

MUNSTER ANIMATION CLUSTER

Draft Strategy



Table of Contents

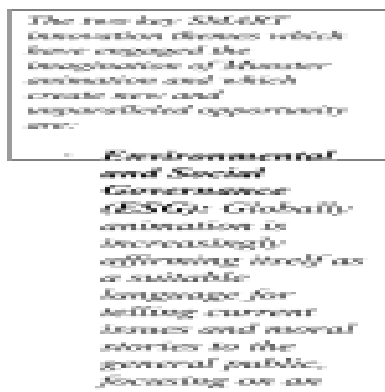
EXECUTIVE SUMMARY.....	3
INTRODUCTION.....	3
ANIMATION IN EUROPE.....	3
ANIMATION TRENDS.....	4
AI IN ANIMATION.....	7
KEY EMERGING ANIMATION THEMES.....	9
EU ANIMATION POLICY.....	10
ANIMATION IN MUNSTER.....	10
MUNSTER ANIMATION CLUSTER STRATEGY.....	12
THE PARTNERS AND COLLABORATORS INVOLVED.....	15
THE OBJECTIVES OF THE PROJECT.....	16
SOCIO-ECONOMIC CONTEXT FOR THE PROJECT.....	16
THE OUTCOMES ON COMPLETION.....	17
THE INDICATORS OF SUCCESS.....	17
OBJECTIVES, OUTPUTS AND OUTCOMES.....	18
OBJECTIVE OF THE PROJECT.....	18
THE EXPECTED BENEFITS FROM THE ANIMATION CLUSTER.....	18
CLUSTER MODEL FOR ANIMATION AND VISUAL EFFECTS SECTOR IN MUNSTER.....	20
THE OUTPUTS AND OUTCOMES OF THE PROJECT.....	21
MUNSTER ANIMATION STRATEGY.....	23
EVOLUTIONARY PHASES OF CLUSTER.....	25
PHASE 1: START-UP.....	26
PHASE 2: GROWTH.....	29
PHASE 3: TRANSFORM.....	33
STRATEGY EXECUTION PLAN.....	36
PRIORITY ACTION PLAN – PHASE 1.....	36
PRIORITY ACTION PLAN – PHASE 2.....	36
OVERARCHING STRATEGY EXECUTION ASSUMPTIONS.....	37
ACTION 1: LAUNCH A VIRTUAL CLUSTER NETWORK AS A PRECURSOR TO THE CLUSTER.....	39
ACTION 2: DESIGN AND ESTABLISH GOVERNANCE MODEL.....	41
ACTION 3: MAPPING THE SECTOR IN MUNSTER.....	45
ACTION 4: DEVELOP A COMPREHENSIVE MUNSTER ANIMATION DIRECTORY.....	49
ACTION 5: IDENTIFY URGENT TRAINING AND EDUCATION NEEDS.....	51
ACTION 6: DELIVER URGENT ANIMATION AND ENTREPRENEURSHIP TRAINING COURSES.....	54
ACTION 7: DEVELOP A FUNDING PLAN.....	56

ACTION 8: APPLY TO JOIN ALICE.....	58
ACTION 9: GREATER CO-ORDINATION AND COOPERATION BETWEEN REGIONAL FESTIVALS.....	60
ACTION 10: DEFINE AND DEVELOP ESG MARKET DRIVEN SPECIALISATION.....	62
ACTION 11: ESTABLISH MUNSTER DIGITAL E-CLUSTER.....	65
ACTION 12: MUNSTER ANIMATION INCUBATOR AND SCALE UP HUB.....	67
ACTION 13: ESG MUNSTER ANIMATION FILM & TV FUND.....	69
ACTION 14: MUNSTER ANIMATION ESG BUSINESS FUND.....	71
 <u>APPENDIX 1: GLOSSARY OF TERMS.....</u>	 <u>74</u>
 <u>APPENDIX 2: PROCESS AND METHODOLOGY.....</u>	 <u>77</u>
 <u>APPENDIX 3: OUTLINE OF KEY PARTNERS, COLLABORATORS, AND BENEFICIARIES.....</u>	 <u>79</u>
 KEY PARTNERS, COLLABORATORS, AND BENEFICIARIES.....	79
COLLABORATORS:.....	79
 <u>APPENDIX 4: RESEARCH FINDINGS.....</u>	 <u>81</u>
INTERNATIONAL RESEARCH.....	81
ALICE – THE ANIMATION LEAGUE FOR INCREASED COOPERATION IN EUROPE.....	81
NESTA UK.....	81
NEXTGEN REPORT – DIGITAL NATIVES TO DIGITAL CREATIVES.....	82
WHAT ORGANISATIONS UNDERPIN UK CREATIVE TECH CLUSTERS.....	82
WORLD ECONOMIC FORUM.....	83
INTERNATIONAL INNOVATION SUPER CLUSTERS.....	83
LONDON SCHOOL OF ECONOMICS.....	84
 <u>APPENDIX 5: EU FUNDING SOURCES.....</u>	 <u>85</u>
"CULTURE, CREATIVITY AND INCLUSIVE SOCIETY"	85
"EUROPEAN ECOSYSTEMS OF INNOVATION"	85
"EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT)"	86

Executive Summary

Introduction

According to Interreg Europe “the cultural and creative industry (CCI) is one of the liveliest productive realities, capable of generating well-being and expressing unique and particular excellences.” The current boom and forecasted growth in the animation sector presents an opportunity for Munster to build upon nascent small and micro animation business across the region and build capacity to contribute to growth and high-value job creation. Furthermore, there is an opportunity for animation businesses within the cluster to focus on SMART innovation in the areas of Environmental, Social & Governance (ESG) and Digital Transformation within the entertainment sector and across wider industry which could create unique competitive advantage while aligning with other related developments including national broadband roll-out and tech enabled innovation and business hubs.



Animation in Europe

European animation productions have a relatively low market share both internationally and within Europe. Whilst the global market is growing, European productions are generally not keeping pace. Europe needs to address its competitive issues and deficits while delivering more fascinating stories, productions, talent and more public funding to further support the performance of the industry. Competing with

major international players and regions will require greater captivation of European and indeed Global audiences, more relevant training, greater talent circulation and better integrating the functioning of our multiple audio-visual funds.

According to the [European Audio-Visual Observatory](#) (December 2021) the European film and animation sector is characterised by:

- A stable theatrical film segment with individual films performing well in terms of exports in cinemas (thanks to a high share of co-productions) and on video-on-demand (VOD), but comparatively limited in terms of number of films produced and hence a comparatively low share of admissions or presence in VOD catalogues. There are approximately 55 European animation films produced each year. 37% of these are co-productions;
- A comparably low market share of cinema admissions in Europe (16%), highly variable depending on a limited number of releases;
- A TV (and subscription video-on-demand [SVOD]) animation segment which seems to be gaining momentum since 2017/2018 and which shares some characteristics with the animation film segment: high share of co-productions and better circulation than live action fiction. The growth in TV animation production is likely partly driven by web-only animation TV series, primarily on You Tube and other video sharing platforms. The high share of animation programmes on SVOD catalogues will likely drive more demand for European animation TV series but, as of 2019, it probably had a marginal impact on the production volume. Looking at the various indicators the

impression is of a shortage of European animation film and TV content. The recent growth in the production of TV content (and the more qualitative sense of a high number of projects in development) may resolve the gap in the coming years, at least as regards TV animation content;

- The European animation production sector appears to be led by France in terms of production volume and by the United Kingdom in terms of theatrical and VOD exploitation;
- China is the first non-European market for European animation films.

Research shows that the EU import enormous volumes of animated products from outside of Europe and that the animation sector is less competitive and developed than the market outside of Europe (e.g. the United States). There is a significant gap between the skills coming out of the education sector and the demands of businesses operating in the sector, which need professionals who are constantly updated on innovative software, techniques and tools. There is also a lack of standardisation at European level of the skills necessary for the professions related to this field.

Animation Trends

Where are the future opportunities?

Enabling organisations to:

- Engage effectively with the metaverse?
- Better visualise and simulate architecture, processes, data, etc?
- Improve customer experience, engagement and communications?
- Reduce carbon footprint and negative environmental and social impacts through VR based training, risk simulation, virtual tourism, etc?
- Improve reputation through better story telling and positive immersive experiences?
- Low budget, mass market AI enabled immersive animated entertainment for smart devices and media.

"From an innovation point of view we're excited by the emerging metaverse as something that enhances the world we live in, as opposed to an uncanny digital simulacrum. We continue to explore many more facets of the metaverse in our work, always with a viewpoint as to how it can positively add to the cultural conversation."
- Colin Giles, Vancouver Film School

"We realize that it's going to be less of a passive-type experience where you just have playback, whether it's a sporting event or whether it's an entertainment offering and more of an interactive, lean-forward, actively engaged type experience."
- Bob Chapek, CEO Disney (from last earnings call)

Is the Munster animation industry Metaverse ready?

- Industries are converging
- Animation is not just about entertainment
- Animation skills have wider application – digital transformation, training, education etc.
- Metaverse is creating significant new opportunities where it is at the core of rethinking digital experience
- The future is virtual reality and augmented reality merging with the more three-dimensional contextual Internet to provide immersive experiences.

"AI-based animations can be produced cheaply, quickly, and with far less manpower than traditional hand-drawn or computer-generated animations. And as these technologies continue to develop and be refined, the price difference will only grow larger. AI art is now better than humans. Some huge studios are beginning to use AI in production."

- Mike White, SVP of next-generation storytelling and consumer experiences, Disney

"We will see an increase in the mainstream use of real-time in animation filmmaking. The big change has been that we can now achieve instantaneous renders that are, graphically, as pleasing as those we're seeking through the traditional digital process. Real-time animation is a medium that provides directors more iterations, allowing them to potentially move around scenes and animated action just like they would on a live-action set. It is also very powerful in that we can now create pleasingly designed 'live animation'. This will bring animation into many more places where it will become part of faster turnaround productions or more conversational media."

- Chris O'Reilly cofounder Nexus Studios

The Animation sector in Munster needs to be adaptable and understand the implications of digital convergence for skills development and opportunities to serve many more industries and consumers with exciting new propositions. The opportunity extends beyond the growing demand for visual effects used in TV and film, VFX, traditional animation, video games to the emerging Metaverse and digital platforms enabling greater collaboration, interaction and consumer experience! These interactions can be virtual, in 3D worlds, across social channels, websites, connected TV and video games with blurred lines and with massive opportunities to create new jobs, economic and social value. The animation industry is at a juncture where it will become more profoundly impactful and relevant. This will require animators and the animation industry to engage in innovation beyond its traditional comfort zone. The industry will need to become more commercial, agile, adaptable and continuously learn and evolve as the market rapidly develops while not losing its core capabilities of compelling story telling and character development. The future of Animation is exciting.

The challenges for the nascent Munster animation sector will be to:

- Build effective partnerships, collaborations and networks with a range of new stakeholders across new sectors and functions;
- Enhance entrepreneurial, business, commercial, sales and digital skills;
- Develop new commercially compelling value propositions outside of areas of traditional competencies.

Animation is being transformed by technology and new ways of virtual working where:

- The technology in animation is improving at an incredible rate;
- An animator's ability to create high quality animation is becoming easier and more accessible;
- Real time / AI technology is reducing rework and rendering, improving communications, collaboration and production time frames;
- Open-source technology e.g. [ChatGPT](#) (software, libraries and processes) is becoming more widely available and providing an engine of innovation, disruption and collaboration;
- Consumers are expecting very high standards in terms of imagery and visuals rooted in great storytelling;
- Addressing the shortage of talent (particularly technical) is a key priority for industry exacerbated by demand and rapid technology redundancy;
- Cloud based technology is enabling animation businesses to optimise pipelines and boot productivity;
- Virtual production has enabled artists to create the same standard of work as they would in a studio environment. This has also resulted in the gig economy becoming an important source of talent right across the world without much incremental cost, set-up time or process changes;
- New ways of consumers accessing content (particularly streaming) is driving huge demand for animation services ;
- The metaverse will deliver experiential engagement across entertainment, business and other social interactions enabled by animation.

These developments represent a big opportunity for a Munster animation cluster. Disparate small scale scattered tech enabled communities will benefit disproportionately from these technology developments, especially AI and 'Virtual' Studios. The more highly invested legacy studios and animation businesses will be potentially disadvantaged as technology advances and fibre broadband is extended, challenging their existing business models.

AI in Animation

AI (artificial intelligence) is significantly disrupting the animation sector. Animators no longer need to spend hours drawing animations and creating 3D models, the AI animation generators do this and more, with some capable of taking scripts or text inputs and creating a fully customizable video. The animator just needs a story or a vague idea of what they want, and the animation software AI generator provides options and brings the story to life.

Other AI enabled animation software can work from scratch to build presentations, sideshows, marketing or branding content promo videos, or 3D models explainer videos, whiteboard videos and even post production VFX. They can help the user create anything visually appealing and informative. Most of these software programs are now becoming freely available saving a lot of time and money. As the quality increases this whole monetary impact is becoming more critical. While AI presents significant opportunities for the

animation sector, it is important to note that human creativity and artistic skills remain crucial. AI is a tool that can augment and assist animators, but it does not replace their creative vision and storytelling abilities. The collaboration between AI, human animators and storytellers can unlock new possibilities and push the boundaries of animation.

There are many AI animation generators available, and they all have their own specialty and features. For example [VYOND](#) it is very user friendly, and its advanced AI allows beginners and professionals to create stunning animations while giving the animator creative freedom and flexibility even if they are not animation experts. [Videoscribe](#) provides a uniquely simple approach to animation creation to enable the effortless design of very short videos utilizing its vast library of images and music to add extra content and quality. It's very popular with beginners because it makes the creative process very simple with its drag and drop interface. It is very easy to use with a rich assortment of predesigned templates allowing novices to start crafting high quality animations right from the get-go. [Animaker](#) is very popular with school children and young teens as it's a fun way to get into the animation creation business. Popular for whiteboard videos within the business environment is [Doodly](#) which supports multiple drawing hands and whiteboard images. [Blender](#) has a very comprehensive suite of advanced features and provides powerful 3D modeling rendering and efficient animation tools that compete with premium software.

The key benefits of AI generated animation are (according to ChatGPT):

- “Streamlined Production Process: AI can automate and accelerate time-consuming tasks involved in the animation production pipeline. It can assist with tasks such as character rigging, motion capture, rendering, and compositing, reducing the manual effort required. This streamlines the production process, allowing animators to focus more on creative aspects;
- Enhanced Efficiency and Cost Savings: By automating repetitive tasks, AI can significantly improve efficiency and reduce production costs. Animators can leverage AI-powered tools and algorithms to generate backgrounds, crowd scenes, and even secondary character animations. This enables studios to produce content faster and at a lower cost.
- Realistic Character Animation: AI techniques like machine learning and deep learning can be used to improve character animation. By training AI models on vast amounts of motion capture data, animators can achieve more realistic and nuanced character movements. AI algorithms can also assist in generating in-between frames, improving the smoothness of animations;
- Procedural Animation: AI can be employed to generate procedural animations, where algorithms create animations automatically based on specified rules or parameters. This approach can be used to create complex and dynamic animations, such as natural phenomena like water, fire, or foliage. Procedural animation saves time and provides flexibility in creating diverse and realistic effects.
- Content Generation and Personalization: AI can be used to generate content and personalize animations based on user preferences. With the help of AI algorithms, animations can be dynamically adjusted to suit specific audiences or adapt to real-time inputs. This allows for personalized storytelling experiences and interactive animations.
- Storytelling Assistance: AI can aid in generating story ideas, character designs, and plot structures. By analyzing vast amounts of existing content, AI algorithms can offer suggestions, predict audience preferences, and even assist in automating

storyboarding processes. This helps animators and storytellers in the creative brainstorming phase;

- Virtual Reality (VR) and Augmented Reality (AR): AI can enhance VR and AR experiences by enabling more realistic interactions and animations within virtual worlds. AI algorithms can improve object recognition, tracking, and scene understanding, resulting in more immersive and engaging experiences.”

Key emerging animation themes



The emergence of Environmental, Social and Governance (ESG) models, methodologies and regulations is arguably the most pressing single issue of our time, with more evidence emerging of environmental and biodiversity destruction associated with human activity and linked with outdated views as to the social function of organisations and companies together with poor unbalanced decision-making processes. This challenging scenario is being rapidly disrupted and unwound, in part because of greater awareness and environmental education and in part by institutional and Governmental ‘call to action’ regarding the ‘social contract’ and better balance in terms of diversity and inclusion in decision making fora, at both corporate and institutional level. For Governments and companies, it is recognised that communicating sustainability, diversity and inclusion goals/projects with key stakeholders is critical. Utilising animation to portray the future while bringing projects and ideas to life is considered by organisations to be more effective as it ensures lasting memorable impact and understanding.

The ESG opportunity for Animation is of course further embellished by the ongoing accelerated digital transformation, the ‘metaverse’ and is becoming more relevant and applicable with continued roll out of National Broadband Plan to all corners of the Munster province. This further assists in insulating the province against the worst effects of inflation and indeed disproportionately assists the province in securing talent and skills necessary to thrive in this new world!

EU Animation Policy

The development of a proposed Munster regional animation cluster aligns with The [Animation Plan for Europe](#) published by the European Commission in September 2017 as part of the preparations for the next Creative Europe Media Programme.

Cultural and creative industries are fundamental to promote smart, sustainable and inclusive growth and contribute to the Europe 2020 strategy. Within the framework of cultural industries, animation is particularly important in the audio-visual sector. At an international level, animation is not only a children's entertainment domain but also increasingly affirming itself as a suitable language for telling current issues and moral stories to businesses and the general public, focusing on an adult audience that recognises its narrative and linguistic ability in telling stories in areas such as climate emergency, sustainability and social issues.

The SMART specialization initiative is a new approach to regional development through EU policy. The document "[Europe 2020](#)" indicated that for the European Union countries the three most important positions and goals associated with SMART specializations are sustainable development, intelligent development and inclusive development.

SMART specializations are clusters of related industries which create innovative socio-economic solutions, increase the competitiveness of regions and the value of their economies on the international arena while also being instruments to support innovation. In the development of small and medium-sized enterprises, especially those closely related to the local environment such as in Munster, using emerging technologies and communications opportunities provide real social and economic development opportunities locally not previously available.

