



ekip White Paper

Innovation By, For, and With the Cultural and Creative Industries

Strengthening Europe's Innovation Ecosystems Through CCI Engagement

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About ekip

ekip is a collaborative platform designed to boost the development of innovation capacity in ecosystems to include the Cultural and Creative Industries (CCI).

Creatives are not just “nice to have” they are essential for driving progress on major challenges like the green and digital transformation and social inclusion. Their competences and skills are crucial for tackling complex innovation processes involving diverse stakeholders.

Rooted in open innovation, *ekip* brings together broad stakeholder groups to co-create and deliver evidence-based policy recommendations. Together, we’re shaping smarter innovation policies for ecosystems where collaborative processes and cross and open innovation are standard practice. We believe this will empower the CCIs to become drivers of innovation, creating a better and brighter future.

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Executive Summary

Innovation within and beyond the Cultural and Creative Industries (CCIs) takes many forms, yet policy debates often focus on a narrow understanding of creativity that fails to reflect the sector's full contribution to Europe's strategic priorities. This white paper presents a broader, more systemic view of how innovation is *by*, *for*, *driven by*, and *co-created with* the CCIs. It argues that a shift in both language and policy is required to recognise and fully harness the sector's role in strengthening competitiveness, democratic resilience, and sustainable development across the continent.

CCIs generate a substantial number of inventions, methods and technologies that later diffuse into other sectors, from game engines and virtual production tools to advanced design methods, smart materials and digital heritage solutions. Yet innovation policies are rarely designed with these specific dynamics in mind. As a result, CCI-led innovation often remains undervalued, underfunded, or poorly integrated into broader industrial and regional development strategies.

At the same time, the CCIs face their own challenges – particularly around environmental sustainability, digital transition and resource constraints – which require targeted innovation efforts *for* the sector. Addressing these issues demands cross-sector expertise, new business models and collaborative experimentation, especially in areas where CCIs operate as “extreme users” whose needs can generate wider technological and organisational breakthroughs.

Beyond their internal innovation capacity, the CCIs act as powerful drivers of innovation across the economy. Their creative methods, prototyping practices, narrative skills and user-centred approaches offer essential capabilities for industries seeking to explore uncertainty, accelerate solution development and engage citizens. CCI environments such as festivals, cultural venues and creative labs provide unique real-world testbeds for experimentation, while creative professionals play key roles in making emerging technologies meaningful, attractive and widely adopted.

The white paper also highlights the importance of open and co-creative innovation models that bring CCIs into early-stage exploration of new challenges and opportunities. Such processes enable diverse actors – policymakers, SMEs, researchers, artists and civil society – to work together across organisational and sectoral boundaries. They foster trust, expand knowledge bases, reduce risk and generate more inclusive and future-oriented outcomes. Strengthening Europe's innovation ecosystems therefore requires greater support for intermediaries capable of facilitating this kind of collaboration.

Taken together, these perspectives demonstrate that the CCIs are not peripheral to Europe's innovation landscape but central to the transitions the EU seeks to achieve. To realise this potential, innovation policies must expand their definitions, instruments and collaboration models to better reflect the creative sector's diversity and interconnectedness. This includes developing policy frameworks that recognise the CCIs as strategic partners in mission-oriented innovation, supporting open innovation infrastructures, and establishing better tools for capturing CCI spillovers across the wider economy.

This broader, more inclusive view of innovation – one that fully recognises the value of cultural and creative contributions – will be essential for enabling Europe to build resilient, competitive and forward-looking innovation ecosystems capable of addressing the challenges of today and tomorrow.

This White Paper was put together by Lena Holmberg using material produced by several people in the *ekip* consortium.

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1 CCI Engagement in Innovation Processes

Making new things and solving problems is at the heart of the cultural and creative industries (CCI). The artists, audience, readers, customers and users are always on the lookout for novel things and approaches, and scarce resources make way for creative solutions to all kinds of challenges. This is one way of talking about innovation and CCI. However, there are many more ways and nuances to consider when looking at how the CCIs contribute to the European strategic agenda focusing on competitiveness, democracy and security¹.

Lately, there have been several articles and reports raising the point that the CCIs contribute much more to the economic in Europe than is often acknowledged, such as the reports “Creative Economy Outlook 2024” (UN, 2024)², “Public Value of Arts and Culture” (Mazzucato, 2025)³ and “Reshaping policies for creativity: we share, we act, we build” (UNESCO, 2026)⁴. However, even if these economic figures are important, they do not reveal the whole picture regarding the impact from the CCIs on the European economy nor do they indicate many possible ways to increase the impact, if current policies regarding CCI and innovation were changed.

