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v2

Resilience and Multilateralism: A Pragmatic Approach to Digital Sovereignty

The "Food4Thought" series is our contribution to elevating the discourse on digital sovereignty and its associated challenges. This collection of texts is designed to provoke thought, encourage dialogue among decision-makers, and support informed decision-making in an increasingly complex digital world. Our aim is to provide a platform for the exchange of ideas, thereby creating a guide for shaping a sovereign and collaborative digital future.



Introduction: Contextualising the Digital Sovereignty Discourse

Following our recent Digital Sovereignty Roundtable at the GovTech Campus in Berlin, we would like to summarize the substantive discussions. In this post, we thank all participants for their valuable contributions and acknowledge that any errors or omissions are ours alone.

As discussed in the December session [\[link\]](#), the rapid pace of digital transformation and the changing geopolitical landscape have brought the importance of digital sovereignty into focus. As democratic structures grapple with these changes, the need to strengthen IT security without compromising openness to global innovation is evident. The following reflects the conversation, centred on the premise of the need to balance resilience with the imperative for multilateral cooperation to achieve a pragmatic approach to digital sovereignty.

Background: The Simultaneous Imperatives of Resilience and Multilateralism

The Berlin Dialogue highlighted the need for a dual approach to digital sovereignty. This includes resilience, the ability to ensure continuity in times of adversity, as well as multilateral engagement, cooperation across organizations, borders and continents, which is particularly important for Germany and Europe. The region can serve as a space to balance the interests of global technology leaders and guide the construction of technology ecosystems that are resilient, equitable, and consistent with democratic values. Germany's competitive advantage lies in its ability to innovate and create trusted networks. By capitalizing on these strengths, the country can navigate the complexities of digital sovereignty while fostering an environment conducive to technological progress. Germany and Europe are uniquely positioned to ensure that technology serves the public good. As the World Bank's Arturo Franco noted, "Germany can play a role in mediating between the big giants to build this technology stack in the right way."

The following sections explore how we can navigate the complexities of digital sovereignty by building trust, good public governance, balancing functionality, and autonomy, fostering innovation ecosystems, and moving from thinking to action.

1. Earning trust through multilateral engagement

Germany's historical ability to build trust through effective international networks was a notable topic of discussion. This trust has been cultivated over the years through diplomatic ties, trade relations, and cultural exchanges, enabling Germany to play a significant role on the global stage. However, the advent of the digital age has brought unprecedented challenges and

opportunities, making it imperative for Germany to adapt its strategies to remain a trusted partner. In today's digital landscape, characterized by rapid technological advances and shifting geopolitical dynamics, trust is becoming a critical yet elusive asset. The focus is on fulfilling the unwritten social contract with citizens, which includes delivering tangible results and maintaining a high level of transparency in government operations. In doing so, Germany can maintain and strengthen the trust of its citizens and international partners alike, recognizing that in the digital age, trust is both a valuable currency and a fundamental component of effective governance and international cooperation.

2. Governmental Leadership for Dynamic Digital Ecosystems

The role of public administration in the digital domain goes beyond the mere production of technological solutions with its own resources. It is fundamentally about facilitating and overseeing a robust digital infrastructure that not only meets today's needs but is also flexible enough to adapt to future challenges. This role recognizes that achieving such a broad goal requires a balanced approach that combines internal development with strategic external partnerships. The modern digital landscape demands agility, innovation and resilience from government, and requires it to keep pace with the latest global technologies.

Understanding what is core to government functionality in this context involves identifying the essential services and operations that must be efficiently managed and delivered to ensure the welfare and security of its citizens and government itself. These include, but are not limited to, public health, education, security, and economic stability. To support these core functions, governments must leverage digital technologies that improve their efficiency, accessibility, and reliability. This means adopting cloud computing for flexible data management, artificial intelligence to improve decision-making processes, blockchain for secure and transparent transactions, and advanced cybersecurity measures to protect sensitive information.

Germany's handling of the COVID-19 pandemic serves as a pertinent case study of its practical stance on digital governance, revealing both successes and shortcomings. The country demonstrated adaptability during an unprecedented global health emergency by incorporating services from international technology companies. This strategy facilitated the maintenance of vital public services while maintaining public health and safety measures. Conversely, the pandemic also highlighted certain shortcomings. Concerns about compliance with the General Data Protection Regulation (GDPR) forced students to rely on government-provided solutions for online schooling, which proved inadequate. This situation highlighted the importance of leveraging external technology expertise and solutions to augment internal capacity and address pressing challenges.

The role of government in the digital age is to act as a strategic facilitator and manager of a dynamic digital ecosystem. This requires a deep understanding of the evolving technology

landscape, a commitment to investing in digital infrastructure that can support core government functions, and the flexibility to form strategic partnerships with external entities. By doing so, governments can ensure that they remain effective stewards of the public interest in an increasingly digital world, capable of responding to both the challenges and opportunities that arise.

3. Balancing Functionality and Autonomy

The debate about digital sovereignty encompasses a wide range of concerns, but at its core is the way in which a nation procures and uses its digital infrastructure. Achieving digital sovereignty requires a nuanced and balanced approach that ensures that digital infrastructure is not only available, scalable, and efficient, but also adheres to the highest standards of security and integrity. This balance is critical because digital infrastructure underpins a wide range of essential services, from public administration and healthcare to education and national security.