Also worth noting and in line with European directives, it will be increasingly necessary to innovate production and delivery processes across all sectors aligned with emerging environmental sustainability criteria.

Animation in Munster

Animation businesses in Munster are generally small and micro businesses which are characterised by the following:

- **Pain points:** Randomness of work / work continuity (feast or famine); A local and national market which lacks sufficient understanding of the potential role & benefits of animation; Rapid technology redundancy; Disillusionment with no regular income; Education potentially creating wrong specialists
- **Needs:** Access to marketing capabilities; Ability to target larger commissions; Access to commercial and funding opportunities; Business skills; Education aligned with business needs; Keeping up with technology / digital innovation; Finding a position of competitive advantage

	 Pain points Randomness of work / work continuity (feast or famine) Market understanding of potential role & benefits of animation Pace of technology redundancy Disillusionment with no regular income Education potentially creating wrong specialists Needs Access to marketing Ability to target larger commissions Access to commercial and funding opportunities Business skills Education aligned with business needs Keeping up with technology / digital innovation
---	--

The Animation sector in Munster, and indeed most of the rest of Ireland, is considered as an emerging and important part of the audio/visual segment of the Creative Industry sector, dominated by film making and creative writing, and somewhat segregated/divorced from other core emerging and indeed mature sectors of the economy such as technology and skills training. While the ‘eastern’ seaboard hosts animation players of some scale and success, including Brown Bag Films and Cartoon Saloon, the industry in Munster is characterised by many smaller, though no less successful’ players including Great Island Films, LooksLoud, Magpie6 Media, Dog Day Media and, of course the internationally acclaimed Dingle Animation Festival.

The sector in Munster is also characterised by very many individual artists, cartoonists, animators, writers and indeed technologists involved in animation, often as sub-contractors. This population has expanded since Covid and is being further underpinned by such key social aspects as the nature and inspiring beauty of location, often coastal, the continued rollout of national broadband plan as well as costs of living /housing considerations in more urban centres. However, this cadre often complain about isolation, uncertainty regarding income, relatively small commissions/briefs as well as lack of networking and collaboration opportunities.

Indeed, there appears to be a lack of understanding and engagement in communities and indeed various authorities as the industry, being so emergent, is less defined, understood and supported as say the food or technology industries.

While the education sector delivers graduates at various levels and specialities to the sector, from Colleges and Institutes in Limerick, Tipperary, Kerry, Cork and Waterford, there appears to be some misalignment in that many of those graduates do not migrate to the industry but pursue opportunities in other, apparently more dynamic sectors such as hospitality/retail etc. Meanwhile, and notwithstanding the large transformational change taking place in the regions 3rd level institutions, academia would welcome more industry engagement to produce a greater alignment between appropriate specialists versus generalists

as well as underpinning their case for more investment in state-of-the-art facilities along with updated hardware and software technology.

Interestingly, at the local and primary/secondary level there exists a network of self/community engagement funded activities, driven largely by local enthusiasts with an animation/film/education background, who nurture local talent at this critical technologically intuitive age via resources/animation festivals.

Finally, there is little or no connection and engagement between all these ‘actors’, who operate in isolation and often in ignorance of each other, and who do not get the attention, skills training, resourcing, organising, collaborative opportunities that could transform the region’s position, capability and offering to the national and indeed international opportunity present and growing.

So, in summary, the Animation sector in Munster is characterised by many small operators working in isolation with discontinuous/random workloads and with little networking opportunities or collaborations and few co-ordinated connections with key relevant stakeholders and potential partners either Nationally (such as via Animation Ireland) or Internationally (such as via [ALICE](#) (Animation League for Increased Co-Operation in Europe)).

Within the Munster region, there is a need for:

- An integrated, cohesive and connected strategy to develop the industry in the region;
- Giving consideration to establishing an animation “enterprise centre” along the lines of other successful centres as a focal point for entrepreneurial activity and investment, while providing a capacity to pursue high value briefs and commissions on behalf of the sector;
- Engaging wider industry and funders at home and abroad (at tradeshow, industry events, innovation hubs etc.);
- Achieving better alignment within and across key stakeholders;
- A business-led focal point for the industry: authoritative, properly resourced, capable of eliciting stakeholder buy-in, while promoting the sector in Munster at home and abroad
- Greater focus on key themes which play to the region’s strengths and delivers commercial advantage;
- An animation cluster brand image which captures the essence of the vision and conveys relevance to key existing and future partners;
- Much closer engagement, alignment and co-operation between the education sector, at all levels, and the animation industry.

Munster Animation Cluster Strategy

The future of Munster animation will be digitally enabled, inspiring and captivating storytelling through animated content related to key themes of our time. This will be provided through a network of digital channels to the entertainment, games, institutional and industrial markets in a memorable and entertaining manner. Students entering the industry will be knowledgeable and continually learning of the full extent of the animation opportunity which may bring those graduates to industries and sectors not immediately obvious at the outset.

Munster animators will be adaptative and capable of learning new skills over their career and supported by an education and skills sector that is technologically up to date and sensitive to

the rapidly changing environment in which the sector finds itself. The challenge will be to make use of all the emerging technologies in a manner that provides an interesting and provocative platform to the unique and inspirational Munster storytelling heritage.

The coming together of all players in this emergent industry in the region will offer scale while remaining nimble, inspirational and mystique in storytelling and all the time improving, adapting and succeeding in the metaverse. This Munster Animation Cluster will also create a focal point for investments, both private and public, for the ongoing development of the animation sector in the region.

What is the future for Munster animation?



Change Drivers	ESG Will be the dominant and fastest issue facing humankind, society and the economy for time to come.	Digital Transformation & Metaverse Will have the most profound impact on the future of the animation industry and its market
Opportunities	Telling & Sharing Stories - Cartoon Forum 2022 – over 70% of pitch projects were environmental & ecological. C20% were concerned with inclusivity - Quality storytelling is profound, engages more parts of the brain and is memorable. Digital animation storytelling trumps traditional techniques on many levels including effectiveness, value and impact	Quality & Innovation - Emerging opportunities arising from digital animation technologies and metaverse require closer working relationships, integrations and understanding of the commercial and public ecosystem - Industry convergence opening up new opportunities for visual creative digital skills and services in areas of ICT, retail, healthcare, manufacturing, security, defence, etc.
	Other Business Opportunities - State and commercial impact finance are already significant and growing sources of funding. - Character merchandising is globally more profitable than animation.	
Cluster Impacts	Consequences for Munster Animation Incremental or strategic response? Capability development? Brand & positioning?	

The future success of animation in Munster hinges upon seizing distinctive opportunities to differentiate itself in the market. Two obvious themes of significant market potential and demand are (1) ESG and (2) Digital Transformation including the Metaverse.

There are links between the two themes and Irish economic policy, Munster's existing centres of excellence (UCC ESG) and Foreign Direct Investment (FDI) footprint.

Munster Animation Cluster Strategy House



The proposed strategic objectives formulated and agreed during the project for the animation cluster in Munster are:

- **Vision:** to be the most creative region In the World to produce compelling, immersive animation content in ESG and Consumer Experiences for a connected global audience
- **Mission:** To build a shared competitive advantage for the animation sector in Munster that attracts, develops and scales innovative and progressive businesses, research, investment and talent by addressing gaps, aligning strengths and enhancing capabilities

The proposed strategy will be built upon four key pillars:

- **Growing Capabilities:** Developing sustainable leading-edge capabilities deeply anchored in industry leadership and genuine industry needs which translates into:
 - Active identification, mapping and solving of industry level challenges including barriers to industry growth such as startup financing, establishing large-scale collaboration projects to attack and solve such challenges;
 - Greater alignment of skills development with market needs;
 - Optimum balance between depth and breadth of specialisms;
 - Improved commercial skills & capabilities.
- **Brand Impact:** A business led focal point for the animation sector within Munster which becomes:
 - A trust-based collaboration platform where new connections and relationships are built and nurtured internationally across academia, policy, industry and capital around industry shifts and emerging economic opportunities;
 - A strong magnet for accelerators, startups, investors, corporates, connected hubs, researchers who all want to relocate to Munster to better their chances of professional and personal success and;
 - An internationally acclaimed showcase for the sector nationally and globally
- **Compelling Propositions:** A dense and tightly interconnected collaboration networks which:
 - Become highways of new projects, new collaborations, mergers, acquisitions, IP Creation / commercialization and new industry-developing projects;
 - Actively develop around the high growth, high value solutions;
 - Build out startup-, scale up- and fast-track to IPO programs with a focus on introducing and connecting the entrepreneurs with professional investors and venture capital companies;
 - Provide leading edge scarce business resources to start ups- and scale-ups;
 - Facilitate the connection and integration of animation resources and specialized suppliers for commercial benefit including speed up of the pace of the investment cycle.
- **Economic Contribution:** An integrated private-public partnership approach to create economic transformation, value-add and development policy which result in:
 - Increased economic activity and employment;
 - Shared go-to-market and business development opportunities for members;
 - Identifying and developing national and international business opportunities for diverse member base and;
 - Creating a sustainable and connected ecosystem of individuals and businesses in the sector.

The partners and collaborators involved

The Partners and Collaborators initially included all the LEO Offices in Munster Region, as well as Local Authority Arts/Creative Officers (where they existed), together with national enterprises such as EI, Skills Ireland & Regional Skills. Initially, all the 'education' partners included all the main Third level institutes such as MTU Cork and Tralee, Clonmel, LIT and UCC. As the project progressed an educational 'sub-system' emerged, in many cases voluntary and with a 'social inclusion' and outreach remit, and sometimes funded by Arts Council (creative Ireland). This significant 'underbelly' often goes unnoticed, has a focus on Primary and Secondary level and sometimes augmented by particularly engaged teachers in the local schools and /or ETB's, BAI, Screen Ireland (Young Irish Filmmakers). Animation is very clearly emerging as a key area of focus given its naturel connections with children as

well as the emergence of advanced software, freely available and to which children take to quite intuitively and naturally.

The other primary collaborators were Industry itself, mainly small and medium enterprises, including many individuals scattered throughout the Munster and neighbouring regions.

The objectives of the project

The Munster Animation Forum (MAF) was established in March 2021, utilising a triple helix model of creative innovation, with interaction between the private sector, academia and state agencies. The MAF vision is to transform Munster into an internationally recognised powerhouse for animation, supporting the economic growth of the creative animation community across the province. This vision will also benefit supporting creative sectors such as ICT, Writing, Acting, Set Design and Music.

The project under the objective “Ecosystems and Integration” will harness the collaboration of partners in the region to develop a long-term sustainable plan for the animation sector in Munster. The project will:

- Develop a 3-year strategic plan, incorporating implementation, for the systematic development of the animation sector in Munster, building on the findings of the Feasibility plan;
- Support regional development of animation clusters seamlessly incorporating other relevant strategies (e.g. National Arts Strategy/five priorities, Regional Enterprise Plans) whilst also influencing local arts, education and investment policies;
- Co-ordinate existing resources in each county, creative enterprises, education and statutory agencies, to develop coherent communication and planning through an appropriate structure;
- Raise awareness, Nationally & Internationally of the commercial benefits and opportunities for high quality, cost effective, animated storytelling in the region.

Socio-economic context for the project

One of the key challenges for Munster is to spread economic growth throughout the region. There is an imperative to address sustainable employment, improve job quality, improve the competitiveness and increase exports, particularly amongst SME businesses. Furthermore, there is a need to build resilience and diversification into Munster’s economy to respond to the additional challenges and opportunities faced by businesses in the post-Brexit and post-COVID-19 environment including the transition to climate neutrality, the transition to a digital economy and the opportunities presented by remote or blended working.

Animation has some specific characteristics, which makes it relevant from a Munster regional economic development perspective. Unlike other visual content production, animation projects tend to employ large teams – often 50 to 120 full-time equivalent - over a period of typically two to three years for a production. The combination of the use of advanced technologies, the need for highly skilled workers and research and development activities give animation an industrial character and provides opportunity to set up local animation studios with global visibility and significant growth and highly qualified job creation potential, which makes it attractive from an economic development perspective.

The animation industry is one of the most innovative sectors globally. It has developed to a stage where it links the tech industry and the content industry to deliver new forms of revolutionary digital transformation. This bridging between content and digital technology is essential for the future of many industries outside of the entertainment sector. The potential of the crossover of animation to other sectors is immense.

Finally, animation has a key role to play in helping address the urgent need to safeguard the environment and society from the dire consequences of the climate emergency. Animation is one of the most effective means to illustrate the future and can provide glimpses of this in spectacular ways, show in-depth analysis of development projects and bring ideas to life. Animation delivers visualizations of the not-yet made, the world to-be, the unthinkable and the unpalatable like no other medium.

We believe that building a vibrant animation sector which contributes to delivering the unprecedented global demand and opportunity for animation content provides an opportunity to scale high value digital employment. But more fundamentally, we are convinced that there is an opportunity to be at the forefront of digital transformation and ESG storytelling which will have wider socioeconomic benefits to the region and globally.

The outcomes on completion

Outcomes included:

- Strong support from a broad range of stakeholders to a shared vision and mission and a common strategy.
- Positive engagement and high levels of participation amongst all key stakeholder groups
- Strong commitment to key themes such as ESG and digital transformation based upon strong storytelling and characterisation skills as potential areas to create social and commercial impact and competitive differentiation.
- Other small animation businesses outside of Munster to become involved in the process and provide valuable input to interviews and workshops.
- Private Equity and Venture Capital firms expressed interested in providing “impact funding” for SME animators.

The indicators of success

Indicators of project success included:

- Positive engagement and high levels of participation amongst all key stakeholder groups
- Strong commitment to key themes such as ESG and digital transformation based upon strong storytelling and characterisation skills as potential areas to create social and commercial impact and competitive differentiation
- Strong support from a broad range of stakeholders to a shared vision and mission and a common strategy
- Strong positive endorsement of the initiative by Animation Ireland and a request to maintain connection and useful shared learnings.

Objectives, Outputs and Outcomes

Objective of the project

The Munster animation cluster intends to seize the opportunity presented by the current boom in the animation sector in a bid to build up its capacity to contribute to growth and job creation in the Munster Region.

By improving the SMEs in the animation sector (producers, animation studios, writers, digital creators), the goals of the Munster animation cluster will be to enable them to collaborate more among themselves through co-productions, make access to funding and capital easier for them and enable them to retain talent within their organisations by avoiding this talent leaving the region. It will therefore boost their competitiveness on the international, globalised market along the entire production value chain.

The stated aims objectives of the project were to develop a clear strategic plan and roadmap:

- To identify the 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.

The expected benefits from the animation cluster

Animation Sector

- Growth of social capital, based upon increasing trust and cooperation between animation businesses
- Improving alignment between animation businesses, the education sector and local authorities to address skills gaps in the sector
- Creating the opportunities to create differentiation based upon key specialisations and themes, quality of storytelling, originality and innovation which create higher demand and profits for businesses within the region
- Possibility of creating international leadership in ESG and technological innovation
- Concentration of sector-specific knowledge and skills
- Greater opportunity to access regional, national or European public funding, by participating in tenders or attracting investments from private and institutional investors individuals
- Increasing opportunities and propensity towards international markets, funding, knowledge and collaboration
- Increasing scalable and sustainable specialisation opportunities

- Potential for growth not only in purely economic terms, but also in terms of competitiveness and image and attractiveness of region for companies, investors and commissioning agents.
- Creating opportunities to share resources, create economies of scale and create capacity and synergistic benefits
- Promoting members and the opportunities of animation to business generally
- Improving animation businesses' / animation professionals' image nationally and internationally through membership of the cluster, aligned branding and knowledge 'spill over'
- Improving the quality, relevance and timing of training and knowledge exchange to meet business needs
- Improving access to and participation in innovation
- Faster transmission of information including market opportunities, knowledge, regulation, research, thought leadership, market intelligence and new business opportunities
- Improving opportunities to access national and European public funding, by participating in tenders or attracting investments from capital markets and the private sector
- Enhancing talent acquisition through improved employer branding from membership of the cluster
- Joint promotion of cluster members to commissioning agents/studios/networks
- Improving ability of animation businesses to attract investment through involvement in the cluster
- Greater opportunities to create partnerships and collaborative projects within or between clusters and organisations which can provide channels to market or access to specialist skills or resources.
- Opportunity of accessing shared resources, capabilities and a network of skilled partners
- Ability to provide and receive on-going business and technical training
- Reduction of risks associated with information asymmetries.

Munster Region

- Attracting inward investment across a range of industries and disciplines including animation, digital, ESG and of the sectors which have a growing interest in leveraging animation as part of their operations or proposition
- Increasing direct and indirect employment
- Creating a dense interaction between businesses located across all counties within the region based upon an ESG and digital thematic approach
- Internationalising local SMEs through opportunities for wider market access and participation in cooperative commissions and programmes especially with EU animation clusters that otherwise would not be available
- Increasing the number of interdisciplinary projects and cooperation for cluster members particularly with other regional centres of excellence, clusters, businesses and educational disciplines
- Accelerating sustainability and environmental projects
- Establishing cluster best practices
- Stimulating technological development and innovation in Munster
- Intensification of business-science cooperation
- Retention of talent and attraction of talent to the region.
- Maintain a register of members and resources within the region.

Cluster model for Animation and Visual Effects Sector in Munster

The essence and inspiration of creating a Munster Animation Cluster is grounded in the concept of shared value and which focusses on the connection between societal and economic progress in the region and its ability to unleash growth and prosperity. More and more industries and indeed authorities recognise the shared value opportunities of not only innovating products and market channels but also enabling local cluster development, where all decisions and opportunities are viewed through the prism of shared value which create not only opportunities for industry players but also greater societal benefits.

The wide variety of skills, competencies, tools and creative talent necessary to successfully develop and launch an animation product, whether freelance professionals or company employees and facilities, is a unique peculiarity of cultural clusters such as is proposed here. These areas of competence need to be characterised and differentiated whether they relate to storytelling, technical production of 3D animations, promotional activities, festival organisation, studio facility management or indeed digital animation technology. This variety of specialisations, already at play in the production of animation content, offers a template for the creation of a larger industry cluster and the support required in its establishment, through to its maintenance and growth phase, with the possibility of expanding nationally and indeed internationally over time.