Below, four perspectives of innovation and CCI are presented. In these the CCIs take on different roles in the innovation processes. Sometimes they are both clients and providers when the innovation is directed towards the core business. Other times they are the ones with challenges that others need to provide solutions to. Often, the CCIs can drive or facilitate other organisations’ innovation processes. They can also participate on equal terms with other industries through co-creation and open innovation. These perspectives can inform debate but also be used as a framework for cities, regions and countries aiming at revising their CCI strategies to become more relevant in relation to the European strategic agenda. They also go hand in hand with the policy recommendations developed and published through the *ekip* Engine⁵.



¹ https://european-union.europa.eu/priorities-and-actions/eu-priorities/european-union-priorities-2024-2029_en

² https://unctad.org/system/files/official-document/ditctsce2024d2_en.pdf

³ https://cms.marianamazzucato.com/wp-content/uploads/2025/09/Public_Value_of_Arts_and_Culture.pdf

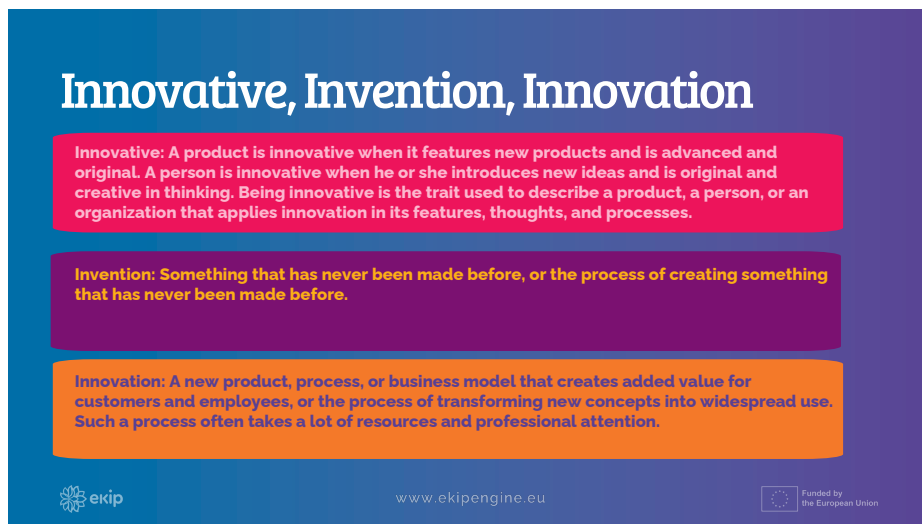
⁴ <https://unesdoc.unesco.org/ark:/48223/pf0000397330/PDF/397330eng.pdf.multi>

⁵ <https://ekipengine.eu/about-us/ekip-engine/>

At the end, some suggestions are provided for how to enhance (a) the way innovation and CCI are talked about, and (b) how to support the different ways to combine the two. But first, some key concepts are introduced as a foundation.

2 Key Innovation Concepts

To be **innovative** is not the same as developing **innovations**, like the notion that an **invention** is not an innovation. This means that solving a problem in an innovative way once during a CCI process can result in an invention, but for it to become an innovation it needs to be packaged in such a way that it can be repeated and widely spread to have an impact for individuals and organisations. This often requires a lot of resources and needs to be done on a professional basis. This is a common challenge also in academia where researchers sometimes develop inventions such as a new molecule or material, but do not have the means in terms of time or money to make it available to customers. This is often solved by either setting up collaborative projects where agreements require results to be shared, selling the rights to the invention or starting a new company with other people.



Innovative, Invention, Innovation

Innovative: A product is innovative when it features new products and is advanced and original. A person is innovative when he or she introduces new ideas and is original and creative in thinking. Being innovative is the trait used to describe a product, a person, or an organization that applies innovation in its features, thoughts, and processes.

Invention: Something that has never been made before, or the process of creating something that has never been made before.

Innovation: A new product, process, or business model that creates added value for customers and employees, or the process of transforming new concepts into widespread use. Such a process often takes a lot of resources and professional attention.

