportunities and prosperity
- Strengthen rural economics and communities through improved connectivity, broadband access and economic opportunity
- Provide greater access to environmentally sustainable transport fleets
- Foster an economy supported by enterprise, innovation and skills and attract investment and through regional economic drivers and support opportunities that diversity and strengthen the rural economy
- Build high quality international connections, investing in ports and airports to enhance competitiveness
- Invest in heritage, public spaces and amenities to enhance quality of life and sense of place

[1] Findings from ex post evaluation of past European Regional Development Fund and Cohesion Fund programmes

- Adopt a low-carbon and climate resilient society, and move towards an environmentally sustainable economy by 2050, including the regeneration of rural Ireland with the promotion of environmentally sustainable growth patterns.
- Conserve natural resources critical to future economic wellbeing
- Provide access to quality services within communities, such as childcare, education and healthcare.

(Government of Ireland, 2018c)

Report of the SME Taskforce: National SME and Entrepreneurship Growth Plan

Published in January 2021, the SME Taskforce delivered upon commitments made in *The Programme for Government – Our Shared Future,* with the aim of mapping "out an ambitious long-term strategic blueprint for Irish SMEs and entrepreneurs, to be finalised in conjunction with the National Economic Plan." Four specialist sub-groups were convened, under which headings the final recommendations and actions were grouped.

1. Entrepreneurship
2. Productivity & Competitiveness
3. Internationalisation
4. Clustering and Networks

Although of overall relevance to the animation industry, the recommendations regarding clustering and networks (please see definitions below) are of particular importance in the context of this Feasibility Study. The report notes that "visibility of and engagement with, and utilisation of, clustering and network structures will lead to a strengthened SME and entrepreneurship base", which will be absolutely critical if the ambitions of the Munster Animation Forum are to be realised.

NETWORKS	CLUSTERS
Business networks are grouping of professionals based on sharing experiences and knowledge in order to advance their business through horizontal or vertical networks, develop or gain access to certain skills and gain access to information on how to grow their business.	A strategic grouping of companies in a sector or region (and sometimes both) whose focus is on working together to address market challenges or opportunities in their field (and region) either nationally or internationally.

Source: Report of the SME Taskforce: National SME and Entrepreneurship Growth Plan

SME and Entrepreneurship Policy in Ireland

This influential review was conducted by the OECD over an eighteen month period, with the final report published in 2019. The standard methodology includes a "diagnostic questionnaire completed by national government authorities, a factfinding mission by an OECD team to hold detailed interviews with policy and business stakeholders, and discussion of a draft report at a peer review session in the OECD".

The key findings of this report are as follows:

- Increasing business dynamism and SME productivity growth are priorities
- The overall business environment is strong but there are priorities in skills and finance
- A unified national SME and entrepreneurship policy would be valuable
- SME and entrepreneurship programmes could be upscaled and refined in some areas
- Local Enterprise Offices have an important role to play
- A multi-pronged approach is needed to increase SME productivity growth
- Clusters and networks play a significant part in strengthening capability and potential for scaling
- There is scope to strengthen business advisory services

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