While the cluster organisation arising out of this and previous studies on the Animation sector in Munster region is not expected to be a 'state organisation' per se, institutional support whether through LEO offices, EI or Creative Ireland, is fundamental for its recognition and initial regulation as well as wider engagement and development of enterprise links in communities involved. In the case of Munster, the proposal would involve several key subjects in the proposed cluster including;

- Animation companies, with as wide a variety of specialisms as possible
- Freelance professionals
- Enterprise support institutions including LEO's/EI
- 3rd Level educational Institutions
- Festival organisers
- 1st / 2nd level educational institutions
- Relevant non-profit organisations.

A critical element in the creation of cultural clusters in animation and visual effects sector across large regions such as Munster is the necessary use of digital and virtual tools, which automatically dismantles the previous 'territorial' model, with its proximity and local feel, while enabling the cluster to organise, function and develop in a completely virtual manner. The aim of adapting this 'e-cluster' approach is to provide an evolved form of 'virtual' rather than 'physical' proximity, and through enabling technology to develop 'close' communication (easy, frequent and reliable) even while physically distant. Other benefits of adapting the 'e-cluster' approach provides the capacity to build a much wider network of contacts and concepts while developing relationships based on trust with people and companies far apart, not alone throughout Ireland but internationally as well.

Many of the potential members of such an animation and visual effects 'e-cluster', whether education institutions, freelance professionals or company employees are already well versed

in the use of digital communication tools and advanced software tools, so seeking alignment and support for the initiative should not be a problem. Of course, a pre-requisite for this approach is a technology platform capable of supporting the necessary co-operation within the cluster. This ‘mindset’ to allow this form of cluster develop involves the cultural, technological and, in time, linguistic capabilities of all cluster members!

So, in summary, this virtual animation ‘cluster’ with such a large pool of knowledge and experience will, properly administered and supported, multiply the economies of scale, time and returns in the production and propagation of new ideas while providing a breadth of capability and capacity for complexity that the various participants would otherwise have little/no access to if using more traditional rigid and limited forms of engagement.

The outputs and outcomes of the project

The animation industry is currently considered a particularly important part of the audio-visual segment of the creative industry (CCI) sector. However, the animation sector in Munster is characterised largely by small and micro businesses which mainly live hand to mouth, deliver smaller commissions and tend to have less opportunities to collaborate with each other.

As outlined in the Executive Summary above, the two key themes which have engaged the imagination of Munster animation and create new and unparalleled opportunity are **Environmental and Social Governance (ESG) and Digital Transformation.**

[Interreg Europe](#) note that there are no regional strategies in place linking animation clusters with other regional smart specializations. They stress the impotence of linking innovation in the creative industries to other clusters. Within animation in Munster there should be commercial opportunities to work with larger domestic organisations and the FDI sector within the region on both ESG and Digital Transformation. Discussions with ALICE (the Animation League for Increased Cooperation in Europe) indicated that this type of specialisation or theme would be unique and differentiating!

The key outputs from the project included:

- A vision, mission, strategy and roadmap for the wider animation cluster ecosystem
- A phased business model, operating model, roles, responsibilities and KPIs for the cluster organisation

The key outcomes of the project included:

- Consensus around priorities and the development stages of the Munster animation cluster and the wider application and role of animation across the community and industry within the region and internationally
- Recognition that the creation of an independent cluster organisation is critical to enabling small and micro animation businesses operate more efficiently, deliver larger scale commissions, leverage specialised resources and reach larger markets with more compelling and competitive value propositions
- The formation of embryonic collaborative networks between animation businesses with a willingness to increase the level of collaboration in the pursuit and delivery of joint opportunities

- Surfacing and addressing within the ecosystem which have been acting as breaks on development of the sector
- Improved communications within the wider animation ecosystem which were traditionally animation businesses, the education sector and Local Enterprise Offices
- Expanded the view of the scope, possibilities, roles and opportunities of animation in growth areas outside of entertainment and gaming sectors for example ESG and digital transformation
- Early-stage expansion of networks within the animation sector to include primary and secondary schools, the social sector, industry-at-large and financial services
- Early-stage engagement with potential international collaboration organisations including like-minded animation clusters.

Munster Animation Strategy

Munster Animation Cluster Strategy House



The proposed Munster animation strategy is summarised in the above Strategy House illustration. It is ambitious and will likely take three to five years to achieve. The organisation and business model will necessarily evolve during this period and is provided for in this plan. The latter part of this strategy document provides an overview of each major stage of development of the cluster from launch, through scaling to transformation. The success of the strategy is greatly dependent upon the successful implementation of the plan. The key elements setting the overall ambition of the Munster animation cluster strategy are the:

- **Vision:** to be the most creative region In the World producing compelling, immersive animation content in ESG and Consumer Experiences for a connected global audience
- **Mission:** To build a shared competitive advantage for the animation sector in Munster that attracts, develops and scales innovative and progressive businesses, research, investment and talent by addressing gaps, aligning strengths and enhancing capabilities
- **Values:** Trusting; Sustainable; Inclusive; Collaborative; Innovative.

The four strategic pillars on which the strategy will be delivered are:

- **Growing capabilities:** Similar to the animation sector across Europe this is an urgent requirement. It requires undertaking a detailed bottom up skills gap analysis for each animation business, educational and skills organisation within the cluster in line with (1) the strategy set out in this document and (2) evolving priority skills needs. Skills needs will be addressed through a range of interventions beyond traditional education and training. For example, the proposed membership of ALICE and other networks will contribute to accessing best in class research and market information and collaboration opportunities for members. Likewise participating in innovation programmes and working with centres of excellence in adjacent / connected fields within the region will enhance capabilities. Filling priority gaps will be a major key performance indicator for measuring the success of the cluster.
- **Brand impact:** The objective is to establish the Munster region as a major international centre for animation specialising and competing based upon key market themes. The strategy action plan addresses key elements required to establish this position including the establishment of a virtual network, e-cluster, animation hubs, funding, membership directory, membership of ALICE and the development of ESG and differentiating digital specialisations.
- **Compelling market value propositions:** is about producing quality products and services. They need to address the needs of all key stakeholders as well as the market. Animation member businesses need support in growing their business, skills and networks, and accessing new commissions and funding opportunities. The market (including the business community, distribution channels and their customers) want leading edge, insightful, engaging, entertaining and purposeful products and content.
- **Contribution to the economy:** a key objective of the strategy is to help develop the economy of the Munster region. **A major study by UK innovation foundation NESTA into future proofing employment based upon future digital skills demands from businesses and employers highlighted animation as the number one most promising set of digital skills for the future workforce.** The high probability of growth in demand for animation skills across all industry segments was particularly emphasised. The Munster animation strategy is very much focused on animation as a key economic growth enabler for servicing growing demand within both traditional industries and new digital markets.

Fourteen key strategic actions are identified and defined later in this document. These are intended to drive the execution of the strategic plan over the three phases of the cluster evolution. The diagram (below) tabulates these action plans and where they impact upon the proposed strategic pillars of the Munster animation cluster.

Action Plans	Strategic Pillars			
	Growing Capabilities	Brand Impact	Compelling Market Value Propositions	Contributing to the Economy
Map Sector	✓			
Education needs & Gaps	✓			
Deliver Urgent Education Needs	✓		✓	✓
ALICE Application	✓	✓		
ESG Theme	✓	✓	✓	✓
Directory		✓	✓	
Munster Digital eCluster	✓	✓	✓	✓
ESG, FILM & TV Fund		✓	✓	✓
Festival Coordination	✓	✓	✓	✓
Virtual Cluster Network	✓	✓	✓	✓
Governance Model		✓		
Funding Plan	✓	✓	✓	✓
Munster Animation Hub(s)	✓	✓	✓	✓

Evolutionary Phases of Cluster

The evolution of the cluster has been considered over three discrete phases:

Phase 1: Start up. This phase commences with establishing a virtual network of cluster animation members with a small central function facilitating opportunities to network, share information and collaborate. It is recommended that initial funding for the virtual network will be provided by local / national state enterprise agencies. In parallel, it is proposed that work be undertaken to map the sector, create and maintain an up-to-date accurate digital directory (for example [MoonDay](#)) of members in line with the process undertaken within the ALICE clusters. This is one of the initial functions of the cluster organisation. The mapping exercise will help identify urgent education and skills development requirements at an individual animation business level. The intent is to address these urgent education and skills gaps during the start-up phase as a priority. Additionally, it is proposed that a long-term funding plan and governance model for the cluster organisation be developed during this phase.

Phase 2: Growth.

This second phase sees the ramp up of the cluster activities including the establishment and resourcing of an effective e-cluster organisation which will provide shared services and resources for members. It is also proposed that an initial animation hub be established and that long term funding structures and processes be put in place to scale activities and enable the cluster to pursue larger commissions on a collaborative basis.

Phase 3: Transform. The final phase sees the cluster transition into a vital and innovative international animation centre and occupying a position of leadership on key themes within the global animation market.

Phase 1: Start up

Objectives

- Establish Munster animation cluster organisation and facilities
- Full and comprehensive mapping of animation sector in Munster
- Support and nurture existing businesses
- Encourage new start-ups across the region, build industry from scratch in certain counties
- Establish membership. Network and definition “of membership”
- Increase member visibility - promote members regionally and nationally
- Better align education requirements with market demand
- Select and deploy networking & collaboration tools
- Identify skills gaps and deliver priority training
- Increase communications and engagement within the industry in Munster.

Phase 2: Growth

Objectives

- Develop new start-ups, innovation, international growth
- Increase member visibility - promote members internationally
- Promote animation as a key digital tool within industry generally
- Expand festival network to every major town within each Munster county
- Increase basic trust and collaboration amongst members
- Grow revenues for Cluster organisation to reinvest in sector
- Establish Munster Animation cluster as a centre of excellence for ESG themes (SMART specialisation)
- Identify the opportunities to create IP within the cluster and amongst the membership base.

Phase 3: Transform

Objectives

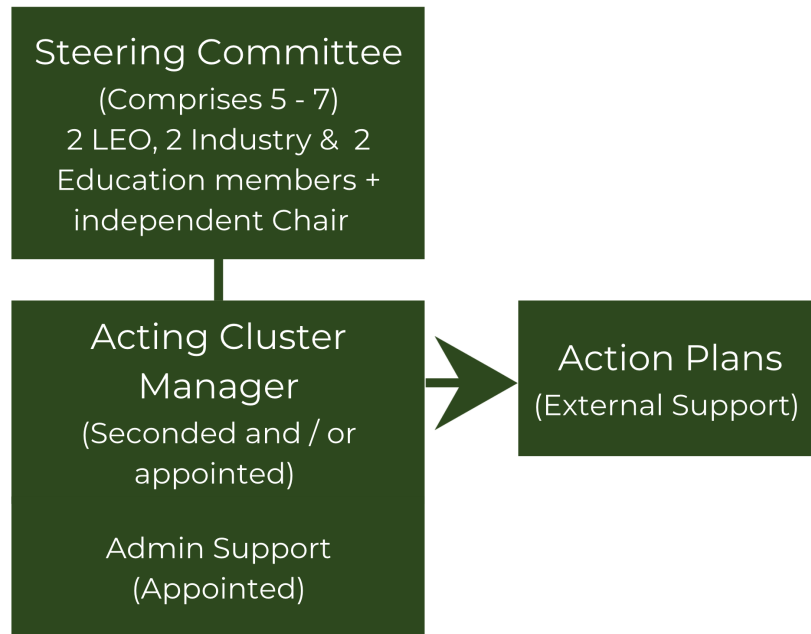
- Develop and build industry scale from both a breadth and depth in the Munster region
- Increase member and cluster visibility - position cluster and its members in industry expert and leadership role internationally particularly ESG and technological innovations
- Market leading research, innovation and thought leadership
- Bring Munster start-ups / scale-ups & national / international corporates together to speed up innovation
- Expose Munster animation cluster members to leading edge thinking, state of the art technology and likely future scenarios which will shape success
- Accelerate transformation within member companies
- Munster animation members will be recognised by the size of the cluster and its value proposition
- A very tight alignment between education and skills provision and industry
- A larger share of export revenues and work from competing globally
- Hosting a minimum of one internationally recognised event of significance showcasing the Munster’s cluster ambition, scale and capabilities.



The following pages outline the evolution of the cluster organisation business model, its objectives target outcomes and Key Performance Indicators (KPIs) in more detail for each of the three proposed phases. A proposed organisation structure, evolving with the phases of development is depicted below.

Phase 1: Start-up

Start-up phase organisation model



Munster Animation Cluster Business Model Canvas

Phase 1: Start -up

Partnership Regional (non cluster members) & national: • Studios • Festivals • Education institutions • ALICE network • LEOs • Animation Ireland	Key Activities • Industry mapping • Membership recruitment • Membership selection criteria • Education, training & mentoring • Cluster establishment & development • Information exchange • Collaboration • Initial promotion of cluster	Value Proposition • Engagement of members to increase mutual value • Access specialist & experienced skills • Establishment of Munster Animation network • Education / training / skills needs and gaps identified and priority needs being addressed
Channels • Munster LEOs • EI • Animation Festivals & Events • Universities and colleges • Chambers of commerce • Screen Ireland • Animation Ireland • MAF website • MAF events	Customers Munster animation cluster businesses • Studios • Writers • Animators • Producers • Festivals	Key Resources • MAF cluster coordinator(s) • Board and employees of MAF • MAF Brand • MAF Facilities & technologies
Sustainable Goals Provide the basis for a mores sustainable Munster animation industry from a people, planet and profit perspective.	Relationship Management • Direct relationship management with MAF members, partners, beneficiaries • All key sectors have a seat at the table	Beneficiaries • Munster animation cluster members • LEOs • Animation Ireland • Screen Ireland • SkillNet Ireland
Costs • Start up: Advisory, strategy, design & branding, Comms; other • Cluster operations: Staff, board, office, IT infrastructure • Cluster projects: Mapping of industry, Industry directory		Financing & Revenue • Public Financing: LEOs

Objectives:

- Establish Munster animation cluster organisation and facilities
- Full and comprehensive mapping of animation sector in Munster
- Support and nurture existing businesses
- Encourage new start-ups across the region, build industry from scratch in certain counties
- Establish membership. Network and definition “of membership”
- Increase member visibility - promote members regionally and nationally
- Better align education requirements with market demand
- Select and deploy networking & collaboration tools
- Identify skills gaps and deliver priority training
- Increase communications and engagement within the industry in Munster.

Overview:

- Cluster entity created and board appointed with strong commercial acumen in place
- Focus on quick wins to lift performance of micro and small animation businesses
- Initial funding in place
- A small number of members (up to 100 member organisations). No membership fee
- Represent Munster industry with Screen Ireland, Animation Ireland, etc.
- Limited resource base and funding. Full time manager, supported by one to three resources. Early stages some part-time personnel.
- The cluster identifies and addresses resources challenges lacking for local animation businesses, like access to facilities, technology, education of young talent for the industry etc.
- Assisted by LEOs and State Enterprise sector
- Attracting members from industry, start-ups, scale ups, research and government and education.

Key Performance Indicators:

- Extent to which cluster activities are aligned with each members’ needs;
- Level of engagement of member SMEs in further education, technology and business mentoring;
- Number of animation business members in the cluster;
- Number of animation commissions completed by members;
- Qualified value of the cluster sales pipeline incl. conversion rates and pipeline churn
- Frictionless access of members to cluster supported resources;
- Rate of employment growth for members participating in the cluster;
- Increasing the quality of cluster resources.

Outcomes:

- Entity is established, manager appointed
- A Munster Animation directory established (members, service providers etc)
- A brand and identity agreed
- Membership criteria established and enrolment process in place

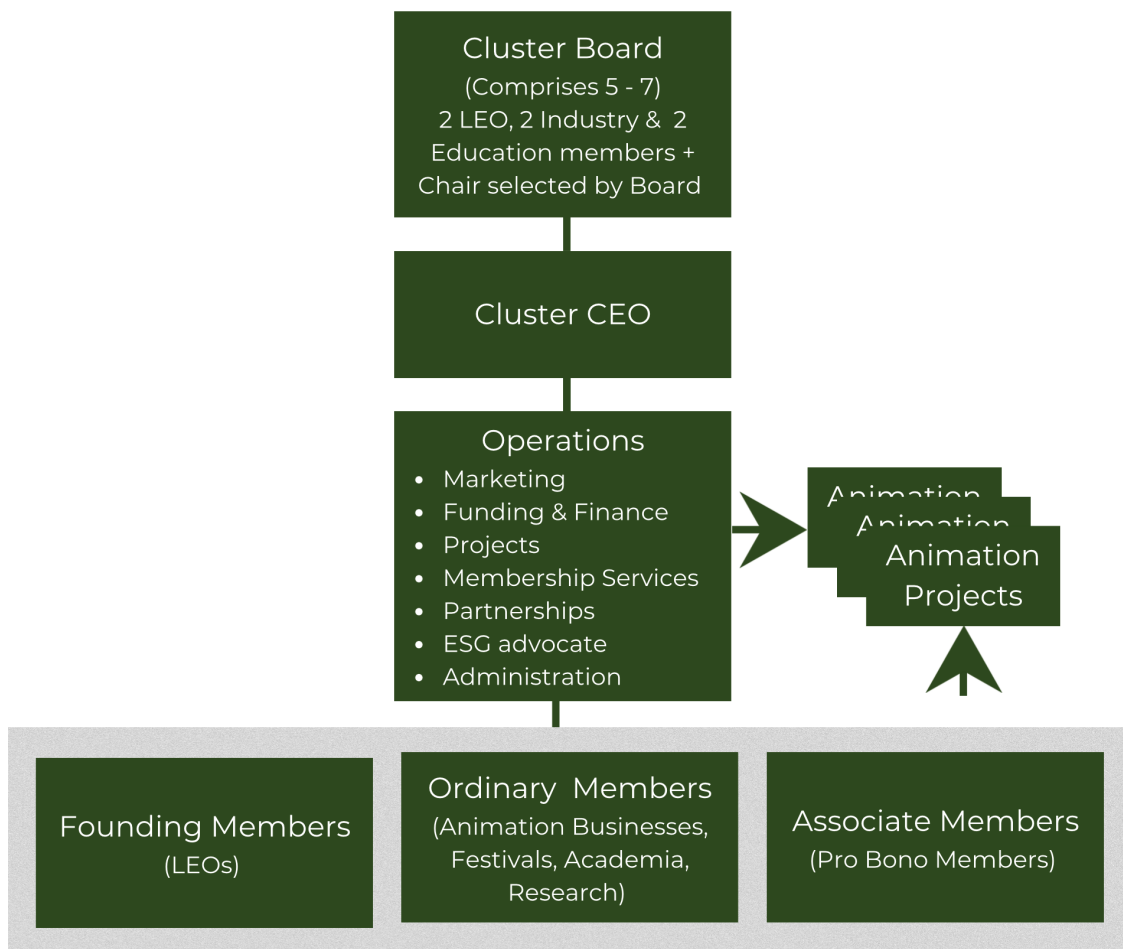
- A launch event with major industry heavyweight endorsement and key stakeholder participation
- Member participation in regular membership communications, networking and events – social engagements
- A base network of cluster members established – access and exchange of useful information.
- Initial directory of Munster animation cluster.