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To be able to create innovation it is important to identify **knowledge assets** that have a potential to be combined into an innovation. Examples of such knowledge assets are models, methods, data, designs, software and inventions.

Such knowledge assets can be made publicly available through publications although under some conditions like copyright and Creative Commons⁶, or kept as a company secret or protected by patents, design patents and trademarks. By doing so the knowledge asset becomes an **intellectual property** allowing creators to earn recognition or financial benefit from their work. The handling of knowledge assets are key to innovation processes and business development, something that initiatives like the CreativeFLIP⁷ addresses through CCI competence development.

When working together with other people or organisations it is important to agree upon how to handle the knowledge assets that are created during the collaboration. This is often done in special agreements for example research projects but also when companies are collaborating. In early phases of exploration of novel challenges and opportunities, it is often difficult to exactly pinpoint who did what and when, why

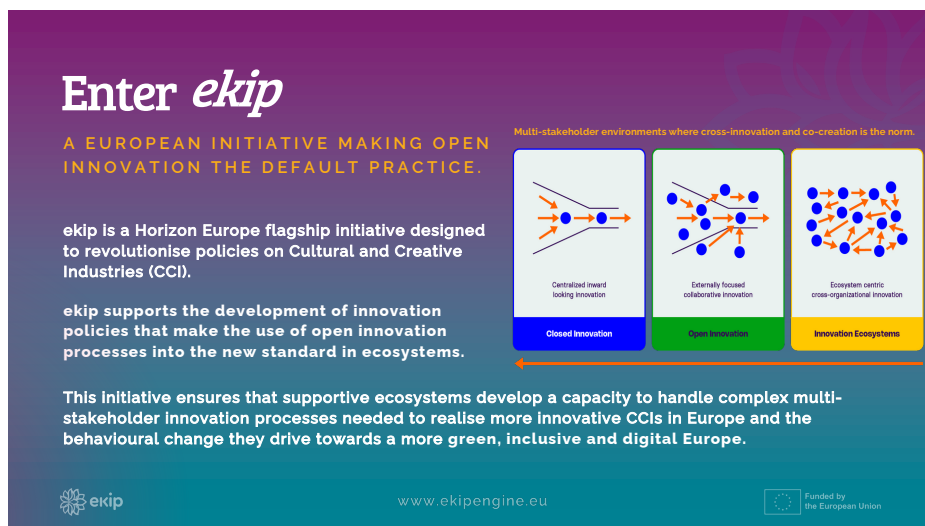
⁶ <https://creativecommons.org>

⁷ <https://creativeflip.creativehubs.net>

it is beneficial to have a common agreement that everything that is developed together belongs to the collaborating entities or that it is totally public.



In general, it is more important to share ideas in early open innovation processes to refine them and gather momentum than to try to keep them a secret, since new ideas come and go all the time and it takes much more than just an idea to transform it into an innovation. This is why *ekip* supports the development of innovation policies that make use of **open innovation** into the new standard in ecosystems, as a means to start collective innovation journeys that can lead to several ideas for projects, products, companies and organisations.



All these basic innovation concepts play important roles when looking at different ways that CCI and innovation can be combined.

3 CGI Core Innovation

The Cultural and Creative Industries (CCIs) generate a wide range of inventions that extend far beyond their own sectors and play a strategic role in strengthening Europe's innovation capacity. Within the broad CCI ecosystem identified by the EU – spanning architecture, audiovisual media, gaming, design, fashion, publishing, museums and heritage – new tools, materials and technologies frequently emerge and later

diffuse into other industries. Examples include game engines and motion-capture technologies originally developed for the video game and film sectors, which are now widely used in architecture, mobility, simulation and healthcare. Virtual production technologies, high-resolution 3D digitisation, AR/VR applications and digital editing tools have similarly grown from creative origins into indispensable components of industrial design, engineering, education and tourism.

Design-driven innovation also stems from CCI, with smart textiles, parametric design software and 3D garment simulation tools influencing manufacturing, construction, health and mobility sectors, as highlighted in the EU's description of design as a key cross-cutting enabler of innovation. UNESCO likewise underlines the innovative outputs emerging from crafts, media arts and heritage sectors, including new forms of digital archiving and creative technologies with broader societal applications⁸.

Taken together, these inventions demonstrate the **systemic importance** of CCI in providing early-stage technological, methodological and user-centred innovations. Their contributions help close the innovation gap, strengthen Europe's competitiveness and support transitions in areas such as digitalisation, sustainability and advanced manufacturing.

