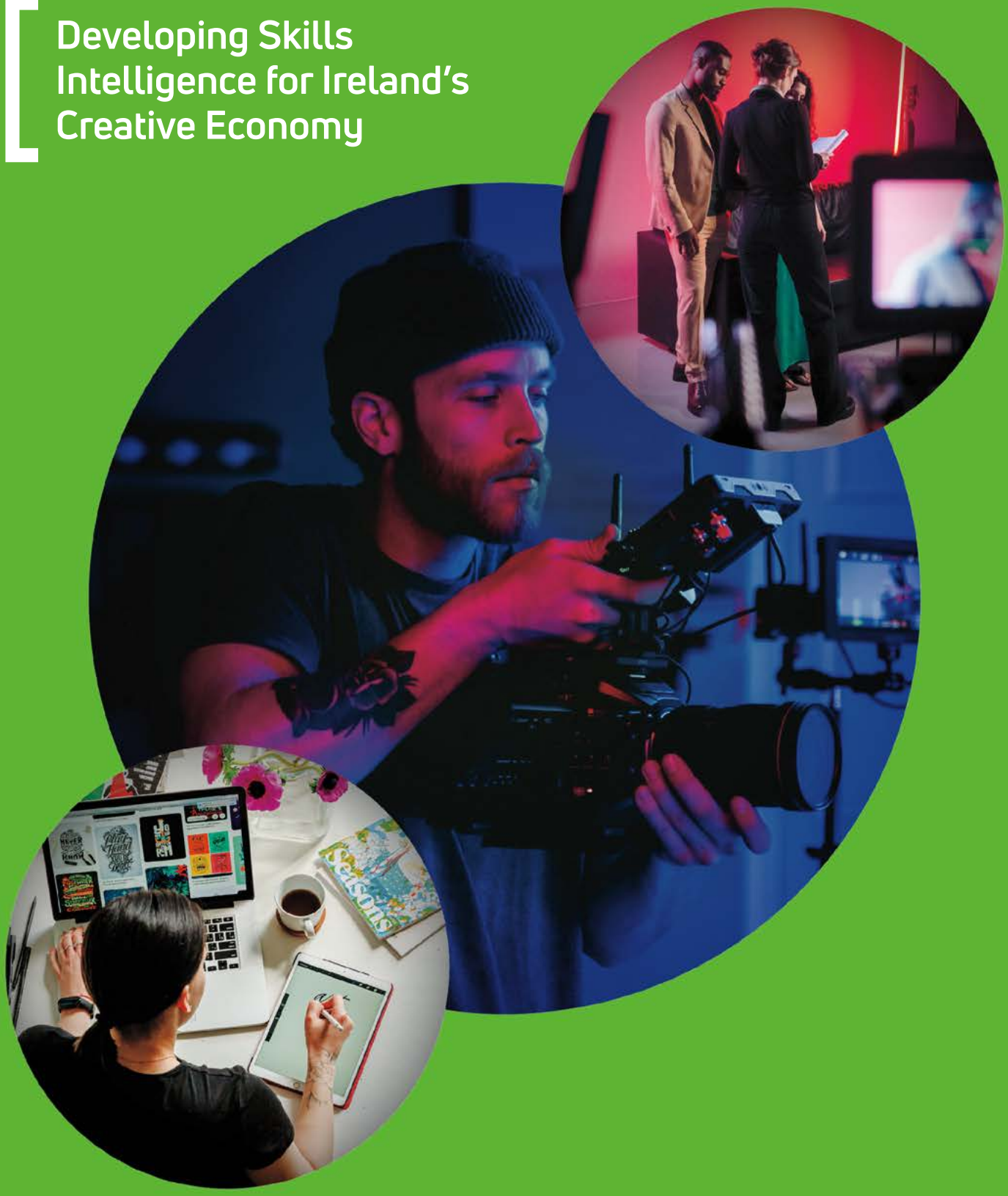
Developing Skills Intelligence for Ireland's Creative Economy



Cultural & Creative Industries Skillnet

Design Skillnet

INSTITUTE DESIGNERS IRELAND LEADING DESIGN

Clár Éire Ildánach Creative Ireland Programme



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1. Foreword

Ireland's creative industries are not just a cultural asset; they are a powerful economic engine. We are a nation of storytellers, innovators, and makers, and our creative economy is a testament to that legacy.

From the compelling narratives developed by our screen sector to the problem-solving prowess of our commercial and digital designers, our creative output resonates on a global stage. Whether it is our animation studios demonstrating unparalleled international growth, the screen and film industries capturing the world's imagination, or the broader design professions shaping how we live, work, and interact with the world around us, creativity is Ireland's ultimate renewable resource. However, raw talent must be met with strategic foresight if we are to maintain our competitive edge on a global stage.

We are currently navigating a period of unprecedented transformation. As we stand at the intersection of rapid technological advancement, and the urgent, necessary drive toward sustainable, climate-conscious practices, the landscape of creative work is fundamentally shifting. The skills that brought us to this point will not alone be sufficient for the future. We must evolve.

To secure the growth, competitiveness, and enduring resilience of Ireland's Cultural and Creative Industries (CDIs), robust and effective skills intelligence is no longer optional; it is a strategic imperative. Yet, despite this undeniable importance, the specific skills needs of our sector remain frustratingly hidden within traditional labour-market systems.

The evidence we currently rely on is too often fragmented, inconsistent, or episodic. This severely restricts our ability to shape proactive policy, drive essential investment, plan our workforce effectively, and align our educational and training pipelines with the actual heartbeat of the industry.

Through evidence-based research, this report provides an opportunity to rethink how skills intelligence is captured and monitored, to become a strategic tool for change, setting a roadmap for policymakers, educators, and industry leaders alike.



I would like to acknowledge all of those who contributed to this report. Thank you to all the stakeholders, including government and policy bodies and in particular the industry representatives who gave up their time and expertise to provide vital insight and knowledge.

In addition, thanks are due to the Design Skillnet and Cultural & Creative Industries Skillnet teams, especially Gareth Lee and Niamh O'Shaughnessy, for leading this research. Our thanks to Sharon Armstrong-Williams and Helen Watson from Counterculture with Simon Sprince and Andy Goodwin from Unscrambled World for delivering this project, and to Skillnet Ireland and Creative Ireland for funding this important work.

On behalf of the Institute of Designers in Ireland (IDI), and in solidarity with our partners across the entire creative spectrum, I warmly welcome this intelligence. By investing in the right skills, fostering lifelong learning, and nurturing the intersections between technology and creativity today, we will ensure that Ireland's creative industries remain not only resilient, but pioneering for generations to come.

Charlotte Barker
Chief Executive
Institute of Designers in Ireland (IDI)


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2. Acknowledgements

This research was funded by Skillnet Ireland via the Industry Insights scheme and by Creative Ireland.

This research report was undertaken by Sharon Armstrong-Williams, Senior Partner & Director for Ireland and Helen Watson, Partner from Counterculture Partnership alongside Associates Simon Sprince and Andy Goodwin of Unscrambled.world; with input and support from the Cultural & Creative Industries Skillnet team (Barbara Deignan and Gareth Lee), the Design Skillnet team (Niamh O'Shaughnessy) and the IDI (Charlotte Barker).

A wide range of individuals and stakeholders were involved in the research, including government and policy bodies; industry bodies; publicly funded organisations; independent organisations and voluntary sector bodies; educational, and training and development institutions. We are very grateful to the many people and organisations who contributed their time and expertise to the development of this piece of research.





3. Executive Summary

3.1 Context

The Creative and Design Industries encompass economic activities that originate in individual creativity, skill, and talent, generating wealth and jobs through the creation of content and intellectual property (IP), including the following subsectors:

- **Animation**
- **Digital Games**
- **Film & TV**
- **Visual Effects**
- **Post-Production**
- **Immersive Technologies**
- **AR/VR/MR (Augmented Reality / Virtual Reality / Mixed Reality)**
- **Digital Media**
- **Digital & Interactive Design**
- **Fashion Design**
- **Motion Graphics**
- **Visual Communications**
- **Product & Industrial Design**
- **Service & Strategic Design**
- **UI/UX (User-Interface/ User-Experience) Design**
- **Content Creation**
- **Advertising**

In Ireland the creative and design industries (CDIs) continue to make a significant contribution to the economy and are key to its international reputation as a creative, innovative and culturally distinctive nation.

In 2023, data from the Central Statistics Office (CSO) shows 27,590 active CDI enterprises in Ireland, representing 6.88% of all active enterprises and employing 55,880 people—2.38% of the national workforce. Including culture-related jobs outside of the culture sector, over 96,800 people work in culture, accounting for 3.4% of total employment in Ireland in 2025, according to Eurostat.

Eurostat, *Cultural Statistics – Cultural Enterprises*, 2023 data for Ireland records a higher-than-average EU rate of self-employment within cultural occupations. Across the EU, about 31.6% of cultural workers are self-employed compared to 13.7% in the wider economy, with Ireland tracking above the general EU average.

The sector is also expanding faster than the economy overall according to data from the Central Statistics Office, Business Demography 2023: between 2019 and 2023, the number of active CDI enterprises increased by 23.3%, compared with 19.1% across the wider economy. Consistent with international patterns, CDIs are predominantly made up of small businesses, with micro-enterprises employing fewer than ten people accounting for 97.01% of all active enterprises in the sector.

The Strategic Contribution of Ireland's Creative and Design Industries.

CDIs represent a significant and growing portion of Ireland's economy. According to latest available Eurostat data, in 2023 the value added of cultural enterprises in Ireland was €4.725 billion, accounting for 1.1% of the total business economy, with a net turnover of €11.629 billion. This is slightly lower than the EU average of 1.9%, pointing towards opportunities to grow the economic contribution of Ireland's creative industries *(Eurostat, Cultural Statistics – Cultural Enterprises, 2023).*

Beyond the direct effect of activities within the sector, CDIs can also contribute to the Irish economy via indirect and induced effects, such as supply chain impacts and spending of wages. A 2024 study commissioned by Screen Ireland found that the annual estimated cumulative footprint of the audio-visual sector is €1.061 billion.

The ideas, talent and capabilities generated within the CDIs extend far beyond the sector itself, strengthening innovation and competitiveness across the wider economy in areas such as technology, tourism, manufacturing, education, health and public services. The Government's *Digital Creative Industries Roadmap 2024–2026* recognises the sector's potential to support enterprise growth, regional development and future job creation, while the Regional Enterprise

Plans highlight the contribution of the creative industries to economic diversification, placemaking and sustainable local growth.

The sector also creates substantial social and cultural value by supporting participation, wellbeing, inclusion, community connection and pride in place. This wider contribution is recognised in national policy, including the *Creative Ireland Programme 2023–2027*, which positions creativity as an important driver of individual and collective wellbeing, social cohesion and economic success.

Taken together, the CDIs generate value well beyond their immediate economic footprint. They create exportable content, services and intellectual property; attract visitors, investment and talent; strengthen other industries; animate towns and regions; and contribute to a more innovative, cohesive and internationally visible Ireland.

Export Growth

According to UN Trade and Development statistics, in 2024 Ireland remained the world's leading exporter in the creative economy, generating US$332 billion in creative services export and capturing 19% of the global market, positioning the country at the forefront of a rapidly expanding sector. As global trade in creative services increases, growing 12% year on year and accounting for 20% of total global services trade, Ireland's creative sector is strongly positioned to benefit from significant opportunities for further export growth and expansion *(UN Trade and Development, International Trade: Creative goods and services, 2024).*

Strengthening Skills Intelligence for Ireland's CDIs

Effective skills intelligence is increasingly important to the growth, competitiveness and resilience of Ireland's CDIs. Despite this strategic importance, the skills needs of the CDIs remain insufficiently visible within existing skills intelligence and labour-market systems. The diversity of the sector—including its high proportion of freelancers, sole traders, microenterprises, SMEs, portfolio careers, project-based work and hybrid occupations—makes it difficult to capture through conventional classifications and data collection methods. Available evidence is often fragmented, inconsistent or episodic, limiting its usefulness for policy development, investment, workforce planning and the alignment of education and training provision with industry needs.

This report considers how Ireland can further develop a strategic approach and process for identifying, analysing and communicating current and emerging skills needs across the CDIs. It draws on significant desk-based research, stakeholder consultation, round-table discussions and analysis of national and international skills taxonomies and intelligence models to inform a future direction for Ireland, building on established national and European systems while responding to the distinctive characteristics of Ireland's creative economy.

3.2 Key Findings

a. A fragmented evidence base

There is currently no single, coordinated approach to the collection, analysis or dissemination of CDIs skills data in Ireland. Valuable research and intelligence are produced by government departments, agencies, Skillnet Networks, sector bodies, education providers, funders and industry organisations; however, activity is distributed across different initiatives, methodologies and sub-sectors.

This fragmentation makes it difficult to establish a consistent picture of the workforce, compare needs between sub-sectors or identify how demand is changing over time. It can lead to gaps, duplication and limited continuity. A strategic and coordinated approach is needed to bring existing evidence together, identify gaps and support regular, forward-looking analysis.

b. The sector is not adequately represented by existing classifications

Standard occupational and industry classifications do not always reflect the roles, and skills within the CDIs. Job titles can be inconsistent, individuals frequently combine several roles, and creative, technical, digital, managerial and commercial responsibilities increasingly overlap. New and hybrid roles can also emerge more quickly than formal classification systems are updated.

A shared skills language would make it easier to describe occupations, capabilities and emerging needs consistently. However, any framework must remain flexible enough to recognise the diversity of different CDI sub-sectors and the realities of freelance, portfolio and project-based work.

c. Freelancers and smaller businesses are underrepresented

Freelancers, sole traders, microenterprises and SMEs make up a substantial part of the CDIs and are frequently underrepresented in formal workforce datasets and employer surveys. Many have limited capacity to participate in lengthy consultation or reporting processes and may not undertake formal workforce planning or training-needs analysis.

Data collection must therefore be accessible, proportionate and designed around the realities of smaller organisations and independent practitioners. Sector bodies, industry networks, funders, local authorities and enterprise organisations could play an important role in building trust, widening participation and embedding data collection within existing relationships and processes. A skills-first approach would provide a flexible and inclusive basis for recognising how capabilities are acquired, applied and transferred across the CDIs, while supporting more responsive recruitment, workforce development and career progression.

d. Skills needs are changing rapidly

Technological, economic, environmental and demographic change is reshaping the CDI workforce. Artificial intelligence and creative technologies are changing production processes, distribution, audience relationships, intellectual property considerations and business models. Digital production and data literacy are becoming increasingly important across creative, technical and managerial roles. Sustainability capabilities will be required to help organisations reduce their environmental impact and respond to changing regulatory, procurement and funding expectations. Accessibility, user-centred design and inclusive design are also increasingly important to widening participation, meeting regulatory requirements and developing products, services and experiences that respond to diverse needs.

Commercial, entrepreneurial, leadership and management capabilities remain particularly important in a sector dominated by freelancers and smaller businesses. These skills enable creative practitioners and organisations to develop sustainable business models, manage people and projects, secure investment, protect and exploit intellectual property, enter new markets and respond strategically to change.

e. Skills intelligence must support learning and career development

Improved intelligence will only create value if it leads to provision that is relevant and accessible to industry. The diversity of roles and career paths across the CDIs makes a skills-first approach particularly appropriate. This places greater emphasis on the capabilities required to undertake work and progress within a career, rather than relying solely on qualifications, conventional job titles or linear occupational pathways.

Creative careers are often developed through a combination of formal education, employment, freelance practice, mentoring, peer learning, short courses and project-based experience. Modular and flexible opportunities—including micro-credentials, mentoring, peer learning and workplace-based skills development—are therefore important to enabling people to enter, remain and progress within the sector.

f. Creative skills contribute across the wider economy

Skills such as curiosity, creativity, design thinking, communication, critical thinking, adaptability, collaboration and problem-solving are fundamental to creative practice and have relevance across the wider economy. These capabilities support innovation, entrepreneurship, organisational adaptability and human-centred responses to technological and environmental change.

The CDIs should therefore be understood both as a beneficiary of national skills policy and as a contributor to innovation and workforce development across other sectors. More systematic recognition of transversal creative skills would strengthen connections between the CDIs, enterprise policy, education and training, and Ireland's wider priorities for innovation, digital transformation and sustainable development.

3.3 Priority Skills Areas

The research highlighted a number of interrelated skills priorities which will be central to the competitiveness, innovation and resilience of Ireland's CDIs. Taken together, these areas provide a clear basis for future investment, learning pathways and flexible training provision across the CDIs, ensuring that technical and creative expertise is reinforced by the commercial, managerial and inclusive-design capabilities required for sustainable industry growth.

a. **AI and creative technologies, digital production and data literacy** are increasingly essential as creative processes, distribution platforms, audience relationships and business models become more technologically enabled.

b. **Sustainability skills** are equally important, enabling practitioners and businesses to reduce environmental impact, respond to regulatory and procurement requirements, and contribute to the green transition envisaged by Ireland's *Green Skills 2030* strategy and the European Green Deal.

c. **User-centred design, accessibility and inclusive design** will support the sector to create products, services and experiences that respond to diverse needs, widen participation and meet the requirements of the European Accessibility Act, while also opening new markets for accessible goods and services.

d. **Commercial, entrepreneurial, leadership and management capabilities** are particularly critical in a sector dominated by freelancers, microenterprises and SMEs: they enable practitioners to build sustainable business models, manage people and projects, secure investment, protect and exploit intellectual property, enter new markets and respond strategically to change.

Going forward, to address these findings, to ensure the sector's skills needs are adequately identified and skills provision is aligned to labour market demands, the sector requires a strategic approach to developing CDI skills intelligence. This needs to be aligned with established national and European systems, particularly ESCO, and adapted through industry evidence to reflect the distinctive structure and working practices of the sector.

Recommendations:

The following Recommendations are outlined in greater detail on Pages 36-39.

1. **Creative Skills Council:** Establish an all-island creative skills council to provide strategic leadership, coordinate stakeholders and strengthen the CDIs' influence on skills policy and investment.

2. **Creative Policy and Evidence Centre:** Create a central hub to coordinate research, skills intelligence and labour-market data, supporting evidence-based policy and workforce planning.

3. **Skills Intelligence Framework:** Develop a shared taxonomy, a common skills language and continuous, forward-looking intelligence framework to identify, monitor and communicate current and emerging CDI skills needs.

4. **Creative Skills Academy:** Establish an all-island academy to develop, pilot, evaluate and scale responsive skills programmes for the CDI workforce.

4. Glossary

Glossary of terms for the purpose of this research

CDIs	*The Creative and Design Industries encompass economic activities that originate in individual creativity, skill, and talent, generating wealth and jobs through the creation of content and intellectual property (IP), including the following subsectors: Animation, Digital Games, Film & TV, Visual Effects, Post-Production, Immersive Technologies, AR/VR/MR (Augmented Reality / Virtual Reality / Mixed Reality), Digital Media, Digital & Interactive Design, Fashion Design, Motion Graphics, Visual Communications, Product & Industrial Design, Service & Strategic Design, UI/UX (User-Interface/User-Experience) Design, Content Creation, Advertising*
CCAI	*Creative & Communications Association*
Creative Ireland	*An all-of-government culture and wellbeing programme with the ambition to inspire and transform people, places and communities through creativity.*
Creative Sectors/ Industries	The term 'Creative Sectors/Industries' includes but is not limited to: Animation, Visual Effects, Digital Games, Film, TV, Post-Production, Immersive Technologies, AR/VR/MR, Virtual Production, Digital Media, Entertainment Events, Music, Theatre, Performing Arts, Visual Arts, Advertising and Design (including Fashion Design, Industrial Design, Product Design, Visual Communications, UI/UX, Interaction Design, and Service Design).
CSO	*CSO data refers to statistics produced by Ireland's Central Statistics Office, which is responsible for collecting, analysing, and publishing objective information on Irish society, economy, and environment.*
Cultural & Creative Industries Skillnet (CCIS)	*Cultural & Creative Industries Skillnet supports the future sustainability and innovation of the sector in response to the strategic need for continuing professional development.*
Design Sector	*Design is a broad sector covering a wide range of disciplines, from visual areas such as graphic design, branding and user experience (UX); to product and industrial design, such as medical devices; to strategic design, such as service design and customer experience.*
Design Skillnet	*Design Skillnet supports the design sector by providing subsidised, tailored training programmes, workshops and networking events for professionals and businesses.*
DFHERIS	*The Department of Further and Higher Education, Research, Innovation and Science funds and creates policy for the higher and further education and research sectors.*
EGFSN	*The Expert Group on Future Skills Needs has the task of advising Government on future skills requirements and associated labour market issues that impact on the national potential for enterprise and employment growth.*
Eirmersive	*The representative, non-profit voice of the immersive technology sector in Ireland.*
Enterprise Ireland	*Enterprise Ireland is the Irish government's enterprise development agency. It invests in and supports the development of Irish-owned companies on their journey to achieving greater scale and to become global leaders in their field.*
ESCO	*European Skills, Competences, Qualifications and Occupations is the European multilingual classification of Skills, Competences and Occupations.*
HEA	*The Higher Education Authority.*
ILO	*International Labour Organization.*

IMIRT	*IMIRT the Irish Game Makers Association is a Company Limited By Guarantee (CLG) that represents game developers in Ireland.*
Institute of Designers in Ireland	*The primary professional body representing the interests of designers across all disciplines in Ireland.*
ISCO	*International Standard Classification of Occupations.*
ISCO-08	*The ISCO-08 codes stand for the International Standard Classification of Occupations (2008), a framework managed by the ILO to organise jobs into a standardised, hierarchical structure. It is designed to compare occupational data across countries, grouping jobs based on similarity in tasks, duties, skill level and specialisation.*
NACE Codes	*The 'statistical classification of economic activities' in the European Community, abbreviated as NACE, is the classification of economic activities in the European Union (EU).*
National Skills Council	*The National Skills Council is an advisory, non-statutory body made up of high-level representatives from Irish industry, social partners and main non-governmental stakeholders.*
National Skills Observatory	*Currently in development through The National Skills Council , the Observatory aims to provide a central source for skills data and research in Ireland.*
US NAICS Codes	*US NAICS Codes (North American Industry Classification System) are hierarchical, six-digit numerical codes used by government and industry to classify business establishments based on their primary economic activity (production processes).*
OECD	*The Organisation for Economic Co-operation and Development is a forum and knowledge hub for data, analysis and best practices in public policy. It works with over 100 countries across the world to build stronger, fairer and cleaner societies – helping to shape better policies for better lives.*
Skills Framework	*A roadmap detailing the process for developing and maintaining the regular and ongoing collection, collation and dissemination of current and future skills gap data for the creative and design industries in Ireland.*
Skills Taxonomy	*The agreed words and terms to describe the skills within the creative and design industries in Ireland. This includes the structured system for categorising and organising the skills of the creative and design industries in Ireland.*
Skillnet Ireland	*Skillnet Ireland is the national workforce development agency of Ireland.*
SLMRU	*The Skills and Labour Market Research Unit in Ireland is a specialised unit based in SOLAS (the Further Education and Training Authority) that produces the majority of the country's labour market intelligence and skills data.*
SMEs	*Small and Medium sized Enterprises. The European Union defines SMEs based on staff headcount (<250), and either annual turnover (€50 million) or balance sheet total (€43 million).*
SOLAS	*The State agency that oversees the building of a world class Further Education & Training (FET) sector in Ireland.*
SOC	*A Standard Occupational Classification code is a four-digit, UK government-standardised system used to categorise jobs by occupational type and skill level, crucial for visa sponsorship. It determines a role's salary "going rate" and eligibility for skilled worker visas.*

5. Research Methodology

This report is informed by a mixed method approach including:

- In depth primary and secondary research on current sources and methods of workforce intelligence collection and dissemination, both national and international.
- Primary consultation through roundtable discussions and individual stakeholder interviews both in person and online.
- Case studies of international models of data collection and dissemination.
- We engaged with a diverse range of national and international stakeholders; including individuals and organisations across different workforce categories, regions and sub-sectors across the CDIs.