Key issues / decisions:

- Funding strategy
- Appointment of cluster team
- Location of cluster organisation
- Board and sub-committee appointment process
- entity format
- Membership criteria.

Phase 2: Growth

Growth Phase Organisation Model



**Munster Animation Cluster Business Model Canvas
Phase 2: Growth**

Partnership Regional (non cluster members), national, international: • Studios • Festivals • Education institutions • R&D institutions • Other animation clusters • LEOs • Marketing agencies	Key Activities • Providing direction for sector • Research & networking • Commercial cooperation • Education, training & mentoring • Innovation & technology • Information exchange • Cluster establishment & development • Collaboration • Marketing of cluster including members nationally & internationally • Engage with industry generally regarding benefits of animation as a highly effective engagement tool • Assisting develop business deals on behalf of MAF members • Membership events • Co-ordination of festivals	Value Proposition • Create stable / improved conditions for development of members • Incubation of new projects • ESG market specialization • Engagement of members to increase mutual value • Access specialist & experienced skills • Improved productivity in sourcing, accessing info, facilities & tech • Downstream / upstream integration with customers & suppliers
Channels • Munster LEOs • EI • Animation Festivals & Events • Universities and colleges • Chambers of commerce • Screen Ireland • Animation Ireland • MAF website • MAF events • MAF publications • Marketing agencies • ALICE	Customers MAF animation businesses • Studios • Writers • Animators • Producers • Festivals • Other businesses (who buy services from MAF members) • Film Studios • Gaming Studios • Gaming Creators • Producers • Commercial businesses • State funded projects	Key Resources • MAF cluster coordinator(s) • Higher education student pool & facilities • Board and employees of MAF • Key industry sub-committees • MAF Brand • MAF Facilities & technologies
Sustainable Goals Demonstrable: • Improved competitiveness amongst members by adopting a more sustainable approach. • Carbon competitiveness & efficiency Munster animation achieving recognition & awards as an ESG center of excellence.	Relationship Management • Direct relationship management with MAF members, partners, beneficiaries • All key players have a seat at the table • Close collaboration • Entire value chain involved in cluster	Beneficiaries • Munster animation cluster members • Local communities & businesses • Munster and Irish economy • Tourism • Animation Ireland • Screen Ireland • SkillNet Ireland
Costs • -Cluster operations: Staff, board, office, studios, IT infrastructure; Marketing & comms, travel, Programmes, Consulting services, other • -Cluster projects: Collaboration projects, innovation projects, member led projects	Financing & Revenue • Public Financing: Government & State Agencies (Ireland, Other), LEOs, European Union funds	

Objectives:

- Develop new start-ups, innovation, international growth;
- Increase member visibility - promote members internationally;

- Promote animation as a key digital tool within industry generally;
- Expand festival network to every major town within each Munster county;
- Increase basic trust and collaboration amongst members;
- Grow revenues for Cluster organisation to reinvest in sector;
- Establish Munster Animation cluster as a centre of excellence for ESG themes (SMART specialisation);
- Identify the opportunities to create IP within the cluster and amongst the membership base.

Overview:

- Cluster management team has grown, five to eight full-time employees;
- Membership has grown, representing more than a hundred members;
- The cluster is running a number of industry collaboration projects and events;
- The cluster's wider ecosystem is growing. The cluster identifies and addresses structural challenges lacking in the wider ecosystem, like access to venture funding, market access into new, international growth markets etc;
- Increased pool of resources and services;
- The cluster is tracking its value impact, measured in contribution to GDP, new jobs created, or capital raised by its members;
- The cluster is expanding out of Munster, establishing first international partnerships and projects;
- ESG is now the major theme being pursued in the cluster aligned with the key industry and market imperatives globally.

Key Performance Indicators (phase 1 plus):

- Number of funded or launched collaborative projects that involve a minimum of two animation businesses and one academic institution;
- Number of new start-ups and scale-ups attracted to the cluster;
- Frictionless access of members to cluster supported Intellectual Property (irrespective of ownership);
- Measurement of intellectual property creation;
- Number of commercial non-animation businesses participating in the cluster (subject to membership criteria);
- Rate of growth in value of overseas commissions;
- Value of investment committed to projects initiated, completed or undertaken;
- Number of effective international partnerships.

Outcomes:

- Building momentum from Phase 1;
- Gaining impact on the external environment of the organisation;
- Creating common added value by pooling resources;
- Creating more favorable, legal and administrative conditions for running a business;
- Participation in meetings with entities from outside of the cluster;
- Adjusting the educational profile in the region to needs of cluster companies;
- Member participation in meetings, sub-groups (formal and informal) and training;

- Setting and implementing common standards to improve quality of animation products;
- Cooperating in buying decisions to improve purchasing power and get better prices;
- Mutual teaching, training and workshops focused on skills development.

Key issues / decisions:

- Location of physical resources;
- Regional hub requirements.

Phase 3: Transform

Munster Animation Cluster Business Model Canvas Phase 3: Transform

Partnership - Regional (non cluster members), national, international: - Studios / Festivals - Education institutions - R&D institutions - Business environment institutions (business parks, incubators, technology transfer centers, financial institutions) - Other animation clusters - Chambers of commerce - Public authorities - Finance & capital markets - Marketing & PR agencies	Key Activities - Providing direction for sector - Research & networking - Policy action - Funding magnet - Commercial cooperation - Education, training & mentoring - Innovation & technology - Cluster expansion - Information exchange - Collaboration - Marketing , PR & Membership events - Assisting develop business deals on behalf of MAF members - Development of carefully selected sub-committees	Value Proposition - Create stable / improved conditions for development of members - Incubation of new projects - ESG market specialization - Engagement of members to increase mutual value - Globalization of production - Economy of scale & productivity - Access specialist & experienced skills - Improved productivity in sourcing, accessing info, facilities & tech - Downstream / upstream integration with customers & suppliers
Channels - Regional (non cluster members), national, international: - Studios / Festivals - Education institutions - R&D institutions - Business environment institutions (business parks, incubators, technology transfer centers, financial institutions) - Other animation clusters - Chambers of commerce - Public authorities - Finance & capital markets - Marketing & PR agencies	Customers MAF animation businesses - Studios - Writers - Animators - Producers - Festivals Other businesses (who buy services from MAF members) - Film Studios - Gaming Studios - Gaming Creators - Producers - Commercial businesses - State funded projects	Key Resources - MAF cluster coordinator(s) - Higher education student pool & facilities - Board and employees of MAF - Key industry sub-committees - MAF Brand - MAF Facilities & technologies
Sustainable Goals Demonstrable: - Improved competitiveness amongst members by adopting a more sustainable approach. - Carbon competitiveness & efficiency Munster animation achieving recognition & awards as an ESG center of excellence.	Relationship Management - Direct relationship management with MAF members, partners, beneficiaries - All key players have a seat at the table - Close collaboration - Entire value chain involved in cluster	Beneficiaries - Local communities & businesses - Munster and Irish economy - Audiences / Broadcasters / Cinemas - Funders - Education sector - Business promotion / training etc initiatives using animation - Financial institutions - Tourism - Animation Ireland / Screen Ireland / SkillNet Ireland
Costs Cluster operations: Staff, board, office, studios, IT infrastructure; Marketing & comms, travel, Programmes, Consulting services, other Cluster projects: Collaboration projects, innovation projects, member led projects	Financing & Revenue Public Financing: Government & State Agencies (Ireland, Other), LEOs, European Union funds Private sector: Projects, Intellectual Property, Events & conferences, Capital raise, Venture funds, rental income from cluster facilities, reports and surveys. Licences, etc.	

Objectives:

- Develop and build industry scale from both a breadth and depth in the Munster region;

- Increase member and cluster visibility - position cluster and its members in industry expert and leadership role internationally particularly ESG and technological innovations;
- Market leading research, innovation and thought leadership;
- Bring Munster start-ups / scale-ups & national / international corporates together to speed up innovation;
- Expose Munster animation cluster members to leading edge thinking, state of the art technology and likely future scenarios which will shape success;
- Accelerate transformation within member companies;
- Munster animation members will be recognised by the size of the cluster and its value proposition;
- A very tight alignment between education and skills provision and industry;
- A larger share of export revenues and work from competing globally;
- Hosting a minimum of one internationally recognised event of significance showcasing the Munster's cluster ambition, scale and capabilities.

Overview:

- More resources, both in terms of government and industry funding, capital market financing, project financing and staff;
- Strong focus on ESG storytelling, narrative and imagery;
- Focus on financial velocity, connecting startups and corporates, growing a stronger collaboration culture;
- Strong investment magnet, widely recognized as a global innovation hotspot in animation, drawing international capital, researchers and start-ups into the cluster
- Ongoing international and national promotion of Munster animation cluster as a centre of excellence in core themes (SMART specialisation);
- Pro-active participation in relevant industry competitions and awards.

Key Performance Indicators (phase 1, phase 2 plus):

- Level of foreign direct investment (e.g. number of overseas animation entities which establish themselves in Munster due to the cluster);
- Number of international commissions;
- Level of graduate absorption into the industry;
- Number of animation festivals and events supported at local county level and participation of primary and secondary students.

Outcomes:

- Participation in project groups and consortia, participating in teams focused on the development of permanent cooperating, launching joint ventures;
- Greater facilitation of resource pooling to create common value add;
- Early stage showcasing as animation as a viable career pathway;
- Greater level of grass root sponsorships for example local festivals;
- Local economic growth and development in terms of employment and economic value added.

Key issues / decisions:

- Membership fees;
- Range and breath of sub-committees;
- International membership;
- Branding strategy;

- IP strategy;
- Driving momentum;
- Alignment and engagement with Animation Ireland;
- Funding for next phase of growth;
- Engagement of IDA and Enterprise Ireland for next phase of growth including potential FDI.

Strategy Execution Plan

The following actions comprise the key elements of the strategy execution plan but by no means comprehensive list!

The timelines by which these key elements are completed are dependent upon the resources available and energy and skill of the team involved. We would expect that Phase 1 of this execution plan would be implemented during year one from the establishment of the cluster and the formation of the Steering Committee while phase 2 would be implemented within two years of this.

It is assumed that once the go ahead for this initiative has been given, a Steering Committee comprising approximately seven members (2 each from LEOs, Industry and Education with an independent Chair) will be assembled and will proceed to appoint an acting CEO with appropriate administrative support. It is expected that this organisation will be temporarily housed in an existing LEO / County Council / State Enterprise facility with good connectivity from both public transport and internet perspective. This will be a precursor to a final agreed operating entity.

All actions listed in phase 1 will be the responsibility of the Steering Committee and the acting CEO until such time as a DAC is established with proper oversight, governance and resources available. It is assumed that the properly established and resourced DAC will be formed in the course of Phase 1 of this plan.

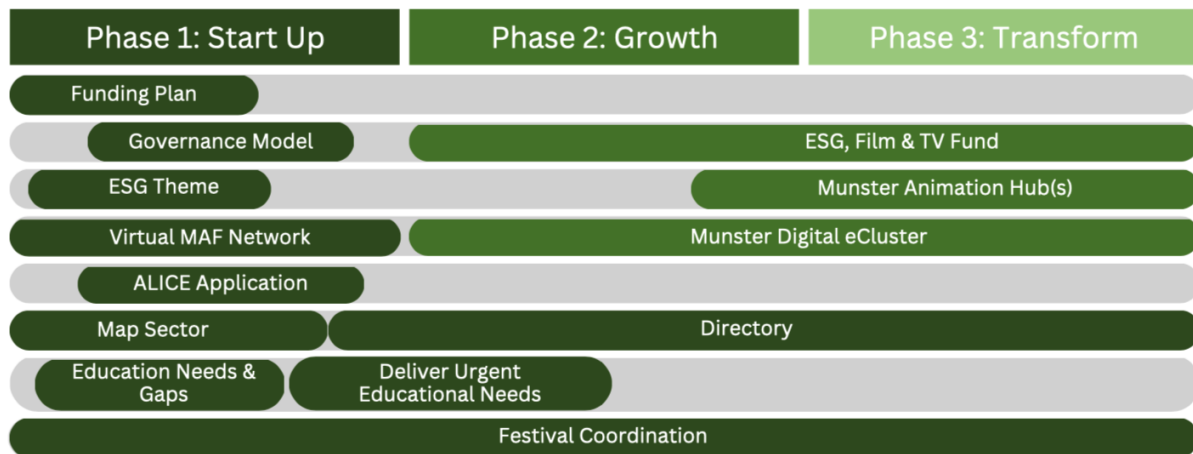
ESG will be an overarching theme of each action during each phase.

Priority Action Plan – Phase 1

- Action 1:** Launch a virtual animation cluster network as a precursor to the cluster
- Action 2:** Design and establish governance model
- Action 3:** Mapping the sector in Munster
- Action 4:** Develop a comprehensive Munster animation directory
- Action 5:** Identify urgent training and education needs
- Action 6:** Deliver urgent animation and entrepreneurship training courses
- Action 7:** Develop a funding plan
- Action 8:** Apply to join ALICE
- Action 9:** Greater co-ordination and cooperation between regional festivals
- Action 10:** Define and develop ESG market driven specialisation.

Priority Action Plan – Phase 2

- Action 11:** Establish Munster Digital e-Cluster
- Action 12:** Establish Munster Animation Incubator and Scale Up Hub
- Action 13:** Establish Munster Animation Film & TV Fund
- Action 14:** Establish Munster Animation ESG Fund.



Overarching strategy execution assumptions

- Achieve alignment of all key actors involved in Munster animation cluster including education, national authorities, animation industry and enterprise supports around the mutually agreed objectives, targets and action plans;
- Getting buy-in is key;
- An animation cluster, properly established and effectively managed, has the potential to create scale, efficiency, joined up thinking, differentiation, prioritisation, compelling value propositions and international opportunities that would otherwise be very difficult to attain;
- The objectives of the Munster animation cluster will be aligned and positively impactful on the national strategies of Animation Ireland and Screen Ireland.
- Training and skill development in Munster must be carefully attuned to industry needs and developments;
- Funding of the Munster animation industry's development needs much greater clarity, understanding and prioritisation;
- Need to reduce reliance on public funding - local funding is small – begging bowl. Focus on private sector;
- Forming a formal industry cluster organisation will bring greater clarity, awareness and industry strategic development with wider regional economic benefits;
- EU and national policy is now framed in a way that promotes and supports industry cluster formation and development;
- Technology is a key fundamental differentiator in successful animation underpinned by strong storytelling and character development;
- The animation cluster will be primarily an e-Cluster promoting the capability of the region as well as providing access to the necessary software and hardware required to meet production needs;
- The current and growing network of digital hubs and innovation centres should be promoted as a natural enabler of a regional based animation cluster from a technical, creative and social perspective;
- The animation cluster will be co-ordinated and managed by an agreed entity such as a company limited by guarantee (suitable for not-for-profit organisations) or similar with a manager and administrator(s) in its initial phase;
- The Munster animation cluster will form around a strong brand identity which conveys the purpose, objectives and values of the cluster;

- Detailed mapping of players (education, animation businesses, festivals etc) and their capabilities, skills and resources to identify specific gaps, strengths and development needs;
- The Munster cluster will seek to become a collaborative member of ALICE to access best practice, research, commission funding, other opportunities and benefits;
- Business management, sales and entrepreneurship need to be developed in parallel with animation technical skills;
- Munster animation participants need to be listed in the European animation directory for visibility and to gain access to international opportunities, knowledge and research. Also strategic use should also be made of the opportunities the Enterprise Europe Network (EEN) offers;
- Munster animation needs a central physical hub to act as a centre of excellence for the sector, to promote animation to other industries and institutions in Munster, provide shared resources and facilities demonstrate the commitment of all stakeholders and partners to the initiative;
- The cluster will be the primary contact for the industry in Munster.

Action 1: Launch a virtual cluster network as a precursor to the cluster

Introduction

Following on from the feasibility study and this strategy process, awareness and expectation has been generated at the potential business and collaboration opportunity of creating an animation cluster in the Munster region. Building and following through on this interest and momentum is critical and as an immediate next step, a virtual cluster network is proposed to capitalise on the level of interest and excitement generated. This virtual network is a precursor to the establishment of the Munster animation cluster and provides a focal point for the initial development of the cluster.

This action should be seen as a quick early win and demonstrates energy and activity in moving to the next steps of cluster development. This virtual cluster will be subsumed and form the basis of the cluster animation organisation once established.

It is proposed that the Munster LEOs either provide initial seed funding for the initiative or identify a suitable alternative funding source.

Responsibility:

Input required: LEOs; Animation Businesses; Education

Why?

- Create momentum;
- Build trust and collaboration;
- Information sharing including register of individuals and businesses;
- Opportunity sharing;
- Build and extend the cluster network to (a) primary and secondary schools (b) businesses which will benefit from animation as part of their digital transformation and customer engagement processes and (c) finance industry;
- Improve communications and understanding between education and animation on key issues and requirements;
- Improve co-ordination and alignment of festivals;
- Improve visibility and opportunity from working with the animation sector in Munster particularly amongst target markets.

What?