However, it is widely acknowledged in this discourse that not all objectives can be achieved simultaneously. The digital technology landscape is characterized by rapid evolution and complex challenges, requiring a pragmatic approach where priorities must be set based on strategic importance. This requires a careful assessment of the nation's immediate and long-term needs, as well as global technology trends and threats. The federal government is therefore faced with the ongoing task of identifying these priorities and adjusting its focus accordingly.

In certain scenarios, this may mean that the ability of a country to control its own digital ecosystem might temporarily take a back seat. For example, if the scalability of digital services or the immediacy of service delivery to citizens becomes paramount, compromises may be necessary. This is particularly true in situations where the use of international cloud platforms or other technologies can bring immediate benefits in terms of efficiency, scalability and innovation, even if this means relying to some extent on external providers.

Such decisions are not taken lightly and require a comprehensive assessment of risks and benefits. The goal is to ensure that the government, in its pursuit of digital sovereignty, does not inadvertently hinder the development or deployment of digital services that are critical to the nation's well-being and economic competitiveness. This dynamic adaptation and prioritization are essential to navigate the complex interplay between maintaining control over digital assets and harnessing global digital innovation for national benefit. It underscores the importance of strategic flexibility in the pursuit of digital sovereignty, emphasizing that it is both a goal and a guiding principle that must be balanced with other critical national interest objectives.

4. Innovation ecosystem and skills development

A skilled workforce and a dynamic innovation ecosystem are key elements in maintaining and enhancing Germany's position in the digital age. A comparison with Germany's dominance in theoretical physics in the early 20th century provides a compelling historical analogy, suggesting that the principles that led to past successes can be applied to today's digital landscape. Just as Germany's leadership in physics was built on a foundation of rigorous education and pioneering research, so too must its strategy for digital excellence be based on a deep commitment to education and research in key technology areas.

The nature of digital transformation goes beyond mere technological advancement; it is a multifaceted human endeavour that involves changing societal behaviours, economic structures, and even cultural norms. That is why it is critical for public institutions not only to support, but to actively lead initiatives aimed at increasing digital literacy and fostering critical thinking skills among the population. This requires a holistic approach to education that integrates digital literacy at all levels, from primary education to higher education and continuing adult education programs. To cultivate a thriving innovation ecosystem, Germany must invest in creating an environment that encourages experimentation, entrepreneurship, and a seamless transfer of knowledge between research institutions and the private sector. This requires not only financial investment, but also the development of policies that facilitate collaboration across sectors and borders.

In addition, leading in key technology areas such as artificial intelligence, cybersecurity, quantum computing, and blockchain requires a deep understanding of both current technological capabilities and future potential. This understanding must be fostered through dedicated research initiatives, public-private partnerships, and international cooperation to ensure that Germany remains at the forefront of technological innovation. By prioritizing education and research, fostering an innovation-friendly environment, and promoting digital literacy and critical thinking, Germany can secure its leadership in the digital age. This strategy not only ensures technological progress, but also ensures that such progress benefits society, strengthening the human aspect of the digital transformation.

5. Creating tangible outcomes

The exploration and development of Proof of Concepts (PoCs) is critical to moving from theoretical discussions to practical applications in the area of digital sovereignty. These PoCs serve as practical examples of how to address the complexities of the digital landscape and implement strategies for a secure digital ecosystem. Within the Digital Sovereignty Talks, there is a focused effort to advance these PoCs to demonstrate real-world applications of digital

sovereignty concepts. This approach not only facilitates a deeper understanding of digital sovereignty implementation, but also fosters innovation and collaboration through the sharing of knowledge and experiences. Through these real-world examples, stakeholders can gain insights into overcoming challenges and identifying best practices, thereby contributing significantly to the development of a resilient digital environment.

Conclusion: A pragmatic approach to digital sovereignty

This article, inspired by the discussions at GovTech Campus Berlin, presents a pragmatic approach to achieving digital sovereignty. It underscores the imperative for both public institutions and private organizations to prioritize the integration of resilience into their digital infrastructures. This resilience is not only about fortifying systems against cyber threats, but also about ensuring that these systems can adapt and evolve in the face of rapidly changing digital landscapes. It also underscores the need for a willingness to engage in international technology cooperation. In the context of digital sovereignty, such collaborations are not seen as compromises, but as strategic imperatives that enhance a nation's technological capabilities and secure its digital future. The dual focus on resilience and international technology partnerships is the cornerstone of a pragmatic digital sovereignty strategy. This approach is not about isolation, but about fostering strength through cooperation, leveraging global innovation while maintaining control over key digital assets and capabilities.

This article proposes concrete steps to operationalize this strategy, advocating the development of proof-of-concepts (PoCs) that translate theoretical frameworks into actionable solutions. These PoCs serve as concrete examples of how to address the multifaceted challenges of digital sovereignty, from securing critical digital infrastructure to ensuring public trust in digital services. They highlight the benefits of a balanced approach that combines homegrown innovation with strategic international partnerships and illustrate the potential for shared progress in technological development. In addition, the article calls for a renewed focus on the human aspect of digital transformation, urging educational initiatives that enhance digital literacy and critical thinking skills. This is critical to cultivating a skilled workforce capable of driving innovation and ensuring that the broader population can navigate and benefit from the digital ecosystem.

In conclusion, the discussions at GovTech Campus Berlin have highlighted a path forward for nations seeking to achieve digital sovereignty. By building resilience into digital infrastructure, actively engaging in international technology collaborations, and focusing on tangible initiatives such as the development of PoCs, countries can take pragmatic steps to secure their digital futures. This approach recognizes the complexities of the digital age and proposes a balanced, forward-looking strategy that promotes cooperation, innovation, and individual empowerment.

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