

Europe's key public infrastructure for cultural heritage data

Twenty years of European cooperation and the next challenge ahead

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The digital transformation of the cultural heritage sector has been a key cultural policy goal in the European Union over the past twenty years. At the core of these efforts is Europeana: one of Europe's most significant initiatives for digital cultural heritage.

Over the past two decades, Europeana has evolved alongside the EU's cultural and digital policy ambitions, with the support of the European Commission, Member States and cultural heritage institutions across Europe. What began as a European endeavor to build a digital library has evolved into Europe's public infrastructure for cultural heritage data, supporting the sector's digital transformation, innovation and, increasingly, Europe's ambitions in the age of AI. In 2022, Europeana entered a new phase as the steward of the common European data space for cultural heritage, an EU flagship central to the European strategy for data.

Germany has been a driving force throughout this journey. Through the Deutsche Digitale Bibliothek (DDB) and its long-standing partnership with Europeana, it has helped shape Europe's digital heritage infrastructure, turning a shared European vision into practice.

Looking back at over a decade of partnership

Germany has been one of Europeana's strongest supporters since its establishment. In 2005, together with other European leaders, then German Chancellor Gerhard Schröder called on the European Commission to create a publicly funded European digital library to safeguard and make Europe's shared cultural heritage accessible online.

The initiative came at a pivotal moment. As large-scale commercial digitisation projects like Google Books were gaining traction, Europe chose to invest in a publicly governed infrastructure, ensuring that digitisation and access remained aligned with European values and in the public interest. Europeana was born from this political, social and cultural ambition.

The evolution to the data space in 2022 reflects a broader policy shift. The focus is no longer only on digitising and providing access to cultural heritage, but also on enabling its reuse, recognising its strategic value in an increasingly data-driven society. As Artificial Intelligence (AI) becomes a powerful and pervasive technology, and as Europe seeks greater digital sovereignty, cultural heritage data has become a strategic resource – one that fosters innovation, competitiveness and opens new opportunities for trustworthy AI.

Today, the common European data space for cultural heritage brings together more than 3,200 contributing institutions and over 62 million assets, of which around 80% allows for some form of reuse. This data is reused in education, research, web applications, video games, natural language processing and, increasingly, AI.

Beyond democratising access to high quality and trusted cultural heritage data, the data space advances digital transformation in EU Member States and cultural heritage institutions through capacity building, policy support and networking. This includes enabling the responsible adoption of new technologies like AI while ensuring institutions retain control over their data, and fostering international collaboration to address shared sectoral and societal challenges.

Throughout this evolution, the Deutsche Digitale Bibliothek (DDB) has played a key role. The launch of the public beta version of the DDB portal in 2012, alongside its designation as Germany's Europeana accredited national aggregator marked an important milestone. Thanks to the DDB,

Germany's local, regional and national collections opened up to Europe, enabling wider access, enjoyment and reuse. At the same time, German institutions became part of a wider European professional community, helping to develop and adopt common approaches that support interoperability, accessibility and collaboration.

Today, Germany consistently ranks among the top contributors to Europeana and the data space both in terms of quantity and quality. Thanks to the DDB, more than 310 German institutions make available over 8 million items in the data space. One third is openly licensed, reflecting Germany's long-standing commitment to open access. This collaboration extends beyond data; the Europeana Network Association brings together over 350 members from Germany, who actively contribute to collaborative change and shared practices.

While the uptake of common frameworks and standards for digitisation and data sharing remains uneven across Europe, and emerging technologies like AI continue to raise new challenges, these efforts in Germany and across other Member States have helped build a truly pan-European infrastructure, professional community and audience.

In the age of AI, this European dimension is ever more important. Interconnected, multilingual and trusted high-quality cultural heritage data can help ensure that Europe's knowledge, cultural perspectives, linguistic diversity and shared values are reflected in the digital technologies that increasingly shape our societies.

Looking ahead: shared opportunities and challenges

Today, Europe once again stands at a pivotal moment, similar to the one that led to the creation of Europeana in 2005. AI is rapidly reshaping how knowledge, culture and history are created, accessed, interpreted and reused. For the cultural heritage sector, which has long served as a trusted and accountable steward of public knowledge and culture, this presents both significant opportunities and complex challenges.

Over the past year, policy discussions and collective work across the sector have highlighted a growing consensus: cultural heritage is not only affected by AI but can also make an active contribution to its development. By providing trusted, multilingual and well-documented data and drawing on its long-standing stewardship practices, the sector can help shape more trustworthy and publicly accountable AI.

As AI becomes an increasingly pervasive technology, important questions arise about the knowledge they are trained on, the values they reflect and the interests they serve. At the same time, technological power is highly concentrated in a small number of global actors, reinforcing the need for Europe to invest in trusted digital public infrastructures that strengthen its technological sovereignty and competitiveness.

Europe is not starting from scratch. Through Europeana and the data space, Europe has already built a trusted, multilingual and interoperable public infrastructure. Building on this foundation, the EU has an opportunity to advance a distinctly European approach to AI – one that places the public interest at its core. This vision is further developed in the paper 'The case for Public AI: making it happen with cultural heritage' recently published within the data space.

The analogy to public service media is instructive here: just as public broadcasters were established to ensure that access to information was not left solely to commercial interests, Public AI seeks to ensure that access to knowledge and culture is not shaped exclusively by AI systems optimised for private interests.

This vision does not come without challenges. From expanding digitisation, improving data quality and addressing historical biases in collections to reducing the environmental impact of AI, important policy questions remain to be addressed. Through the data space, Europeana is supporting the sector in tackling these challenges by pooling intelligence, fostering collaboration and building practical capacity.

The success of the data space ultimately depends on the continued commitment of Member States, as it has been since Europeana's inception. Recognising this, the European Commission's 2021 Recommendation calls on Member States to step up digitisation efforts, make more high-quality

content available through the data space, and develop national strategies that support the uptake of advanced technologies like AI. It also recommends that data resulting from publicly funded digitisation projects is made available through the data space, reinforcing its role and mandate as a shared European infrastructure in the age of AI.

Europe responded collectively to the challenges of digitisation and access twenty years ago. Today, AI calls for the same ambition, common vision and spirit of cooperation. The partnership between Europeana and the Deutsche Digitale Bibliothek demonstrates how sustained European collaboration, political leadership and a shared agenda can deliver the trusted and competitive public infrastructures needed not only to preserve and share our cultural heritage, but also to ensure it continues benefitting society.

Faced with the complex challenges – but also unprecedented opportunities – presented by AI, continued cooperation between Germany, through the leadership of the DDB, Europeana and the common European data space for cultural heritage, as well as with other EU Member States and initiatives, will remain essential. AI is not a national challenge, but a European and global one. Responding to it is not simply a matter of technological adoption: it is also a question of democratic responsibility and the long-term safeguarding of Europe's cultural sovereignty.