



Up2Circ – Boosting the Uptake of Circular Business Model, Product and Process Innovation

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Sectorial catalogue

CCIs



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1. Introduction to the sector

Cultural and Creative Industries (CCIs) covers the following industries: architecture, archives, libraries and museums, artistic crafts, audiovisual (including film, television, video games and multimedia), tangible and intangible cultural heritage, design (including fashion design), festivals, music, literature, performing arts, (including theatre and dance), books and publishing, radio, and visual arts.¹

At the end of 2019, the Cultural and Creative Industries were among the heavyweights of the European Union's economy, but the COVID-19 crisis will have a massive and lasting impact on the sector's entire value chain.

By 2020, the European cultural and creative economy had lost around 31% of its sales.

With estimated revenues of €643 billion and generated added value of €253 billion in 2019, the cultural and creative industries (CCI) accounted for 4.4% of EU GDP in terms of sales, an economic contribution greater than that of telecommunications, high tech, pharmaceuticals or the automotive industry.

Between 2013 and 2019, total CCI sales had increased by €93 billion, representing growth of almost 17% over the period.

By the end of 2019, over 7.6 million people in Europe were working in the cultural and creative economy, and the sector had created over 700,000 jobs in 7 years (+10%), including authors, performers and other creative professionals.

Over the period, almost all 10 CCI sectors enjoyed solid, continuous growth, albeit at different speeds: over 4% per year for video games, advertising, architecture and music, between 0.5% and 3% for audiovisual (AV), radio, visual arts, performing arts and books. Only the press saw a sharp drop in activity (-1.7%), mainly due to a difficult transition to digital.

In 2020, the European cultural and creative economy lost around 31% of its sales: With a 31% drop in sales, the cultural and creative economy is one of the sectors most affected by the Covid crisis in Europe.

¹ Source: https://single-market-economy.ec.europa.eu/sectors/cultural-and-creative-industries_en

2. Challenges for the sector with regard to sustainability demands

While the largest EU-28 countries (France, Germany, Italy, Spain and the UK) remain the center of gravity of the European cultural economy, accounting for 69% of revenues, Central and Eastern European countries are posting the most dynamic growth rates.

Nevertheless, digital transformation is provoking considerable shocks, and an asymmetry in the balance of power with global platforms that may jeopardize the sector's financial viability, employment, innovation and future investment.

The ever-accelerating digitization of consumption patterns raises a number of challenges for cultural players, from the remuneration of rights holders to the smooth running of markets and the fight against the piracy of protected works.

Nevertheless, the last ten years have seen an intense dynamic of innovation: diversification of distribution methods, transformation of cultural experiences, deployment of digital offerings, development of new content... This innovation has been driven by an intensification of online consumption: in 2018, 81% of internet users in the EU used it to listen to music, watch videos or play games online - more than for e-commerce or social networks.

Today, the cultural and creative industries (CCI) face considerable challenges linked to the digital and ecological transition, and to the hyper-competition created by the formation of global digital players. Transformation of uses, increased competition from international players, upheaval in modes of creation, production and distribution are all issues that reflect common problems and call for the development of cross-functional actions aimed at CCIs.

One example of circular economy principles in the arts is the upcycling of waste materials into new artistic creations. This approach not only reduces waste but also promotes creativity and innovation. Many artists are already incorporating upcycling into their work, creating stunning pieces of art from materials that would otherwise be discarded.

Another way creative industries can promote sustainability is by embracing the concept of "closed-loop" systems. This involves designing products and materials that can be reused or repurposed after their initial use, rather than being discarded. For example, fashion designers can create clothing made from recycled materials, which can be further recycled at the end of their useful life.

The circular economy can also be applied to the production and distribution of artistic content. For example, music and film production can be made more sustainable by reducing energy consumption and using eco-friendly materials in the production process. Digital distribution can also help reduce waste by eliminating the need for physical media, such as CDs and DVDs.

Furthermore, the arts can also help raise awareness and educate the public about the importance of sustainability. Art exhibitions, performances, and other creative works can be



used as platforms to communicate important messages about the environment and inspire action towards a more sustainable future.

In the visual arts, upcycling has become a popular trend. Many artists are using discarded materials like old newspapers, bottle caps, and other waste to create stunning works of art. For example, the artist Tom Deininger creates sculptures made entirely from recycled materials, such as old toys and plastic packaging.