The following contact groups contributed to the research:

- Local sector representation (Employers and Employees)
- Freelancers
- National cultural and design bodies
- Workforce and Sector Networks / Focus Groups
- Sector Support and Professional Accreditation Bodies
- Education and Training Providers
- Industry leaders and managers
- Skills data analysis experts
- Government/Public Policy.



6. Strategic and Sectoral Context

Ireland's approach to skills development in the creative and design industries (CDIs) is shaped by a distributed but interconnected ecosystem of national agencies, sectoral bodies and enterprise-led initiatives.

At a system level, the Department of Further and Higher Education, Research, Innovation and Science (DFHERIS) provides overall policy direction, with SOLAS (Ireland's Further Education and Training Authority), overseeing further education and training provision and the Higher Education Authority (HEA) guiding higher education strategy and investment.

Labour market insights are currently generated through the Skills and Labour Market Research Unit (SLMRU) and the Expert Group on Future Skills Needs (EGFSN), informing national skills planning.

Skillnet Ireland, the national workforce development agency of Ireland, plays a critical role in delivering enterprise-focused and industry led research and training, through regional and sector-specific networks, such as Cultural & Creative Industries Skillnet and Design Skillnet, which respond directly to the needs of practitioners and businesses in the creative economy.

In addition, sectoral bodies such as the Arts Council and the Design & Crafts Council Ireland play a key role in supporting, developing and advocating for their respective creative sectors. They provide funding, advice, networks, research and promotional opportunities that help artists, designers, makers and cultural organisations to sustain their practice and reach wider audiences. They also act as important links between practitioners, communities, government and the wider economy, helping to shape policy, raise standards and ensure that the arts, design and craft remain visible, valued and accessible across Ireland.

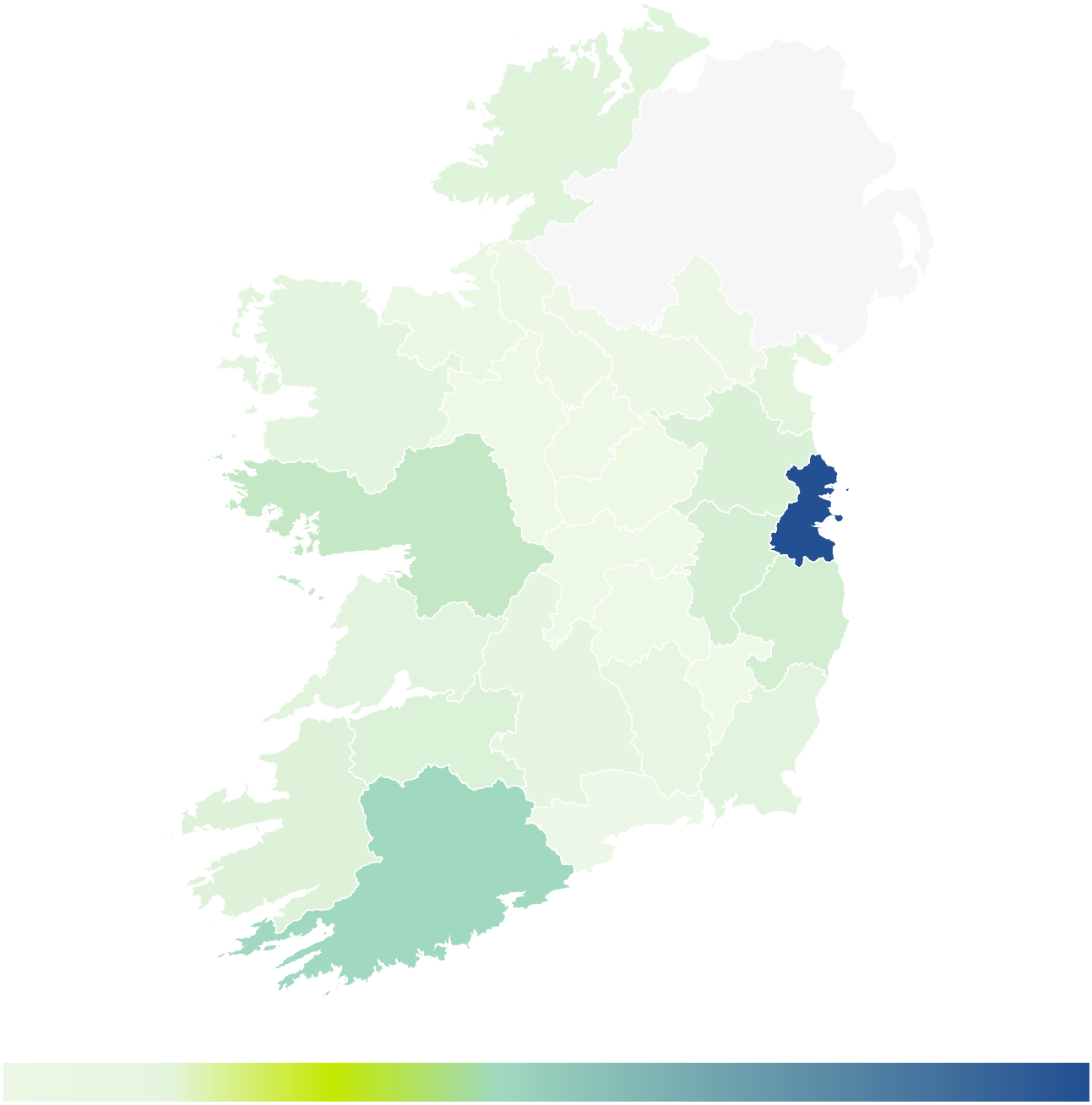
Trade associations such as the Institute of Designers in Ireland, Eirmersive, IMIRT, Animation Ireland, VFX Ireland, Screen Producers Ireland and Creative & Communications Association play an important role in representing and strengthening Ireland's creative and design industries. They provide a collective voice for professionals and businesses, advocate for sector needs, support skills development, promote best practice and create opportunities for networking, collaboration and visibility. By representing designers, immersive technology companies, animation, film and VFX companies, game developers and advertising practitioners, these organisations help to build professional standards, connect industry with policy makers and education providers and support the growth, recognition and sustainability of their sectors nationally and internationally.

State Agencies such as Fís Éireann/Screen Ireland and Coimisiún na Meán, and support organisations such as the National Talent Academies and the Creative Futures Academy, provide important infrastructure for Ireland's cultural, screen and design sectors. They support development through funding, training, skills programmes, talent pipelines, sector promotion and industry partnerships. Screen Ireland invests in talent, creativity and enterprise across film, television, animation, documentary, VFX and games; while Coimisiún na Meán supports media development through funding, learning and development, sponsorship and cultural content schemes. The National Talent Academies help build a skilled and diverse screen workforce across Ireland and the Creative Futures Academy supports creative education and professional development, helping practitioners and organisations adapt, collaborate and grow.

While this multi-layered system provides a strong foundation, the inherent diversity of the sector—characterised by a wide range of organisational sizes, a significant freelance and microenterprise base and prevalence of interdisciplinary roles - and the array of support mechanisms, present a key challenge for the collection and dissemination of robust, timely and appropriate skills data. This complexity limits the sector's ability to generate consistent evidence to inform policy decision-making and support effective industry development.

6.1 Geographic Concentration of CDI Enterprises

Active Enterprises in CDI by county, 2023



A chloropleth map showing the number of active enterprises in the creative and design industries in Ireland by county in 2023.

CCDI enterprises are mainly concentrated in urban centres across Ireland, with Dublin accounting for 42% (11,646) of all active CDI enterprises. Cork and Galway are the next largest clusters, accounting for 10% and 6% of active CDI enterprises respectively.

Map: Counterculture Partnership LLP • Source: CSO Business Demography • Created with Datawrapper



7. The Role of Skills Intelligence in a Dynamic Sector

Skills Intelligence, Innovation and Industry Growth

Effective skills intelligence is increasingly important to the growth, competitiveness and resilience of Ireland's CDIs. The *Digital Creative Industries Roadmap 2024–2026* identifies skills, innovation, enterprise development and improved data as interconnected priorities for growing Ireland's digital creative economy. A more coherent understanding of current and emerging skills needs would support these ambitions by helping businesses anticipate change, adopt new technologies, strengthen productivity and respond to opportunities in domestic and international markets.

This is particularly important in the Irish context, where much of the sector comprises freelancers, sole traders, microenterprises, SMEs and project-based organisations. These businesses often have limited capacity to undertake formal workforce planning or invest in extensive training needs analysis. Timely and accessible skills intelligence enable them to identify capability gaps, plan recruitment and professional development, retain specialist expertise and prepare for emerging occupational and market requirements. At sector level, it provides a stronger basis for coordinated investment by Government Departments and Agencies, Skillnet Ireland, enterprise agencies, industry bodies and education and training providers.

The need for this forward-looking approach is reinforced by significant technological and demographic change. Ireland's *National AI Strategy Refresh 2024* recognises the importance of preparing the workforce for the impact of artificial intelligence and expanding upskilling and reskilling through Skillnet Ireland, Springboard+, apprenticeships and other human-capital initiatives.

For the CDIs, AI and other emerging technologies are changing creative processes, production methods, intellectual property considerations, business models and the skills required across creative, technical and managerial roles. Reliable intelligence will be essential to enable businesses to respond to these developments strategically, while retaining the creative judgement, specialist knowledge and ethical practices on which the sector's value depends.

Longer-term workforce pressures also need to be considered. The Expert Group on Future Skills Needs has identified population growth and ageing as significant factors affecting Ireland's future labour supply, workforce participation and skills requirements. For the CDIs, this strengthens the case for better evidence on recruitment, retention, career progression, succession in specialist roles and the transfer of knowledge between generations. It also highlights the importance of widening access to creative careers and supporting more people to enter, remain and progress within the sector.

Skills intelligence must therefore translate into provision that is relevant and accessible to industry. The National Skills Council's strategic advice to Government emphasises the need for an agile, inclusive and resilient skills system that supports lifelong learning and responds effectively to labour-market change. Similarly, the national Further Education and Training Strategy, *Creating Futures 2026–2030*, places relevance, flexibility, career development and lifelong learning at the centre of future provision. These principles are particularly relevant to creative businesses and practitioners, who require modular and flexible opportunities—including short courses, micro-credentials, mentoring, peer learning and workplace-based skills development—that can be accessed alongside employment, freelance work and business management.

Understanding the skills landscape of Ireland's CDIs requires more than an assessment of talent supply or educational provision. It depends fundamentally on the systems through which skills are observed, collected, interpreted and communicated.

Across Irish and European policy frameworks, there is a growing recognition that skills data is not simply a technical resource but a form of strategic infrastructure—one that shapes how sectors are understood, prioritised and supported - and is critical to underpinning economic and sectoral development.

Within the CDIs in Ireland, this challenge is particularly acute. The sector encompasses a wide and evolving spectrum of activity, from traditional cultural domains such as the arts and heritage to highly digitised fields including design, games and immersive media. As the *Digital Creative Industries Roadmap 2024–26 (The Roadmap)* highlights, the sector spans "advertising and design… to music, the wider arts, libraries and cultural heritage," reflecting both its breadth and its complexity. The sector's diversity is further reflected in the range of freelancers and SMEs and the governance and structure of organisations and businesses from charities and not-for-profits through to commercial design companies operating on a global scale. This complexity, while a source of strength, presents significant challenges for how skills are defined, measured and supported.

A stronger CDIs skills and labour market intelligence system would connect these national policy ambitions with the practical needs of industry. It would enable training providers and industry partners to develop provision in response to evidenced demand; help businesses invest more confidently in their people; and support clearer learning and career pathways across creative, digital, technical, commercial and leadership roles. Skills intelligence should be understood as an essential component of Ireland's creative industry infrastructure—supporting innovation, productivity, recruitment, talent retention, workforce resilience and sustainable business growth.



8. Defining Skills for a Changing Workforce

8.1 A Skills-First Approach

A Skills-First Approach places the individual's capabilities and potential at the centre of recruitment, workforce development and career progression, rather than relying primarily on qualifications, job titles or length of experience. This is particularly relevant to Ireland's creative and design industries, where roles are diverse and frequently combine creative, technical, commercial and managerial responsibilities. Many people working in the CDIs develop their expertise through freelance work, professional practice, mentoring and self-directed informal learning in the workplace, in addition to formal learning.

The complexity and diversity of the sector present a significant challenge when designing a skills taxonomy. Creative businesses adapt rapidly, while portfolio careers, freelance working and movement between sub-sectors mean that occupational roles are rarely fixed. A skills-first approach is therefore more appropriate than one based solely on job titles. This is particularly important for microenterprises and SMEs, where small workforces must combine multiple capabilities and respond quickly to evolving technologies, markets and business models.

Focusing on demonstrated capabilities and development potential, rather than relying primarily on qualifications, roles or previous job titles, would give employers a clearer understanding of available talent and enable practitioners to articulate the range of skills acquired through education, employment, freelance practice and experiential learning.

This approach is backed up by sector research which highlights the need to recognise these varied routes through mechanisms including Recognition of Prior Learning, micro-credentials, paid traineeships and industry-led development.

Supported by a shared skills taxonomy built on an agreed common skills language, this approach could help employers—particularly SMEs and microenterprises— identify workforce gaps, recruit from wider talent pools and target investment in training. It would also enable practitioners to demonstrate transferable skills, identify progression opportunities and access focused development without undertaking unnecessarily broad qualifications. OECD research suggests that skills-first practices can improve job matching, adaptability and inclusion, provided that skills assessment is transparent, quality-assured and supported by appropriate worker protections.

This approach aligns with Ireland's ambition for a more agile and industry-responsive skills system and with the European Commission's emphasis on lifelong learning, skills recognition and portability. Applied carefully, a skills-first approach would strengthen recruitment, progression and workforce planning while supporting a more diverse, adaptable and resilient creative sector.

A skills-first approach is particularly relevant in the CDIs as conventional job titles rarely capture the complexity of the work undertaken or the flexibility required to operate successfully in the sector. Roles frequently combine creative, technical, commercial and managerial responsibilities, while portfolio careers, freelancing and movement between sub-sectors are commonplace. Microenterprises and SMEs require small workforces to hold multiple skills and adapt quickly as technologies, markets and business models evolve. Focusing on demonstrated capabilities and development potential, rather than relying primarily on qualifications, roles or previous job titles, would give employers a clearer understanding of available talent and enable practitioners to articulate the range of skills acquired through education, employment, freelance practice and experiential learning.

Supported by a shared taxonomy, skills profiles and Recognition of Prior Learning, this approach could improve recruitment, team formation, workforce planning and targeted professional development. It would also help individuals identify transferable skills and navigate progression into adjacent, specialist or leadership roles. This direction is consistent with OECD research on skills-first labour markets, Ireland's National Skills Council priorities and the European Commission's *Union of Skills*, which emphasise skills recognition, lifelong learning, portability and stronger alignment between workforce demand and education and training.

8.2 AI and the Future Creative Workforce

Artificial intelligence is likely to continue to reshape the cultural, creative and design workforce by changing the tasks required within existing occupations, creating new hybrid roles and altering the balance between human and automated production. Ireland's *National AI Strategy Refresh 2024* identifies AI as a driver of productivity and innovation, while emphasising responsible adoption and the need for workforce upskilling and reskilling. The *Digital Creative Industries Roadmap 2024–2026* similarly positions technology, talent and skills development as central to the growth of Ireland's digital creative industries.

AI is likely to augment many roles rather than simply replacing them. Its ability to support research, concept development, editing, production, audience analysis, administration and distribution, enables practitioners and businesses to work more efficiently and explore new creative possibilities. At the same time, automation may reduce demand for some routine or entry-level tasks, potentially weakening established routes through which people may gain experience and progress in their careers. International Labour Organization research suggests that generative AI is more likely to transform the content of many occupations rather than eliminate them entirely, although displacement risks and impacts will vary across roles and workforce groups.

AI adoption is also likely to generate new and hybrid occupations combining creative expertise with technological, commercial and ethical capabilities. These may include AI-assisted designers and producers, creative technologists, immersive-experience developers, synthetic-media specialists, AI workflow managers and specialists in data governance, rights and content verification. Existing roles will also likely evolve as creative directors, performers, artists, designers, technicians, producers, marketers and managers require greater understanding of AI tools, data, intellectual property, transparency and responsible use. These developments further reinforce the value of a skills-based taxonomy capable of identifying changing tasks and capabilities that may not yet be reflected in established job titles.

Future provision will need to extend beyond basic technical proficiency. The workforce will require opportunities to develop:

- practical and critical AI literacy
- creative application and evaluation of AI-generated outputs
- data literacy and governance
- copyright, intellectual property and rights management
- ethical, transparent and inclusive use of AI
- content authentication and verification
- effective human–AI collaboration
- adaptable creative, commercial and leadership capabilities.

The EU AI Act strengthens this requirement by introducing responsibilities relating to AI literacy and the responsible deployment of AI systems. Training should be flexible and accessible to employees, freelancers and small businesses, combining short courses and micro-credentials with mentoring, peer learning and workplace-based practice. Targeted transition support may also be needed for roles or career stages most exposed to automation, particularly where AI reduces entry-level opportunities or changes the value of established specialist skills.

The proposed taxonomy and skills-intelligence system should monitor these changes continuously. This should include tracking emerging occupations, changes in role profiles, tasks susceptible to augmentation or displacement, employer adoption and new training requirements. Regular engagement with practitioners, employers, education providers and worker representatives will be essential, as job-advertisement data alone may not capture freelance work, informal role changes or emerging practice. Used in this way, the taxonomy could help Ireland's CDIs anticipate workforce transformation, direct investment towards priority skills and ensure that AI adoption supports creative quality, fair work, sustainable careers and industry growth.

8.3 Learning and Career Pathways

Learning and career pathways across the CDIs are rarely linear. Individuals may enter through higher or further education, apprenticeships, paid traineeships, community practice, self-directed learning or employment in another sector. They may subsequently move between salaried and freelance work, creative practice, production, administration, technical roles and business ownership. Access to careers in the sector and a diverse workforce are key to its continuing growth and skills are therefore acquired through a combination of formal education, experiential learning, workplace practice, mentoring, peer exchange and continuing professional development. Any CDIs skills framework must reflect these varied journeys, recognise prior and experiential learning, and make visible the transferable skills that enable movement between occupations, sub-sectors and career stages.

Recent research identifies opportunities to strengthen the infrastructure supporting learning and career pathways. The CCI Skillnet report *Skills Challenges in the Visual Arts, Performing Arts and Cultural Events Sectors* highlights the potential for a more coordinated and strategic approach to skills and professional development, including expanded paid entry-level opportunities, more equitable regional access, better-connected provision and clearer signposting to relevant training. It identifies paid traineeships, secondments, shadowing, mentoring, micro-credentials and Recognition of Prior Learning as important mechanisms for creating more accessible and recognised progression routes.

The 2025 Cultural & Creative Industries Skillnet round tables on skills gaps similarly identified a persistent gap between education and industry, limited formal apprenticeship routes and a strong demand for practical, flexible and CPD-aligned learning that can be undertaken alongside freelance and project-based work. A future framework should illustrate how creative, technical, transversal and business capabilities develop across broad career stages:

Entry and Emerging Career:

foundational creative or technical proficiency; digital and AI literacy; communication and collaboration; understanding of professional practice; and practical experience secured through paid placements, traineeships, apprenticeships or supervised projects,

Intermediate and Established Career:

deeper specialist expertise combined with project and production management, client relationships, commercial awareness, budgeting, intellectual property, sustainability and responsibility for teams or collaborators. Development routes could include short, accredited programmes, micro-credentials, mentoring, peer learning, secondments and industry-led CPD.

Advanced, Leadership and Enterprise:

strategic leadership, organisational and financial management, innovation, governance, business development, internationalisation, workforce planning and the ability to mentor others and lead complex partnerships, productions or creative enterprises. Appropriate development may include executive learning, coaching, leadership networks, cross-sector placements and structured peer exchange.

These stages should operate as flexible reference points rather than a rigid occupational hierarchy. Progression in the CDIs may involve increasing specialisation, moving into management or leadership, establishing an enterprise, transferring into an adjacent industry, or developing a sustainable portfolio career. Pathways should also support returners and mid-career changers, recognising that creative professionals may move into and out of the sector at different stages of their working lives.

This approach aligns with Ireland's *National Strategic Framework for Lifelong Guidance 2024–2030*, which seeks to provide more coherent guidance across education, employment and career transitions. It also supports the *Digital Creative Industries Roadmap 2024–2026*, under which Government and industry are working to strengthen engagement between the CDIs and third-level education and improve awareness of creative career pathways. The national Further Education and Training Strategy, *Creating Futures 2026–2030*, further emphasises accessible, flexible and industry-responsive opportunities for career development, upskilling and lifelong learning.

Mapping career stages against skills requirements, qualifications, professional development and experiential learning opportunities would add substantial practical value to the taxonomy. Learners and practitioners could identify their existing capabilities and next development steps; employers could plan recruitment, progression and succession more effectively; and higher and further education institutions, Skillnet networks and training providers could identify gaps, align curricula with industry needs and develop more responsive provision. Over time, anonymised data on pathway use could also strengthen understanding of how creative careers develop, where people leave the sector and which interventions are most effective in supporting progression, retention and sustainable working lives.

9. Key Challenges for Developing Skills Intelligence in the Sector

9.1 Visibility, Classification and Data Gaps

A core challenge in developing effective skills intelligence is the absence of consistent definitions and classifications across the CDIs. The Digital Creative Industries Roadmap emphasises the need for more targeted definitions, noting the importance of strengthening "data gathering and analysis across these important drivers of growth and innovation."

This lack of visibility is further compounded by the nature of creative work itself. Roles within the sector frequently combine creative, technical and entrepreneurial capabilities, often operating across multiple domains simultaneously. Traditional labour market classifications, designed around clearly bounded occupations and industries, struggle to capture these hybrid roles. As a result, important aspects of the workforce including freelance and emerging occupations shaped by digital technologies remain underrepresented or misclassified within existing data systems.

Without a shared taxonomy, the sector remains only partially visible within national datasets, limiting the ability to accurately assess its workforce, skills needs and economic contribution.





9.2 Fragmentation, Informality and Capacity Constraints

A persistent barrier to addressing these issues is the absence of a formalised and standardised approach to the regular collection of skills data within the sector. While national skills systems have evolved significantly, they have not yet fully captured the complexity and diversity of creative work. Consequently, skills data is often fragmented, episodic and incomplete, limiting its value for policy development and sectoral planning.

The structural diversity of the sector further complicates data collection. The CDIs encompass organisations of widely varying size and scale, from large production companies to microenterprises, sole traders and freelancers. A significant proportion of the workforce operates on a freelance or project basis, often across multiple roles and sectors.

These characteristics create challenges for standard data collection approaches including:

- Freelancers and portfolio workers are frequently underrepresented in official datasets
- Micro and small enterprises may lack the administrative capacity to engage with surveys or reporting requirements
- Hybrid roles and cross-sectoral activities are difficult to categorise within existing frameworks.

In addition, many organisations within the sector operate with limited internal resources. The absence of dedicated Human Resources or workforce planning functions, particularly within SMEs and among freelancers, reduces the capacity to collect and report skills data systematically. As a result, there is often a reliance on informal knowledge rather than structured evidence.

The National Skills Council has emphasised that effective skills policy depends on "good quality data, that is accessible, current and well-integrated into the skills ecosystem." However, achieving this standard within the CDIs requires addressing the structural and capacity constraints that currently limit participation in data systems.

