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Enabling the public sector



Platform



Germany



COVID-19 pandemic



Creating an open-minded environment



with public sector and external partners



Scale-up across Europe envisaged



(In this specific area)

# A rescue operation powered by AI

For many of us, a satisfying life involves enjoying various forms of art. A vibrant cultural and creative sector is an essential part of our communities.

The COVID-19 pandemic put all this at risk when lockdown measures brought so much cultural life to a standstill. From one week to the next, our cultural industry was on the brink of losing its livelihood, with irreparable damage to its people and ecosystem.

To help this industry survive the lockdown period, many EU Member States decided to compensate artists' lost income via public money. But a challenge remained: how can governments distribute these funds fast and to those in legitimate need? And – even more tricky – what does it take to make technological innovation eligible for adoption by the public sector?

## Digesting massive amounts of information – fast

The German government set up a special fund of EUR 2.5 billion for cultural events, and tasked the City of Hamburg to take the lead in enabling distribution throughout the country. The idea was to quickly build a scalable federal platform where artists anywhere in Germany could request and receive short-term financial aid in lieu of postponed cultural events.

The City of Hamburg's finance ministry is well known to embrace IT innovation, having established a digital factory and innovation

lab. This lab was now entrusted with building the support application platform. The city's relationship with SAP spans more than 20 years, making the selection of SAP Business Technology Platform (BTP) as the foundation for this project an obvious choice.

The result was an intuitive self-service AI platform for a digitalised aid-application process – covering all steps from initial request, validity checks, objection handling to payment. Other external partners included Dataport and d-Labs, responsible respectively for the back-end integration, running the solution and providing technical support, as well as for building the landing page.

Emphasising efficiency, the platform was completed in just three weeks.

## AI as the key to speed

SAP BTP is an innovation platform optimised for SAP applications in the cloud that brings together many services in one unified environment. The true innovation for the new solution, however, was the integration and use of Artificial Intelligence (AI) abilities to speed up processes in public sector administration.

AI-based capabilities, such as SAP BTP Document Information Extraction and Business Entity Recognition, allowed the authorities to automate the process of evaluating applications. In fact, it is the use of AI that made the new support application platform a feasible solution to begin with: Imagine the time and staff it

would have taken to check 'by hand' whether uploaded data (e.g. proof of event cost, identity) matched information on the aid request.

The new platform also integrated the existing core finance software – SAP S/4HANA – to process aid payments and German federal applications (e.g. the federal tax office authentication service) to prevent fraud. Moreover, live reporting provided both state authorities and the federal government with important information in real time on requested budget amounts and application status.

The result stands for itself: by end 2022, more than 2.7 million documents had been automatically evaluated and classified for a total of 47,000 cultural aid applications filed on the platform.

### It took a pandemic...

Many actors handling sensitive personal data may be hesitant to adopt innovative solutions. And a proliferation of strict regulations, privacy rules and ethical questions around AI makes compliance difficult for innovators. Considering these complexities, the adoption of AI by public authorities is not a straightforward matter.

It took a state of urgency and higher-order priorities to change this mindset. The fact that after the lockdowns cultural life in Germany could resume so fast proves that providing quick help by harnessing AI was the right decision.

Furthermore, it is crucial that no shortcuts were taken in upholding all privacy laws and ethical principles. The build-up of the AI platform was

accompanied by intensive discussions between federal representatives, state representatives and SAP. Bringing both legal and IT experts to the same table during the decision-making process made it possible to showcase technological opportunities and evaluate options together – and for authorities to give direct feedback, express concerns and share own ideas.

### ... to make AI acceptable in public administration

The success of this AI platform has made it a best-practice for helping people in need in other sectors. In fact, it provided a real boost for digitalisation, agility and resilience for other funding programmes appointed by the German government, such as more recently the €1 billion Federal Energy Fund for Culture<sup>1</sup>. As of today, AI capabilities are implemented in eight different scenarios to automate and speed up the processing of any kind of fund request.

If we maintain this momentum, generative AI will help develop even wider-reaching solution capabilities, notably to improve interaction with its applicants. AI technology based on large language models will improve communication by quickly turning unstructured input into easy-to-understand content.

There are two helpful take-aways from SAP's experience with AI in the public sector: First, the model of cross-discipline cooperation that allowed us to reconcile the use of AI with ethics and privacy protection should become standard procedure. Second, a common legal framework on AI without stifling innovation, would facilitate AI uptake looking forward.

The pandemic may be over, but we are living in a disruptive age. We should not wait for the next crisis to push public service beyond their limits, but future-proof our innovation process now. It is time to put AI to work in our public sectors, transparently with high standards and for everyone's benefit.



<sup>1</sup> Kulturfonds Energie des Bundes