The film industry is also embracing sustainable practices. For example, the set of the movie “Mad Max: Fury Road” was built entirely from recycled materials, including old cars and scrap metal. The crew also used renewable energy sources and recycled water on set.

3. CE opportunities for the sector

Several major transformation dynamics are emerging in this sector:

- Relocating activities: this involves shortening the distances travelled. At the same time, this will make culture a driving force for local transition, through all its needs: purchasing, food, buildings, energy and transport. In the book industry, depending on the publisher's choices, the number of kilometers traveled by a book between the place of paper production, the printer and the place of storage can be divided by 20, or even more.
- Systematize the sharing of tours, exhibitions and broadcasts between several local partners, multiply the number of performances or activities by professionals in each region (masterclasses, collaborations with local artists, conferences, cultural actions, etc.), for example during residencies. Finally, slow down by encouraging the re-creation of works abroad rather than touring them - particularly for theater and dance.
- Reducing the scale of events: the attractiveness of projects, the driving force behind cultural development in recent decades, has led to the "eventization" of culture, with the end result being a permanent growth in audience size. The more visitors a cultural event attracts, the more international its audience, the more spectacular its programming must be to stand out from the crowd... and the heavier the carbon footprint. It is entirely possible to produce a quality exhibition that combines a rich scientific and cultural content with a controlled ecological footprint, notably by reducing the number of works on display and the distance they travel. The result is a significant reduction in energy consumption.
- Ecodesign: the creation of any work of art or scenography requires energy for its inputs (materials), for its transformation processes, for its distribution (notably because of the volumes and masses moved during possible itineraries), as well as during its end-of-life (waste and other



"negative externalities"). These needs must be documented in terms of quantities and impacts, to enable creators and the institutions that support them to choose the most virtuous and resilient practices.

- The most carbon-intensive technical equipment, such as large gasoline-powered generators, should be avoided. Increasingly power-hungry sound systems are unsustainable, as is the race to stream works in ever-higher formats.

4. Overview of tech-savvy SMEs that develop/offer solutions to increase circularity in the sector

While technologies already exist to increase circularity in the sector, such as AI, AR/VR or even 3D for design or manufacturing, blockchain or big data for event promotion or marketing for example, increasing the sustainability of iCCs is not primarily linked to technological solutions, but more on organizational changes, the development of new services and experiences, and the digitization of current offerings.

As already mentioned, the major transformations underway to decarbonize the sector involve training, the relocation of certain activities, production downsizing, downscaling, the integration of mobility issues, recycling and eco-design.

In France, for example, specific calls have been launched to support the industry's digital and ecological transitions:

- for the development of "innovative ticketing solutions" that integrate and mutualize the interests of stakeholders, making it possible to book and pay for artistic and cultural offerings;
- to encourage the emergence of "green alternatives" for projects in the circular economy;
- for the development of "augmented live performance experiences": new services and dematerialized distribution systems based on innovations in technology, usage, organization and business models;
- for the development of solutions for the "digitization of heritage and architecture" to renew and increase access to a wide variety of heritage and architecture, particularly at a distance.

Of course, other initiatives exist, such as OSCaR, co-funded by the Creative Europe Programme : from December 2019 to December 2021, the OSCaR (Opera Sceneries Circularity



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and Resource efficiency) project has brought together leading European players who have decided to collaborate together to explore new ways of designing, producing and managing opera sets according to circular economy principles.

It is important to note that Cultural and Creative Industries can be resource intensive and subject to changing trends, resulting in a large environmental impact.

CCIs are a main driver of innovation to other industries: they cover a large number of distinct value chains – such as design, fashion, audiovisual, cultural heritage, video games, architecture, and performing arts – with a strong innovation capacity and close connection to other sectors of the economy, through creativity, design and new organisational processes and business models.

5. Links to sector specific online contents

- EY - Rebuilding Europe, *2ème Panorama européen des industries culturelles et créatives* (2021)
- Economic Donut, Medium, *Circular Creativity: How the Arts are Redefining Waste* (2022) <https://medium.com/@economicdonut/circular-creativity-how-the-arts-are-redefining-waste-a4967c5eea82>
- <https://theshiftproject.org/article/decarboner-culture-rapport-2021/>



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