A further limitation is the lack of continuity in data collection. Existing insights are often derived from one-off studies or periodic surveys, rather than from ongoing, longitudinal data systems which restrict the ability to track changes over time, assess policy impacts, or anticipate emerging skills needs. The Expert Group on Future Skills Needs has noted that traditional research approaches can take "18 months from proposal to publication," highlighting the need for more agile and responsive methods.

10. Towards a Shared Skills Intelligence Framework

10.1 The Case for a Coordinated Approach

The CDIs are currently underrepresented in national research outputs around skills and workforce development. Fragmentation across the sector currently limits its ability to demonstrate its full scale, value and impact.

While individual sub-sectors may appear relatively small in isolation; and are predominantly overlooked in national skills data research; collectively they represent a significant component of the Irish economy. As the Digital Creative Industries Roadmap notes, the creative industries "boost competitiveness, productivity, sustainable growth, employment and export potential."

There is a strong foundation of skills and workforce intelligence in Ireland, delivered through a number of key agencies such as SOLAS, SLMRU, Skillnet Ireland, National Skills Council, Regional Skills Fora, Expert Group on Future Skills Needs, Higher Education Authority and the proposed National Skills Observatory, which will be a significant step forward in developing a coherent and inclusive picture for Ireland.

The sector needs to present a united, coordinated and strategic approach to industry data which would enable the sector to:

- Present a stronger, more coherent voice in policy and funding discussions
- Illustrate cumulative economic and social impact
- Improve visibility within national and European investment frameworks
- Identify thematic and cross sectoral skills gaps
- Support a skills first approach to creative sector workforce development.

In this context, standardisation is essential in creating a common skills language through which a highly diverse sector can describe its workforce, skills needs, occupations and economic contribution. At present, these industries often span multiple policy areas, classification systems and institutional remits, which can make their value, impact and specific skills gaps difficult to evidence consistently. By developing more standardised definitions, data categories and methods for capturing skills information, the sector can move from fragmented or anecdotal evidence towards a more coherent national picture.

This strengthens collective advocacy by allowing representative bodies, education providers and industry stakeholders to identify common challenges, such as talent pipelines, regional skills gaps, emerging digital capabilities, skills mismatches, freelance and micro-enterprise needs, and barriers to progression. It also enables more strategic engagement with Government, enterprise agencies and funders, as the sector can present clearer evidence of demand, impact and future workforce requirements. Ultimately, better standardisation of skills data supports more targeted policy, investment and training interventions, helping to improve the long-term sustainability, resilience and competitiveness of Ireland's creative and design industries.

10.2 Transversal Skills and Wider Economic Integration

Central to this approach is the recognition of transversal skills as a unifying element across the sector and beyond. As identified by the Expert Group on Future Skills Needs, transversal and digital skills, alongside collaboration, lifelong learning and adaptability, are critical across all sectors of the economy.

The CDIs play a key role in developing these capabilities, particularly in areas such as curiosity, critical thinking, creativity, design, communication and problem-solving. These skills are increasingly in demand across a wide range of sectors, including ICT, manufacturing and services, where they support innovation, user-centred design and organisational adaptability. Positioning the sector as a provider of transversal skills shifts its role from a discrete cultural domain to a central contributor to the wider skills ecosystem. This creates opportunities to integrate creative skills into broader education and training provision, including:

- Embedding design thinking within STEM and digital programmes
- Incorporating creative competences into vocational and apprenticeship pathways
- Supporting interdisciplinary learning across higher education.
- Enhancing creativity across the tertiary sector.

Such integration aligns with national policy objectives, including the need to "equip our workforce with cutting-edge skill" and support continuous upskilling in response to technological change.

In addition, the sector would benefit from closer integration with the wider skills agenda at both policy and delivery level. The CDIs bring distinctive perspectives and a wide range of expertise and there is an opportunity to strengthen links and develop greater collaboration across different specialisms within the sector itself. Transversal and cross sectoral skills such as financial management, business development, marketing etc have relevance across the CDIs and beyond.

ESCO Skill Type Definitions

- **Transversal Skills:** These are foundational competences applicable across almost all occupations and economic sectors. They are often called "soft skills", human skills or 21st-century skills, such as curiosity, critical thinking, adaptability, collaboration, digital literacy and foreign languages.
- **Cross-Sectoral Skills:** Relevant to several different sectors and industries rather than just one. For example, project management, data analysis, or basic administrative skills are valuable in both finance and healthcare.
- **Sector-Specific Skills:** Knowledge and abilities shared within a specific industry but used across many different occupations within that sector. For example, understanding cybersecurity protocols is a sector-specific skill within the technology sector, required for developers, IT managers and support staff alike.
- **Occupation-Specific Skills:** Competences unique to one specific occupation, craft, or specialisation, requiring specialised training or licensure. Examples include operating a specialised medical device (surgeon), welding a specific type of metal (welder), or preparing tax returns (accountant).

Transversal knowledge, skills and competences are relevant to a broad range of occupations and economic sectors. They are often referred to as core skills, basic skills or soft skills, the cornerstone for the personal development of a person. Transversal knowledge, skills and competences are the foundation for the development of the "hard" skills and competences required to succeed in the labour market.

10.3 Impact, Influence and Investment

Feedback from national skills and workforce intelligence agencies suggests that the sector needs to develop its own means of collating and disseminating skills data and to work with other agencies to present a unified picture of the impact of the CDIs as a whole.

The development of a joint approach and standardised taxonomy is ultimately about enabling the sector to better articulate its value and secure its future. In a policy environment increasingly driven by data, scale and measurable outcomes, the ability to present a coherent, evidence-based case is critical.

Reflecting the wider European policy context, the Expert Group on Future Skills Needs, Skills for Growth Insights Note (2025) recognises that "skills development is a cornerstone of economic resilience and competitiveness across Europe" . Aligning with these priorities requires robust data systems and a clear articulation of the sector's contribution to innovation, growth and societal development. In doing so, the sector can move from partial visibility to strategic recognition, positioning itself as a key contributor to Ireland's economic growth, innovation capacity and future skills ecosystem.



10.4 Dissemination and Application

Even the most sophisticated data systems have limited impact if their outputs are not effectively disseminated. The EGFSN's evolving publication model reflects an understanding that skills intelligence must be communicated in ways that are accessible and actionable. Its work emphasises the importance of identifying "common themes and cross sectoral synergies" that can inform multiple sectors of the economy.

For the CDIs, where many workers operate outside formal institutional structures, the accessibility of such insights is particularly important. Data must not only inform policymakers but also support employers, educators, enterprises and individuals navigating complex and evolving career pathways. At a European level, similar priorities are evident.

Initiatives such as the European Commission's Union of Skills emphasise lifelong learning, mobility and coordinated action, all of which depend on robust and interoperable data systems.

For Ireland, aligning national approaches with these broader frameworks is essential to ensuring that its skills ecosystem remains both competitive and connected.

The challenge facing Ireland's CDIs is not simply to develop skills but to develop the capacity to understand skills, to make visible what is currently diffuse, to anticipate what is emerging and to communicate insights in ways that enable action. As the *Digital Creative Industries Roadmap* makes clear, these industries "boost competitiveness, productivity, sustainable growth, employment and export potential." Ensuring that their skills needs are accurately captured and effectively addressed is a central component of Ireland's broader economic strategy.

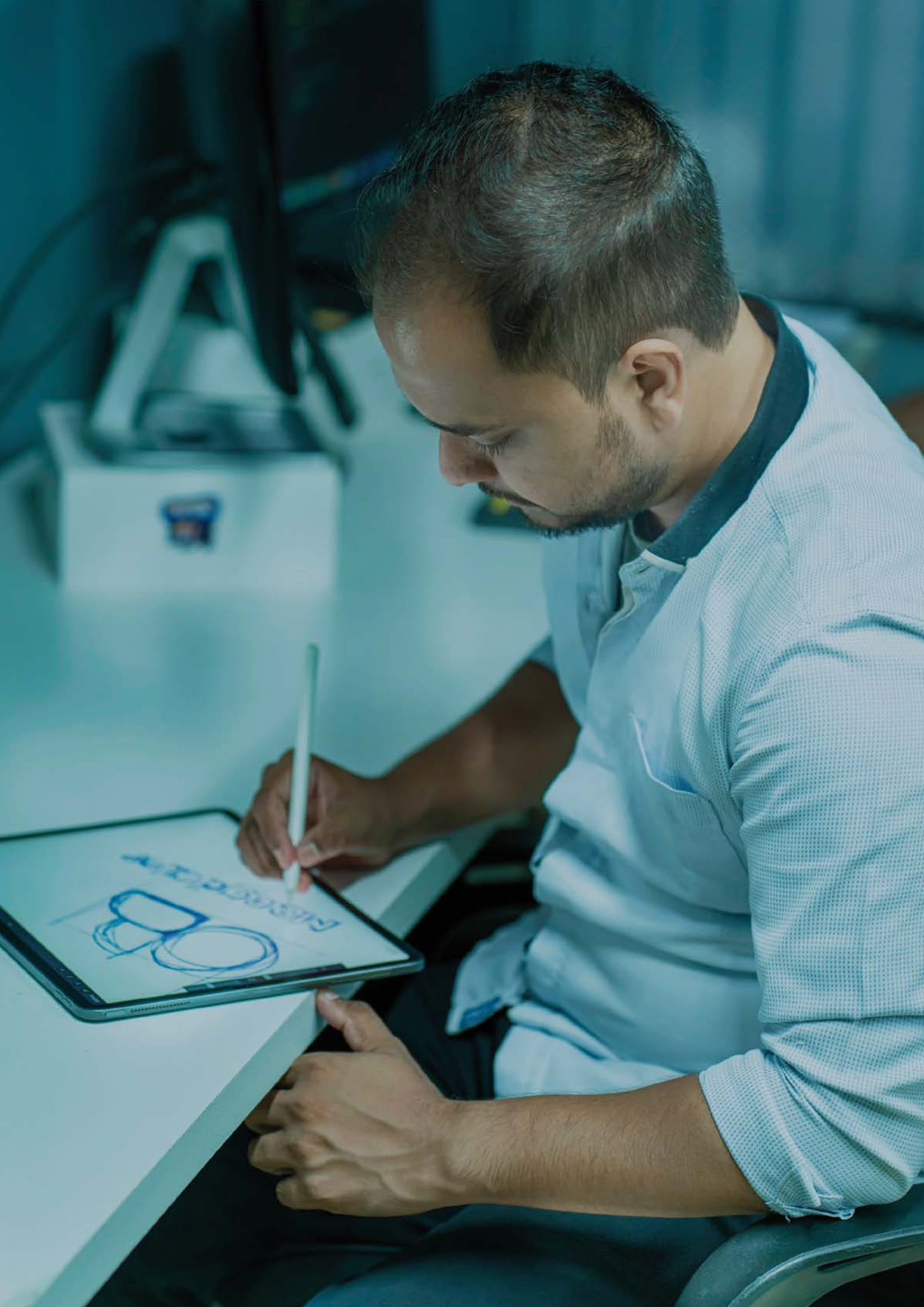
In this context, the evolution of skills data systems represents a critical step toward a more coherent and responsive policy environment. Moving towards an integrated skills intelligence ecosystem will enable Ireland not only to support its CDIs more effectively but also strengthen the foundations of innovation and growth across the wider economy.

In addition to its value for policy development, CDIs skills data has significant relevance for employers, industry, education providers, skills development organisations, and the workforce itself. For employers and industry, robust skills data can help identify current and emerging skills needs, support workforce planning and inform recruitment, retention, and encourage employers to invest in upskilling and develop relevant strategic approaches to skills development. It can also provide a stronger evidence-base for wider investment decisions and for shaping responses to technological, economic, and sectoral change.

For education and training providers, skills data can help ensure that courses, curricula and provision remain aligned with labour market needs and industry practice. This supports the design of more responsive programmes, strengthens progression pathways, and helps learners develop skills that are both relevant and transferable. For skills development providers, such data can guide the targeting of interventions, highlight areas of unmet demand and support the delivery of tailored upskilling and reskilling opportunities.

For the workforce, access to clear and reliable skills intelligence can improve understanding of career opportunities, skills requirements, and progression routes within the sector. It can support individuals in making informed decisions about education, training, and career development; while also helping to articulate the value of existing skills and identify areas for further growth. Taken together, CDI skills data can play an important role in creating a more connected, responsive, inclusive, and future-focused skills ecosystem in Ireland.

When considering the mechanisms by which data can be shared and accessed, it is important to consider and prioritise the different 'use cases' or audiences.



11. Proposed Framework for Ireland

Findings suggest that projects to develop specific skills taxonomies and frameworks both nationally and internationally require significant investment and long-term resources. Many skills data leaders we spoke with reported an iterative approach, developing, testing and refining their methodology through many years (between 5 to 18 years in some cases) and combining ad hoc surveys with in-person interviews and focus groups.

Projects such as Cyanotypes have developed creative ways of reimaging and classifying skills and competences in the CDIs sector, while subject, art form or sub sector advances have also been made; for instance, Charter, the European Cultural Heritage Skills Alliance and Action Plan which proposes a sector wide collaborative approach to addressing skills gaps.

Conversations with the main skills intelligence and development bodies in Ireland suggest that it is an opportune moment, with increased interest within national and international policy in the CDIs as an important element of economic and social development; and the proposed National Skills Observatory which could potentially build on any sectoral intelligence gathered and work collaboratively with sector representatives to advocate for future investment.

The need is widely recognised but the approach must be phased and targeted. Further dissemination of sector skills data to industry, employees and independent sector workers should follow and would require further development of an appropriate platform/mechanism which is fully accessible to all. Tools such as 'FLOW', an interactive, online skills, competency framework and career development tool designed by the IDI and Design Skillnet, could be further developed or act as a model for a new cross-sectoral skills and career guidance platform.

11.1 Developing a CDIs Taxonomy

The following key findings are drawn from desk-based research examining global best practices in skills taxonomy and framework development, combined with primary research with a range of providers, industry, skills data specialists and policy advisers and the sector.

11.2 Core Requirements

Before exploring the lessons learned from other projects it's essential to establish what Ireland's CDIs specifically need from a skills taxonomy. Based on initial stakeholder consultations any successful framework must balance diverse user requirements with strategic national objectives.

An ideal taxonomy for Ireland's CDI should serve a diverse range of stakeholder needs including :

- Policy makers
- Skills providers/ educational institutions
- Employers and industry bodies
- Graduates, job seekers, freelancers and employees.

Each group would potentially use the outputs from the system in different ways. Some end-user applications may include:

- Policy Development
- Workforce planning and analysis
- Education and training alignment
- Career pathways and mobility mapping.

The taxonomy must also meet several strategic requirements to ensure its effectiveness and relevance:

- Tailored to capture the unique characteristics of the Irish CDIs
- Compatible with EU schemes allowing international comparison
- Have sufficient granular depth to inform policy and intervention development
- Consistent with the goals of the Irish skills agenda.

11.3 Taxonomy Design Principles

Taxonomy development is a constantly evolving discipline, shaped by both technological capabilities and changing understanding of how skills function in the workplace. This evolution can be understood through two major shifts: moving from job-centric to skills-centric frameworks and from expert-defined to data-driven development processes.

Legacy Taxonomies

Skills taxonomy development has traditionally been constrained by two limitations:

1. **A job-centric approach that focused on existing job titles rather than skills**

Occupation-based taxonomies focus on predefined job titles rather than the specific, evolving capabilities required for the modern world of work. Their static and rigid structure makes them unsuitable for today's rapidly changing economy, particularly within dynamic creative industries where roles and skill requirements continuously evolve

2. **Taxonomy definitions rely on subjective expert assessments**

Skills taxonomies have traditionally been developed through a manual, qualitative process involving workshops, interviews and surveys with domain experts and business leaders to define, categorise and validate a list of required skills.

Creating a skills taxonomy based solely on stakeholder and expert input is often slow, subjective and hard to scale. This approach can also lead to a rigid, biased and quickly outdated list of skills that doesn't fully capture the true needs of an industry or discipline.

Recognising the need for more responsive, objective and scalable approaches, practitioners and researchers have developed new approaches in a bid to address these challenges.

Skills Based Taxonomies

In recent years there has been a shift from job-based to skills-based taxonomies which more accurately reflects the changes in the modern workplace. Rapid technological change and increasing demands for workforce agility have made traditional, static job titles less effective for capturing the dynamic capabilities required in today's economy. Skills-based frameworks offer the flexibility needed to address evolving industry requirements and support strategic workforce planning.

Data Driven Taxonomies

A second significant development has been the growing adoption of data-driven taxonomies.

Data-driven taxonomies offer significant advantages over traditional approaches through their objective, dynamic and scalable characteristics. Unlike qualitative methods that rely on subjective expert opinions, data-driven models use AI/Machine Learning to analyse vast amounts of real-time information from job postings, resumes/CVs and project data. This approach ensures taxonomies provide a current, unbiased and accurate reflection of skills in demand within the market.

Whilst certainly more time/cost effective, this approach has limitations. Most of the data-driven taxonomies considered are built on analysing job adverts. Using job adverts as a primary data source means that they can be limited by a demand-side bias, reflecting only what employers seek rather than the full range of skills an available workforce possesses. Job adverts, framed in HR language, can obscure key capabilities and fail to capture the expertise of individuals who don't fit a standard job description.

This issue is particularly relevant to Ireland's CDIs, where a significant number of roles - such as those for independent artists, freelance designers, or heritage craftspeople - are project-based and not formally advertised, meaning their skills would be completely absent from such a taxonomy.

Hybrid Approaches

While skills-based and data-driven approaches offer significant advantages over traditional taxonomies, no single methodology can fully represent the complexity of Ireland's creative and design industries (CDIs). A hybrid approach is therefore likely to provide the most credible, practical and sustainable model.

In this context, "hybrid" has two related dimensions. First, it combines an occupation-based structure with a more flexible skills-based framework. Second, it combines quantitative, data-driven analysis with qualitative evidence and sector expertise. Together, these elements provide the stability required for alignment with national systems while retaining sufficient flexibility to reflect the distinctive and rapidly evolving nature of the CDIs.

Combining Occupation - and Skills-Based Frameworks

Occupational classifications remain important because they connect the taxonomy to established labour-market statistics, qualifications, employment data and national and international frameworks such as CSO, NACE and ESCO. However, occupational categories alone cannot adequately represent a sector in which people frequently work across disciplines, combine several professional identities or move between employment, freelance practice and project-based work.

A hybrid taxonomy would therefore retain occupations as useful reference points while placing skills and competences at the centre of the framework. This would allow a role such as "designer", "producer" or "creative technologist" to be understood through its component skills, rather than treated as a fixed and uniform job description. It would also make visible the skills shared across different CDI sub-sectors, including creative practice, project management, communication, entrepreneurship, digital capability, leadership and collaboration.

This approach is particularly important for identifying hybrid and emerging roles. New areas of practice frequently develop at the intersection of established disciplines—for example, immersive production, virtual design, creative AI, digital heritage and sustainable materials practice. These may not be recognised quickly enough within conventional occupational classifications, but their underlying skills can be captured, validated and incorporated into a more responsive skills-based structure.

Combining Data with Sector Knowledge

The second aspect of the hybrid approach is methodological. Data drawn from job advertisements, CVs, professional profiles, funding applications, training records and other sources can identify patterns at a scale and speed that would not be possible through consultation alone. It can reveal changes in employer demand, emerging terminology and relationships between occupations and skills.

However, data analysis should not be treated as objective or complete simply because it is automated. Its findings reflect the coverage, language and biases of the underlying data sources. Job-advertisement data, in particular, is likely to underrepresent freelancers, sole traders, microenterprises, voluntary organisations and practitioners whose work is commissioned through informal networks or project-based relationships. It may also privilege larger employers and more formalised areas of the economy.

Stakeholder and practitioner knowledge is therefore essential to interpreting the data, addressing gaps and validating findings. Artists, designers, cultural organisations, creative businesses, craft practitioners, educators and other sector specialists can identify capabilities that are central to practice but may not appear in conventional employment data. For instance, these might include artistic research, curatorial judgement, material knowledge, community engagement, cultural mediation, rights management and the ability to develop a sustainable portfolio career.

A hybrid model would use data analysis to establish an initial evidence base and identify trends, followed by structured engagement to test, contextualise and refine the findings. Stakeholder input would not be confined to the initial development stage. It should form part of an ongoing validation process through which the taxonomy is reviewed and updated.

A Layered Taxonomy for the CDIs

In practical terms, the hybrid approach could be organised through four connected layers:

1. **A common foundation:** established national and international classifications and terminology, including ESCO, NACE and relevant CSO frameworks, supporting comparability and interoperability.
2. **Transversal skills:** capabilities relevant across the CDIs and the wider economy, including curiosity, creativity, critical thinking, communication, collaboration, adaptability, problem-solving, digital capability, leadership and entrepreneurship.
3. **Sub-sectoral and specialist skills:** more detailed skills associated with areas such as design, visual arts, performing arts, screen, gaming, publishing and immersive technologies.
4. **Emerging skills:** a flexible layer capturing new capabilities arising from technological, environmental, commercial and social change, including creative AI, sustainable production and new digital forms of cultural participation.

Ideally, the framework should also record relationships between skills, occupations, qualifications, learning provision and career pathways. This would enable the same underlying taxonomy to support different uses, including workforce planning, curriculum development, skills-gap analysis, business support and individual career development.

Governance and Continuous Improvement

A hybrid taxonomy requires a clear process for deciding when new skills should be added, existing definitions amended or outdated concepts removed. Data-led updates should therefore be considered alongside input from a representative governance structure, such as the proposed Creative Skills Council (Recommendation 1). The Council could review emerging evidence, oversee agreed definitions and ensure that revisions reflect the diversity of the CDIs.

This would position the taxonomy as a living resource rather than a fixed classification exercise.

11.4 A Phased Hybrid Model

Of the three implementation options—building a new taxonomy, adopting an existing framework or developing a hybrid model—the hybrid option is likely to offer the most appropriate balance of relevance, resources and interoperability for Ireland's CDIs.

Rather than duplicating existing work, Ireland could adopt established frameworks as the foundation of the taxonomy and develop additional sector-specific layers where gaps are identified. For example, established terminology could be used for digital, managerial, entrepreneurial and transversal skills, while bespoke classifications could be developed for specialist creative practice, portfolio careers and emerging interdisciplinary roles.

This model would offer several benefits:

- **Relevance:** it could represent specialist and emerging CDI skills that are not adequately captured by existing frameworks.
- **Efficiency:** it would reduce the time and cost associated with constructing an entirely new taxonomy.
- **Interoperability:** alignment with established classifications would support connections with national skills analysis, education and training systems, labour-market data and enterprise supports.
- **Comparability:** it would enable the CDIs to be analysed alongside other sectors while retaining more detailed sub-sectoral intelligence.
- **Responsiveness:** data analysis and stakeholder validation would allow the taxonomy to evolve as technologies, practices and business models change.
- **Ownership:** continued involvement from practitioners, businesses, agencies and providers would strengthen trust, legitimacy and adoption.

The central challenge will be to achieve sufficient sectoral specificity without creating a framework that is excessively detailed or difficult to maintain. A modular structure would help address this risk. The common foundation could remain relatively stable, while specialist and emerging-skills layers could be reviewed and updated more frequently.

A hybrid approach should not, therefore, be understood as a compromise between competing models. Properly designed, it is a deliberate combination of established standards, current data and practitioner expertise. It offers the strongest basis for creating a taxonomy that is nationally connected, internationally interoperable and sufficiently responsive to the distinctive realities of Ireland's creative and design industries.

11.5 Conditions for Success

1. Stakeholder Ownership

Drawing from international best practice, several critical factors distinguish successful taxonomy implementations from failed initiatives. These factors fall into two key phases: securing stakeholder engagement during development and ensuring widespread adoption once deployed.