As national policies addressing the cultural and creative industries often point out, the CCI are teeming with inventions in terms of materials, computer game engines, production methods, and business models. However, the **support mechanisms** provided as a result of traditional tech-oriented innovation policies are seldom designed to fit the CCI. For example, the Swedish National Strategy for Promoting Sustainable Development for Businesses in the Cultural and Creative Industries points out that the concept of innovation needs to be broadened to fit the CCI, and the support mechanisms providing advice and funding needs to be developed⁹. In addition, the people working with developing strategies and policies for innovation, digitalisation and export need to be aware of the potentials within the CCI.

This kind of core business innovation is made by the CCI for the CCI, but there are more ways to combine innovation and CCI.

4 Solving CGI Challenges with Innovation

"To address the climate and biodiversity crises, we as societies must reimagine how we live, produce and relate to the planet. The CCS, like all sectors and industries, have an impact on the environment, but they are uniquely positioned as drivers of systemic change through storytelling, imagination and behavioural influence¹⁰." (p. 3)

The report "Creative Shifts – Empowering Culture for Sustainable Living¹¹" outlines good practices, assess policy tools and formulate recommendations to support the green transition in the CCI. This kind of innovation is seldom part of the core culture and creative products, but rather ways to make them more sustainable in its production or delivery.

⁸ <https://www.unesco.org/en/articles/cultural-and-creative-industries-cci>

⁹ https://www.regeringen.se/contentassets/5362b817cbfb4966aa2be1158f946c67/sou-2022_44-webb_.pdf

¹⁰ De Smedt E and De Voldere I (2025) Shaping tomorrows: the CCS as agents of change in Europe's transition. Front. Commun. 10:1657019. doi: 10.3389/fcomm.2025.1657019

¹¹ European Commission: Directorate-General for Education, Youth, Sport and Culture, Creative shifts – Empowering culture for sustainable living, Publications Office of the European Union, 2025, <https://data.europa.eu/doi/10.2766/6678618>

Examples of important environmental issues for the CCI are according to the report:

- Improving energy efficiency
- Adopting circular economy principles
- Increase recycling
- Climate adaptation measures
- Pollution prevention measures
- Biodiversity improvements

To some extent, there are already solutions addressing these challenges, but innovation is needed to overcome different kinds of restraints such as physical (outdoor festivals a long way from energy sources) and economical (the cost needs to be very low to attract customers). Although the solutions to the challenges may be largely provided by experts in other fields, the CCI need to participate as active clients providing a correct description of the situation and boundary conditions. It should also be noticed that the CCI context often provide so-called **extreme customer** situations¹². Such edge cases whose intense needs, high-level usage, or complete lack of adoption provide deep insights, revealing product flaws, untapped motivations, and future trends. This means that innovation for the CCI can lead to applications also in other fields.

The CCI often have an interest in becoming more sustainable in all dimensions but often lack the knowledge or the resources to make significant changes. The report points to several ways to address this such as the use of new tools and data, sharing good practices, policy development, institutional action, learning from others. It also emphasising the need to empowering the CCI and make use of its ability to be a driver of sustainable transformation, not only within the CCI but in society in general.

"While much attention has been directed towards transformative action in sectors such as energy and transport, the cultural and creative sectors (CCS) also hold significant, yet under-recognised, potential to contribute meaningfully to the sustainability agenda. With their proven capacity to foster public awareness, create emotional engagement and inspire behavioural change, culture, creativity and the arts warrant more strategic and ambitious integration into climate action efforts. At the same time, emerging assessments of their ecological footprint underscore the urgency for the CCS to adopt stronger environmental practices."
From Creative Shifts – Empowering Culture for Sustainable Living¹³

5 CGI Driving Innovation

The CCI not only contributes to its own industries but also acts as a driver and catalyst of innovation across many other sectors¹⁴. This happens in several complementary ways as described below. The list indicates that the most important impact from the CCI on the European goals related to competitiveness, democracy and resilience probably stem from how it is combined with other areas and industries, something that needs to be acknowledged, rewarded and supported to achieve its full potential.

By contributing established creative methods used in innovation

- CCI have long worked with creative practices – such as ideation, gamification, role-playing, prototyping, and virtual worlds – that have become central tools for innovation in other industries.