- Use existing network as the basis for the cluster network;
- Enable a technology platform as the initial virtual platform;
- Create a co-ordinating resource;
- Establish an agenda;
- Manage expectations.

Role of LEOs

- Alignment and support;
- Provide some resources including people and assistance in sourcing an enabling platform;

- Promotes animation sector locally.

Key assumptions

- Run centrally by a nominated LEO on behalf of region. The nominated LEO becomes the budget holder;
- Overseen by interim committee;
- Resourced full-time with support;
- Mobilises the LEO mentor network as an additional industry recruiter/project promotion opportunity;
- Oversees phase 1 activities;
- Initial budget prepared and in place;
- Runs networking and knowledge sharing events;
- Enabled by a collaboration platform;
- Facilitates shared pipeline of opportunities;
- Runs sector promotional events;
- Liaises with LEOs and education institutions on delivering quick wins;
- Initiates contact with ALICE;
- Acts as a regional focal point for Animation Ireland;
- Plays a key role in design of e-Cluster;
- Works with LEOs in promoting business and entrepreneurship programmes for sector locally;
- Collates a calendar of festivals;
- Assists networking with festivals;
- Explores other funding opportunities.

Additional commentary

This is the logical next step in the process of establishing an animation cluster in the region following the feasibility study and this well engaged with strategy formulation process. It is also critical, following some intense engagement with stakeholders, managing their expectations while continuing the momentum by establishing this ‘virtual’ cluster.

The ‘virtual’ cluster will have all the key elements including a ‘pentagon’ approach and accommodating all current members and networks. The prospect of a ‘quick win’ regarding the whole process of establishing an animation cluster in Munster is also relevant in this regard.

Consideration should be given to continuing to use of a virtual teaming and collaboration platform e.g. Mehhall.

Action 2: Design and establish Governance Model

Introduction

An organisation needs to be established to manage the successful operation of the cluster. This action plan addresses all aspects of corporate governance, structure and resourcing. Included within this are key issues such as definition of membership, board structure and practices, controls, responsibilities and oversight, accountabilities, succession planning, risk management etc.

Input required: LEOs; Animation Businesses; Education

Why?

- Need a sustainable and viable organisation to support the development of the cluster;
- Need to create credibility within animation sector locally and internationally;
- Provide a focal point for industry in Munster to showcase capability;
- Create a magnet and focal point for inward investment, funding, ideating and talent;
- Represent Munster animation with Southern regional Assembly, ALICE, EI and other key funders and stakeholders;
- Align with Screen Ireland and Animation Ireland objectives and plan.;

What?

- Business and operating model design;
- Governance system providing oversight and transparency;
- Criteria for board membership;
- Criteria for Munster animation cluster membership;
- Definition of process to co-opt other individuals, skill sets and resources;
- To act as a representative and engagement umbrella for all organisations involved in animation in Munster;
- To identify IP creation opportunities and capitalise on these for the benefit of the animation industry in Munster;
- Enabling the progressive ability for the cluster organisation to:
 - source and apply funding;
 - tender for commissions;
 - take on larger projects;
 - acquire capital assets;
 - invest in key strategic infrastructure.

Role of LEOs

- Alignment and support;
- Advise on the most appropriate structure to enable the LEOs participation. We have been informed by the LEOs that a DAC is the most appropriate structure from a local authority funding and governance perspective;
- Accessing start-up funding;
- Provide initial oversight and infrastructure;
- Provide resource including people and assistance in sourcing an enabling platform;
- An integral actor in the cluster;

- Provision of management and entrepreneurship training and mentoring for members;
- Secondment of interim resources.

Key assumptions

- Overt alignment and support from all of the Munster LEOs;
- Positive engagement and alignment with Animation Ireland and their plans;
- Has the ability to earn revenue, enter commercial contracts, raise funding and bid for work;
- Has a board and operates in line with Code of Practice for Governance of State Bodies 2016;
- Is a membership organisation;
- Membership is based upon an application process;
- Has the ability to recruit staff;
- Board is elected by the members and must adhere to be representative of each major stakeholder group;
- Board has the ability to delegate responsibilities to sub-committees of the board. A nominated board member must chair each sub-committee;
- There should be sub-committees representing each major stakeholder grouping;
- Members and non-members may be co-opted to sub-committees;
- LEOs support initial funding or they identify another appropriate funding stream.

Additional Commentary

The Governance model proposed should be consistent, where practicable and appropriate, with the Code of Practice for Governance of State Bodies 2016 (updated 2022) and is based on the underlying principles of good governance: accountability, transparency, probity and a focus on the sustainable success of the organisation over the longer term.

The Governance model proposed also takes account of successful governance models of similar organisations in other jurisdictions while cognisant of the fledgling nature and initial ‘start up’ phase of this Munster Animation Cluster organisation. Essentially, what is being proposed is an organisation governance model capable of evolving over time as the organisation and its values takes hold and its value and levels of engagement, both at home and abroad, increases.

Evidence suggests that successful ‘virtual’ clusters have governance and co-ordination structures and processes that supports the development activities of the broad ‘church’ of cluster members, participate with other trade associations and relevant institutions, sometimes on behalf of cluster member groups, and provide ‘service centres’ which interact with, for example, educational and training intuitions and regional innovation agencies while providing shared services such as help desks and consortia enablement in support of cluster members. This cluster form also enables the formation of cluster sub-committees where appropriate and potentially can play an important role in fostering good relations internally between cluster members and externally with institutions, development agencies and indeed, potentially, commissioning principals and agents.

In any event, processes which promote positive beneficial interactions between all cluster members, commercial partners and local/regional institutions will be welcomed as will the system of information exchange, know-how, and exposure to emerging and innovative

technologies be welcomed. The cluster, in time, would also be expected to support research and development, promotion and marketing activities both to National and International markets, not only of the current activities of cluster members but also promote the onboarding of new professionals to the sector while highlighting and developing skills already present in the region.

Close collaboration and alignment with Animation Ireland together with activities of other state agencies and representative groups involved in the Animation sector is also of fundamental importance as we marshal scarce National resources while highlighting the unique characteristics of the Munster region as a base for Animation and related activities.

While conscious that, at the initiation phase, state/local authority funding and other supports will be necessary to establish the cluster and its Management, in time it would be expected that the cluster becomes a self-funding Industry led initiative, capable of developing and growing in line with the expected growth and success of the industry itself in the region.

Operating Model

The operating model of the Munster Animation cluster should be governed by a Memorandum of Understanding /Articles of Association which would lay out the scope of the organisation, its objectives, promoters, duration and decision-making process.

The Animation cluster should be led by a Board of Directors made up of key stakeholders but with competence in governance and oversight requirements.

The Board is collectively responsible for leading and directing the cluster body's activities and may delegate functions to management including day to day running of the organisation consistent with agreed shared values and objectives.

The Board should fulfil key functions, including reviewing and guiding strategic direction and major plans of action, risk management policies and procedures, annual budgets and business plans, setting performance objectives, monitoring implementation and performance against agreed targets and objectives.

The Board should act on a fully informed and ethical basis, in good faith, with due diligence and care, and in the best interest of the Munster Animation Cluster while promoting the development of the industry in Munster and including all key stakeholders as well as the capability of its leadership and staff. The Board, on the occasion of its first meeting should appoint a Chairperson and Secretary from its ranks. The Role of the Chairperson is to lead the Board while also overseeing the appointment of a CEO for the Munster Animation Cluster who is responsible for the effective performance of the organisation against agreed objectives and targets. At minimum, the Board should adopt a statement of strategy for each period of 3-5 years ahead, annually reviewed and, where necessary, refreshed.

In the interests of transparency and integrity, all board members should comply with the various provisions of Companies Act 2014, especially in terms of various tax and fitness to practice considerations.

As the Munster Animation Cluster grows and matures it is recommended that other elements of the Code of Practice for the Governance of State Bodies be adapted in areas such as Ethics in Public Office, Board Effectiveness and Risk Management.

Secretary of the Board

It is proposed that the Board appoints a secretary from their members whose role is to support the Board. The scale and scope of the role will necessarily evolve over time as the organisation grows but, initially, will be responsible for proper recording of Board minutes as well as circulation of Board papers in advance of Board meetings. The Secretary of the Board should report to the Chairperson on all Board governance matters and should assist the Chairperson in ensuring relevant information is made available to the Board and any committees that may arise as the organisation grows.

Action 3: Mapping the sector in Munster

Introduction

This action provides the foundation for understanding the breadth and depth of the industry currently in the region and is the critical database upon which the cluster initiative is built upon.

As this is the major task / job of work to be undertaken in phase 1 and is critical to the subsequent successful role out of phase 2 and phase 3, it is essential that this action is given the priority and focus it requires. We expect that this action will take a minimum of 3 months following the formal initiation of the cluster and will require absolute cooperation in a time bound manner with the cluster members! It may be expedient and add velocity to have some of this work outsourced to competent partners. We recommend that the ALICE model be followed as far as possible to ensure alignment with ALICE to gain the benefits of their learnings and developments.

Input required: LEOs; Animation Businesses; Education

Why?

Need a better understanding of the regional animation profile including skills, capabilities, competitive differentiators, maturity of players and specific areas for improvement. Mapping will:

- Help design efficiency plans for the growth of the entire animation ecosystem in the region;
- Help inform public policy;
- Form the basis for establishing a directory for regional and national collaboration;
- Provide an ability to benchmark against ALICE regions;
- Form the basis for identifying collaboration opportunities with ALICE and others;
- Help identify regional skills gap analysis and create development plans;
- Help in determining funding and other supports needed;
- Help provide government agencies with up-to-date measure of the current scale of the industry in Munster;;
- Help identify all capabilities, resources, facilities and other key assets
- Provide the data for the cluster directory – which will be used by commissioners, funders etc;
- Form the basis of a Gap analysis.

What?

- Research and data sourcing exercise based on enhanced ALICE guidelines;
- Discovery which requires investigative research and engagement to uncover undocumented players;
- Enables benchmark region at a granular level versus the ALICE clusters;
- Enables benchmarking of Education versus ALICE Regions and best practice courses covering animation, animation management and entrepreneurship.

Role of LEOs

- Provide necessary resources – people, methodology and assistance in sourcing technology;
- Ensure the database is managed in a compliant manner until the cluster is established;
- Completes its own input for Mapping including services, education, funding etc.

Key assumptions underpinning this action point are:

- Need detailed and up to date information on all relevant animation businesses and; individuals involved in animation in Munster;;
- There is agreement on the definition of a cluster member
- Need a comprehensive and representative listing of all industry players, to ensure the cluster is representative of entire industry;
- Need to understand skills gaps and specialisation;;
- Need to address the current isolation of individuals and businesses in the region (quick win);
- The benefits of mapping will need to be communicated to key stakeholders;
- A communications campaign will be required to ensure as many individuals and businesses understand the benefits and complete the process;
- Mapping will help extend the cluster network thereby increasing its value;
- The virtual cluster network should be established and up and running before mapping takes place;
- Mapping should be a pre-requisite for organisations to access LEO development programmes for animation sector;
- Need detailed and up to date information on all education and skills development programmes available for the animation sector in the region;
- Mapping is a critical activity which needs to be resourced properly;
- Mapping will be consistent with ALICE data gathering processes;
- Mapping input will be undertaken by individual cluster stakeholders;
- Mapping data returns will be independently reviewed to ensure they are completed properly and accurately;
- Mapping data input will be performed electronically;
- Mapping will be proactively maintained and updated in accordance with an agreed methodology consistent with ALICE;
- There will be a process to ensure appropriate new cluster members are mapped as part of the new membership process;
- An analysis of all animation facilities and premises in the region as part of mapping process will be required.

Additional Commentary

The action is to undertake (and thereafter maintain) a full mapping of all animation activity in the region – animation businesses, education, distribution companies, festivals and regional / local bodies etc. to build a bottom-up profile of the sector in the region. Mapping should be based upon an enhanced version of ALICE mapping guidelines for each company in the cluster and should include:

- Business model of each company (all key elements supporting the value proposition of a cluster member);
- Compelling value proposition of each company.

The intention should be to collect information which can be added to the European animation database being created by ALICE.

Note ALICE covers:

- Animation businesses:
 - Detailed classification of jobs (per business);
 - Detailed professional profiles (per individual);
 - Profile of the production company;
 - Sources of funding and companies' funding instruments;
 - Classification of animation audio-visual projects;
 - Funding sources and tools for audio-visual projects;
 - Phases of audio-visual animation projects (by project).
- Distribution companies:
 - Profile of the animation distribution company;
 - Audience profile – demographic indicators;
 - Classification of animation content consumed by audience segment;
 - Classification of viewing platform;
 - Offer of animation content.
- Education (see below analysis of industry education available)
 - Classification of educational centres;
 - Classification of educational programmes.
- Regional:
 - LEOs;
 - Public tools for promoting audio-visual projects;;
 - Private funding;
 - Conservation bodies;
 - Conservation funds;
 - Festivals and events.

A detailed analysis of Industry education available

Compare the training / education available in the region against recommended ALICE curriculum for (1) Animation Technicians (2) Animation Managers and (3) Animation Entrepreneurs - versus what is currently available through colleges, LEOs and other bodies.

In particular, there is a need to develop business skills and provide mentoring amongst animation businesses in areas such as:

- Business model design / improvement;
- Value proposition development;
- Entrepreneurship and creative development;
- Leadership and team building;
- Time management;
- Project management;
- Workplace health and safety;
- Sector legislation / regulation;
- Internship;
- Marketing for creative industries;
- Crowdfunding as a market-test tool;
- Financial forecasting;.

Action 4: Develop a comprehensive Munster animation directory

Introduction

The directory will provide a detailed database of all members and their capabilities and services. It will be used to help members network with each other, showcase members to the wider animation and business community and build members online presence. A key objective for the directory to become part of the ALICE directory thereby exposing members to wider European and Global collaboration and new business opportunities.

Input required: LEOs; Animation Businesses; Animation Ireland; ALICE

Why?

- A basis for the marketing of the industry
- A directory is required to facilitate regional, national and international collaboration
- The directory provides a basis for tangible discussion with ALICE, other regional clusters, Animation Ireland, State Agencies, Funders etc.
- The directory creates a value add to member organisations
- Facilitate national and international (especially EU) co-productions
- A networking tool for animation companies and institutions in the region.

What?

- For animation businesses, it is a:
 - Directory which includes key competencies (2D lifecycle, 3D lifecycle, software tools and other skills) of each member
 - It also includes reference projects, client testimonials and accreditations of each member
- It will also provide details of all currently available training and skills programmes through colleges, LEOs and other bodies across the region
- It will provide input for the development of marketing collateral for the region.

Role of LEOs

- Promotes benefits of directory to prospective cluster members
- To understand the scope and scale of the industry in their territory
- To target development programmes to member organisations as appropriate e.g. business development programmes.

Key assumptions

- This will be a digital directory
- The directory will be Moonday to be consistent with ALICE
- The cluster organisation will apply to be a member of ALICE
- Directory will be subject to GDPR rules
- Directory will be managed centrally by the cluster organisation with appropriate service levels
- The directory will be maintained up-to-date
- Members are responsible for managing their own data profiles

- Members will have their own log-ons
- The directory will be integrated with the core cluster platform
- There will be no duplicate entry between the directory and the cluster platform.

Additional Commentary

The directory should be based upon the ALICE smart directory. It is a profile of each animation business.

A key first step will be to determine whether the cluster can participate in the Moonday platform being used by ALICE or set up its own version of Moonday. **Moonday is a dedicated platform for audio-visual professionals, which provides networking and collaboration functionality for participants.**

Action 5: Identify urgent training and education needs

Introduction

The 2021 “Skills Gap in the Irish Animation Sector” research report commissioned by Animation Ireland highlights the gap between industry needs and existing capabilities. These include graduates not being “industry ready” and lack of knowledge relating to animation software programmes. The cluster strategy process has also identified development issues in the areas of business management and entrepreneurship which are also consistent with the findings of ALICE.

The purpose of this action is to identify and confirm urgent specific skills gaps for each member animation business based upon the industry mapping exercise (Action 3). The ALICE curriculum will provide a basis for benchmarking training content to address urgent gaps.

Input required: LEOs; Animation Businesses; Animation Ireland; SkillNet; Education Sector

Why?

- To bridge gap between industry and education regarding the balance between specialisation and generalisation in people in the sector;
- To ensure the industry and sector is provided with appropriately trained recruits
- To better meet demands of the market;
- To improve competitiveness of Irish industry by taking advantage of the productivity and efficiency of new animation technologies;
- To expose skills gaps in software, hardware, management and entrepreneurship;
- To identify emerging training and education opportunities in a rapidly evolving environment;
- To establish credibility of the cluster and deliver value quickly;
- To identify valuable internship opportunities for prospective graduates and animation businesses similarly funded, for example as the Grad Start model and possibly supported by the South West Regional Enterprise Fund when it is established.

What?

- Proper examination of current and future industry skills needs and opportunities
- Foster greater collaboration between primary, secondary and 3rd level institutions as well as great cooperation between 3rd level to ensure talent is developed and nurtured and ensure appropriate skills are developed and delivered;
- To bridge the gap between industry and education in terms of training and skills needs and provision.

Role of LEOs

- Provide management and entrepreneurship training and mentoring;
- Promote and assist greater collaboration between:
 - All education providers within each LEO area;
 - SkillNet and 3rd level across region.

- Encourage growth and propagation of more film and animation festivals; demonstrating viable businesses and career options in the sector;
- Raise awareness of the role, benefits and opportunities of animation across all business, government and community sectors.

Key assumptions

- Animation businesses' skills needs can be identified, quantified and prioritised;
- Animation businesses will participate in the process of detailed skills deficit analysis through the mapping process;
- Skills deficits will be cognisant of key emerging themes e.g. ESG, Metaverse;
- The cluster will facilitate greater co-ordination between education providers and industry to more closely define needs and provision;
- The cluster will facilitate and enable the development of specialist versus generalist centres;
- The cluster will co-ordinate fallback arrangements for out of region, out of state delivery where gaps cannot be closed within required times and within the local education network for example latest Metaverse developments;
- Need to consider developing experience and capabilities in virtual team working ;
- Training needs are collated and driven by individual needs in each separate business;
- There is a consistent training and skills strategy across the region;
- Need to improve cost, quality and competitiveness of industry through newest technology;
- Need to align the quality and quality of relevant skills base with the industry growth objectives of the cluster;
- Need to consider skills shortage in the animation industry internationally as an opportunity for the education and the animation sector in Munster;
- Cross regional LEO specialist animation business development and mentoring programmes required and aligned with the objectives of the cluster.