2. Taxonomy Development

Successful taxonomy development requires extensive stakeholder consultation to ensure both credibility and practical application. This involves conducting workshops, focus groups and co-design sessions to capture expert insights. Advisory panels or steering committees should provide governance and oversight throughout the process. Broader stakeholder input can be gathered through surveys and consultations, whilst pilot testing with selected partners validates the taxonomy's structure, common skills language and usability before wider implementation.

3. End-user Adoption

For a skills taxonomy to achieve meaningful impact beyond a simple skills inventory, it must secure widespread adoption across all key stakeholder groups. This requires tailored communication strategies that address each group's specific needs and priorities.

Promotion must clearly articulate value propositions for each audience. Policy makers require emphasis on how the taxonomy provides a data-driven framework to justify and target funding, measure sectoral health, and create effective national strategies. Employers need to understand how it simplifies hiring and talent management, enabling identification of skills gaps, workforce upskilling, and improved retention. Skills providers should see how it helps align curricula with industry demand, ensuring students acquire the most relevant and in-demand competences. Employees and job seekers must understand how it enables clear career progression, identifies promotion requirements, and connects them with relevant training and opportunities.

The most successful taxonomy implementations are not defined by the underlying data structure but rather by how the data is presented and integrated. Effective presentation and seamless integration with existing systems determine whether taxonomies become valuable tools or remain unused resources. Understanding end-user requirements is critical to ensuring widespread and long-lasting adoption.

Two common techniques used to maximise end-user adoption include:

- **User-friendly tools and visualisation**

These make data accessible across different contexts by repurposing the presentation layer to provide the most appropriate access method for each end-user. For example, policy makers typically benefit from public-facing dashboards showing skills trends. In contrast skills providers need interactive tools mapping career pathways whilst employees and job seekers require simple, searchable interfaces that make information discovery intuitive.

- **Interoperability**

Interoperability between systems drives the most successful adoptions. Simply put, this means providing a mechanism so that data can be embedded within tools stakeholders already use. For employers, this means integration with HR and learning management systems. For job seekers, it requires ensuring the taxonomy powers searches on public job boards and career platforms.

The most successful skills taxonomies provide an Application Programming Interface (API) that allows their dynamic data to be seamlessly integrated into proprietary systems.

In summary, the key components for successful taxonomy deployment should include:

1. Adopt skills-based frameworks, though hybrid approaches combining skills and occupation elements are equally valid
2. Prioritise data-driven approaches to enable cost-effective, near real-time update cycles
3. Employ hybrid methodologies that combine data-driven approaches with stakeholder expertise to fill in key gaps
4. Design for interoperability by offering mechanisms to deliver data to users in their existing systems
5. Foster multi-stakeholder partnerships to maximise engagement during development, validation, and end use
6. Design for multi-stakeholder utility – make complex information easily accessible and usable to all stakeholders.

11.6 Risks and Pitfalls

Best practice reveals recurring challenges that can undermine even well-designed taxonomies. Understanding these common failure points can help Ireland's CDIs avoid costly mistakes and ensure sustainable implementation.

Lack of Long-Term Investment

In order to make a significant impact, long term investment is required. Relevant and up to date data is a necessity for the development of any sector. In the case of the CDIs where there has been an historic lack of investment, it will be essential that any project to develop and integrate a skills taxonomy is funded long term and resourced at the right level.

Lack of Maintenance and Taxonomy Rigidity

A skills taxonomy is often treated as a one-time project but the world of work is constantly changing. Static taxonomies quickly become obsolete, leading to misaligned training, inaccurate workforce data, and poor talent management decisions. The most effective taxonomies are treated as living systems that are continuously updated to reflect evolving industry requirements.

Poor Granularity

Finding the right level of detail is critical to taxonomy success. A taxonomy can fail if skills are either too broad, such as "communication", to be useful, or too specific, such as "knowledge of a single software function", to be manageable. The key is to find the optimal balance that provides meaningful insights without creating an administrative burden.

Data and Adoption Issues

Even the best-designed taxonomy can fail without proper adoption. Key challenges include relying on outdated or incomplete data sources and lack of buy-in from stakeholders. Without clear communication about the benefits users may perceive the taxonomy as additional administrative work leading to low adoption rates and rendering the entire effort ineffective.

Poor/Unmanageable Data Sources

Skills data is often scattered across various systems and compiling this information represents a substantial and challenging undertaking for most organisations. Without appropriate infrastructure and dedicated resources this process can quickly overwhelm organisations and lead to system neglect.

Lack of Stakeholder Alignment

If a taxonomy is created in a silo without input from key potential stakeholders, it may not reflect the real-world needs and language of the organisation or industries it is meant to represent. This can lead to resistance and a lack of trust in the system.

Irish CDI Sector Specific Considerations

There is currently no one way in which skills are categorised in Ireland. The sector, agencies and bodies engaged in gathering skills data have tended to develop their own approaches, for instance based on ESCO or CSO codes.

Understanding these parallel initiatives and their chosen methodologies is important when determining the best course of action for Ireland's CDI. Consideration of the potential for alignment, integration, or coordination between these frameworks will be essential to ensuring the success of a CDIs taxonomy.

Implementation Approaches

There are three possible approaches to implementing a new taxonomy for the Irish CDIs:

1. Build a completely new taxonomy from scratch
2. Adopt an existing taxonomy that already fulfils many of the essential criteria
3. Develop a hybrid model that combines both methods.

Choosing between these three approaches requires careful consideration of several critical decision factors. These factors will determine which option best suits the specific needs and circumstances of the Irish CDI.

Critical Decision Factors

To guide selection, three key factors must be weighed carefully against each implementation approach. Understanding how each factor applies to Ireland's specific context will determine which approach offers the best value for stakeholders.

The key decision factors for selecting the most appropriate way forward are **relevance**, **resource constraints**, and **interoperability**.

1. Relevance and Context

The primary factor in taxonomy selection is whether an existing framework accurately reflects the specific skills, jobs, and emerging trends within a particular sector.

Designing a new taxonomy represents the optimal approach when sectors have highly specialised or rapidly evolving skills that existing frameworks fail to capture. New or niche industry areas may require bespoke taxonomies to accurately define their unique skill sets and future requirements. This approach ensures perfect alignment and high relevance but requires the most substantial resource investment.

Adopting an existing taxonomy represents a strong choice when a sector's skills are well-defined and align closely with established frameworks. Adoption saves significant time and financial resources on development whilst immediately providing a comprehensive, proven structure. However, this approach risks insufficient specificity for niche roles or failure to capture emerging skills crucial to sectoral innovation.

Developing a hybrid often represent the most practical solution. Organisations can adopt broad, existing taxonomies as foundations and supplement them with custom, highly granular skills relevant to their specific sectors. For instance, a design skills council might adopt a national framework for general creative and management skills, then develop detailed layers for specialised, emerging competences such as sustainable design practices. This approach balances broad utility with sector-specific detail.

2. Resource and Time Constraints

The second critical factor concerns the resource and time constraints facing the organisations involved in the development.

Designing a new taxonomy - represents a substantial undertaking that requires extensive research, data collection, and stakeholder consultation.

Design requirements involve substantial investment in time and resources, including engaging subject matter experts, conducting labour market analysis, and building governance structures for ongoing maintenance. Taxonomy development timescales are measured in years not months. For anything beyond a simple taxonomy this approach requires organisations to have significant funding and a clear, long-term commitment to development and maintenance.

Adopting an existing taxonomy - represents the most efficient approach. Adopting an existing taxonomy drastically reduces development time and costs, allowing organisations to focus resources on implementation and immediate application rather than framework creation.

Adopting an existing taxonomy presents several potential limitations including poor fit for unique organisational needs, potential for outdated content, and dependency on external providers for crucial updates and maintenance.

Developing a hybrid – this approach requires moderate investment. This method is less demanding than building from scratch but more resource-intensive than simple adoption as it involves the effort of custom-building and integrating sector-specific layers.

3. Interoperability and Stakeholder Buy-in

A skills taxonomy's value is maximised when it can integrate effectively with other systems and frameworks. There are three potential approaches to consider: Design, Adopt and Hybrid.

Design - Whilst a bespoke taxonomy can be designed for perfect skills alignment, it may struggle with broader system interoperability. If it fails to align with national education frameworks, qualification systems, or wider labour market data it risks becoming a siloed tool that provides limited value for external partners.

Adopt - Using a well-established, open-source taxonomy ensures instant interoperability. This approach makes it easier to compare skills, align qualifications, and share data with other sectors, government bodies and educational institutions, representing a major advantage for key stakeholders.

Hybrid - This model offers the best of both worlds. It ensures the core taxonomy is standardised and interoperable with wider systems, while customised data layers provide sectors with the specificity they need. This balance fosters collaboration and widespread adoption as all stakeholders can see their needs reflected in the final product.

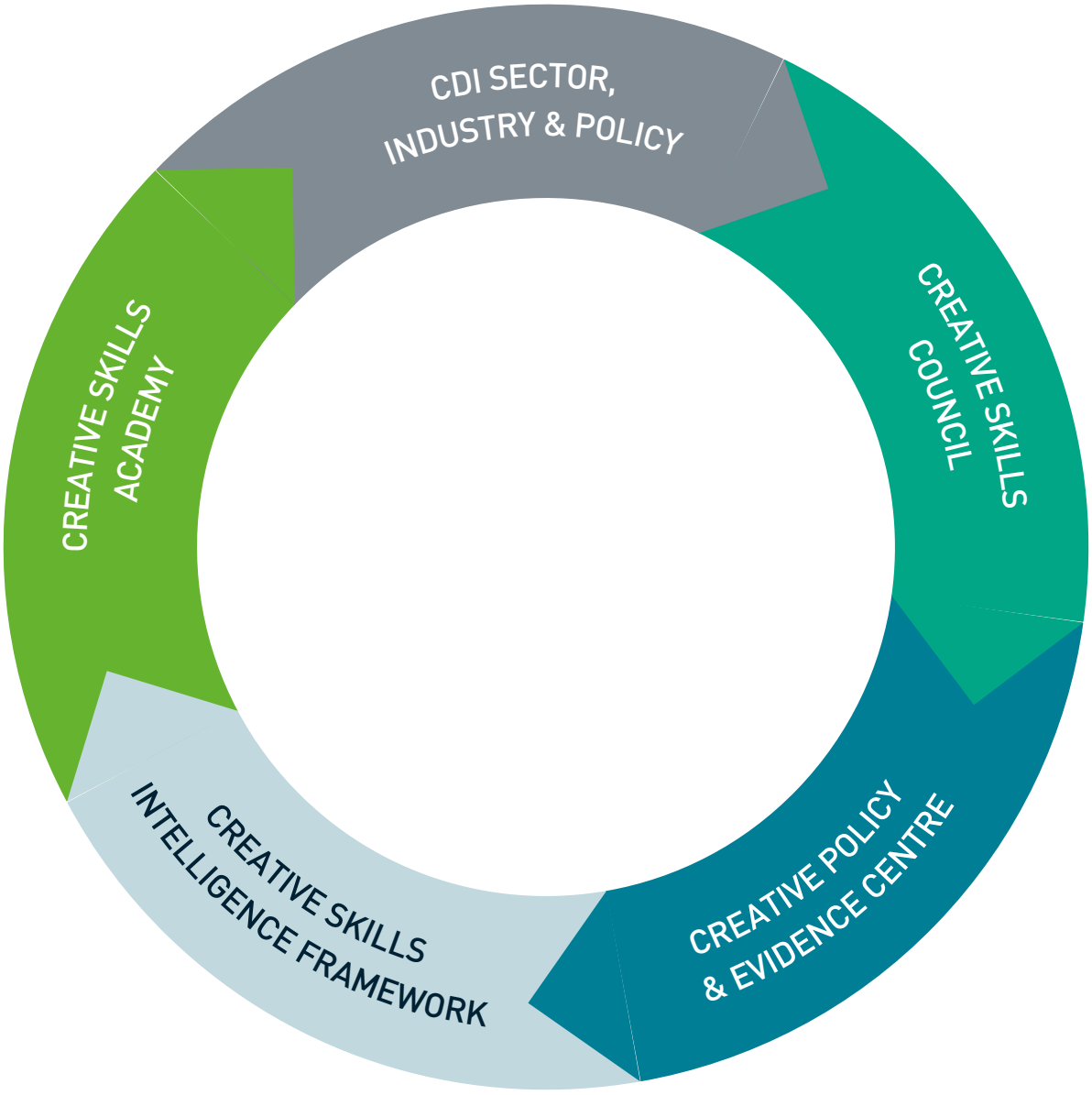


12. Recommendations

The following recommendations are designed to provide a governance and delivery framework for creative skills intelligence.

Recommendations:

1. **Creative Skills Council:** Establish an all-island creative skills council to provide strategic leadership, coordinate stakeholders and strengthen the CDIs' influence on skills policy and investment.
2. **Creative Policy and Evidence Centre:** Create a central hub to coordinate research, skills intelligence and labour-market data, supporting evidence-based policy and workforce planning.
3. **Skills Intelligence Framework:** Develop a shared taxonomy, a common skills language and continuous, forward-looking intelligence framework to identify, monitor and communicate current and emerging CDI skills needs.
4. **Creative Skills Academy:** Establish an all-island academy to develop, pilot, evaluate and scale responsive skills programmes for the CDI workforce.



Recommendation 1:
Establish an all-island Creative Skills Council

A coordinated approach to CDI skills intelligence will require sustained collaboration between government departments, state agencies, industry and representative bodies, education and training providers, funders, enterprise stakeholders, employers and creative practitioners. At present, relevant data, expertise and activity are distributed across multiple organisations, with different remits, definitions and methods of data collection. While this creates a valuable body of knowledge, the absence of an overarching coordination mechanism can make it difficult to develop a coherent understanding of shared skills needs, identify emerging priorities or connect sector-specific evidence with national policy and investment decisions.

The establishment of an **all-island Creative Skills Council (CSC)**, or a similar structured mechanism, would provide a focal point for this collaboration. The Council would bring together organisations responsible for skills policy, labour-market analysis, enterprise development, education and training, sector investment and workforce representation. It should be sufficiently broad to reflect the diversity of the CDIs while maintaining a clear remit and a manageable governance structure. Representation should include freelancers, microenterprises and SMEs, whose experiences and skills needs are frequently underrepresented in conventional employer and labour-market datasets. The Council should include regional representatives as well as representatives from Northern Ireland.

The CSC would provide strategic direction and development of CDIs skills intelligence. It would oversee the alignment of CDIs intelligence with national frameworks and datasets, ensuring that the sector is more visible within wider skills, enterprise, education and labour-market planning.

Importantly, it would strengthen communication between the sector and policymakers. This approach would enable the CDIs to speak with greater clarity and consistency about workforce needs, skills shortages, training priorities and future opportunities. This would support more effective advocacy while helping government, agencies and funders make better-informed decisions about policy, provision and investment.

Action Plan

Establish an all-island Creative Skills Council bringing together government departments, state agencies, sectoral and trade bodies, education and training providers, funders, enterprise representatives, employers, skills bodies and creative practitioners. Its initial responsibilities should include:

- agree a clear remit, governance structure and terms of reference
- identify core stakeholders on an All-island basis
- support the future development of the proposed all-island Creative Policy and Evidence Centre or similar model
- identify opportunities to align with national skills and labour-market structures
- provide a strategic and collective voice on skills priorities, workforce development and future investment
- provide ongoing strategic advice to effectively shape policy responses aligned with sectoral workforce needs
- secure representation for the sector within the proposed National Skills Observatory and explore opportunities for ongoing engagement with the National Skills Council.

The Creative Skills Council should operate through an agreed multi-year work programme, supported by appropriate leadership, secretariat capacity and dedicated resources. Regular reporting and clearly defined outputs would help ensure that it becomes an active mechanism for coordination and delivery, rather than an advisory group with limited influence.

Indicative Timeframe:

Short term to establish; ongoing thereafter

Recommendation 2:
Establish an all-island Creative Policy and Evidence Centre

The strategic collation and dissemination of CDIs sector intelligence is key to the continuing development and growth of the sector. The ability to rely on trusted evidence to fully understand and demonstrate the sectors impact, needs and opportunities more widely is essential and a nationwide collaborative approach is required to fully demonstrate the importance of the CDIs to the economy and the infrastructure of Ireland.

The creation of **an all-island Creative Policy and Evidence Centre** (CPEC) or similar model would help respond to this critical need, similar to the Creative PEC model in the UK.

The CPEC would act as the lead agency for the collation and dissemination of sector research and skills and labour market data. Its function would agree common terminology and shared priorities, identify evidence gaps, coordinate research and data-collection activity, and support the development and maintenance of a common skills taxonomy. It would act as a central repository and commissioner of dedicated analytical outputs on creative sector skills trends, and disaggregated data that reflects the diversity of sub-sectors and occupations in the sector.

By mapping current and planned provision and initiatives, it would reduce duplication, encourage data sharing and identify opportunities for joint commissioning, pilot activity and investment. It would also provide a structured route through which emerging issues—such as artificial intelligence, digital transformation, sustainable practice, changing business models and new interdisciplinary roles—could be considered collectively and translated into responsive education, training and business supports.

To support effective use, skills insights should be disseminated through annual reports, rapid Skills Insights Notes, dashboards and targeted briefings for policymakers, education and training providers, funders, SMEs and freelancers. This would establish skills intelligence as an ongoing evidence base to inform policy, guide provision and support strategic decision-making across the sector.

The CPEC would provide public access to relevant, reliable and up to date skills intelligence; support evidence-based policymaking, improve recognition of the sector's contribution and help ensure that future investment, education and training responses are informed by robust and current data.

Action Plan:

Establish an all-island Creative Policy and Evidence Centre to act as the lead research hub and central repository for the collation and dissemination of sector skills and labour market data.

- define the remit, governance arrangements and relationship with the Creative Skills Council and Creative Policy and Evidence Centre or similar model
- establish shared definitions and priority evidence requirements
- act as a repository, commissioner and coordinator of sector skills data collection, analysis and dissemination
- map existing skills provision, initiatives, datasets, taxonomies and research
- commission and /or coordinate research into emerging and underrepresented skills needs to support skills forecasting and workforce planning
- ensure meaningful representation of freelancers, microenterprises, SMEs and different CDI sub-sectors within skills data
- measure the impact of skills provision for the sector using qualitative and quantitative methodological approaches that include outcomes related to employer engagement, freelancer participation; and policy uptake and impact
- advocate for dedicated CDIs skills outputs within national reporting
- produce regular outputs such as Skills Insight Notes, dashboards and annual skills reports, including evidence related to how wider creative and design skills are impacting other sectors and the wider economy
- establish a nationally agreed taxonomy and framework based on a common skills language for the ongoing collation, analysis and dissemination of quality sectoral skills data

Indicative Timeframe:

Short to medium term.

Recommendation 3:

Develop a coordinated, real-time and forward-looking all-island skills intelligence framework for the CDIs

Transition towards a coordinated, continuous and forward-looking all-island **skills intelligence framework for the CDIs**. Led by the Creative Skills Council and developed by the Creative Policy and Evidence Centre this would be underpinned by a nationally agreed taxonomy (a common skills language) that provides consistent definitions of sub-sectors, occupations, skills and emerging roles, aligned where appropriate with CSO, SOLAS, HEA, Eurostat and ESCO classification systems.

This enhanced creative skills intelligence framework should adopt a hybrid approach (Section 11.4) and draw on regular sector-specific skills surveys, relevant modules within national surveys, administrative datasets and alternative data sources, including funding and grants reporting, platform and portfolio data, LinkedIn, Lightcast and Data City. It should also ensure that SMEs, freelancers and project-based workers are represented through proportionate, accessible and low-burden data collection mechanisms.

Action Plan:

Develop an all-island creative skills intelligence framework that combines a shared taxonomy, a common skills language, regular data collection, real-time labour market analysis, and accessible dissemination. Begin by agreeing a common classification of CDIs sub-sectors, occupations and skills, aligned where possible with national and European systems. Pilot data collection through an annual skills survey, existing funder reporting mechanisms, LinkedIn, Skillnet networks and selected platforms such as Lightcast or Data City. Ensure specific mechanisms are included to capture freelancers, micro-enterprises and project-based workers.The evidence generated through the all-island creative skills intelligence framework could also be used to demonstrate the wider value of creative and design skills across the economy. The skills intelligence framework could be used to identify where transversal skills such as curiosity, creativity, critical thinking, design thinking, user-centred innovation, collaboration, communication and problem-solving are relevant to national priorities, including digital transformation, AI adoption, enterprise innovation, public service reform and lifelong learning. This would support education, training and enterprise stakeholders to embed these skills where appropriate across wider skills programmes.

Key Actions:

- Develop a standardised CDIs taxonomy based on a common skills language covering sub-sectors, roles and skills.
- Test the taxonomy with industry bodies, agencies, educators and policymakers
- Pilot an annual CDIs skills survey, potentially using LinkedIn as a distribution channel
- Explore Lightcast, Data City and other real-time data tools for relevance, cost and coverage
- Work with funders to assess whether data capture can be embedded into grant and scheme reporting
- Map transversal creative and design skills against national skills priorities, develop case studies showing how CDIs skills support innovation and productivity, and promote creative and design skills as part of Ireland's wider future skills agenda. Ensure outputs are accessible to SMEs, freelancers, educators, policymakers and enterprise stakeholders.

Indicative Timeframe:

Medium term, with pilot activity beginning in the short term.

Recommendation 4:
Establish an all-island Creative Skills Academy

Working under the strategic direction of the All-Island Creative Skills Council and informed by intelligence from the Creative Policy and Evidence Centre, the Creative Skills Academy would translate skills needs as identified in the skills intelligence framework into practical programmes, pilots and interventions. It would provide the operational and delivery layer for developing the CDI workforce.

The Academy would act as an engine for innovation: developing, testing and evaluating new approaches to learning, professional development and workforce support before successful models are adopted more widely. Its work should address current and emerging priorities, including artificial intelligence, digital transformation, sustainable practice, entrepreneurship, leadership, management and transferable creative and design skills.

Rather than duplicating existing provision, the Academy would operate through a distributed partnership model, working with Skillnet networks, further and higher education institutions, training providers, sector bodies, employers and creative practitioners across the island of Ireland, potentially through specialist sectoral hubs in different regions. It would commission and coordinate provision, support collaboration between providers and extend access to freelancers, microenterprises, SMEs and people working in regions where specialist opportunities are limited.

It would also provide the environment in which new delivery models can be tested. These might include modular and stackable learning, cross-sector programmes, peer learning, mentoring, placements, paid development opportunities and recognition of prior and experiential learning. Consistent monitoring and evaluation would identify what works, for whom and under what conditions, creating an evidence base to support wider investment and adoption.

Action Plan:

Establish an All-island Creative Skills Academy as the operational mechanism for developing, piloting, testing and delivering responsive CDI skills programmes.

The Academy should **begin with a focused portfolio of pilot programmes** aligned with evidence of current and emerging workforce needs. An **independent evaluation framework** should be established from the outset, enabling successful approaches to be refined, shared and progressively embedded across existing education, training and workforce-development systems

Key Actions:

- define its remit, governance arrangements and relationship with the Creative Skills Council and Creative Policy and Evidence Centre or similar model
- map existing provision and identify priority skills gaps that require intervention
- establish a distributed network of delivery partners across the island of Ireland, potentially through specialist sectoral hubs in different regions
- co-design pilot programmes with employers, freelancers, practitioners, education providers and sector bodies.
- test responsive, flexible and accessible learning models suited to portfolio careers, microenterprises and SMEs
- support cross-sector and cross-border knowledge exchange
- develop approaches to recognising prior, professional and experiential learning
- embed evaluation of the reach, quality and impact of pilot programmes
- identify effective models for scaling, mainstreaming and wider adoption
- secure multi-year investment to support sustained programme development and delivery.

Indicative Timeframe:

Short term to establish and initiate pilots; medium term for evaluation, scaling and wider adoption.