¹² <https://www.library.hbs.edu/working-knowledge/pay-attention-to-your-extreme-consumers>

¹³ European Commission: Directorate-General for Education, Youth, Sport and Culture, Creative shifts – Empowering culture for sustainable living, Publications Office of the European Union, 2025, <https://data.europa.eu/doi/10.2766/6678618>

¹⁴ Given that the CCI encompass so many kinds of work, one kind of CCI can of course also support another CCI in its innovation process.

These methods help generate new perspectives, accelerate concept development, increase user-centricity, and strengthen the ability to work in uncertain and exploratory contexts.

By offering experimental environments for testing and development

- Festivals, cultural venues, and heritage sites provide real-world testbeds where other sectors can trial new solutions under complex but inspiring conditions. Audiences are typically in an open, exploratory mindset, enabling realistic observation of behaviours and rapid experimentation.

By developing new methods, concepts, and prototypes

- CCIs continuously develop new ways of collaborating, ideating, and prototyping – approaches that often migrate into sectors such as technology, urban development, healthcare, education, and mobility. Creative practices also support scenario building and future-oriented thinking.

Through co-creation and open innovation with other sectors

- CCIs play a central role in cross-sectoral open innovation processes, participating in exploratory workshops and collaborative projects that generate shared knowledge and knowledge assets. Their strength lies in navigating ambiguity, shaping meaning, and identifying emerging needs long before they are clearly defined.

By making technology and innovation attractive and meaningful for users

- CCIs are essential in shaping user experiences – through design, storytelling, media, and interaction. Many technologies only gain traction once creatives translate them into compelling, accessible, and desirable forms for broader audiences

By driving societal and systemic innovation

- Beyond product innovation, CCIs contribute to major societal transitions such as sustainability and climate neutrality and adaptation¹⁵, and intergenerational fairness¹⁶ by bringing a human-centric approach to innovation, resilience and societal development¹⁷. They also help communicate and visualize complex issues, engage citizens emotionally, and influence behavioural change – critical components of large-scale innovation efforts¹⁸.

The capacity for cultural and creative practices to act as catalysts for innovation, whether through new or improved technologies, novel organizational arrangements, fairer social approaches, or new and improved products, processes or services is currently (spring 2026) highlighted by the European Commission. Through an open call, organizations and individuals are invited to contribute case studies that demonstrate how creativity shapes innovation and establishes new frameworks for collaboration¹⁹.

However, it should be noted that being this kind of driver or supporter of innovation seldom leads to reaping the effects of the resulting innovation in terms of reputation or money. That is, the ownership of the knowledge assets created is assigned to other stakeholders than the CCIs.

¹⁵ https://ec.europa.eu/assets/eac/culture/docs/voices-of-culture/voices-of-culture-brainstorming-report-green-transition-2023_en.pdf

¹⁶ https://ec.europa.eu/commission/presscorner/detail/en/ip_26_535

¹⁷ <https://www.humanvalues2025.aau.dk/>

¹⁸

https://creativeflip.creativehubs.net/assets/upload/CREATIVE_FLIP_Policy_Orientation_Issue_2_Green_Storytelling_layout_FINAL.pdf

¹⁹ <https://ec.europa.eu/eusurvey/runner/2026CreativeInnovation#page0>

6 Co-Creation and Open Innovation with the CCIs

As is evident from the descriptions above, the roles as supplier and customer in innovation processes are not always clear cut. Ideas developed within one context can be transferred to another, creating innovation spill-over effects. One way of addressing and enhancing this is to create opportunities for open innovation, where people and organisations from different fields and sectors come together to explore and learn more about new challenges and opportunities on equal terms. One example of such an open innovation environment is the co-created concept of the Innovation Hub²⁰, focusing on “innovation by production”²¹.

‘Innovation by Production’ – a concept developed by ekip

Interesting solutions and inventions are often the fruit of artistic processes and cultural production. Yet, since the focus is on the presentation of the work, these solutions and inventions serve only this need and are not nurtured to be scaled into innovations.

ekip recommends the combination of cultural support (rooted in cultural policy) with innovation support (rooted in innovation policy) for those productions where there is potential and interest for scaling innovation so called ‘Innovation by Production’. A win-win.

Doing co-creation and open innovation with the CCIs brings many benefits for other industries, as it enables them to tap into a broader diversity of perspectives²², accelerate problem-solving, and access knowledge and skills that are often unavailable within traditional sector boundaries. Research shows that co-creation processes generate more innovative solutions by combining varied forms of expertise and creativity, leading to outcomes that are better aligned with market and societal needs.