Additional Commentary

The Munster animation cluster needs a flexible skills development approach which is complimentary to existing education organisations (schools / colleges / universities), SkillNet and providers (LEOs) and which delivers:

- Graduates of quality and relevance to the industry in Munster and beyond;
- On-the-job just-in-time training for animation businesses;
- International opportunities for Munster graduates broadening their experience and professional development and who are tagged by the cluster.

This process should begin as soon as possible following the mapping exercise which will identify skills and training gaps. The process should be undertaken with the support of relevant skills training and development agencies.

Animation design and production software is constantly evolving, and no traditional school can afford the luxury of constantly re-equipping itself with new versions of these expensive programs. There needs to be a process which constantly updates the skills of learners in a process of “Lifelong Learning” but also to train trainers and upgrade teachers.

The Munster animation cluster should consider signing up to such programmes as:

- “Pact for Skills”, initiated by the European Commission (DG Employment, Social Affairs and Inclusion), which aims to promote lifelong learning for all and create strong skills partnerships;
- “Creative Pact for Skills Manifesto” published by a group of Creative Industries stakeholders who aim to respond to the most urgent skills needs by coordinating on a European scale, relevant to the ecosystem of the sector.

Action 6: Deliver urgent animation and entrepreneurship training courses

Introduction

This action develops and delivers urgent training interventions in the most optimum manner. Consideration should be given to business constraints and the most appropriate delivery mechanisms including continuous business training, mentoring, on-the job learning etc. It is expected that training will cover a wide range of topics ranging from technical, operational, management, financing and entrepreneurial subjects. Some of these may need to be delivered on a just in time basis.

Input required: LEOs; SkillNet

Why?

- To help animators fill immediate skills shortfalls;
- To help animators with business development;
- To help animators raise finance;
- To address business needs of animation entrepreneurs;;
- To enhance the capacity ESG, climate and digital related transformation in society and business by having in house up to date capability;
- To support creation of regional centre of excellence in ESG.

What?

- LEO and SkillNet run programmes;
- See details from ALICE;
- Directory of all training courses to be analysed, reviewed and updated regarding relevance and focus in terms of the cluster strategy.

Role of LEOs

- Responsible for development of entrepreneurship skills;
- Animation to be brought into centre of training and development strategies for all industries as appropriate;
- All Munster LEOs need to co-ordinate and work together to deliver complimentary and mutually supportive animation development programmes with a strong focus on business development, funding, innovation and ESG across all industries;
- A comprehensive and mutually supportive mentoring programme needs to be put in place with focus on developing the business opportunities envisaged by the cluster.

Key assumptions

- There are mechanisms to fund identified training needs and gaps;
- Training will be of necessary quality to meet needs and make a difference
- Training is continuous;
- The cluster can leverage ALICE developments;
- Support and advice will be provided by the cluster to help members generate funding and revenue e.g., Patreon account; NFT; Crowdfunding (e.g., Kickstarter, Indiegogo)
- Training will be provided in business development for animators (incl. freelance websites; YouTube Channels; Online education content; affiliate marketing etc.);

- Training will be provided in proposition development including animation shorts (Etsy, Animation for social media etc);
- Training will be provided in all aspects of ESG and opportunities arising.

Additional Commentary

What is the future of animation?

Enduring Requirements: Telling & Sharing Stories, Quality, Innovation, Business skills



"We realize that it's going to be less of a passive-type experience where you just have playback, whether it's a sporting event or whether it's an entertainment offering and more of an interactive, lean-forward, actively engaged type experience."
- Bob Chapek, CEO Disney (from last earnings call)

"AI-based animations can be produced cheaply, quickly, and with far less manpower than traditional hand-drawn or computer-generated animations. And as these technologies continue to develop and be refined, the price difference will only grow larger. AI art is now better than humans. Some huge studios are beginning to use AI in production."
- Mike White, SVP of next-generation storytelling and consumer experiences, Disney

Is the Munster animation industry Metaverse ready?

- Industries are converging
- Animation is not just about entertainment
- Animation skills have wider application – digital transformation, training, education etc.
- Metaverse is creating significant new opportunities where it is at the core of rethinking digital experience
- The future is virtual reality and augmented reality merging with the more three-dimensional contextual Internet to provide immersive experiences.

Where are the future opportunities?

Enabling organisations to:

- Engage effectively with the metaverse?
- Better visualise and simulate architecture, processes, data, etc?
- Improve customer experience, engagement and communications?
- Reduce carbon footprint and negative environmental and social impacts through VR based training, risk simulation, virtual tourism, etc?
- Improve reputation through better story telling and positive immersive experiences?
- Low budget, mass market AI enabled immersive animated entertainment for smart devices and media.

"From an innovation point of view we're excited by the emerging metaverse as something that enhances the world we live in, as opposed to an uncanny digital simulacrum. We continue to explore many more facets of the metaverse in our work, always with a viewpoint as to how it can positively add to the cultural conversation."
- Colin Giles, Vancouver Film School

"We will see an increase in the mainstream use of real-time in animation filmmaking. The big change has been that we can now achieve instantaneous renders that are, graphically, as pleasing as those we're seeking through the traditional digital process. Real-time animation is a medium that provides directors more iterations, allowing them to potentially move around scenes and animated action just like they would on a live-action set. It is also very powerful in that we can now create pleasingly designed 'live animation'. This will bring animation into many more places where it will become part of faster turnaround productions or more conversational media."
- Chris O'Reilly cofounder Nexus Studios

Action 7: Develop a funding plan

Introduction

A strategy is required to address the longer term funding needs of the Munster animation cluster. Whilst it is proposed that the initial funding of the cluster will be supported by the LEOs in the region, this will not be sufficient to scale and deliver the ambition of the sector. Consideration needs to be given to other sources of funding including state, EU and the private sector in addition to areas of revenue generation such as IP, cluster services, sales commissions and other fees. Initially there will be no fees for membership of the cluster, however the cluster organisation should be able to charge members fees for services or use of shared resources as the cluster develops and value accrues.

Input required: LEOs; Enterprise Ireland; Animation Ireland, ALICE, Animation Industry

Why?

- To fund the establishment and development of the cluster;
- To initiate the process of envisaging future funding streams for the ongoing development of the cluster in later phases;
- To enable the cluster to become a powerhouse of animation and the development of the regional cluster;
- To enable the cluster qualify and tender for significant / larger commissions;
- To promote the cluster internationally.

What?

- A detailed plan for phase 1, 2 and 3 funding for the cluster;
- Map all funding sources available national and internationally;
- Detailed marketing package to support funding applications;
- Apply for funding e.g., National and EU programmes etc.

Role of LEOs

- Assist sourcing of initial funding for establishment of the cluster including mapping etc;
- Provide input into determining and prioritising funding needs;
- Assist in identifying sources of funding;
- Jointly / regionally support applications for such funding in whatever way is necessary;
- Provide input to funding applications and marketing collateral;
- LEO alignment and active involvement to provide initial scale and ambition of the cluster as well as collective determination;
- Satisfy governance, transparency and oversight procedures are compliant with State codes of practice.

Key assumptions

- The cluster will be empowered to raise funding;

- The cluster will have the appropriate governance and controls to raise, manage and distribute funding;
- The cluster will disburse funds to LEOs, Education, Festivals, Animation businesses as required;;
- The cluster will raise funding from public and private sector organisations both locally and internationally;
- Initial funding by LEOs.

Additional Commentary

There are significant EU funds available across a range of sources which are applicable to the cluster. Some of these relate to creative industries and animation particularly, others are applicable to digital transformation and ESG themes.

Application for European Funding to support the development of the cluster e.g., Horizon Europe 2021 to 2027: Pillar 2 - “Culture, creativity and inclusive society”; Pillar 3 “European ecosystems of innovation”. Creative Europe 2021-2027 the EU framework programme that supports activities in the cultural and audio-visual sectors.

One of the most difficult issues for European producers and institutions is to fully understand the various European funding mechanisms available and to go through the detailed and onerous application process. This will be an important competence of the Munster cluster leadership team ideally in partnership with specialist Local Authority European funding teams.

A marketing presentation package will be required for finding strong partners and financing around co-production collaborations within EU to include statement of intent, marketing targets, regional development benefits etc. The objectives will be to create collaborative funding opportunities while leveraging the expertise and standing of more developed animation clusters.

The scope of the application of the investments should include:

- Original Film and TV and other audio-visual projects;
- ESG and digital themes;
- Education including primary and secondary schools;
- Festival development and other local animation promotional activities;
- The cluster infrastructure and resourcing.

Action 8: Apply to join ALICE

Introduction

It is recommended that the cluster become a member of ALICE. The benefits for animation within the Munster region include becoming part of a larger European network supported by the EU with the objective of growing the industry and improving its competitiveness. Membership will provide access to learning, best practice, case studies, commissions. Membership will also promote the Munster region as an engaging and original animation destination with collaboration opportunities as well as deeper knowledge of EU funding options. ALICE is a few years ahead in its development and will help kickstart the animation cluster particularly in areas of research, processes, technology, education and governance.

This action is deemed as priority following the establishment of the cluster organisation. Early contact with ALICE is recommended to establish relationships with Munster Animation and build support for joining it.

Input required: LEOs; Animation Businesses; Education; Animation Ireland

Why?

- To access animation cluster best practice and research;
- To access animation cluster management tools and methodologies;;
- To help members access significant EU funding sources;
- To access specialist skills and resources for both the cluster and its members;
- To help members participate in collaboration programmes and revenue opportunities.

What?

- ALICE - Animation League for Increased Cooperation in Europe;
- The regional cluster partners of ALICE are:
 - Wallonia (Belgium);
 - Hauts-De-France (France);
 - Catalonia (Spain);
 - Puglia (Italy);
 - Bratislava (Slovakia);
 - Rzeszow (Poland).

Role of LEOs

- Make initial approach to join ALICE on behalf of Munster animation and seek short term opportunities for collaboration including access to tools and animation project participation for members;
- Prepare a presentation (pitch) document outlining the reciprocal benefits of the cluster joining ALICE.

Key assumptions

- ALICE is open for new members;
- ALICE will welcome the opportunity to work with the Munster cluster;

- Animation Ireland will support application;
- There are reciprocal benefits for ALICE regions.

Additional Commentary

ALICE - Animation League for Increased Cooperation in Europe is funded by INTERREG. It explores avenues for interregional collaborations in the animation sector to leverage the sector's potential for growth and innovation and to foster the development of a pan-European, world-leading industry. ALICE aligns with the objectives of the Animation Plan for Europe published by the European Commission in September 2017 as part of the preparations for the next Creative Europe Media Programme. ALICE also aligns neatly with the ambition of the Munster animation cluster and appears like an ideal partner opportunity.

The objectives of ALICE are to enable SMEs in the animation sector to collaborate through co-productions, make access to funding and capital and enable the retention of talent thereby boosting competitiveness on the international, globalised market along the entire production value chain. A critical role of the leadership of the Munster animation cluster is to pro-actively engage with ALICE and source on behalf of the sector all the promised benefits of ALICE membership.

Action 9: Greater co-ordination and cooperation between regional festivals

Introduction

Munster region currently hosts a major animation festival of global significance, the Dingle Animation Festival. However, under the radar of the Munster animation industry and indeed the education sector is a network of highly active, creative and engaging festival activity operating on a somewhat ad-hoc basis but led by passionate individuals in the various locations in which they operate. In many cases this is the first opportunity for young children and teenagers to engage with animation and indeed with a lot of the emerging related technologies available on smart phones and tablets. This has given rise to a rich tapestry of engagement and interest amongst young people particularly in those locations where festival activity occurs. Undoubtedly the industry would benefit from a more co-ordinated approach to this festival activity perhaps developing an Animation Dojo Model along the lines of the “coder dojo” initiative – a free and fun way to learn animation for kids and teens. With wider reach and greater coordination throughout the region this extended festival activity with awards and celebration potentially could cascade up to the Dingle Animation Festival!

Input required: LEOs; Animation Businesses; Festival Organisers; Animation Ireland; Education Sector

Why?

- Promote animation as a fun activity and a viable career option in primary, secondary and 3rd level education institutions;
- Promote Munster region as a centre for animation investment, training and collaboration;
- Create a tiered system of competition and excellence within the primary, secondary and 3rd level system of animation training;
- Inspire more young people to enter the animation industry – help address skills shortage;
- To promote the important role of animation in innovation, creativity, digital communication and engagement to businesses and other organisations;
- Expose the creative capability of the region to the global animation industry.

What?

- Greater knowledge of existing festival activities and networks up to and including the Dingle Animation Festival;
- Support schools and animation businesses in making submissions to local and international festivals;
- Encouraging further development of growth of festival activities and networks;
- Aligning on key strategic themes of Munster animation;
- Provide follow on support and training for each step from primary to secondary to third level for animation enthusiasts;
- Provide a platform for exposure for emerging talent to industry.

Role of LEOs

- Identifying candidate animation businesses which would benefit from support for attending festivals;

- Supporting local festivals become more effective as a platform for marketing regional capabilities.

Key assumptions

- Festivals can help funding for animation projects;
- Festivals are an effective means of marketing Munster animation talent and opportunities;
- Festivals are an effective means of inspiring people to join the animation industry;
- Effective local, national and international networking mechanisms for industry;
- There will be a common shared platform to support festival organisation – submissions, organisation, selection etc;
- Support to animation businesses in making submissions (applications, press kits, fees, screening formats etc);
- Mechanism to resolve unintended competition, overlap, poor timing, exposure and organisation of festivals.

Additional Commentary

An important aspect of Munster Animation cluster is to encourage and further build the network of festivals and competitions with greater emphasis on ESG and Digital SMART themes thus increasing awareness, interest, engagement and participation in animation at a much earlier age. This has the potential to be a significant early win following the establishment of the cluster.

Critical to achieving this objective will be to continue to engage positively with the existing network of festivals and individuals who have so selflessly and with great enthusiasm created this platform.

Action 10: Define and develop ESG market driven specialisation

Introduction

Environmental, Social and Governance (ESG) is and will continue to be the dominant and fastest growing issue facing humankind, society and the economy for time to come. Market demand is accelerating for ESG themed animation production, explainer videos, visualisations. For example Cartoon Forum 2022 – over 70% of pitch projects were environmental & ecological. Approximately 20% were concerned with inclusivity.

ESG represents a major opportunity for the animation sector. Demand will come from across all business sectors in areas which include data visualisation, impact reporting, marketing, employee and other stakeholder engagement and education etc. Within the region and nationally there will be an opportunity to create strong linkages with other clusters and centres of excellence with an ESG focus. There is also an opportunity to connect with the substantial and growing impact funding available nationally and internationally. There are no established animation clusters with an ESG specialisation yet this is recognised by the EU as the most pressing issue of our time and affecting all aspects of our existence.

There is a clear first mover advantage for Munster animation cluster here provided the initiative is taken! IT is recommended that work on the ESG theme begin as soon as possible.

Input required: LEOs; Animation Businesses; Festival Organisers; Animation Ireland; Enterprise Ireland; IDA.

Why?

- A focus on ESG is a value added differentiated proposition in which a focus on value rather than cost is critical and should mitigate competitiveness issues such as Ireland's higher wage and cost of living costs versus competitors such as Spain;
- Quality storytelling is profound, engages more parts of the brain and is memorable. Digital animation storytelling trumps traditional techniques on many levels including effectiveness, value and impact. Animation is the most effective medium to explain the "world to be" and the "world could be";
- There appears to be no animation cluster specialising in ESG;
- Opportunity to complement and work with other non-animation regional centres of ESG excellence / specialisation e.g. The Burren College of Art;
- To take advantage of the increasing opportunity and need to explain why and what needs to be done and is being done to address ESG;
- To demonstrate the capability and capacity of the cluster to support the ESG requirements of businesses and other sectors.

What?

- Development of integrated regional Smart specialisations around specific digital ESG themes across sectors e.g., animation, technology, pharma, engineering, training etc;
- Engage with all key actors in the cluster including festivals, industry, LEOs, education while aligning goals and objectives and strategies.

Role of LEOs

- Promote opportunity for collaboration on ESG with animation across all businesses within LEO area.

Key assumptions

- Can create synergies with other national and regional ESG developments / programmes / initiatives;
- There will be a demand for ESG animated story telling and visualisations;
- Can access significant ESG funding to support development;
- Can establish a leading position in ESG animation;
- Animation businesses will be supportive;
- Gap in market for ESG animation festivals;
- Animation can help depict reality environmental and social scenarios which cannot be readily visualised as effectively as other medium;
- Animation can be utilised to visualise and better depict the impact of climate and environmental stress tests and scenario analysis;
- Animation can be used to effectively build consensus on different realities around ESG which are not fully understood or appreciated by other parties.

Additional Commentary

Market ESG Animation Needs:

- Market: Ranging from start-ups through corporates (incl entertainment, games and advertising) and governments;
- Purpose: Communicate sustainability ideas, progress and commitment;
- Qualities: Informative, inspirational animation videos to showcase projects and initiatives;
- Why animation: Ability to glimpse the future in spectacular way; show in-depth analysis of development projects; bring ideas to life.

Potential Market Offering:

- Explainer videos: How can individuals or organisations help?;
- 3D visualizations: of the not-yet made, developed, impacts, etc. The world to-be. The future;
- ESG story telling: Bring projects and needs to life to touch hearts and inspire;
- Brand and high-profile conference / event / project support: COP28, WEF etc.

It is proposed that MAF focus on ESG animation opportunities. These themes have significant storytelling requirements, future demand and application for animation. Furthermore, there are significant public and private sector funding available for projects addressing this theme. We summarise later in this document major EU funding sources. We can help citizens understand the challenges that ESG has identified and show just how this project and the businesses involved are delivering the means to communicate the solutions

Research indicates that thematic specialisation greatly supports development and innovation of animation clusters. Cooperating with specialist clusters also provides an opportunity for MAF members to collaborate and participate in areas such as VFX (Apulia), gaming, digital

technology (Wallonia), cultural and creative (Slovak Republic), and ICT (Podkarpackie). [See ALICE recommendations].