13. Framework Delivery Options

We have provided two potential models of suitable delivery frameworks for the development of a shared Taxonomy.

Both models assume the prior establishment of a governance and delivery structure, such as the Creative Skills Council and / or the Creative Skills Policy and Evidence Centre which would oversee and commission the work.

13.1 Model 1 - A Phased Approach

Implementation roadmap

Delivery Phases	Activities
Phase 1: **Foundations (Months 1–3)**	*Scoping, landscape mapping, data gap analysis.*
Phase 2: **Framework design (Months 2–6)**	*Taxonomy and common skills language development, layered design, accessibility, prototype.*
Phase 3: **Testing and pilots (Months 4–10)**	*Use cases, tool review, survey design, stakeholder testing.*
Phase 4: **Integration and strengthening (Months 6–18)**	*Policy alignment, LinkedIn engagement, credentials exploration, better freelance data, live update mechanisms.*
Phase 5: **Sustainability and scale (Months 12–36)**	*Permanent home, dissemination tools, evaluation, rollout planning.*



Phase 1: Foundations

a. Establish a project governance and delivery structure within the Creative Skills Council and the Creative Skills Policy and Evidence Centre or similar model

Timing: Months 1–2

- Set up a Working Group with representatives from industry, policy, Skillnet Ireland, education and data stakeholders including the National Skills Observatory
- Agree the scope, purpose and priority users of the framework, with a clear focus on current workforce needs rather than early-career education alone
- Confirm a lead organisation and delivery partners for a three-year pilot phase
- Develop a simple project plan covering governance, milestones, consultation points and decision-making.

b. Map the existing skills and data landscape

Timing: Months 1–3

- Assess how existing systems such as ESCO, national classification systems and sector reports can be used before building anything new
- Identify the main evidence gaps, particularly around freelance work, hybrid roles, AI-related skills and cross-sector capabilities
- Produce a short gap analysis paper to guide development.

Phase 2: Framework Design

a. Develop a shared skills taxonomy and Framework

Timing: Months 2–6

- Create an initial skills-based taxonomy built around a common skills language focused on capabilities, behaviours and attributes rather than fixed job titles
- Start with a core set of cross-sector skills, including leadership, management, communication, adaptability, digital skills, AI awareness, sustainability and accessibility
- Use ESCO as the starting point, then develop sub-taxonomies where sector-specific detail is required
- Test the draft taxonomy with a small group of industry and policy stake-holders before wider rollout.

b. Design a layered and accessible framework

Timing: Months 3–6

- Build a simple front-end framework for users, supported by a more detailed technical back end aligned with policy and classification systems
- Use plain language throughout so the framework is easy for employers, freelancers, learners and educators to understand
- Ensure the framework, process and user journey are accessible and user-friendly from the outset
- Produce a first prototype structure that can be reviewed and refined.

Phase 3: Testing and Pilots

a. Test the framework through practical use cases

Timing: Months 4–8

- Work with companies, sector bodies and stakeholders to identify and prioritise real-world use cases
- Test the framework against scenarios such as recruitment, progression pathways, graduate readiness, freelancer credibility, training design, funding applications and tax-credit evidence
- Use this testing phase to refine the framework so it works as a practical tool, not just a reference document
- Publish 3–5 illustrative pilot use cases as early examples.

b. Review external data tools and platform options

Timing: Months 4–7

- Undertake a detailed review of Lightcast and Data City to assess usefulness, taxonomy fit, data quality, interoperability and costs
- Compare these tools against national data sources and sector needs.
- Identify whether either tool could support real-time analysis, vacancy insights or taxonomy development
- Produce an options appraisal with recommendations for adoption, piloting or rejection.

c. Pilot an annual creative skills survey

Timing: Design in Months 5–7; launch in Months 8–10; repeat annually

- Design an annual digital skills survey focused on current workforce needs, skills gaps and emerging trends
- Ensure the survey is proportionate and accessible for SMEs, micro-businesses and freelancers
- Explore delivery via LinkedIn and partner distribution through Skillnet Ireland networks, sector bodies and public agencies
- Use the first survey to establish a baseline dataset for future comparison.

Phase 4: Integration and Strengthening

a. Strengthen sector visibility through LinkedIn engagement

Timing: Months 6–12

- Encourage employers, freelancers and practitioners in the sector to make stronger use of LinkedIn to improve occupational visibility and sector data
- Work with education providers to encourage students and graduates to maintain LinkedIn profiles to strengthen skills and career tracking
- Develop and share a short LinkedIn case study showing how the platform can support sector clarity, visibility and engagement
- Circulate the case study to data holders and stakeholders to gather feedback and support.

b. Align the work with national policy and the National Skills Observatory

Timing: Months 6–12

- Ensure the framework is designed to feed into the National Skills Observatory and wider national skills architecture
- Position the work in relation to broader policy priorities such as digitalisation, AI, sustainability, productivity and transversal skills
- Engage relevant departments and agencies so the sector is better represented in future national evidence systems
- Develop a short policy alignment paper showing how the framework supports national priorities.

c. Bring industry into the process at the right stage

Timing: Months 6–9

- Once there is a draft framework and sample use cases, invite industry practitioners to provide targeted feedback
- Keep engagement lightweight and meaningful, using workshops, short consultations or focused reviews
- Prioritise input on usability, language, relevance and trust
- Refine the framework based on feedback and publish a revised version.

d. Explore a portable credential or endorsement model

Timing: Months 9–15

- Assess the feasibility of an industry-recognised endorsement or credential model that allows people to evidence skills clearly
- Test whether this would add value for freelancers, employers, commissioners and clients
- Explore how any endorsement model could link to the framework, LinkedIn or other professional profiles
- If viable, develop a small pilot model for testing.

e. Improve data collection on freelancers and SMEs

Timing: Months 9–18

- Develop more joined-up methods for capturing freelance, project-based and hybrid work, which are often missing from existing systems
- Explore the use of administrative, survey and platform data to improve coverage
- Simplify reporting processes so smaller organisations can participate without excessive burden
- Produce recommendations for a sustainable sector data model.

f. Create mechanisms for live updating

Timing: Months 12–18

- Introduce a formal review and update cycle for the framework so it can respond to rapid change, especially in technology and market demand
- Build in a process for regularly updating skills related to AI, digital production, sustainability and emerging hybrid roles
- Assign responsibility for monitoring trends and recommending updates.
- Publish an annual framework update note.

Phase 5: Sustainability and Scale

a. Identify a long-term institutional home

Timing: Months 12–18

- Assess which organisation or partnership is best placed to provide a permanent home for the framework and its data
- Consider a policy, evidence or sector-facing body that can maintain the framework over time
- Agree responsibilities for governance, data collection, updates, dissemination and stakeholder engagement.
- Produce a sustainability and ownership plan before the end of the pilot phase.

b. Develop dissemination tools and stakeholder outputs

Timing: Months 12–24

- Translate the framework into user-friendly outputs, including summaries, dashboards, briefings and sector guides
- Tailor outputs for different audiences, including policy makers, employers, freelancers, educators and sector bodies
- Ensure the framework is communicated as an active, practical resource rather than a static report
- Run a targeted communications campaign to increase awareness and use.

c. Review, evaluate and scale

Timing: Months 24–36

- Evaluate the pilot against agreed measures such as stakeholder engagement, usability, policy relevance and evidence quality
- Review whether the framework has improved understanding of current workforce skills needs and sector data gaps
- Refine the taxonomy, survey model and dissemination tools based on findings
- Develop a plan for long-term rollout and integration into national skills systems.

13.2 Creative Skills Framework

The following sets out a 3-year pilot programme.

Purpose

The pilot would create a practical, skills-based framework to improve how the sector identifies, understands and responds to workforce skills needs. It will focus on current workforce demand and reflect the realities of freelance, project-based and hybrid work across the sector.

A three-year pilot remains the most realistic approach. This prioritises core framework development, a small number of practical use cases, a light-touch annual survey, and a clear plan for longer-term sustainability.

Delivery Model

The programme would be delivered through a small core team, supported by targeted external expertise where needed.

What the Pilot Would Deliver

- A shared, skills-based framework built around a common skills language focused on capabilities, behaviours and attributes rather than job titles
- An initial taxonomy aligned with national and European systems
- 2–3 tested use cases in areas such as recruitment, progression and training
- A light annual creative skills survey to begin building a consistent evidence base
- Improved approaches to capturing freelance and project-based work
- Concise, accessible outputs for industry, policy and education stakeholders
- A plan for long-term ownership, updating and sustainability.

Value for Investment

This is a lean but credible pilot designed to establish the essential foundations of a national Creative Skills Framework within a constrained budget. It prioritises practical value, stakeholder testing and policy relevance, while avoiding over-engineering at the outset.

Alternative, Lower-Cost Route

The following model is intended as an alternative route, providing a middle ground between what already exists and what would be required to adopt an ESCO taxonomy suitable for the CDIs. This approach would provide a basic model which could potentially be developed further to adopt ESCO in the future, dependent on additional funding/resources:

- Adopt Lightcast as a taxonomy via the upcoming DataCity / Lightcast licence
- DataCity / Lightcast provides not only the taxonomy but also the demand side data collection and a view on the companies in Ireland
- For additional cost LinkedIn data at individual sector level could be used to provide the evidence of supply, for instance roles and skills
- This approach should be combined with Use Cases and tested with Stakeholders to establish tools and models for rapid development.



Appendix 1. International Taxonomy Models

The research reviewed a range of national, international, commercial and data-driven skills taxonomies and intelligence sources to identify approaches relevant to Ireland's CDIs. It considered each model's structure, development methodology, adoption and practical application, alongside its principal strengths and limitations. The review encompassed expert-led, stakeholder-driven, user-generated and machine-learning approaches, assessing their relevance, accessibility, granularity, adaptability, interoperability and capacity to capture emerging and specialist skills. Particular attention was given to the representation of freelance, hybrid and project-based work within the CDIs. The findings provide an evidence base for determining whether Ireland should adopt an existing framework, develop a bespoke taxonomy or pursue a hybrid model combining established classifications, real-time labour-market data and continuing sector expertise.

A1.1 ESCO (European Skills, Competences, Qualifications and Occupations)

Structure

Built on a three-pillar architecture comprising Occupations (~3000 entries), Skills/Competences (~14000 entries), and Qualifications. The skills component uses a hierarchical structure distinguishing between transversal skills (applicable across multiple occupations) and occupation-specific skills. Each skill includes detailed descriptions and is mapped to relevant occupations and educational pathways. It should be noted that the educational pathways element is under heavy development and has a more limited uptake across the EU.

Development

Developed through extensive expert consultation involving stakeholders from education systems, employment services, and statistical offices across EU member states. The initial development took four years, launching officially in 2017. ESCO undergoes annual updates with major revisions every 2-3 years, with the latest version (v1.2.0) released in 2023.

Although initially developed using an expert led consensus approach, the EU is increasingly leveraging data-driven methods, including the analysis of job advertisements, for ongoing maintenance and updates.

Adoption

Used across all 27 EU member states plus Iceland, Norway and Switzerland. Primary adopters include national public employment services, educational institutions and major recruitment platforms like EURES and Europass.

ESCO is also integrated into many private sector platforms for recruitment and HR as well as job boards. Most of the developments are 'under the hood' utilising the power of ESCO whilst hiding its complexity. Examples here include the recruitment platforms Adzuna (global) and Monster (Spain).

Summary

ESCO provides a comprehensive, free and multilingual framework with strong European Commission backing, enabling consistent skills recognition, labour mobility and integration with employment and recruitment platforms. However, its complexity, relatively slow update processes and limited granularity in fast-evolving or specialist fields mean that it does not always capture the niche, hybrid and rapidly changing skills characteristic of the CDIs.

More Information:

https://esco.ec.europa.eu/en

A1.2 Singapore Skills Framework (SFw)

Multiple sectors, single country, expert/stakeholder Driven

Overview

The Singapore Skills Framework is a sector-specific skills taxonomy developed as part of Singapore's national SkillsFuture initiative. It provides detailed mapping of career pathways, job roles, and skills required across key economic sectors, designed to support workforce transformation and enable Singaporeans to pursue lifelong learning aligned with industry needs.

Structure

Organised into sector-specific frameworks covering over 35 industries, from aerospace to retail. Each framework maps career pathways with job roles arranged by career levels (from entry to senior management), technical skills and competences required for each role, and critical core skills (generic skills applicable across sectors). Currently encompasses over 600 job roles and thousands of associated skills.

Development

Co-created through intensive industry consultation involving employers, trade associations, unions, and training providers within each sector. Development began in 2015 with initial frameworks launched in 2016. Each sector framework typically takes 12-18 months to develop. Frameworks are reviewed and updated every 2-3 years to reflect evolving industry needs and technological changes.

Adoption

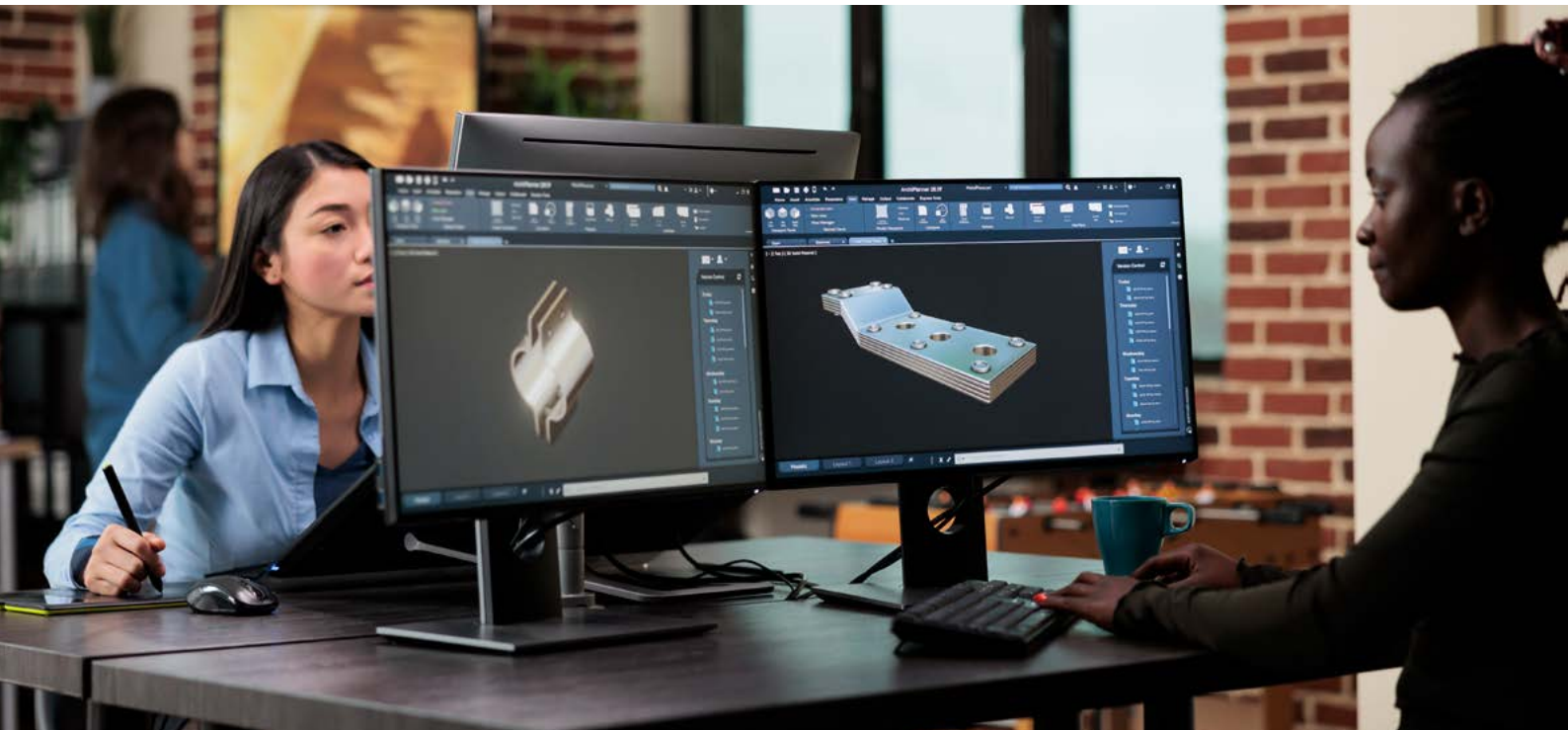
Mandatory reference point for government-funded training programs in Singapore. Widely adopted by employers for workforce planning, training providers for course design, and individuals for career planning. Integrated into Singapore's national training ecosystem including SkillsFuture Credit usage and Workforce Skills Qualification (WSQ) framework.

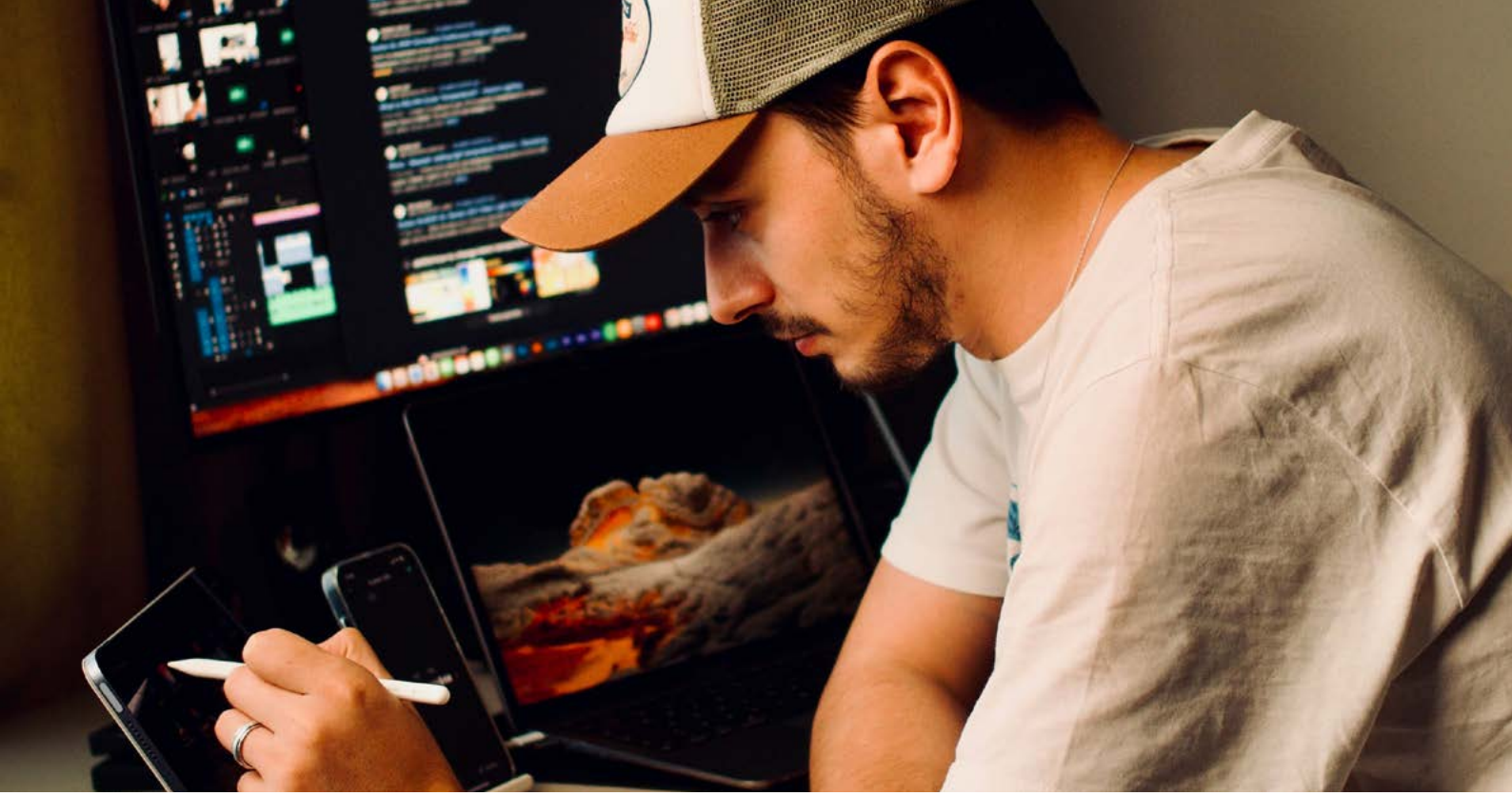
Summary

The Singapore Skills Framework provides highly detailed, industry-specific mapping of job roles, skills, career pathways and training opportunities, underpinned by strong government investment and extensive industry engagement. However, its resource-intensive, sector-by-sector model is closely tied to Singapore's economic and institutional context and may be less effective in capturing emerging cross-sectoral roles or transferring easily to other national settings.

More information:

https://www.skillsfuture.gov.sg/skills-framework





A1.3 ESCoE/NESTA Skills Taxonomy

Multiple sectors, single country, data driven

Overview

A data-driven skills classification system developed through collaboration between the Economic Statistics Centre of Excellence (ESCoE) and NESTA (National Endowment for Science, Technology and the Arts). The taxonomy uses machine learning techniques to analyse real-time labour market data, focusing on identifying and clustering skills from online job advertisements to understand the evolving UK skills landscape.

Structure

Machine learning-generated clusters organised into skill families based on co-occurrence patterns in job postings. The taxonomy groups thousands of individual skills into broader clusters representing different types of capabilities, from technical programming skills to soft skills like communication. The structure is more fluid and data-driven compared to traditional expert-defined hierarchies.

Development

Initial development began around 2018-2019, leveraging techniques like word embeddings and clustering algorithms to identify skill relationships. The methodology allows for continuous updating as new job posting data becomes available, making it more dynamic than traditional taxonomies.

Adoption

Primarily used for research and policy analysis rather than widespread operational deployment. Adopted by UK government departments for labour market analysis, researchers studying skills evolution, and organisations examining the future of work.

Summary

The ESCoE/NESTA Skills Taxonomy offers a dynamic, data-driven means of identifying emerging skills, changing patterns of demand and relationships between capabilities using real-time job-advertisement data. However, its research focus, technical complexity and reliance on English-language online vacancies limit its accessibility and risk underrepresenting freelance, project-based and informally recruited roles, particularly within the cultural and creative industries.

More information:

https://www.escoe.ac.uk/projects/making-sense-of-skills/

https://data-viz.nesta.org.uk/skills-map/index.html

A1.4 Lightcast Skills Taxonomy

Multiple sectors, multiple countries, data driven

Overview

Lightcast is a proprietary skills classification system developed by Lightcast (formerly Burning Glass Technologies), a labour market analytics company. The taxonomy provides real-time insights into skills demand by analysing millions of job postings globally, designed to support workforce planning, talent acquisition, and educational alignment with market needs.

Structure

Comprehensive taxonomy covering over 32,000 skills organised into skill clusters and families. Skills are categorised by type (hard skills, soft skills, certifications) and mapped to occupations, industries, and educational programmes. The system includes proficiency levels, skill relationships, and demand metrics, with skills ranging from broad categories like "Project Management" to specific technical competences like "open XR".

