Fritzi Köhler-Geib: Efficiency, resilience and digital horizons - perspectives and challenges for the public sector

Keynote statement by Dr Fritzi Köhler-Geib, Member of the Executive Board of the Deutsche Bundesbank, at the Digital Excellence Forum, Berchtesgaden, 31 January 2025.

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Check against delivery

1 Introduction

Against the backdrop of a changing geopolitical environment, the relevance of digital advances and innovations has further increased.

I have just returned from a discussion among policy makers and researchers in Washington D.C., and many of the exchanges touched on the economic outlook in a potentially more fragmented world economy.

For both reasons, I am delighted to be part of this conference about digital excellence here in Berchtesgaden.

Representing the Bundesbank on this panel, I would like to contribute three considerations from a public sector perspective.

While there is a lot of discussion about digitalisation in Germany and the need to catch up in particular in the public sector, there are encouraging examples. The Bundesbank is at the forefront of public sector digitalisation: it is using artificial intelligence in multiple ways and is among the first public institutions to move seriously into the public cloud.

International financial architecture, markets and instruments are changing due to ongoing economic fragmentation and technological advances. Working on the digital euro is a way for the European Central Bank System to prepare for those changes and to take an active role.

Given the geopolitical environment and growing cyber risks, the Bundesbank is investing in its cyber resilience, including the setting up of a new governance model for IT security.

Allow me to expand on that.

2 Innovation

The Bundesbank is breaking new ground by proactively using the public cloud. This is a significant step forward for a public sector institution. As a first step, our innovative, high-performance and secure eBusiness portal for our currently over 180,000 customers—NExt—went "live" in the cloud. Customers are banks, insurances, corporates or other public sector institutions.

At the same time, we built up a Bundesbank-owned private cloud in our computer centres for particularly sensitive data. Through our hybrid cloud strategy and investments in technological trends like artificial intelligence, we are ensuring our readiness for the challenges of today and tomorrow.

Artificial intelligence will help us to expand our economic analyses and improve our understanding of the effects of various policy measures on inflation, employment and economic growth.

It also plays a pivotal role in our risk analysis efforts.

Take, for example, the risk controlling function and its analysis related to the many counterparties with whom the Bundesbank conducts financial transactions or purchases securities. By combining diverse sets of data and information, artificial intelligence helps us identify potential financial difficulties of a counterparty at an early stage. Given the sheer volume and complexity of the data involved, collecting and evaluating this information manually would be nearly impossible.

Through the strategic application of artificial intelligence, we can detect risks more quickly and with greater precision, allowing us to take timely and informed action.

We are also using an artificial intelligence platform that allows access to the latest language models in a secure environment. It is a chatbot that works in a very similar way to ChatGPT—only ours has different requirements, for example in terms of data governance. The requests are neither stored in the cloud nor used for training purposes.

3 Future of Finance

The international financial architecture, markets and instruments are currently changing due to ongoing economic fragmentation and technological advances.

Against this backdrop, there are several reasons in favour of the digital euro.

The first reason is related to autonomy and sovereignty. So far, there is no sovereign pan-European solution for payment in the digital space. As a result, there is a risk that Europe will become overly dependent on US providers for critical infrastructure. A digital version of the euro will facilitate a European-based ecosystem around payments.

Another reason is related to efficiency. We are seeing very strong fragmentation in the European payment market and increasing concentration through international card systems that are all US-based. The digital euro establishes standards that simplify competition.

Lastly, we also have to consider resilience. With the digital euro, we are safeguarding ourselves against competing currencies and stablecoins. The digital euro would be the next step in the development of the euro and would bring central bank money into the digital age.

The Bundesbank is a key player in the development of a digital euro thanks, amongst other things, to its IT expertise in payment systems and in the area of tech trends.

4 Cybersecurity

Cybersecurity is a decisive factor for the stability of the global economy and the functioning of our modern society. Operators of critical infrastructure, such as the Bundesbank, are under growing pressure from targeted cyber attacks.

Of course, the Bundesbank, too, is subject to the most common types of attacks like phishing or denial of service attacks. To give you an example: on average, we receive a phishing attack every 5 minutes.

That's why the principle "Secure by Design" is of crucial importance from the very beginning when developing and operating IT solutions and services.

The Bundesbank has just rolled out a new governance model for IT security in order to create the basis for effectively counteracting growing threats.

Concretely, we are appointing a designated "security architect" in each Bundesbank department who serves as the go-to person for all architecture-related security concerns. The security architect will support product owners and agile teams in implementing security processes and regularly evaluating the impact of security-relevant information.

This role is complemented by "security champions" within each product team. These champions will help maintain the required level of information security throughout the entire product lifecycle, including regular checks for new vulnerabilities.

The governance model includes not only dedicated roles and responsibilities but also professional development and training measures for all staff in order to sensitise them to the fact that IT security is a critical discipline for everyone.

5 Conclusion

To conclude: By keeping up with technological developments, playing an active role in providing future forms of payment and of course safeguarding our security, the Bundesbank contributes to the competiveness of the German and European economy.

This is more relevant than ever in the current geopolitical context.

That's why I'm thrilled to participate in this excellent conference and exchange.