The benefits of the ESG theme include an opportunity to greatly increase the connectivity between MAF animation businesses and other non-animation businesses and initiatives in the Munster region. These include the ESG centre of excellence at UCC, the multi-national tech sector, medical device sector, the food / dairy sector centre of excellence at UCC, etc. Research shows that animation is increasingly used by organisations to tell stories much more effectively than any other media, to visualise complex information and concepts, create new forms of customer engagement and experience, transform operational process and learning.

Where possible opportunities should also be sought to link the proposed MAF themes with non-animation other regional specialisations within Munster, Nationally and Internationally such as food, biotech, biopharma and digital technology.

Thematic specialisation also provides the benefit of more efficient and effective use of animation resources in a low-emission economy with a clear market need. The animation cluster should adopt a specific and thoughtful approach to efficiently achieve sustainable growth whilst supporting more sustainable practices in the wider economy. Better jobs will be created through social inclusion, through growth based on thematic specialisation and will contribute to the Irish Government's green objectives.

Action 11: Establish Munster Digital e-Cluster

Introduction

Since the COVID pandemic, the animation sector globally has shifted considerably to a virtual model. As a largely digitally enabled industry, geographic restrictions and physical location have become less of an issue. Research indicates that small and micro firms perform better within virtual clusters in various areas including innovation, international networking, pace of development and scaling. Further advances in technology (e.g. [ChatGPT](#) and Adobe's [After Effects](#)) have removed many of the traditional barriers to entry for small scale animation creation and rendering.

In addition to the trends and benefits above, the creation of a digital e-Cluster will enable Munster animation to launch and deliver benefits to members much more quickly than a location based cluster. Appropriate collaboration infrastructure will need to be in place to enable operations and there are plenty of good readily available tools in the market to facilitate the necessary forms of collaboration. One of the key enabling tasks following e-cluster establishment is to source the enabling technologies to create a virtual studio including any necessary training and education.

The Digital e-cluster is an evolution from the virtual network. The virtual network is a networking and communications precursor to the Digital e-cluster which is a technology enabled collaboration ecosystem with a rich and current variety of leading software tools, resources and capabilities.

It is envisaged that the Digital e-Cluster will be supported by physical hub(s) at a later stage.

Input required: LEOs; Enterprise Ireland; Animation Businesses; Screen Ireland; Animation Ireland; Education.

Why?

- Physically located production is no longer a determining factor;
- Animation is rapidly becoming a digital industry;
- Animation commissions are produced effectively on a virtual basis;
- Animation expects to globally source capabilities and input on a virtual basis;
- Support development of employment in local communities across the region;
- Roll out of national broadband provide a level playing field in terms of communication, digitalisation, ecommerce etc.

What?

- Digitally connected and enabled network of individuals and businesses and institutions that communicate and collaborate virtually for mutual benefit;
- A “virtual” studio supported by technology capable of delivering the major attributes of a “physical” studio equivalent;
- A virtually engaged network capable of capitalising on key market led opportunities including climate, metaverse, digital transformation etc.

Role of LEOs

- Provide assistance in identifying the technical tools to establish MAF;
- Provide connectivity between animation and other organisations on specific themes;

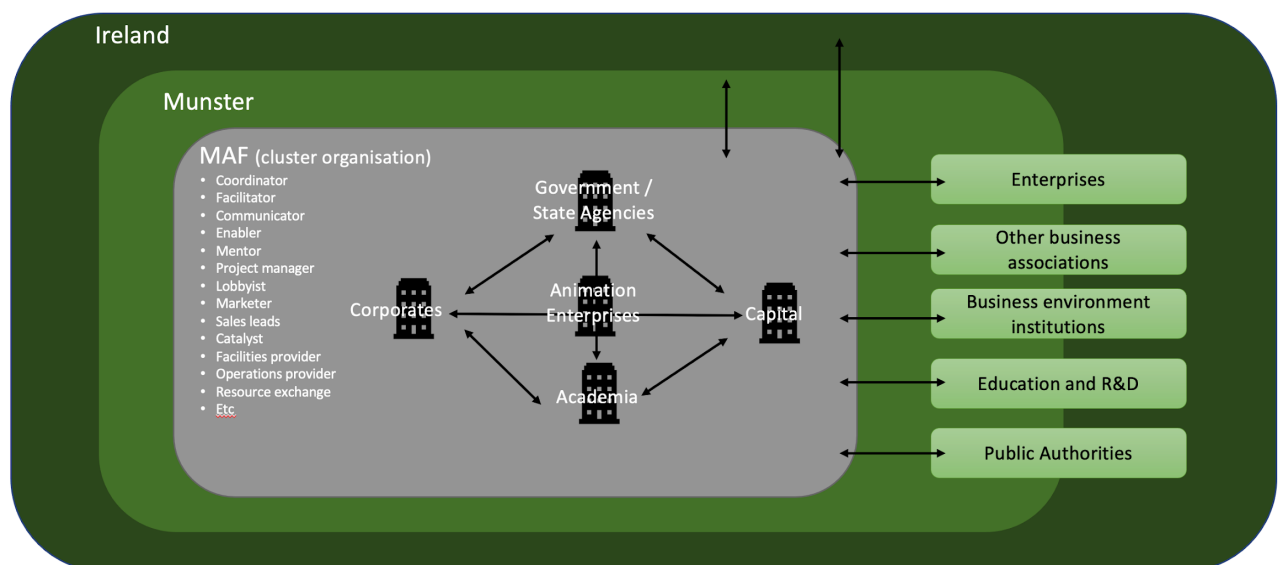
- Provide focus through the various LEO programmes in support of animation sector digitalisation;
- Provide business / market training to animation start up and small enterprises in the LEO area.

Key assumptions

- Animation will continue to embrace the growth of virtual production and ways of working;
- An animator's ability to create high quality animation is dependent more on technology than physical co-location;
- Virtual production has enabled artists to create the same standard of work as they would in a studio environment;
- The gig economy is becoming an important source of talent right across the world without much incremental cost, set-up time or process changes for studios and animation businesses.

Additional Commentary

e-Cluster Organisation



Where appropriate in-person meetings and collaborations should be encouraged and supported by the e-cluster.

Action 12: Munster Animation Incubator and Scale Up Hub

Introduction

There is a need for physical shared infrastructure to support the Munster animation cluster, its administration and indeed support the continuing e-cluster development. The feasibility study identified the need for physical studios to bring animators in each county together in a shared collaborative location. This may no longer be necessary depending on the success of the e-cluster and 'virtual' studio. The development of local business hubs has had mixed results both in Ireland and internationally. Considerations need to be given to effective specialisation, economics of scale, networking, programming and use of scarce capital.

The proposal is to initially establish a central administrative Munster hub which will also act as a centre of excellence for the animation sector and the headquarters for the animation cluster. Once this is established a business case may be developed for additional hubs in areas which have greater concentration and indeed specialisation of animation businesses.

Input required: LEOs; Enterprise Ireland; Animation Businesses

Why?

- An inspirational hub to promote animation to other industries and institutions in Munster;
- Provide shared resources and facilities;
- Demonstrate the commitment of all stakeholders and partners to the initiative.

What?

- A physical, inspirational and prestigious branded location in which to house the initiative;
- Well located in an easily reachable central location ideally with other related resources within the environs;
- A colocation centre especially for the early phase development and scaling of animation businesses;
- Suitably situated and capable of attracting qualified leadership and staff;
- Demonstration and test facility for new animation technologies.

Role of LEOs

- Identify and short list candidate locations;
- Proactively support and promote the chosen location;
- Make it easy for all local businesses and institutions to deal with chosen location.

Key assumptions

- Need to start with a central hub which acts as an initial centre of excellence and model for other potential animation hubs across the region;
- The hub is focussed on helping start-ups and scale ups;
- The hub is revenue generating;
- The hub is a physical and virtual networking facility which connects cluster members internationally;

- The hub provides physical facilities and resources to cluster members;
- The hub runs programmes for cluster members;
- The hub is the physical focal point for the cluster;
- The hub is the physical HQ for the cluster;
- The hub may spawn local spokes over time;
- There is a solid business case;
- The hub will network with other hubs internationally to create opportunities and programmes for cluster members;
- The hub is branded;
- The hub will operate based upon ESG best practice.

Additional Commentary

For local companies and freelance digital sector workers (animation, gaming, cross-media, virtual effects and postproduction) in a colocation centre, this Munster Animation Cluster ‘hub’ will act as the administrative centre of the cluster, and in time may also provide a wide variety of services from training to technology and collaborative centre to studio space. The hub can also be viewed as an iterative development, evolving as the cluster moves through the various phases of development as outlined above while also embracing the ongoing rapid technological advancements to inform future decisions regarding resources and ‘must have’ capability.

Action 13: ESG Munster Animation Film & TV Fund

Introduction

One of the desired key capabilities of this Munster Animation Cluster is the ability to target larger briefs and commissions, leveraging the breadth and depth of cluster member capabilities, than otherwise would be the case if such briefs were pursued by individual companies themselves. This involves all appropriate capability, commercial/educational/local enterprise/resources be deployed in pursuit of suitable targets and commissions and supported by necessary funding to properly 'pitch' for such briefs in a relevant and professional manner.

Input required: LEOs; Enterprise Ireland; Animation Ireland; ALICE

Why?

- To provide a marketing and promotion fund to enable the cluster, apply for and succeed in larger commissions and briefs than otherwise would be the case;
- To support and target the creation and production of carefully researched original content
- To fund the scaling of the production capacity of the industry in Munster;
- To fund the development of collateral (animated storyboards) in the form of animated content to promote animation and individual businesses enabling the demonstration of the capability of the cluster to distributors, major studios, streamers and TV companies.

What?

- Raising money from private, public or institutional funders for the creation of original animation content (Features, TV series, promotional material, concepts).

Role of LEOs

- Endorse applications for institutional and public funders.

Key assumptions

- Robust business plan required;
- Funding available from EC for EU originated content
- EU agencies including Creative Europe, Horizon Europe etc will provide funding opportunities for the cluster. The appendices to this document provide further details.
- Funding will be for collaborative projects;
- Robust governance processes in place;
- Major function in cluster will be the development and on-going maintenance of relationships with public funders, capital markets and commissioners;
- There will be a board established for the cluster with the substance, quality and standards required to provide confidence amongst major funders.

Additional Commentary

This would be a major ambition in establishing the Munster animation cluster and assumes that the cluster body is more credible and capable than the sum of the parts.

Action 14: Munster Animation ESG Business Fund

Introduction

ESG as a core corporate and societal theme has emerged as the most powerful issue facing society at present. The issues raised in ESG discussions are now core and central to EU, Ireland and Local Government policies. Increasing and more onerous regulation and forthcoming non-financial disclosures will impact all walks of life and represents the single most disruptive event of our generation.

It is proposed in addition to initial seed funding and the film fund, that the cluster pursue the substantial EU impact funding streams ringfenced for ESG initiatives and potentially available to the Munster animation cluster. Furthermore, with success and momentum the cluster should also be in a strong position to access private sector and capital markets ESG funding of which there is a substantial growing pool being mandated by financial regulatory authorities.

The ESG market is set to grow exponentially with the mandatory obligations resulting from the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standards (ESRS). This will create potential demand from all but the smallest businesses for more effective ways to communicate their ESG and CSR progress and credentials.

Input required: LEOs; Enterprise Ireland; Animation Ireland; IDA

Why?

- To support the implementation and funding of the ESG theme;
- To fund ESG regional animation programmes and animation business productions and content.

What?

- Raise finance from private, public or institutional funders for the creation of original ESG animation content (Features, TV series, promotional material, concepts);
- Focussed on collaborative projects / efforts.

Role of LEOs

- Endorse applications for institutional and public funders;
- Create exposure for animation businesses across the region on ESG.

Key assumptions

- Robust business plan required
- Can create significant impact on ESG locally and internationally
- Can create unique advantage
- The cluster will require ESG expert resources
- The cluster will work closely with ESG research centres
- Orientation will be towards bottom line as well as social and environmental impacts

- The cluster will share learnings and support other organisations looking to impact ESG
- Multi stakeholder involvements and partnerships
- Provide opportunities for ALICE members outside of Ireland
- Social includes cultural and creative developments
- There will be a high demand from government, media, online communities and other stakeholders for visibility / information on progress
- Funding will be for collaborative projects
- Robust governance processes in place.

Additional Commentary

This action will necessarily be part of developments during phase 2 and phase 3. It will be a natural step forward in the continued development and prestige of the Munster cluster. It will also require resources both technical and administrative to pursue these opportunities. First mover advantages should arise and accelerate the success of this action.

Appendices

Appendix 1: Glossary of terms

TERMS	DEFINITIONS
Adobe After Effects	Adobe After Effects is a digital visual effects, motion graphics, and compositing application developed by Adobe Inc. It is used in the post-production process of film making, video games and television production. Among other things, After Effects can be used for keying, tracking, compositing and animation.
ALICE (Animation League for Increased Co-Operation in Europe)	A.L.I.C.E, the ‘Animation League for Increased Cooperation in Europe’, created under Interreg Europe in 2019 is designed to help European animation producers build strong intellectual property in an extremely competitive international market.
Artificial Intelligence (AI)	Artificial intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.
Augmented Reality	Augmented reality (AR) is an interactive experience that combines the real world and computer-generated virtual world, including visuals, sounds and other stimuli.
Cartoon Forum	A unique animation ‘pitching’ event with pre-selected TV projects and where animation producers can find cross-border partners and financial backers.
Character Animation	A specialised part of animation processes in which animated characters are brought to life. Character animators shape characters to take on a desired personality, experience specific emotions or embark on a physical or mental journeys.
ChatGPT	ChatGPT is an artificial intelligence technology that uses natural language processing (NLP) to analyse and understand written or spoken language, and then generate responses based on that input.
CSRD	Corporate Sustainability Reporting Directive arising from European Green Deal’s climate change action objectives to enhance the disclosure by companies on climate and environmental data.
Environmental, Social & Governance (ESG)	ESG is a framework that helps stakeholders understand how an organization is managing risks and opportunities related to environmental, social, and governance criteria (often called ESG factors).
ESRS	The European Sustainability Reporting Standards and which follow the CSRD directive (above).
European Audio Video Observatory	The European Audio Video Observatory is part of the Council of Europe in Strasbourg, France. It is a public service organisation. The Observatory was created in 1992 in order to collect and distribute information about the audio-visual industries in Europe.
FDI	Foreign Direct Investment.

GDPR	The General Data Protection Regulation, which regulates data protection and privacy in the EU.
ICT	Information and communications technology.
Interreg Europe	Interreg is a key European Union (EU) instrument that strengthens cooperation between regions and countries within the EU. As part of the EU's Cohesion Policy, Interreg plays a vital role in promoting regional development, cohesion, and reducing economic disparities.
IPO	Initial Public Offering, the process of offering for the first time shares of a private company to the public to raise funds in a new share issuance.
KPI's	Key Performance Indicators, a quantifiable measure of performance over time for a specific objective or set of objectives.
Metaverse	The metaverse is a proposed network of immersive online worlds experienced typically through virtual reality or augmented reality in which users would interact with each other and purchase goods and services, some of which would exist only in the online world.
Procedural Animation	Procedural animation is a type of computer animation used to automatically generate animation in real time and allows for a more diverse series of actions than could otherwise be created using predefined animations.
SMART Innovation	SMART Innovation is part of a smart specialisation strategy whose goal is to set priorities to build competitive advantage while matching research and innovation strengths to business needs.
SMART Specialisation Initiative	Smart Specialisation Initiative is an innovation policy concept that aims to boost regional enterprise innovation, contributing to growth and prosperity by helping and enabling regions to focus on their strengths.
Subscription Video on Demand (SVOD)	Subscription Video on Demand (SVoD) refers to video streaming services that require users' subscriptions for authorized access to content. e.g. Netflix.
Triple Helix Model	The triple helix model of innovation refers to the interactions between academia, industry and government which fosters economic and social development as described by such terms as the 'knowledge economy'.
Video on Demand (VOD)	Video on Demand is a system in which viewers choose their own filmed entertainment, by means of a PC or interactive TV system, from a wide available selection.
Visual effects (VFX)	Is the process through which imagery is altered, created, or enhanced for live-action media that could not be captured during live-action filming due to it being costly, dangerous, impractical, or impossible to shoot. Visual effects allow for the integration of live-action footage and VFX to create realistic objects, characters and environments.
Virtual Studios	Virtual studios and production allow real-world and digital platforms to converge using a game engine to create virtual

	sets and environments during filmmaking. Virtual production allows for more flexibility and creativity in filmmaking, as it eliminates the need for physically building every set or flying crew to physical locations.
Virtual Reality	Virtual reality (VR) is a simulated experience that employs pose tracking and 3D near-eye displays providing the user with an immersive feel of a virtual world.
Cultural Industries	Cultural industries refer to industries that produce and distribute cultural goods or services. These industries can include businesses that create, distribute, or sell creative products and services.
Pain Points	A pain point is a specific problem that prospective customers of a business or industry are experiencing. Resolving customer ‘pain points’ can create business and/or creative opportunity.
Value Proposition	A value proposition is a statement that clearly summarises why a customer would buy or select your product or service over a competing product or service and highlights the benefit that customers receive by making the particular selection.

Appendix 2: Process and Methodology

The project was planned to be undertaken over five phases:

1. **Programme initiation** – project planning; initial development of cluster core design concepts; set up of MAF technology platform; workshop design and; programme plan; participant introductory briefings and workshops
2. **Where are we going?** – a series of workshops and one-to-one meetings to examine key change drivers, trends and horizon risks for the sector; stakeholder pain points and potential pain relievers; disconnects within the Munster animation ecosystems and beyond; opportunities and implications for the design of the animation cluster organisation. Research was also undertaken into the development of high performing clusters internationally and recent trends in the evolution of European animation clusters.
3. **MAF strategy** – a series of workshops and one-to-one meetings to develop MAF's: overall strategy; key strategic pillars and business model as they evolve over time; key performance objectives for the animation cluster organisation; value proposition including areas of competitive differentiation and advantage.
4. **How do we get there?** – this phase developed the proposed strategy deliverables into an executable project roadmap, business case and risk management plan.
5. **Strategy sign-off** – approval of key deliverables and recommendations.