Development

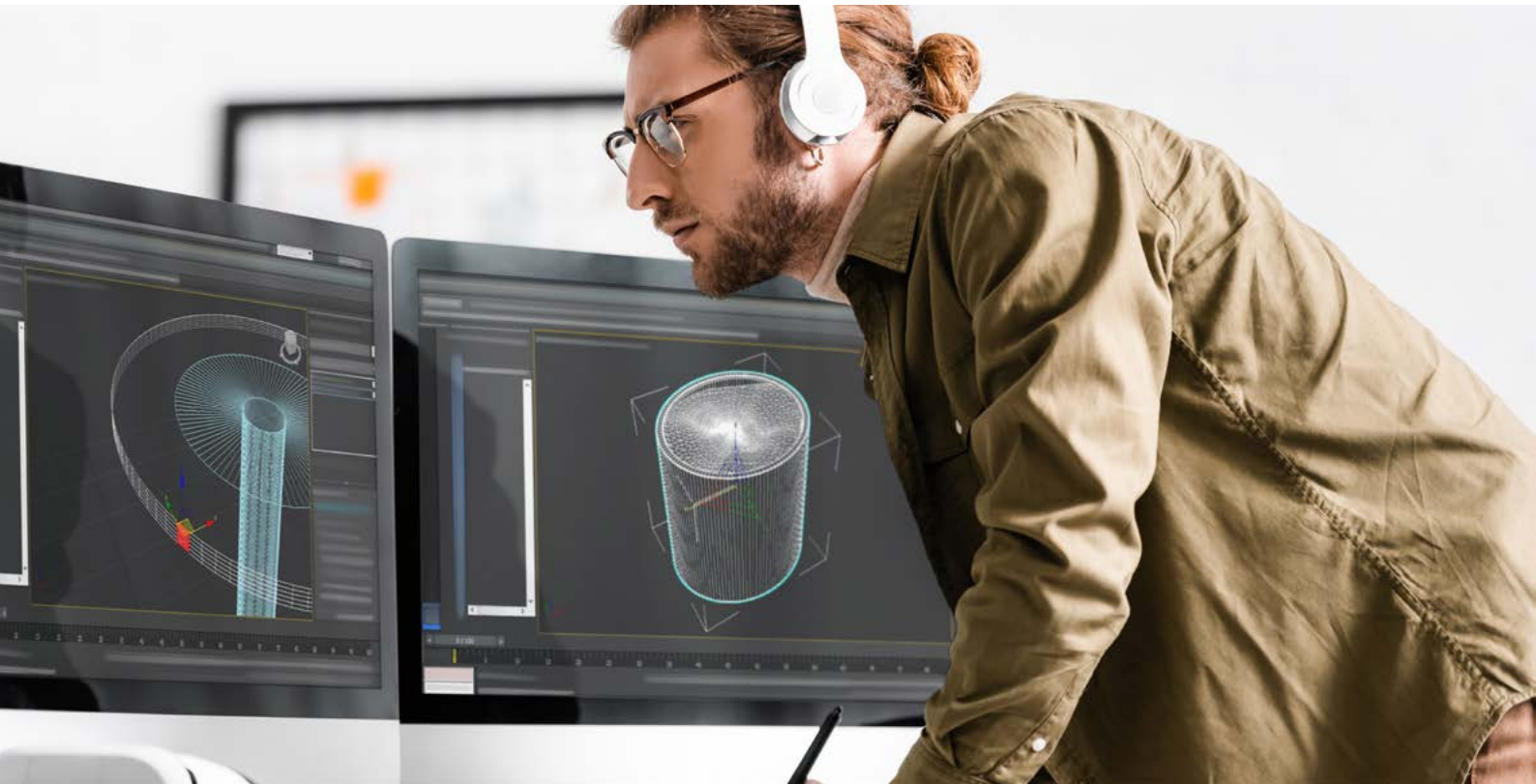
Built using machine learning and natural language processing applied to millions of job postings collected in real-time from job boards, company websites, and recruitment platforms. Development began in the early 2010s with continuous refinement. The taxonomy is updated daily as new job posting data is processed, allowing for rapid identification of emerging skills and changing demand patterns.

Adoption

Widely used across North America, Europe, and other markets by employers for workforce planning, educational institutions for curriculum development, and government agencies for labour market analysis. Major clients include Fortune 500 companies, universities, workforce development boards, and economic development organisations seeking data-driven insights into skills supply and demand.

Summary

The Lightcast Skills Taxonomy provides comprehensive, highly granular and frequently updated intelligence on global skills demand, with strong analytical and integration capabilities supporting workforce planning, recruitment and curriculum development. However, its commercial cost, proprietary methodology and reliance on online job advertisements limit accessibility and transparency and may underrepresent freelance, informal and project-based employment, particularly across the creative and design industries.





A1.5 Canada's Skills and Competences Taxonomy

Overview

Developed by Employment and Social Development Canada (ESDC) to facilitate a Pan-Canadian dialogue on competences, the Skills and Competences Taxonomy streamlines the terminology of hundreds of occupational descriptors used in the labour market. The taxonomy serves as a reference tool to address labour market topics and issues, improving the comparability of concepts and their application throughout occupations and sectors across Canada.

Structure

Organised into seven main categories: skills, abilities, personal attributes, knowledge, interests, work context, and work activities (with tools and technologies sometimes listed as an eighth category), each further divided into sub-categories. The taxonomy comprises about 300 competency descriptors, with approximately 200 descriptors selected for inclusion in the first version of the Occupational and Skills Information System (OaSIS).

Development

First published in July 2019 the taxonomy was constructed based on internal products such as the Career Handbook, Skills and Knowledge Checklist, and Essential Skills profiles, the American O*NET system, as well as best practice from various national and international competency-based frameworks. Described as an "evergreen product" with ESDC continuing to consult with internal and external stakeholders to validate and improve content. The Skills for Success model was integrated into the 2022 version.

Adoption

Used by analysts, researchers, employment counsellors and employers, as well as job seekers, students, and parents seeking practical information about work and skills. Serves as the framework for the Occupational and Skills Information System (OaSIS), which contains measurement indicators for most descriptors across over 900 occupations. It also complements federal, provincial, and territorial employment programs involving skills identification and utilisation.

Summary

Canada's Skills and Competences Taxonomy provides an open, bilingual and comprehensive framework that improves the consistency and comparability of skills information across occupations and sectors. Its integration with national occupational data, foundation in established international frameworks and continuing stakeholder validation strengthen its practical value. However, its relative newness, evolving structure and complexity may create adoption and version-control challenges, while its reliance on the US O*NET system may limit its ability to reflect some distinctively Canadian labour-market needs.

More information:

https://noc.esdc.gc.ca/SkillsTaxonomy/SkillsTaxonomy-Welcome

A1.6 Linkedin

LinkedIn's skills and occupations framework operates differently from the pre-defined taxonomies described here. It is included here as a **key data source** rather than as a potential framework for developing a more formal taxonomy.

Overview

LinkedIn's approach to skills taxonomy leverages user-generated professional data where users self-report skills, job titles, and roles, creating a continuously updated dataset of how workers describe their own capabilities. This differs from standardised occupational codes by capturing actual professional language and emerging terminology rather than formal classifications.

Structure

In essence LinkedIn functions as a massive, continuous survey of working professionals, stratified by geography, sector, demographics, and networks. The platform captures complete skill portfolios, actual skill combinations, and career progression patterns showing how skills develop over time.

Development

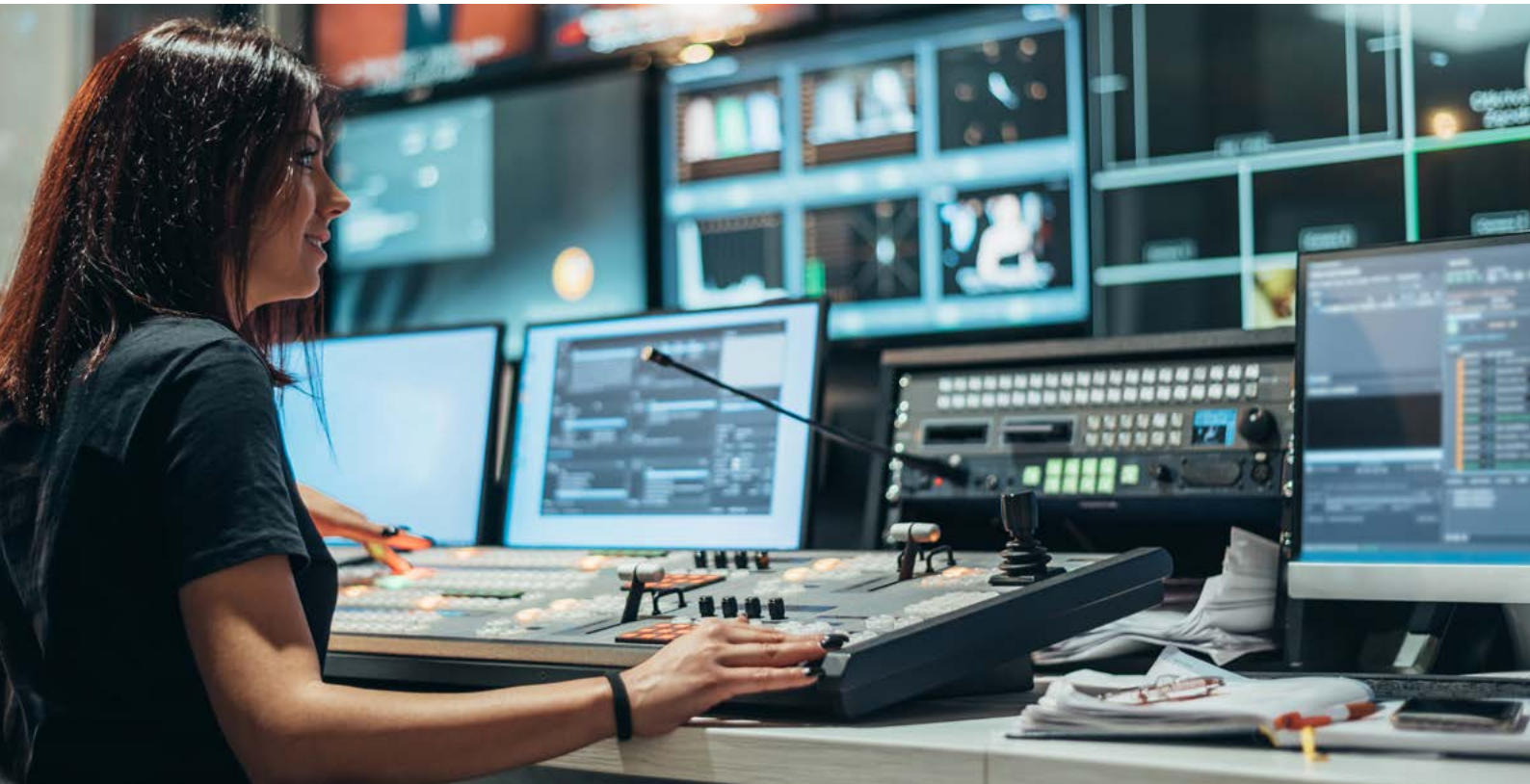
Created through user self-reporting the dataset evolves organically as professionals add new competences, change roles, and adapt their descriptions to reflect current market language. This creates a real-time reflection of how the workforce describes itself, with emerging roles appearing in profiles long before formal job advertisements.

Adoption

Used extensively for skills-job matching, talent acquisition and labour market analysis across global professional markets. Organisations integrate LinkedIn data with formal taxonomies to create hybrid systems that understand both official classifications and colloquial descriptions. Applied in recruitment platforms, skills gap analysis, workforce planning and educational programme development worldwide.

Summary

LinkedIn provides a large-scale, continuously evolving source of workforce intelligence, capturing authentic professional language, emerging skills, career pathways and combinations of capabilities that may not yet appear in formal classifications. However, inconsistent terminology, self-reporting bias, uneven demographic and sectoral representation, and reliance on a commercially controlled platform limit its suitability as a standalone evidence source. It is therefore most valuable when used alongside formal taxonomies and other labour-market datasets.



Appendix 2. Data and Platform Case Studies

Through our research we identified and tested three potential ways of developing a robust, integrated and practical approach to creating a Taxonomy, Framework and method of collecting, collating and disseminating skills data in the Creative and Design Industries Sector.

In undertaking this work, we explored how the potential approaches might provide detailed data (beyond a mere taxonomy) and its practical implications in terms of developing sector knowledge and insights.

A2.1 Ireland Linkedin Case Study

This case study explores how LinkedIn can be used to measure the supply side of the workforce. It focuses on the **Games and the Graphic Design industries in Ireland** and utilised a counterfactual for both to provide a view on a comparator location.

The counterfactuals were chosen for each industry that have similarities in terms of size of workforce, Denmark for Games and Finland for Graphic Design.

A note on LinkedIn and Ireland's usage

LinkedIn can be viewed as a pre-filled survey of the workforce where users have inputted their career history, skills and education to advance their careers. LinkedIn categorises its workforce across over 400 industry codes (based on US NIACE) and encourages users to highlight their skills, seniority, areas of expertise and education.

Across the entire workforce Ireland has 3.12m profiles including students and those who are retired; 2.77m when excluding students and retired. Broadly this calculates to a LinkedIn penetration rate of 77% when comparing with the national statistics working age population of 3.6m.

This calculation is across the whole workforce and certain sectors will have higher and lower rates. From our experience creative, digital and design industries tend to have higher penetration rates.

No one platform or data collection method will ensure full representation of the workforce; however, LinkedIn provides the largest sample available of industry's employment, skills and education. The data in the following case studies represents around 85% of the sector based upon Ireland's overall penetration rate of 77% and the Graphic Design and Games industries having a higher level of LinkedIn users.

Games workforce

The games workforce data has been split into the **Pure** workforce, those who are working within the games industry, and the **Adopted** workforce, those with games skills working in other industries.

Denmark has been used as a counterfactual and additional data for Ireland has been provided on the workforce's education footprint and key locations.

Pure Games

Ireland Total – 3018
Denmark Total – 3242

	Ireland	Denmark
Experience Levels		
0-5 Years	426	409
6-10 Years	515	671
10+ Years	2077	2162
Seniority		
Founders & Directors	397	386
Senior	690	562
Managers	211	142
Entry level	1078	1014
Areas of Expertise		
Sales & Partnerships	386	556
Marketing & Comms	260	352
Creative & Production	1362	1503
Admin & Operations	969	811
R&D	41	20
Recruitment		
Past year recruitment	301	297
Past 2 year Recruitment	426	453
Open to new opportunities	671	494
Retention (10+ Yrs)	254	1116
Willing to Relocate*	482	422
Freelancers & Interns		
Interns	141	125
Freelancers	289	347
Education Levels		
1st Degree	1598	953
Masters and above	843	527

** Willing to relocate is a measure of people from outside the region who would relocate if the opportunity presented itself. In our experience this can also include hybrid workers.*

	Ireland	Denmark
Currently in education (CPD)	85	62
High Level Skills – Broad skills areas that could also be described as roles		
Game Development	1061	1103
Game Design	1057	1104
Games Engines & Engine Development	536	589
Console Development	341	228
3d Modelling	433	363
Sound design	252	221
Games UX/UI	389	371
Animation & Character Animation	550	486
Game Testing	542	263
Granular Skills – Skilled in tools and specifics of games development		
3ds Max	286	215
Unreal Engine	534	382
Unity	849	815
Adobe Creative Suite	879	660
Blender	341	211
Substance Designer	129	107
FMOD	49	39
Ableton	39	27
Zbrush	187	193
Marvelous Designer	33	22
Emerging Skills – Tools, thematic skills and AI		
Generative Design	19	11
Immersive (VR,AR,MR)	152	115
Machine Learning	81	67
Gaussian Splats	1	1
Meshy AI	11	0
Generative Code	67	92
Procedural Content Generation	21	18
Flutter	23	7
Dart	7	4
Affinity	27	14

Ireland Deeper Dive

Education

Study Areas	
Computer Games & Interactive Media	401
Computer Science & Programming	379
Art, Design & Graphics	288
Advertising & Marketing	203
Business & Management	107
Universities	
Technological University Dublin	265
Trinity College Dublin	158
University College Dublin	128
Dundalk Institute of Technology	94
University of Limerick	92
Dublin City University	82
Pulse College	77
University of Galway	72
Limerick Institute of Technology	63
Institute of Technology, Carlow	60

Locations

Key Locations	
Greater Dublin	1847
Galway Metro Area	248
Limerick Metro Area	104
Cork Metro Area	195

Adopted

Ireland Total – 11595
Denmark Total – 9222

	Ireland	Denmark
Experience Levels		
0-5 Years	1324	843
6-10 Years	2544	1526
10+ Years	7727	6853
Seniority		
Founders & Directors	1832	2046
Senior	4025	3514
Managers	1137	718
Entry level	4126	2921
Areas of Expertise		
Sales & Partnerships	1432	2088
Marketing & Comms	1966	775
Creative & Production	4892	3278
Admin & Operations	2974	2894
R&D	331	187
Recruitment		
Past year recruitment	2507	1924
Past 2 year Recruitment	3592	2710
Open to new opportunities	3946	2874
Retention (10+ Yrs)	1164	922
Willing to Relocate*	2526	1441
Freelancers & Interns		
Interns	365	177
Freelancers	663	286
Education Levels		
1st Degree	9815	4899
Masters and above	5325	3724
Currently in education (CPD)	211	146

** Willing to relocate is a measure of people from outside the region who would relocate if the opportunity presented itself. In our experience this can also include hybrid workers.*

	Ireland	Denmark
High Level Skills – Broad skills areas that could also be described as roles		
Game Development	11595	9222
Game Design	7363	6128
Games Engines & Engine Development	2286	1623
Console Development	508	210
3d Modelling	702	741
Sound design	1515	1078
Games UX/UI	2157	2474
Animation & Character Animation	1279	1156
Game Testing	3704	2219
Granular Skills – Skilled in tools and specifics of games development		
3ds Max	397	322
Unreal Engine	588	481
Unity	1899	2049
Adobe Creative Suite	2474	2330
Blender	572	383
Substance Designer	125	90
FMOD	47	31
Ableton	57	67
Zbrush	165	179
Marvelous Designer	14	16
Emerging Skills – Tools, thematic skills and AI		
Generative Design	406	236
Immersive (VR,AR,MR)	517	610
Machine Learning	1799	964
Gaussian Splats	2	0
Meshy AI	34	2
Generative Code	987	587
Procedural Content Generation	46	21
Flutter	226	117
Dart	83	54
Affinity	63	34

Ireland Deeper Dive

Education

Study Areas	
Computer Science & Programming	5121
Business Administration	1288
Design & Visual Communications	790
Information Technology	768
Marketing	564
Universities	
Technological University Dublin	1285
University College Dublin	1006
Trinity College Dublin	687
Dublin City University	601
University of Limerick	522
National College of Ireland	519
University College Cork	458
University of Galway	427
Munster Technological University	352
Dublin Business School	337

Locations

Key Locations	
Greater Dublin	6925
Cork Metro Area	968
Galway Metro Area	567
Limerick Metro Area	435

Graphic Design workforce

The Graphic Design workforce data has been split into the workforce that exist within **Design Services** (the LinkedIn industry code for Design) and **Outside Design Services**. The second search enabling us to discover which industries people with graphic design skills work in across Ireland.

Finland has been used as a counterfactual and additional data for Ireland has been provided on the workforce's education footprint and key locations.

Graphic Design skills within design services

Ireland Total – 8082
Finland Total – 6324

	Ireland	Finland
Experience Levels		
0-5 Years	909	714
6-10 Years	1486	953
10+ Years	5687	4657
Seniority		
Founders & Directors	1588	1382
Senior	1624	964
Managers	304	137
Entry level	3761	3103
Areas of Expertise		
Sales & Partnerships	1341	1151
Marketing & Comms	738	576
Creative & Production	4752	3737
Admin & Operations	1208	817
R&D	43	43
Recruitment		
Past year recruitment	725	508
Past 2-year Recruitment	1296	739
Open to new opportunities	2348	1725
Retention (10+ Yrs)	758	583
Willing to Relocate	1363	529
Freelancers & Interns		
Interns	481	381
Pure Freelancers	1326	1464

** Willing to relocate is a measure of people from outside the region who would relocate if the opportunity presented itself. In our experience this can also include hybrid workers.*

	Ireland	Finland
Education levels		
1st Degree	5414	3702
Masters and above	1579	1384
Currently in education (CPD)	293	445
High Level Skills – Broad skills areas that could also be described as roles		
Graphic Design	8082	6324
Design Tools/Software	6244	4322
Layout & Composition	4987	2893
Branding	3922	2180
Illustration	2864	3021
Art Direction	2093	1362
Design thinking	2335	1019
Digital Marketing Design	2544	2516
Print Design	4193	3772
UX/UI	2101	1727
Granular Skills – Skilled in tools and specifics of Graphic Design		
Adobe Photoshop	4746	3434
Adobe Illustrator	4604	3285
Adobe Indesign	3600	2709
Photography	3036	1804
HTML/CSS	1379	787
Adobe Lightroom	1374	296
Interaction Design	1193	1059
Social Media Graphic Design	2981	1987
Logo Design	3151	1982
Emerging Skills – Tools, thematic skills and AI		
UI Prototyping Tools	1567	894
Figma	1138	646
Data Visualisation	967	892
Co-Design	962	725
Data Driven Design	936	711
Agile Design	653	315
Generative AI for Design	584	279
Canva	574	199
SVG Animation	422	206
Sustainable Design	411	452

Ireland Deeper Dive

Education

Study Areas	
Design & Visual Communications	1915
Graphic Design	1872
Art/Art Studies	441
Product Design	422
Digital Communications and Media	368
Universities	
Technological University Dublin	770
National College of Art & Design	444
Dún Laoghaire Institute of Art, Design and Technology	398
Munster Technological University	286
Limerick Institute of Technology	203
Waterford Institute of Technology	191
University College Dublin	188
Griffith College Dublin	180
UX Design Institute	173
University of Limerick	162
Subsector Breakdown	
Graphic Design	4445
Design Services	3637

Locations

Key Locations	
Greater Dublin	4139
Galway Metro Area	599
Limerick Metro Area	265
Cork Metro Area	376

Graphic Design workforce outside of design services

Ireland Total – 22909
Finland Total – 20187

	Ireland	Finland
Experience Levels		
0-5 Years	2805	3894
6-10 Years	5976	6405
10+ Years	14128	9888
Seniority		
Founders & Directors	3566	4091
Senior	7386	5814
Managers	2017	1242
Entry level	8079	8602
Areas of Expertise		
Sales & Partnerships	3912	3847
Marketing & Comms	3974	3924
Creative & Production	7184	7351
Admin & Operations	7550	4831
R&D	289	234
Recruitment		
Past year recruitment	4704	2728
Past 2 year Recruitment	7356	4136
Open to new opportunities	8461	6232
Retention (10+ Yrs)	6736	2166
Willing to Relocate	5980	2342
Freelancers & Interns		
Interns	1603	1126
Pure Freelancers	1675	4248
Education Levels		
1st Degree	15985	12269
Masters and above	8964	5883
Currently in education (CPD)	1675	1326

** Willing to relocate is a measure of people from outside the region who would relocate if the opportunity presented itself. In our experience this can also include hybrid workers.*

	Ireland	Finland
High Level Skills – Broad skills areas that could also be described as roles		
Graphic Design	22909	20187
Design Tools/Software	18245	14922
Layout & Composition	16689	14336
Branding	8214	7862
Illustration	4815	5764
Art Direction	2671	2938
Design thinking	4458	2710
Digital Marketing Design	3985	3362
Print Design	5920	6082
UX/UI	6526	5253
Granular Skills – Skilled in tools and specifics of Graphic Design		
Adobe Photoshop	14003	10305
Adobe Illustrator	9662	7274
Adobe Indesign	6553	6038
Photography	7718	6878
HTML/CSS	5983	3620
Adobe Lightroom	1318	1286
Interaction Design	2679	2103
Social Media Graphic Design	2209	4233
Logo Design	3964	3034
Emerging Skills – Tools, thematic skills and AI		
UI Prototyping Tools	1422	1231
Figma	2038	1481
Data Visualisation	3393	3639
Co-Design	12112	9892
Data Driven Design	2745	2553
Agile Design	2209	2008
Generative AI for Design	2052	1498
Canva	2786	1153
SVG Animation	76	34
Sustainable Design	2453	2725

Ireland Deeper Dive

Education

Study Areas	
Graphic Design	3548
Design & Visual Communications	3525
Marketing	2167
Digital Communications and Media	1392
Media Studies	1286
Universities	
Technological University Dublin	2491
University College Dublin	1465
Dublin City University	1143
Munster Technological University	898
Trinity College Dublin	853
Dún Laoghaire Institute of Art, Design and Technology	825
University of Limerick	816
Griffith College Dublin	709
University College Cork	699
Dublin Business School	688
Subsector Breakdown	
Professional Services	7962
Technology, Information & Media	5079
Manufacturing	2128
Retail	2025
Entertainment Providers	1362
Education	986
Financial Services	858
Government Administration	621
Consumer Services	527
Hospitals & Health Care	471

Locations

Key Locations	
Greater Dublin	14201
Cork Metro Area	2364
Galway Metro Area	1004
Limerick Metro Area	896

A2.2 Lightcast

Lightcast (Lightcast.io) as one of the leading global labour market analytics companies, covers the demand-side as well as performing the role of a skills taxonomy system.