Open collaboration also strengthens relationships, trust, and long-term partnerships across sectors – factors that OECD highlights as essential for resilient and inclusive innovation ecosystems²³. Moreover, engaging CCIs in co-creation expands the knowledge base of all the participating industries and opens pathways to new technologies, business models, and markets. Taken together, these benefits make CCI engagement an important policy lever for strengthening competitiveness, fostering cross-sector innovation, and supporting societal transitions²⁴.

7 The Need for Innovation Policy Development in Europe

The CCIs can take on many roles in innovation, and it is important to keep this multiplicity in mind when looking at the potential for CCIs to contribute to the European Strategic Agenda²⁵, since they provide both opportunities and challenges that need to be met by different policy developments and actions.

It should also be noted that it is also important to recognise the role of the CCIs as they are and not reduce them to being mere instruments in innovation processes for other industries. In fact, having a strong CCI

²⁰ <https://knowledge-bank.ekipengine.eu/wp-content/uploads/2025/12/Stockholm-SWE-City-Poster-Template-Final.pdf>

²¹ <https://ekipengine.eu/cci-many-inventions-but-little-innovation/>

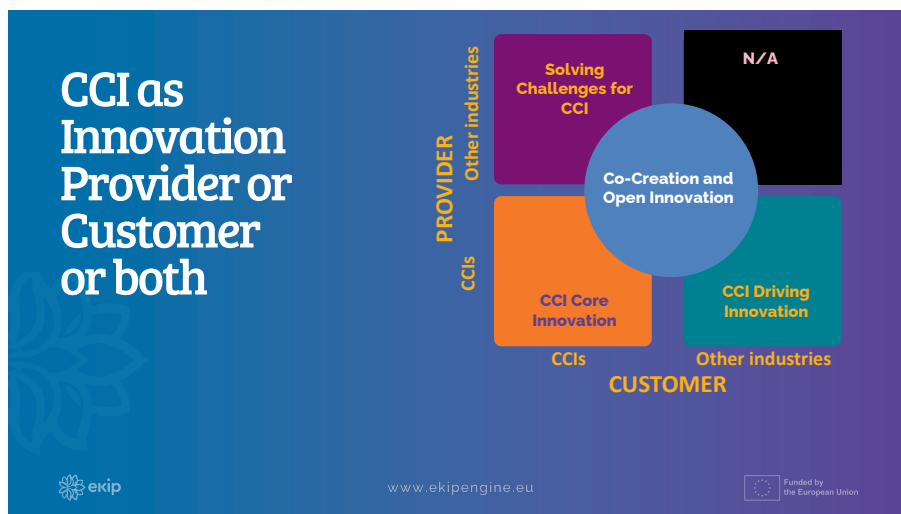
²² <https://www.forbes.com/councils/forbesnonprofitcouncil/2024/12/19/co-creation-unlocking-the-power-of-collaborative-innovation/>

²³ OECD (2021), “Economic and social impact of cultural and creative sectors: Note for Italy G20 Presidency Culture Working Group”, OECD Local Economic and Employment Development (LEED) Papers, No. 2021/11, OECD Publishing, Paris, <https://doi.org/10.1787/4d4e760f-en>.

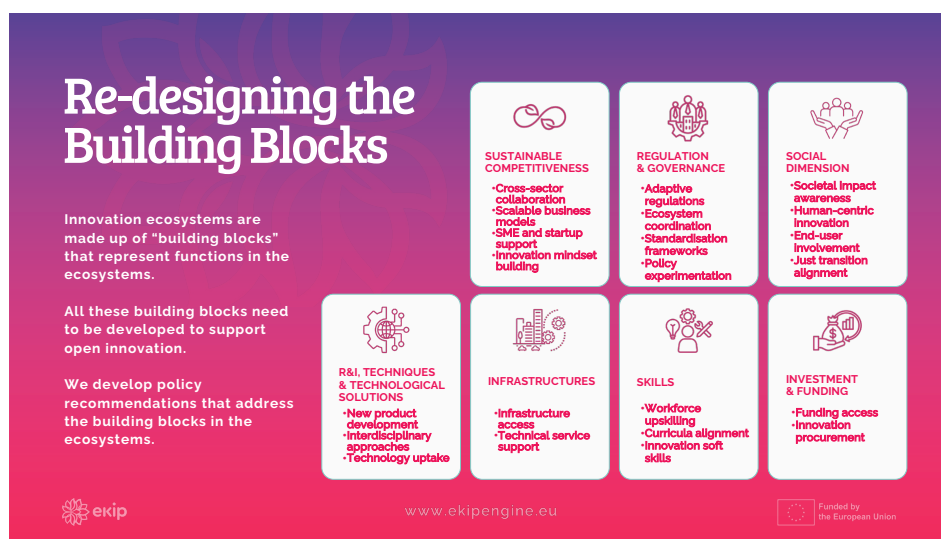
²⁴ <https://www.unesco.org/en/articles/cultural-and-creative-industries-cci>