The process was designed around key workshops which:

- Sometimes included all stakeholders particularly in phase 1 and 2 to discuss big issues and trends which impacted everyone involved. These workshops often would include between 25 and 40 participants.
- Included single groups of stakeholders to focus on specific areas for example: animation businesses on their pain points; education institutions on industry development needs; education and animation businesses on disconnects between both groups; Local Enterprise Offices on economic development and Cluster Organisation design; Enterprise Ireland to discuss funding, export markets and economic development; etc.

The process also involved a considerable number of one-to-one meetings with members of the animation and education sector on a regular basis. Stakeholders also suggested other groups and individuals which the project team should meet. These one-to-one meetings were important to give key stakeholders a voice, build support for the programme and collect valuable contributions. The process also allowed us to validate and test findings and recommendations before they were brought to larger workshop groups for discussion.

Processes which were new to the local authority were the use of an online interactive platform to manage communications, share documentation and facilitate participant interaction in workshops and meetings.

Methodologies employed in the planning or execution of the project

The project combined several proven methodologies and tools including:

- **Strategic Foresight:** PESTLE analysis; SWOR analysis; scenario analysis.

- **Strategy Design:** One page strategy (house); business model canvas; economic development canvas; battlecards (competitive proposition and differentiation); Design Thinking
- **Strategy Execution:** Log Frame (strategy execution and risk management plan); Business case.

Appendix 3: Outline of key partners, collaborators, and beneficiaries

Key partners, collaborators, and beneficiaries

Key partners: Partners who have invested financially or provided resources for the project.

- Cork County Council:
 - Arts Office;
 - Local Enterprise Office South Cork;
 - Local Enterprise Office Cork North & West.
- Cork City Council:
 - Local Enterprise Office Cork City.
- Clare County Council:
 - Local Enterprise Office Clare.
- Kerry County Council:
 - Local Enterprise Office Kerry.
- Limerick County Council:
 - Local Enterprise Office Limerick.
- Tipperary County Council:
 - Local Enterprise Office Tipperary.
- Waterford County Council:
 - Local Enterprise Office Waterford.

Collaborators:

The Partners and Collaborators initially included all the LEO Offices in Munster Region, as well as Local Authority Arts/Creative Officers (where they existed), together with national enterprises such as EI, Skills Ireland & Regional Skills. Initially, all the ‘education’ partners included all the main Third level institutes such as MTU Tralee, Clonmel, LIT and CIT, as well as UCC. As the project progressed an Educational ‘sub-system’ emerged, in many cases voluntary and with a ‘social inclusion’ and outreach remit, and sometimes funded by Arts Council (creative Ireland). This significant ‘underbelly’ often goes unnoticed, have a main focus on Primary and Secondary level and sometimes augmented by particularly engaged teachers in the local schools and /or ETB’s, BAI, Screen Ireland (Young Irish Filmmakers). Animation is very clearly emerging as a key area of focus with given its nature connections with kids as well as the emergence of advanced software, freely available and to which kids take to quite intuitively and naturally.

The other primary collaborators were Industry itself, mainly small and medium enterprises, including many individuals scattered throughout the region and included entities such as Great Island Films (Cork) (the.cluster.greatislandfilms.com), LooksLoud production company (Cork) (the.cluster.looksloud.com), Internationally acclaimed Dingle Animation Festival (Kerry) (the.cluster.animationdingle.com), Magpie 6 Media studios (Clare) (the.cluster.magpie6media.com), motion graphic studio Elucidate Studio (Cork) (the.cluster.elucidatestudio.ie), as well as individuals such as famed actor and producer as well as leading edge film maker Michael Curran-Dorsano and former CEO of Wexford Film Festival

and filmmaker with strong technology and VR/AR interest Linda Curtin, and indeed many more.

The structure of the team/partners and the role that each partner held:

- Overall project Management (Cork South/Cork North & West);
- Development of the 3-year Strategic Plan (Kerry);
- Development and Delivery of Design Thinking Animation Cluster Workshops (Clare);
- Development of Communications Portal and ongoing co-ordination of communications throughout the project (Waterford);
- Budget monitoring (Cork South);
- Coordination of Industry engagement (Limerick);
- Mapping and relationship building of/with all suitable Digital Hubs/Community Enterprise Centres across the three regions (Tipperary).

Appendix 4: Research Findings

International Research

At an international level, animation is increasingly affirming itself as a suitable language to make the general audience aware of topical issues such as environment and social issues. Just as comics have now established themselves as an effective means to tell great pages of journalism for adults and children, animation cinema is increasingly opening up to current issues and news. For instance, the 2019 edition of Anima, the international animation film festival in Brussels, hosted in its programme three feature films that tell the civil war in Angola, the repression of the Khmer Rouge in Cambodia and life in the refugee camps of Beirut. This trend follows the success of films that have been applauded at an international level, such as *Persepolis* and *Waltz with Bashir*. However, feature films take time to be realised and require significant productions, capable of focusing on diffusion in international festivals as well as of platforms such as Netflix (see the American *Love, Death & Robots*). In some countries such as Italy, the still unripe market has so far pushed most studios to focus on the “safer” entertainment market (television series for children), rather than on films for adults. But things have been changing, thanks to new tenders and laws that encourage production, such as the recent Tax Credit for Italy (used in many European countries as well): tools that aim to develop the market, in favour of the growth of new talents and stronger studios, able to afford more “experimental” film productions. It is worth noting a growing attention to the new generations of authors and animators that involves schools and training institutions or festivals of this sector that have multiplied.

ALICE – the Animation League for Increased Cooperation in Europe

Funded by INTERREG Europe Programme 2014/2020. There is an opportunity for MAF to link up with and potentially participate in the next phase of ALICE. ALICE explores avenues for interregional collaborations in the animation sector to leverage the sector's potential for growth and innovation and to foster the development of a pan-European, world-leading industry. ALICE intends to seize the opportunity presented by the current boom in the animation sector in a bid to build up its capacity to contribute to growth and job creation in Europe. The six partners of the ALICE project are Wallimage, Wallonia (BE), Pictanovo, Hauts-De-France (FR), PROA, Catalonia (SP), Puglia Region, Department of Tourism, Economy of Culture and Valorization of Territory (IT), Ministry of Culture of the Slovak Republic, Bratislava (SK) and the Rzeszow Regional Development Agency, Rzeszow (PL). We have had meetings with individuals from Puglia and Catalonia. ALICE provides an excellent reference point for: benefits of a connected animation cluster; the architecture of an animation cluster; funding sources; governance models; SMART specialisations; training and education requirements. ALICE also documents the profiles of each of the six clusters. This provides useful benchmark information for MAF.

NESTA UK

Creative Nation. Key findings on creative industries include:

- They are a motor of growth in local economies. Creative industries have been growing twice as fast as the rest of the economy;

- They concentrate in a small number of top locations;
- Although they are more productive than comparably sized businesses, they will not materially contribute to addressing regional productivity problems unless they scale-up significantly;
- They tend to be more productive than companies in other sectors in almost all parts of the country. However, many are micro-businesses which limits the sector's ability to lift regional productivity;
- Regional rivals should work together to grow their creative industries: For example, locations that saw their neighbours become more specialised were almost 80 per cent more likely to become more specialised in that sector;
- The wider creative economy is stronger in creative clusters: analysis also suggests that companies in non-creative industry sectors operating in creative clusters tend to be more creative too.

NextGen report – digital natives to digital creatives

Key findings include:

- There are significant disparities between disadvantaged and advantaged pupils in terms of the opportunities available to develop creative digital skills, as well as between geographical regions, that need to be addressed. And it was noted that children from disadvantaged backgrounds are far less likely to access extra-curricular activities;
- There is a skills gap in both specific creative digital skills, as well as social and emotional skills, such as resilience, communication and interpersonal skills. And we know both these so-called 'createch' skills and social and emotional skills are going to be more in demand in the future;
- Teacher capacity can be a real challenge. Education practitioners may lack confidence and experience in developing young people's creative digital skills, and we need to support them with adequate time, training and professional development;
- Parents and teachers, as well as young people, often lack awareness about the relationship between creative digital skills and future career opportunities;
- We need a common language and definition for what we mean by digital creativity and creative digital skills. While employers often ask for software-specific skills, discussions with industry experts and labour market researchers suggest that focusing on developing technical skills may not be the best solution, given technology and software changes so rapidly. We also need to describe skills in a way that is accessible and meaningful for schools, drawing on best practice.

What organisations underpin UK creative tech clusters

Key findings include:

- There should not be a cookie cutter approach to thinking about cluster development. But, building on the strengths and challenges that make a place unique, we can apply good practice to promote inclusive growth;
- A renewed focus on clusters creates important new agendas for local organisations. Cluster thinking suggests that companies have a tangible and important stake in the business environments where they are located. Performance of the business, and indeed

the cluster as a whole, is intricately tied into the relationships companies have with one another alongside their links with non-commercial stakeholders;

- This shift in focus from national to local ecosystems has been reflected in an emphasis on local policy making, highlighted most noticeably with the powers being transferred to cities and regions;
- There is a move in thinking about companies. Historically, companies thinking about competition and strategy have focused on what goes on inside their organisation. But much of the research on clusters suggests that a good deal of competitive advantage lies outside companies. As such, some (like Michael Porter) have suggested that the unit of analysis has changed from the company to the locations at which they are based;
- As such, the health of the cluster is important to the health of the company. This makes sense - in its simplest sense, the more vibrant (economically, socially and culturally) a local area is, the more the area attracts new companies, investment and consumers. Therefore, other organisations, alongside companies, are increasingly important in providing an ecosystem of support to ensure sustainable and resilient economic growth;
- A large - and growing - number of organisations representing the needs of companies and individuals are offering access to services like information and funding. Collectively, they form a powerful political and cultural force, and their activity is having an influence on the places they are based.

World Economic Forum

White Paper - Factors for Enabling the Creative Economy.

No single determining force drives success in the creative economy, but commonalities exist in many creative hubs. There are five simple factors that policymakers should take into account when aiming – to stimulate creative economies in their countries. They can be considered a framework for maximizing the contribution of the creative economy to wider economic growth and development:

- The local strengths: Successful creative economies are found in close proximity to academic, research and cultural centres, allowing ideas and people to mingle;
- The technological enablers: Digital technology enables creative ventures to be launched from any location at scale, and successful creative entrepreneurs have been able to harness technology to their advantage;
- The inspiring entrepreneurs: The catalysts in creative hubs are successful individuals who demonstrate what is possible while inspiring and training other creative entrepreneurs.
- The role of government: By using regulation and incentives wisely, governments can help create the right conditions for creative economies to flourish;
- The power of place: Creative economies are in places where people want to live due to location and amenities – and the most successful have established themselves as international hubs.

International Innovation Super Clusters

We researched the:

- **Norwegian Innovation Super Clusters:** including Ocean space; Seafood and; Energy;
- **Canadian Innovation Super Clusters:** including the Digital Supercluster; the Ocean Supercluster and; the Protein Supercluster.

Key lessons from these developments include:

- Supercluster models are replacing traditional cluster models as a more successful approach to deliver sustainable regional economic development;
- **Traditional innovation clusters (c.7,000 globally)** are often built around the Triple Helix Framework; Local by design; Often organized around legacy industries. Focus on sustaining old, cornerstone industries in the region; Closely linked with local universities; Suffer from limited resources; Poor environments for investors, capital and scale- ups;
- **Superclusters** initiatives: Are specifically designed & built; Have a strong focus on story & narrative of building large Innovation Superclusters; Have a legal structure, Board, CEO in place; Focus on financial velocity, connecting startups and corporates, growing a stronger collaboration culture; Based upon a pentagonal model.

London School of Economics

Are engaged in various projects to evaluate creative platforms, particularly animation including:

- How to reach reaching vulnerable and marginalised communities and ensuring help and guidance is easily accessible. For example, a campaign to encourage young people to become more aware of factors that may be having a negative impact on their mental health and wellbeing;
- The impact animation can have in driving significant conversion rates in online shopping environments;
- Using animation to better represent and understand social issues including Colombian women's experiences of migrating to Chile;
- The ability of animation to improve discourse on racial violence;
- The impact of animation in tangibly improving effectiveness of digital conversational agents. Results show that the perception of a conversational agent is dramatically altered when the agent is voiced by an actual, tangible animated person.

Appendix 5: EU Funding Sources

Horizon Europe: is the European programme for research and innovation for the period 2021-2027, for which an investment amounting to €95.5b has been allocated. The general objective is to produce a scientific, technological, economic and social impact from EU investments in research and innovation. Based on the United Nations Sustainable Development Goals (SDG), the programme is divided into three pillars of which the last two constitute an important source of funding for animation and visual effects sector:

- Pillar 2: Global challenges and European industrial competitiveness to strengthen the competitiveness of European industry through the adoption of innovative solutions in the industrial sector;
- Pillar 3: Innovative Europe - to promote all forms of innovation, including non-technological innovation, especially within SMEs, facilitating technological development, demonstration and knowledge transfer, and strengthening the dissemination of innovative solutions.

“Culture, creativity and inclusive society”

Within Pillar 2, whose budget amounts to 53.5 billion euros, one of the themes is “Culture, creativity and inclusive society”: the investments in research and innovation relevant to an animation cluster is c. €2.3b over seven years, focuses on challenges related to cultural heritage and the creative industry, as well as social and economic transformations.

The specific funding relevant to MAF include:

- "Innovative research on European cultural heritage and cultural and creative industries" - aims to improve the protection, enhancement and restoration of cultural heritage. The funded companies support sustainable growth and the creation of job opportunities through cultural and creative industries, helping to make them a source of innovation and job opportunities;
- "Innovative Research on Social and Economic Transformations" - this area of intervention participates in addressing social, economic and political inequalities, supporting the development of human capital and a global European strategy for inclusive growth.

Pillar 3, the “European Innovation Ecosystems” and the “European Institute of Innovation and Technology (EIT)” support the development of creative clusters.

"European ecosystems of innovation"

This aims to strengthen innovation ecosystems by enhancing their connections, making them inclusive and efficient so that they can support the scalability of companies and stimulate innovation to address important challenges such as social and economic recovery, sustainability and resilience in a responsible way; the financial endowment available to the European Innovation Ecosystems is €528m over seven years.

The relevant areas for MAF are:

- CONNECT - which focuses on building interconnected and inclusive innovation ecosystems across Europe, building on existing strengths of regional and local ecosystems and encouraging the involvement of all actors and territories to define,

undertake and achieve collective ambitions for the benefit of society, including green, digital and social transitions and the European Research Area;

- SCALEUP - strengthening network connectivity within and between innovation ecosystems for sustainable business growth with high social value;
- INNOVSMES – which supports the European “Innovative SMEs” partnership, which will help innovative SMEs to increase their R&I capacity and productivity and to successfully enter global value chains and new markets.

"European Institute of Innovation and Technology (EIT)"

The aim is to innovate by nurturing entrepreneurial talent and supporting new ideas. The EIT aims to facilitate integration and interconnection between businesses, training institutions and research institutions. Two other objectives are to increase the entrepreneurial and innovation capacity of the higher education sector in Europe and to broaden the regional and local. The EIT has a financial endowment of almost €3b for the period 2021-27. Much of the EIT's budget is dedicated to supporting the Knowledge and Innovation Communities (KICs), made up of European partnerships between companies, research institutions, universities and businesses that pursue a strategic agenda in specific scientific sectors and technological, through integrated advanced training, research and innovation activities. There is an EIT for Climate which is a proposed theme for MAF.

Creative Europe supports activities in the cultural and audio-visual sectors with a budget of €2.4b. The general objectives of the programme are to safeguard, develop and promote the European cultural heritage; increase the competitiveness and economic potential of the creative and cultural sectors, in particular the audio-visual sector.

Digital Europe funds digital transformation, its budget amounts to €7.5 billion euros. The pillar dedicated to advanced digital skills emphasizes the importance of training and the development of innovative knowledge and skills in various digital fields. It addresses the needs of students, professionals, businesses and operators of these sectors. It can constitute a significant support tool for the development of creative clusters.

Eurimages fund: promotes the making of independent films, including feature films, animation films and documentaries. This fund, whose annual budget amounts to approximately €27.5 million euros, aims to support Co-productions between Member States, Promotion of co-productions and Exhibitions.

INTERREG – the inter-territorial cooperation programme, funded by the ERDF, aims to support collaboration between all European territories and regions: this program helps and supports local and regional governments to implement policies that promote growth and development and to share best practices and know-how in order to pursue common objectives and ensure sustainable development. As part of the creation of cultural clusters between different member countries, this programme can contribute to the growth and development of networks through specific cooperation tools. INTERREG has funded the development of ALICE.

Any public or private, profit or non-profit organisation can participate in the programme including SMEs, Large Corporations, Universities and research centres, associations, NGOs and Public bodies.

URBACT funded by the ERDF, aims to help urban areas to develop innovative, sustainable and pragmatic solutions capable of integrating the social, economic and environmental fabric. Social inclusion and Environment are two of the five themes supported.

INTERACT funded by the ERDF, aims to enhance the effectiveness of cohesion policy by promoting the exchange of experiences, the transfer of good practices and the dissemination of innovative approaches between partners and territorial cooperation programmes. The exchange of good practices and the creation of networks beyond the borders of the member countries are fundamental elements for the development of animation clusters.

Next Generation EU is a €750b temporary recovery tool that will help repair the immediate economic and social damage caused by the coronavirus pandemic to create a greener, digital and resilient Europe to cope with present and future challenges. 30% of funds are reserved for climate transition. Additionally there is funding for the protection of biodiversity, gender equality and ecological transition.

European Digital Innovation Hubs (EDIHs) will function as one-stop shops that help companies dynamically respond to the digital challenges and become more competitive. By providing access to technical expertise and experimentation as well as the possibility to “test before invest”, EDIHs help companies improve business/production processes, products, or services using digital technologies. They also provide innovation services, such as financing advice, training, and skills development that are needed for a successful digital transformation. Environmental issues are also taken into account, in particular with regard to energy consumption and low carbon emissions.