The Lightcast Platform is a real-time labour market analytics system that leverages machine learning techniques to process and analyses vast quantities of global job postings.

By examining millions of job advertisements, the platform generates a comprehensive and continuously updated skills taxonomy comprising over 33,000 distinct skills. These skills are systematically organised into coherent clusters and are mapped to relevant occupations and industries.

The system is highly granular with skills ranging from broad categories like "Project Management" to specific technical competences like "open XR". The platform's dynamic updating mechanism ensures that the data remains current, reflects the evolving demands of industry and helps identify their current and emerging skill requirements.

Lightcast has a well-established reputation and is widely considered to be the gold standard of real time workforce data. It has been used by the Irish government, Central Statistics Office and in academic literature.

An example of a Lightcast skill definition for 3d Production can be viewed at:

https://lightcast.io/open-skills/skills/ES47663B83875784129B/3d-production

Further skills can be browsed from the menu near the bottom of the page.

Costs

POA but around €30k per annum for custom dashboards – €120k + for full system and API access.

Strengths

- Wealth of real-time data captured from live job markets
- Allows searching by SOC, ISCO-08 and NACE
- Constantly evolving and highly granular skill identification
- Strong analytics & reporting capabilities – a key data source for skills gap identification
- Direct integration with occupation and education data
- Regular updates reflecting market changes
- Years of data allows for longitudinal analysis to explore how roles, industries, and skills have evolved
- Robust API and platform integration options for enterprise users
- Can be used to identify creative skills demand across all sectors not just CDI.

Limitations

- Only captures demand-side skills so inherent bias toward sectors where online-posted jobs are the norm and may miss industries that don't recruit online completely
- No simple mapping of Lightcast skills to ESCO (but technically possible at additional cost)
- Relatively expensive commercial licensing model limits accessibility
- Requires ongoing subscription for continued access to updated data and insights

Issues Regarding NACE for CDI

Applying Lightcast's skills data to the CDI in Ireland presents some challenges. Although NACE codes serve as valuable classification tools for statisticians, they are insufficiently granular and context-specific to accurately capture the nuances of the modern hybrid business operations, roles and skills in the CDIs.

Further Concerns / Issues to be Considered for the CDI Sectors:

- Lightcast includes self-reported codes with no verification, which leads to inaccurate sector mapping. The fact that companies have no incentive to update codes when their activities evolve, exacerbates this problem
- Companies in CDI are often misclassified across multiple unrelated codes (e.g. software development, business services, arts)
- NACE Rev.2 dates from 2008, with Rev.2.1 being implemented in Ireland from 2026 - 2031. This means that classifications may lag market developments and fail to identify nascent industries or emerging subsectors
- CDI business often operate across multiple disciplines simultaneously

- Companies that combine activities from different branches of NACE are poorly represented or completely misrepresented
- Provides little to no insight into whether a company is a creator, distributor, platform or service provider within a creative value chain
- The 'broad brush' approach makes identifying regional clusters impossible
- Does not map meaningfully to skills taxonomies, making it difficult to connect company identification with workforce development needs
- If companies cannot be accurately identified and grouped by sub-sector, it becomes difficult to aggregate skills demand in a meaningful way, or track progress against national strategies. This issue affects the application of skills taxonomies, such as Lightcast, which rely on accurate company data to produce reliable skills signals.

A2.3 The Data City + Lightcast https://thedatacity.com/

Another option for accessing Lightcast's data is their recent partnership with DataCity.

About Data City

The Data City is a pioneering AI-driven platform designed to augment official company datasets with a wealth of financial, investment and employee metrics, as well their impact on the wider economy (GVA, Turnover, R&D).

Data City has a well-established reputation in the UK and has had extensive collaborations with key industry bodies and UK government departments – most notably providing sector mapping instrumental in developing the UK's Industrial Strategy.

The Data City + Lightcast approach can address several issues identified in the Creative Ireland M-CO report:

- Provides a cohesive approach to data collection that can be repurposed for internal, external stakeholder and government or national statistical level reporting.
- Technically can be aligned with EU skills taxonomies and reporting (albeit at additional cost).
- Sectors can be segmented in a multitude of ways in real time to refine/ redefine what companies are included or excluded from the classification.
- A wide range of sector information including cluster identification (e.g. Location Quotients), wider economic impacts (e.g. Gross Value Added) and extensive company financial information out of the box.
- Reliable and repeatable data collection plus extensive historical records.

Company classification within DataCity

The platform employs a sophisticated Real Time Industrial Classification (RTIC), that allows the end user to segment industries to gain nuanced and accurate insights into emerging industries and niche sub-sectors, surpassing the limitations of traditional classification systems like NACE and SIC.

Real Time Industrial Classifications (RTICs) are The Data City's 's proprietary alternative to traditional SIC and NACE codes.

Each RTIC defines a specific industry vertical - such as Artificial Intelligence, FinTech, or Digital Creative Industries. The platform uses machine learning to analyse companies' digital footprints (websites & media).

The platform then identifies language patterns associated with activities, technologies, or supply chain roles to better define what the company does. These results are validated against expert input to ensure a minimum 90% confidence threshold before publication. The Data City currently maintains over 400 RTICs covering both established and emerging sectors with classifications updated regularly to reflect changes in the economy.

NACE/SIC Classifications vs Reality

Feature	NACE Assumptions	CDI Sector Reality
Primary Activity	Each company has one principal activity, assigned a single code	Companies operate across multiple disciplines simultaneously (e.g. branding, web design, video production)
Output Type	Physical goods or clearly defined services	Intangible and blended outputs such as intellectual property, user experience, brand strategy and content
Industry Borders	Sectors are distinct and mutually exclusive (e.g. Retail separate from Technology)	Sectors increasingly overlap (e.g. e-commerce is retail, technology, logistics and marketing combined)
Workforce	Assumes traditional employer-employee relationships	High proportion of freelancers, contractors, and project-based work arrangements

Important note: The platform is currently only available for the UK market. The version for Ireland is due to launch imminently. The features outlined below are based on the UK platform; any expected differences for the Ireland release are noted where relevant.

Note: Lightcast data will not be generally available at launch but will be available on request for an additional cost. The Data City could not provide an exact cost at the time of writing**.**

Core Capabilities:

- Access to 9+ million UK companies. **Ireland will launch with over 300,000 companies.**
- 90+ data points per company including financials, growth metrics, and investment data. **Ireland will have a similar number of data points but comprehensive financial data and calculations for Gross Value Added (GVA) will be introduced post launch.**
- 400+ pre-built RTIC sector classifications. **Ireland will launch with the same number of RTIC sector classifications.**

Key Tools Within the Platform:

- Machine Learning List Builder - Build custom sector classifications using machine learning by adding seed companies or keywords
- Smart Filters - Create targeted, export-ready company lists
- Macro Insights Dashboards - Visualise sector trends and economic patterns

Add-Ons:

- Cluster Analysis - Define and explore economic clusters based on RTICs with custom geographies
- Real-Time SIC Codes (RSICs) - AI-powered SIC code correction

Limitations and Considerations:

- Only captures demand-side skills so there is bias toward sectors where online-posted jobs are the norm and may miss completely industries that don't use online recruitment platforms
- Recurring platform subscription and Lightcast add-on costs are relatively high. UK pricing from £8,000 - £10,000 per year for a single seat, up to £30,000 - £46,000/ year for 15 seats). The base price for Ireland is expected to be similar to the UK price but the Lightcast integration is likely to be more expensive than the UK version
- Custom RTIC development may be needed for specific CDI taxonomy requirements considering the unique attributes of the Irish CDI.

Table Comparing Lightcast Standalone to The Data City + Lightcast

Feature	Lightcast (Standalone Platform / API)	The Data City (with Lightcast add-on)
Core Focus	Labour market dynamics, skills monitoring, workforce planning, and education pathways.	Company analysis, emerging sector mapping, regional clusters and labour market dynamics & skills monitoring.
Taxonomy Elements	Lightcast Occupation Taxonomy (LOT) consisting of a 4-tier hierarchy (Career Areas > Occupation Groups > Occupations > Specialized Occupations).	Maps Lightcast's taxonomy directly to individual company profiles, enabling users to see exact hiring trends for custom segmentation of businesses.
Number of Skills	33,000+ skills updated monthly (categorised into Specialized, Common, Software, and Certifications).	33,000+ (uses the Lightcast skills database but filters it specifically through the lens of individual companies and sector lists).
Occupational Codes	Native, deep mapping to global standards including ISCO, SOC, and O*NET.	Uses SOC/ISCO and median salary data to map job postings directly to company records.
Industry Codes (NACE, SIC)	Relies on standard industry classifications like NACE, NAICS, and SIC.	Augments standard SIC/NACE codes with proprietary RTICs (Real-Time Industrial Classifications) to track 500+ emerging sectors (e.g., AI, Net Zero).
Geographical Scope	Global (US, UK, Europe, APAC, Canada).	Historically UK-centric (profiling 9 million+ UK companies), though currently expanding to a global platform with Ireland the first country to be rolled out).
Customisation	Bespoke custom dashboard can be delivered by Lightcast (usually at a lower cost than the full system).	The whole system is designed to enable the end user to customise their searches/outputs.
Cost / Pricing	POA but around €30k per annum for custom dashboards – €120k + for full system and API access. Price is per team.	£8-10k per year for company data. No pricing available for Lightcast add on but expected to be more than the £5k UK price. Price is per seat – 15 seats with Lightcast in the UK costs £38k.

The Data City + Lightcast Data Points

The Data City in the UK provides over 90 data points per company aggregated from a variety of primary and third-party sources, including Companies House, CreditSafe, Dealroom, Lightcast, Innovate UK, and 360 Giving. Whilst the exact number of data points available at launch in Ireland is unknown, it is expected to be very similar to the data described below, with the exception of full financials and out of the box Lightcast add-ons.

1. Company Fundamentals

- **Company Info:** Name, company number, type, and incorporation date
- **Locations:** Registered office address and operating locations
- **People:** Lists of directors, shareholders, and Persons with Significant Control
- **Group Structure:** Parent company, ultimate parent company, and their respective locations.

2. Classification & Innovation

- **RTICs (Real-Time Industrial Classifications):** 400+ sectors
- **SICs:** Traditional Standard Industrial Classification codes for comparison
- **Keywords:** Web-scraped tags including sector keywords and innovation keywords
- **Innovation Scores:** Proprietary 1–3 star ratings measuring how innovative a company is based on its digital footprint and funding.

3. Financials & Growth

- **Full Financials:** Up to 6 years of historical financial data (Turnover, EBITDA, Cash, Debtors, Creditors etc.)
- **Growth Measures:** Estimated turnover growth and employee growth percentages
- **Employee Estimates:** Modelled employee counts for companies that don't report them
- **GVA Estimates:** Gross Value Added at a company and regional level.

4. Funding & Investment

- **Equity Funding:** Data on investment rounds, total funding amounts, and lead investors (via Dealroom)
- **Grants:** Records of funding from **Innovate UK** and other grant-making bodies
- **Charitable Funding:** Data on grants received from 360 Giving sources.

5. Jobs & Labour Market (Lightcast)

- **Job Postings:** Historical and current hiring activity
- **Skills:** Breakdowns of required skills (Specialised, Common, Software, and Certification skills)
- **Salaries:** Median salary data for specific roles (SOC4 classification).

6. Digital & Contact Data

- **Web Presence:** URL, website descriptions and social media handles (LinkedIn, Twitter/X) where available
- **Contact Info:** General company email addresses and telephone numbers.

Appendix 3. Taxonomy Comparison Matrix

Name	Launch / Dev Time	Scope	Industry	Skills	Adoption	Expert / Data Driven	Skills Gap Analysis	Ease of use	Suitability for Adoption / Adaption
ESCO	2017 7 yrs	EU+	27 Sectors (NACE)	~14k	Widespread EU use & adapted for use in key private sector platforms.	Both	Yes	Medium / Hard	Yes, with modification
NESTA	2017 < 1 yr	UK Only	All (allegedly)	6k – 10k	Research & Policy focussed. Used by UK Gov, Open Jobs Observatory (NESTA) & academia.	Data	Yes	Hard	Methodology Only
Sing-apore	2016 2 yrs per framework	Sing-apore	30+ Frameworks	>50k	Widespread adoption in Singapore with deep integration in government systems. Used extensively by private sector, training providers, parents & students.	Expert	Yes	Easy	Methodology Only
Canada	2019 Not disclosed.	Canada	All (allegedly)	250 - 300	Widespread adoption as it's a core gov tool. Wide integration in employment systems and well-designed tools for analysts, employment counsellors and employers, as well as job seekers, students, and parents.	Expert	Yes	Easy	Methodology Only
Lightcast	2011 8 years initially but now provides near real time updates.	Global	31	>33k	Extensive global adoption with over 6k users globally. Used extensively by government, businesses, local authorities and education providers in over 160 countries.	Data with expert input	Yes	Easy	Yes, but commercial



Appendix 4. Illustrative Use Cases

Global best practice shows that industry bodies/ taxonomy owners are increasingly redefining their roles by establishing more dynamic and interactive relationships with their members. This evolution is often driven by the provision of ongoing, practical tools that facilitate continuous data collection and analysis, in turn generating detailed insights into workforce trends. These tools enable these organisations to move beyond traditional, periodic data gathering towards a more real-time, responsive approach to workforce analysis. By offering these resources, organisations position themselves as trusted partners who deliver sustained value, support strategic decision-making, enhance operational efficiency, and foster proactive adaptation to evolving industry dynamics. This shift not only enhances the relevance and credibility of these organisations but also encourages active member engagement, as stakeholders perceive tangible benefits from sustained collaboration.

This section is intended to outline products or services that could be developed in the short, mid or long term, to support employability, company growth, educators and policy.

It is recommended that the following Use Cases could be further explored with the CDIs' business community and core stakeholders to provide a clearer picture of demand. Many of these individual Use Cases are potentially interoperable with companies and users being connected to a mixture of services that work alongside each other.

These are:

1. Based on International best practice for business support and growth.
2. Represent a movement from industry bodies to providing added value services in partnership with industry
3. Where represented in discussion during the business stakeholder meeting
4. Provide initial and ongoing data collection that enables a clear understanding of the industry and any gaps
5. Can potentially be integrated with leading Taxonomies and therefore provide some level of future proofing
6. Utilise AI to add value and speed of delivery.



A4.1 Job Description (JD) Creator & Job Advert Analyser

An automatic job description (JD) creator and analyser that creates a JD for companies based upon company/user input and/or analyses an existing JD for skills gaps.

For Example:

'I want a JD for a web designer that has good Graphic Design skills, who is up to speed with current UX/UI tools, and understands how to utilise AI. The candidate can be a recent graduate but preferable would have 2-3 years' experience'

The system would take this request and produce a first draft. The user could then fine tune by selecting the key skills, knowledge and competences from a dropdown list populated from a taxonomy.

This would include a list of emerging skills for the role, derived from data sources such as LinkedIn (supply) / Lightcast (demand).

Therefore, from the example above prompt the skills would include:

Design / Competences

- Digital prototyping
- Human Interaction design
- Design Patterns
- Wireframing
- W3 Consortium Standards

Tools & AI

- Figma
- Adobe XD
- CSS
- AI-Powered Prototyping & Design
- Workflow Automation

JD Analyser

A second use case would see a user upload a current JD and the system could ingest, analyse and improve.

This use case may not be required and would be based upon initial feedback on how companies would use the system i.e. are they more likely to create or upload?

It is worth considering that the service could be used for Full Time/Part Time, contractors and freelancers.

Need

Companies are aware that job roles are evolving to the opportunity and demands of AI/Automation and Sustainability but have a limited understanding of the skills required for each role. As a result, companies end up creating JDs with generic skills, missing out essential skills.

Strategic Value i.e. Benefits to the CDIs

This tool would provide a stream of real-time primary data including:

- Number of JDs created and by whom
- Roles requested
- Skills requested
- Skills produced by the system in each JD
- Employment type FT/PT, contractors and freelancers.

Data required	Roles and Skills data from sources such as Lightcast, Linkedin, ESCO.
Taxonomy links	ESCO or Lightcast (required)
Data gathered from system	User requests (roles & prompts) Skills and competences selected
Requires localised data	No
Ease of implementation	Easy / Medium Would require a digital agency with database skills in order to build a database and integrate the chosen Taxonomy(s) and LinkedIn. Minimum ongoing maintenance.
Potential Costs	€25-€50k Costs are dependent on developing a JD creator or including a JD analyser. First phase could be the JD creator for €25k. FYI, pricing is inclusive of all relevant sectors.
How AI could be used	AI would take the skills data and user inputs and turn this into a narrative within the JD.
Short, Mid or Long	Short (this is a quick win)
Scoring (Bronze, Silver,Gold)	Gold

A4.2 Business Growth Pathway

Similar to a career pathway, this service will help SME creative companies understand their potential growth pathway as well as the future employees and skills required for their stages of growth.

For example, an 8 person games company is growing, winning contracts as well as developing their own titles. They are keen to understand the type of team they require for their next stage across; development, management, marketing and administration.

At present the founders would more than likely seek advice from others in their community.

This system would allow founders to quickly describe their current workforce, the skills within the team, and projected revenue.

The system would then create a strategic growth plan and skills competency matrix for the short, medium and long term. Potentially the user could use their company LinkedIn profile as a starting point.

The plan would include all roles, skills, experience levels, for each phase of growth as well as where to find their staff i.e. graduates, freelancers, experienced professionals, board members / non execs.

Government training incentives could also be included in the growth plan.

The data required to create the growth plans would be derived from Lightcast and Linkedin and represent the workforce from real companies.

Need

Companies can have a good view of technical and creative skills required to deliver projects but may have a limited view on the types of employees and internal structures required as they grow and therefore can make costly mistakes when hiring. *"`If only I knew then what I know now"*

At the heart of this use case is best practice knowledge dissemination and this system / service could be delivered in a number of formats:

- An online system that contains pathways for multiple industries.
- A report for each industry that is sent to individual companies.
- A piece of marketing and/or webinar with an industry leader explaining their growing pains.

Strategic Value i.e. Benefits to CDIs

Oversight of companies who aspire to grow, their current workforce and skills, their future workforce and their growth timelines.

List of companies who have used the service, who can be surveyed to identify how they have grown.

Captured data on:

- Number of growth plans created and by whom
- Current company; roles, skills and competences.
- Short, medium and long term company; roles, skills and competences requested.
- Potential for Ongoing survey data.

Data required	Data on examples of aspirational companies from sources such as Lightcast and Linkedin. The roles & skills of their employees
Taxonomy links	ESCO or Lightcast (would add value)
Data gathered from system	Company's existing workforce & skills Requested growth pathways showing roles and skills
Requires localised data	No
Ease of implementation	Medium if creating a system. Easy if taking this idea and running with it as a knowledge dissemination piece where Medium and Large SME leaders from different CDI sectors explain best practice and *'the things I wish I had known'*
Potential Costs	€50k+ for a full system and would require a digital agency with DB skills, and a data agency to gather the aspirational example company data. Minimal costs for knowledge dissemination / thought leadership, which may be a good starting point and a way of testing if a full system is desirable.
How AI could be used	Not really applicable to this system
Short, Mid or Long	Short - Thought Leadership (this is a quick win) Long - Full system
Scoring (B,S,G)	Silver / Gold

A4.3 Future Skills Radar / Impact Assessor

There is an awareness that creative companies do not fully understand the impact of emerging technologies and trends such as AI, Automation and sustainability; how the way they work will change and who they will employ.

This system would predict the impact of key trends within each industry, with particular emphasis on AI, Automation and sustainability.

For example, a digital agency is starting to see the impact and benefits of AI and is keen to understand their future position in terms of workforce, skills and client demands.

The starting point to answer the example above would be for the user to answer a series of questions regarding their company, workforce, skills, future aspirations and view on emerging trends.

The system would then deliver a tailored report taking the company's current position and covering:

- Trends that are impacting workforce and workflows
- Emerging skills that they should be exploring
- Availability of local skills (employees and freelance)
- Risk and Opportunity Matrix (identify how prone the company is to emerging trends as well as the benefits of adapting to changes as early as possible)
- Recommendations of organisations to connect with, events and training
- Further reading.

Need

Companies do not have a clear vision of how AI and Automation tools are likely to affect their industry.

There is a plethora of information covering trends, for multiple industries, produced by large consultancies such as McKinsey, PWC, Goldman Sachs, OECD, LSE, Nesta, which are largely strategic i.e. for policy and are often produced by academics. Therefore, these reports are hard for companies to digest and most likely not even something for which they would search or of which they would even be aware.

Strategic Value i.e. Benefits to the CDIs

This service would be targeted specifically at future-proofing the industry against emerging trends - how AI / Automation tools will affect each industry in CDI and the requirement to work more sustainably.

Skillnet Ireland would benefit from both an identification of companies who are concerned about emerging trends / technologies as well as gaining an understanding of their current workforce and skills.

Captured data on:

- Current knowledge from large consultancies in one place and repurposed for a creative audience
- Current company; roles, skills and competences
- Company risk and opportunity score
- Identification of possible future skills gaps before they impact the industry
- Potential for Ongoing survey data.

Data required	Current reports on impact of emerging technologies, trends and sustainability. LinkedIn data on existing skills in the local workforce to measure supply (would add value)
Taxonomy links	ESCO or Lightcast (would add value)
Data gathered from system	User company existing workforce & skills Risks and Opportunity data Future skills gaps
Requires localised data	Ideally yes as Irish opportunities will have some unique aspects
Ease of implementation	Hard This system would require a software agency with AI expertise to build its core. A digital agency to develop final design and UX. Skills data would also need to be gathered.
Potential Costs	€50k - €80k
How AI could be used	This system would be underpinned by a LLM to digest reports and create recommendations
Short, Mid or Long	Long
Scoring (B,S,G)	Silver (key driver is future proofing the industries whilst also gathering user inputted company audits)

A4.4 Skills Matcher

CDI across Ireland, similar to most countries, has a high proportion of skilled freelancers, contractors and self-employed.

Companies may have a clearer understanding of international freelancers through platforms such as Fiverr, UpWork, Toptal, Freelancer.com, Shakersworks, but would prefer to hire locally rather than remotely.

The Freelancer Skills Matcher service would contain a detailed view of the local freelancer workpool, their skills and experience levels.

Freelancers inputting a basic CV including:

- Skills
- Experience
- Previous work.

Companies would be able to filter and connect to local freelancers, as well as uploading live opportunities.

Need

For employers there is no clear view of the local freelancer workforce across the whole of CDI. For the workforce freelancing has always been a core model for flexible working.

As the workforce becomes more disjointed the freelancer workforce is becoming larger and more important.

Additionally, as freelancers can work remotely there is a risk that this workforce has less impact locally.

Freelancers are often used as specialists to fill skill gaps, which is particularly relevant as CDI industries evolve.

Therefore, initiatives that support the connection between local employers and freelancers are vital.