²⁵ <https://www.consilium.europa.eu/en/european-council/strategic-agenda-2024-2029/>

foundation with many skilled individuals and organisations is essential for innovation processes, as is the constant recruitment of new people.



Common for all the perspectives described above is a need for policy development to change the how innovation ecosystems are organised and operate. This involves developing the innovation ecosystem building blocks such as infrastructures and networks, investment and funding, regulations and governance, how to work with skills and competence development, and techniques and technologies. In addition, sustainable competitiveness needs to be considered as well as the social dimension.



There is also a need to develop and refine the language used when talking about innovation and the CCIs. This especially evident when looking into how innovation and CCI are handled within policies related to innovation and culture respectively²⁶.

For example, the new strategy for the Arts Council England (2020-2030) points out that “risk taking and innovation are critical to the success of the cultural sector²⁷”. However, their actions point at continuing funding CCIs although accepting that not all investments will be immediately successful, which is in line

²⁶ <https://ekipengine.eu/understanding-cultural-policies-and-innovation-policies-differences-overlaps-and-societal-benefits/>

²⁷ <https://www.artscouncil.org.uk/our-strategy-2020-2030>

with the cultural policy mindset. One alternative and more innovation-oriented way to address the need to increase innovation would be to support open innovation processes, where several cultural organisations could work and learn together with other stakeholders, thereby reducing the risk and enhancing to chance to success.

ekip as a collaborative foresight-driven policy development platform is designed to boost the progress of innovation capacity in ecosystems to include the CCIs. One key concept is Open Innovation that when implemented enables CCIs to contribute to and benefit from early stages of innovation processes, supporting the European Strategic Agenda. Now *ekip* promotes Open Innovation 3.0, building upon the prior two versions but with two major additions: (1) a strong emphasis on CCI engagement to enhance innovation work in all kinds of business areas, and (2) foresight-driven policy recommendations targeting innovation policies to make this possible and feasible. However, this does not take away the importance of the other ways of combining innovation and the CCIs and providing means to support them.

One important measure to enhance this process is to support innovation intermediaries at different levels. They act as agents that connect actors, resources and perspectives across the innovation system, translating high-level visions into practical action by linking policymakers, industry, research and civil society. As challenge-driven innovation gains importance, these boundary-spanning organisations are increasingly expected to steward complex multi-actor processes, align transformative goals and embed societal challenges into regional development pathways²⁸.

Universities have important roles to play in relation to such intermediaries such as instigators and as provider of new knowledge, in line with the 4th generation university concept²⁹. Perhaps their most important role is to find new ways to measure the impact the CCI have on other industries, driving their innovation processes and contributing to Open Innovation processes.

"Finally, the EU has an opportunity – and a responsibility – to speak more boldly on the global stage of the climate and sustainability agenda about the vital role of the CCS as a formidable driver of change capable of influencing behaviours, shifting norms and catalysing systemic transformation. The EU must strive to speak with one unified voice, championing the contribution of the CCS in a consistent manner as a core enabler of the global transition towards a more sustainable future. Europe has a strong platform from which to lead by example – now is the time to use it." From "Creative Shifts – Empowering Culture for Sustainable Living"³⁰, p. 79)

²⁸ <https://www.interregeurope.eu/news-events/news/innovation-intermediaries-in-challenge-driven-ecosystems>

²⁹ <https://4thgenuniversity.com>

³⁰ European Commission: Directorate-General for Education, Youth, Sport and Culture, Creative shifts – Empowering culture for sustainable living, Publications Office of the European Union, 2025, <https://data.europa.eu/doi/10.2766/6678618>