Strategic Value i.e. Benefits to the CDIs

Data on the volume of freelancers across CDI is required to promote the opportunity of such a system. Freelancers can then input their details and CV/Biog, skills from dropdown list and portfolio links.

Captured data on:

- Freelancer details
- Company requests
- Company data required on application
- Identification of skills gaps, through analysing supply and demand
- Potential for Ongoing survey data (freelancers and companies).

Data required	User submitted freelancer data (freelancers self-reporting) LinkedIn data on existing freelancers and their skills would provide a useful seed list of freelancers and data points to promote the importance of freelancers to CDI sectors.
Taxonomy links	ESCO or Lightcast (would add value)
Data gathered from system	Freelancer details Company requests Company workforce analysis Skills gaps
Requires localised data	Yes
Ease of implementation	Medium Technically, not a difficult system. The hard part is getting freelancers to engage. The starting point could be a report and marketing of the data on the Freelancer workpool.
Potential Costs	€26k - €40k
How AI could be used	AI is integral to skills matching and interpreting the data inputs and gaps.
Short, Mid or Long	Short - Medium
Scoring (B,S,G)	Bronze / Silver (of definite importance but has difficulties due to the largely invisible nature of the freelance community)

A4.5 Cluster Builder

The creative industries across Ireland operate largely as individual companies with limited visibility of complementary businesses in their local ecosystem. While informal networks exist, there is no systematic way for companies to identify peers with complementary skill sets, discover collaborative working opportunities, or build the kind of structured industry clusters that attract larger contracts, investment, and international attention.

The Cluster Builder service would map the skills, capabilities, and specialisms of CDI companies, enabling them to identify natural collaborative partners. Companies would input a basic profile covering:

- Core services and specialisms
- Tools and technologies in use
- Current capacity and project types
- Growth ambitions and target sectors

The system would surface complementary companies - for example, matching a UX studio with a software development house, or a games audio specialist with an animation company - enabling introductions, collaborative pitches, and ultimately the formation of formal or informal clusters.

Over time, repeat collaboration patterns and declared partnerships could be used to map emerging cluster activity across regions and sub-sectors, providing Skillnet Ireland with a live picture of the Irish CDI ecosystem.

Need

Creative SMEs in Ireland frequently miss out on larger contracts or export opportunities because they lack the scale or breadth of skills to bid competitively as a single entity. Cluster formation is well evidenced internationally as a driver of sectoral competitiveness, yet the pathway from isolated SME to functioning cluster is rarely supported in a structured way. Companies willing to collaborate often simply do not know who to collaborate with.

The tool/service could be used alongside existing support events act as a follow up to support collaboration. Additionally, small huddle style events could be organised around specific joint opportunities where data from the platform highlights potential collaborators around themes such as joint IP creation.

Strategic Value i.e. Benefits to the CDIs

This service would provide a real-time picture of cluster formation activity across the CDIs, identifying which sub-sectors and regions are developing collaborative density and where gaps remain.

Captured data could include:

- Company profiles; core skills, specialisms, and capacity
- Collaboration requests and matches made
- Declared partnerships and consortium formations
- Regional and sub-sector cluster mapping over time
- Skills gaps at cluster level, not just company level
- Potential for ongoing survey data on collaborative outcomes

Data required	User-submitted company profiles (companies self-reporting) LinkedIn data on company size, skills, and sector would provide a useful seed dataset and allow validation of self-reported information.
Taxonomy links	ESCO or Lightcast (would add value)
Data gathered from system	Company capability profiles Collaboration requests and matches Cluster formation and partnership declarations Skills density by region and sub-sector.
Requires localised data	Yes - the primary value of the service is in surfacing local and regional collaborative opportunities, though cross-border cluster opportunities (e.g. island of Ireland or EU partnerships) could be a longer-term feature.
Ease of implementation	Medium Technically similar in scope to the Freelancer Skills Matcher. The principal challenge is company engagement and ensuring profiles are kept current. An initial light-touch version could launch as a directory with matching functionality, with cluster mapping analytics added as a phase two once sufficient data has been gathered.
Potential Costs	€30k - €50k
How AI could be used	AI would be used to interpret company capability descriptions, map them against taxonomy terms, and surface non-obvious complementary matches - for example, identifying that a sustainability consultancy and a motion graphics studio share a common client base in ESG reporting.
Short, Mid or Long	Short - Directory and matching (phase one) Long - Cluster mapping and analytics (phase two)
Scoring (B,S,G)	Silver / Gold (High strategic value for Skillnet Ireland as a cluster development tool; principal risk is engagement, which could be mitigated by integrating with existing Skillnet network touchpoints)

A4.6 CV Skills Enhancer / CV Bulk Checker

There is no common standard in terms of language used on CVs when describing and highlighting skills. Additionally, companies are increasingly utilising AI driven pre-screening tools which are looking to identify specific skills, tools, and competences.

This leads to a scenario where individuals applying for jobs often miss key skills to add to their CVs and employers seeking to recruit may miss the ideal candidate.

This service would allow individuals to upload a CV and have it checked to see if they have included all the essential skills and experiences required for a job role. Incredibly useful for both individuals entering the workforce and experienced professionals looking to align their skills.

Companies can bulk upload CVs during the recruitment process to filter the top candidates, identifying missing skills from applications and generating a skills heatmap showing the strength and weaknesses of the talent pool against industry benchmarks.

Need

There is a disconnect between how a person describes their skills and how companies search for candidates. Creative professionals often use subjective language, under-report their skills and miss vital transferable and technical skills relevant to their desired role.

SMEs are often overwhelmed by the volume of CVs received for a role. Manual checking is time consuming and prone to human error and bias. The use of automated recruitment systems saves time but can result in an even greater disconnect in creative professions.

A potential offshoot of such a service would be that experienced professionals gain a clear view of the contemporary and emerging skills employers are looking for and are then redirected to a Career Pathway service that connects them to CPD training (physical or online). We have outlined such a service as an enhancement to *https://flowcareerpath.com/*

Strategic Value i.e. Benefits to the CDIs

Provides an overview of the actual capabilities of the talent pool rather than the self-reported or desired skills. It allows talent benchmarking on the skills density of applications across different regions and sub sectors.

It provides hard data on the skills that candidates think they have versus the skills required by SMEs, identifying where bridging courses should focus.

Data required	CVs – Individual and in bulk from SMEs and JDs (from SMEs)
Taxonomy links	Lightcast or ESCO (would add value)
Data gathered from system	Anonymous skills profiles from Individuals Anonymous skills profiles from bulk imports Skills heatmap Linguistic gaps – identification of common areas where candidates do not use industry standard terminology. SME query trends based on what skills companies prioritise during recruitment. Could also be used as evidence for accessing tax credits or development funding as the system could identify recruitment patterns of grant-funded companies.
Requires localised data	No
Ease of implementation	Medium Technically not that hard but this is essentially processing lots of personal data so could potentially be a legal minefield.
Potential Costs	€26k - €60k
How AI could be used	A Natural Language Processing system would need to be created in order analyse CVs
Short, Mid or Long	Mid
Scoring (B,S,G)	Silver/Gold

A4.7 Skills & Career Pathway Agent (Enhanced www.flowcareerpath.com)

This service would enhance flowcareerpath.com by identifying the technical / emerging skills for each role across CDI. Much of this data is contained in taxonomies such as ESCO and could be enhanced through LinkedIn mapping of roles and their career pathways.

The user would be connected to; courses (in person and online) delivered locally and internationally, knowledge exchange forums and groups (such as eirmersive.com) where informal training may take place, and employers could be directed to training grants available.

Need

Companies, employees and job seekers have a limited understanding of traditional and emerging skills required for roles and careers across CDI.

Additionally, CDI career pathways are evolving as roles are increasingly becoming cross-sectoral (i.e. designers working in non CDI industries). It is important to present career pathway opportunities to the workforce looking to upskill for the road(s) ahead.

Strategic Value i.e. Benefits to the CDIs

Enhances the career potential of the CDI workforce whilst improving the connectivity of local course providers and sector groups.

Ongoing data capture on the skills and roles requested from the existing workforce, identifies those who are seeking new roles and those who are new to the workforce.

Connects the CDI workforce with the wider community of Educators and Sectoral support and membership groups in a meaningful way.

Data required	Roles & Skills data - Taxonomy Career pathway data - LinkedIn Course providers & informal training from sector groups (Local and Global for both)
Taxonomy links	Lightcast or ESCO (required)
Data gathered from system	User details & selected careers Training selected and whether it's online or in-person and local or global
Requires localised data	Yes
Ease of implementation	Medium Not too difficult as it could be considered a phase 2 of flowcareerpath.com Taxonomy integration would require a database experienced agency Example career pathways need to be gathered for key roles.
Potential Costs	€20k - €35k
How AI could be used	Based upon the LinkedIn etc career pathway examples, AI could be used to predict and personalise career pathways at scale. Additionally, if the system started with a user inputting a prompt rather than selecting from dropdowns, then AI could be used in a chat / agent-based model. Therefore, AI could lead to the service being delivered as a web platform or even via WhatsApp
Short, Mid or Long	Mid
Scoring (B,S,G)	Silver/Gold

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Appendix 6. Detailed Methodology and Consultation Findings

Methodology

This report is informed by a mixed method approach including:

- In depth primary and secondary research on current sources and methods of workforce intelligence collection and dissemination, both national and international.
- Primary consultation through Roundtable discussions and individual stakeholder interviews both in person and online.
- Case studies of international models of data collection and dissemination.
- We engaged with a diverse range of national and international stakeholders; including individuals and organisations across different workforce categories, regions and sub-sectors across the CDIs.

The following contact groups contributed to the research:

- Local sector representation (Employers and Employees)
- Freelancers
- National cultural and design bodies
- Workforce and Sector Networks / Focus Groups
- Sector Support and Professional Accreditation Bodies
- Education and Training Providers
- Industry leaders and managers
- Skills data analysis experts
- Government/Public Policy

Round Table Discussions

Three in-person round table discussions were held in November 2025 at the Guinness Enterprise Centre in Dublin facilitated by Counterculture.

All three round tables were presented with the same highlights of the research to date, November 2025, (see below). Each round table was then asked specific questions in relation to their individual focus (detailed under each round table below).

Focus of the Research:

Desk based research into existing taxonomies, their usage and development.

Highlighting:

- Development challenges
- Usage and implementation challenges
- Trends and data usage
- Timescales involved in development
- Interoperability – how to connect to existing taxonomies tax.

Key Findings

Trends:

- Real time data, data driven
- Existing platform integration; LMS, HR & recruitment systems
- Designing for end user experience

Best Practice:

- Hybrid design; bespoke data alongside existing taxonomies.
- Detailed, granular level data to reinforce use cases
- Many taxonomies are regionally unique
- Ongoing stakeholder engagement - design and testing

Round Table 1: Skills Taxonomy - Policy

Focus and Questions for Discussion

Strategic Value

How does this work fit into the policy landscape?

- Workforce intelligence
- Workforce development
- Policy Alignment
- Future Policy
- EU Policy

What are the latest headlines on CDIs skills taxonomies and frameworks from a policy perspective?

Framework & Governance

- Are there existing taxonomies/frameworks with which we need to align?
- Which departments/agencies/organisations should be involved in designing and delivering a skills taxonomy and framework?
- What governance/advisory structure would ensure sustainability?

Discussion Resources & Roadmap

- How might we ensure the future sustainable collection of data?
- How might it be resourced financially on a long-term basis?
- What opportunities are there for transversal/cross sector collaboration?

Policy headlines

1. **Purpose must be clear:** Clarification of what the purpose of the data and framework is. For example— policy, funding, career guidance, curriculum design, recruitment, workforce planning, or employer support. The answer to this should shape the approach
2. **Skills matter more than job titles:** Job titles were seen as fluid, inconsistent and often unhelpful, especially in freelance and SME-heavy sectors. There was strong support for focusing on skills, capabilities and attributes rather than formal roles
3. **Freelancers and blurred definitions create data gaps:** The sector is hard to measure because of high levels of freelance work, overlapping roles, and the way some parts of the sector position themselves as "digital" rather than "creative." This weakens visibility in existing systems
4. **Existing data exists but not joined up enough:** There is already a lot of useful data and research, but it is fragmented, not always easy to access, and often not aligned to the sector's real needs
5. **Alignment with national systems is essential:** The proposed National Skills Observatory, EGFSN processes and wider policy structures were seen as critical reference points. Any new approach needs to plug into these systems rather than sit outside them
6. **Language and communication remain a challenge:** Participants highlighted confusion around what is meant by "skills," "roles," "taxonomy" and "framework," and noted that the sector also struggles to present itself clearly to policymakers and other stakeholders
7. **Method for collation needs to be accessible:** successful data collation will depend on creating something practical, connected, easy to use and sustainable over time.

Round Table 2: Skills Taxonomy – CDI Sector

Sector Needs & Purpose

- If this creative skills taxonomy worked perfectly, how would it help your organisation?
- What outcomes or insights do you want it to deliver?
- What should it not be?

Data & Design

- How can we ensure it is relevant to:
  - Employers
  - Employees
  - SMEs
  - Freelancers
  - Policy
  - L&D Providers
- What level of granularity of data is required to meet the needs of the stakeholders above.

Embedding & Governance

- How can this taxonomy be embedded in L&D practice and curriculum design?
- Who needs to be involved?
- Are you aware of any best practice models?

Sector Headlines

1. **Skills and capabilities**: The sector needs a framework based on skills and capabilities, not just job titles. Job titles are inconsistent and misleading
2. **Transferable skills:** Key transferable skill such as adaptability, management, communication and collaboration are essential across the sector
3. **Lifelong learning** is critical because of rapid technological and market change
4. **Freelancers and micro-businesses** are hard to capture but crucial to the sector's workforce. They must be reflected properly in the framework and data collation
5. **Disconnection** There is a lot of existing data from government, agencies, employers and sector bodies which is valuable but fragmented, better coordination is needed
6. **Clear and accessible language**. Language such as "taxonomy," "framework" and even "skills" can be confusing unless it is clearly defined and translated into something meaningful for employers, freelancers, learners and educators. The framework must be user friendly.

Round Table 3: Skills Taxonomy - Industry

Sector Skills Challenges:

- Skill shortages in high-growth areas like 2D/3D animation, design, and gaming.
- Curriculum lag, as creative and design industries evolve faster than traditional third-level course cycles.
- Lifelong learning and upskilling are crucial due to rapid technological change.
- Training affordability is a barrier, especially for microbusinesses and freelancers with tight margins.
- Ongoing collection of data in this fast-moving, diverse and under-resourced sector.
- Diversity of sector and lack of defined roles and skills.
- Existing data does not show the full picture.

Focus and Questions for Discussion

Sector Needs & Purpose

- If this creative skills taxonomy worked perfectly, how would it help your business or organisation?
- What outcomes or insights do you want it to deliver?
- What should it not be?

Data and Design

- What level of granularity of data does it need to capture?
- What do you see as the future skills gap trends?
- It is essential that any taxonomy remains current. How do you think we can ensure this and what role might employers play?

Embedding and Governance

- Who needs to be involved?
- How can this be delivered successfully and sustainably?
- Are you aware of any best practice models?

Industry Headlines

1. **Agreed terminology that is accessible:** The current terminology feels too technical and policy oriented. Such terms as taxonomy" and "framework" would need translating into much simpler, more accessible language for employers, freelancers and learners
2. **Skills over job titles:** Participants consistently prioritised skills, competences and behaviours over formal job titles, which are inconsistent, fluid and often misleading
3. **Transferable skills matter deeply:** Communication, leadership, adaptability, presenting, writing and collaboration were seen as fundamental, especially in small organisations and for career progression
4. **Small business reality must shape the model:** Most agencies and organisations are small, requiring broad, flexible roles. A too-rigid framework would fail to reflect this reality
5. **Balance between shared structure and sector specificity:** A common architecture may help visibility and policy alignment, but detailed sector-specific layers are still needed to be useful
6. **Future-facing capability is essential:** AI, sustainability and accessibility are not optional extras; they are fast becoming core capability areas
7. **Adoption depends on practical value:** The framework must solve real problems, support real decisions and offer clear benefits to each stakeholder group.

Headlines: All Round Tables

1. **Skills Over Titles:** Since job titles in creative and SME sectors are fluid, inconsistent and often misleading, the framework should be built on **competences and attributes and behaviours**
2. **Clear and accessible language**. Language such as "taxonomy," "framework" and even "skills" can be confusing, unless it is clearly defined and translated into something meaningful for employers, freelancers, learners and educators. The framework must be user friendly
3. **Interoperability:** The framework can't be a standalone "island" of data. It must plug into **national policy systems** (like the National Skills Observatory). Co-design with the sector
4. **Transferable skills:** must not be overlooked. Key transferable skill such as adaptability, management, leadership, communication and collaboration are essential across the sector and key for career progression
5. **Freelancers and SME**: Although challenging to capture, they are key to the sector's workforce. They must be reflected properly in the framework and data collation.
6. **Existing data exists but not joined up enough:** There is already a lot of useful data and research, but it is fragmented, not always easy to access, and often not aligned to the sector's real needs
7. **Future-facing capability is essential:** AI, sustainability and accessibility are not optional extras; they are fast becoming core capability areas.

Individual Stakeholder Conversations

Individual conversations were carried out online with stakeholders with the objective of gaining a high level, broad understanding of out-of-sector Skills Taxonomies, with an international perspective.

Key Findings from Research to date:

Collated Intelligence Current context

- Variety of organisations and departments developing reports and research often in silos, relating to skills which are disseminated through various channels but not available to all and uptake is unknown
- Quality of the data and research methods is unclear. Based on qualitative information, not data
- Existing data not entirely relevant to the CDI sectors
- No one organisation/department leading on skills development/ championing at policy level
- No one repository for skills data and research - needs to be current and accessible to a variety of users
- Clarity of the purpose and timescale of various skills development initiatives e.g.: Skills Observatory
- A need to map the existing recent research
- Annual need for data collation to ensure sector remains relevant amid fast-changing tech and industry needs
- Shared European ambition to standardise and future-proof skills taxonomies for the creative and cultural sectors.

Skills

- Need to also capture soft, transferable skills and competences and behaviours
- Hard skills can be very complex to capture correctly and inconsistency of skills in different creative industries
- Need to focus on growth of the sector and employers' needs, not individual learning needs
- Skills needed to capture: basic skills, technical, vocational, transversal, critical business, sustainable.

Taxonomy Development

- Majority recommend sticking to ESCO to align with policy and cross sectoral skills taxonomy development
- Strong sense of no need for 'another platform'
- Key challenges lie in developing communication and a shared language between industry, education and policy. The language used is currently inaccessible. i.e. Taxonomy, competency frameworks etc.
- Within 3 years another 8 skills taxonomies will be developed by Skillnet Networks – need to align
- Research shows that taxonomies require sustained investment and take years to develop
- Validity of existing Freelancers data and intelligence is unclear.

Accreditation vs Endorsement

- Mark of quality welcomed by industry
- Tax credits
- Restrictions of academic bureaucracy at HE level – lack of responsiveness to industry and learners needs
- Flexible models more challenging for Quality Assurances in Higher Education
- Industry Endorsement
- Microcredentials
- Transversal skills
- Lifelong learning - creating a culture of lifelong learning.

Governance & Advocacy

Steering Group to lead and develop CDI skills development across Ireland – need for a joined-up expert group.

List of Stakeholders Consulted During the Project.

Individual Stakeholder Interviews			
Name	**Organisation**	**Location**	**Project**
Kara McGann	Ibec	Ireland	
Helen McMahon	Enterprise Ireland	Ireland	
Joan McNaboe	SLMRU/SOLAS	Ireland	
Denise Rocks	West Regional Skills Forum Manager	Ireland	
Silke Hassreiter, Zoltan Batho and Treshi Perera	Breda University Netherlands	Netherlands	AVENUE EU Project
Claudia Plainauer	3sUnternehmensberatung GmbH	Austria	Creative Flip Project
Shauna Dunlop	SOLAS - State Agency for Further Education & Training	Ireland	
Heather Carey	Creative Industries Policy and Evidence Centre (Creative PEC)	UK	
Eoin McDonnell	Skillnet Ireland	Ireland	
Becky Riches	materahub	Ireland	
In-person round table 1: Policy (5.11.2025)			
Name	**Organisation**		**Context**
Anne Ribault O'Reilly	Department of Further and Higher Education & Skills		Digital Skills
Helen McMahon	Enterprise Ireland		Skills Policy
Ciara Cowap	EGFSN (Expert Group on Future Skills Needs)		Skills Needs
Patrick Kelleher	CSO (Central Statistics Office)		Skills Policy
Mairead O'Connor	The Wheel		Policy
In person round table 2: Creative Sector 6.11.2025			
Bernie McCoy	Creative Futures Academy		Skills / Taxonomy
Danielle Townsend	Founder of Bounce		Skills / Taxonomy
Alex Kotsos	Competency Frameworks		Skills / Taxonomy
Gareth Lee	CCI Skillnet		Skills / Taxonomy
Barbara Deignan	CCI Skillnet		Skills / Taxonomy
Niamh O'Shaughnessy	Design Skillnet		Skills / Taxonomy
In person round table 3: Industry 6.11.2025			
Name	**Organisation**		
Catherine Roycroft	Cartoon Saloon		
Karen Hanratty	Path Design Agency		
Brian Nolan	Detail		
Sinead Costello	Brown Bag		
Colum Slevin	Story Toys		
Alessandra Ravida	Red Dog		

Appendix 7. Stakeholder Research Questions

Desk Based Research Stakeholder Questions

Glossary of terms for the purpose of this research
Skills Taxonomy The agreed words and terms to describe the skills within the creative and design industries in Ireland. This includes the structured system for categorising and organising the skills of the creative and design industries in Ireland.
Skills Framework A roadmap detailing the process for developing and maintaining the regular and ongoing collection, collation and dissemination of current and future skills gap data for the creative and design industries in Ireland.
Approach Actionable recommendations to build on the framework to develop an agreed process or digital tool application to live capture skills data for the creative and design industries linked to a defined set of roles.
Context
Can you tell me about your work in relation to developing /using Skills taxonomies?
Can you tell me about your work in relation to developing /using Skills taxonomies?
How do you currently define and measure skills?
What works well or poorly about your current approach?
What challenges do you currently face in identifying, categorising, or tracking skills in your organisation/sector?
Taxonomy
How would you measure the success or effectiveness of a skills taxonomy?
How detailed should a skills taxonomy be? (i.e.: broad categories vs. specific competences/proficiency levels?
Should skills be weighted by importance, or include proficiency levels? use a skills taxonomy/ framework? What needs to be considered for it to be useful to you or the sector?
How would you and your organisation use a skills taxonomy/framework? taxonomies in the future?
What needs to be considered for it to be useful to you or the sector? For example, to inform policy, education provision, employers, learners.
Future Focus
What do you think will need to be included or considered in Skills taxonomies in the future?
What is the most practical and efficient approach to collate skills on an ongoing basis?
What do you think are the possibilities and impact of AI in the future on skills in the sector? skills taxonomies? Or helpful research.
Future Development of the Taxonomy
Who do you think are the strategic partners/organisations which need to be involved in this work going forward?
What international opportunities should we be aware of?
Would you like to be involved in the future development of this work?
Best Practice
Do you know of any best practice examples relating to skills taxonomies and frameworks? Or helpful research or policies in Ireland or internationally.
Policy Context
Are you aware of any policies at national / EU level that this project needs to align with?
Additional Comments
Is there anything else you would like to add?


ATOMOS
SONY

Cultural & Creative Industries Skillnet

Cultural & Creative Industries Skillnet

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Participating Skillnet Networks are co-funded by Skillnet Ireland and network companies. Skillnet Ireland is funded from the National Training Fund and the European Union through the Department of Further and Higher Education, Research, Innovation and Science.

Skillnet Ireland

Rialtas na hÉireann
Government of Ireland

Co-funded by the European Union