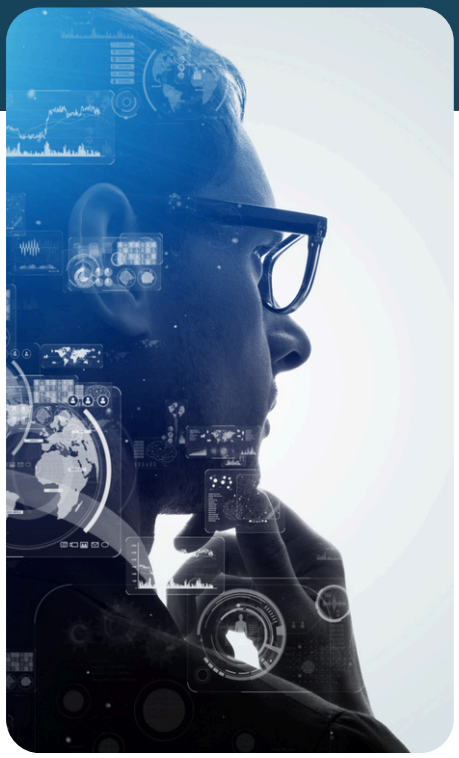
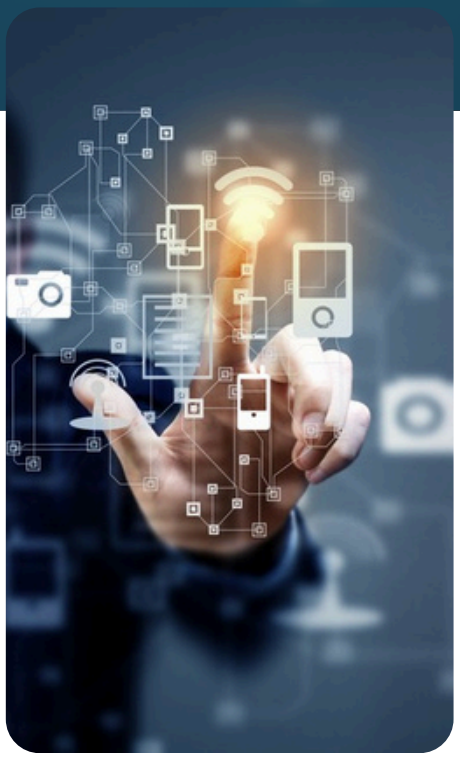
Forum of Federations
The Global Network on Federalism and Devolved Governance

Governing AI in Federal Systems

Challenges and Opportunities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July 2026

Introduction

On 7-8 May 2026, the Forum of Federations (the Forum), in collaboration with *Publius: The Journal of Federalism* (Publius), convened an international research workshop exploring the intersection of federalism and artificial intelligence (AI). A component of Forum's ongoing program on AI in federal governance systems, the workshop gathered 17 experts from Brazil, Canada, Germany, India, Nepal, Pakistan, Spain, Switzerland, and the United States at Marquette University's Les Aspin Center for Government in Washington DC for two days of conversations on emerging practice and common trends in federations.

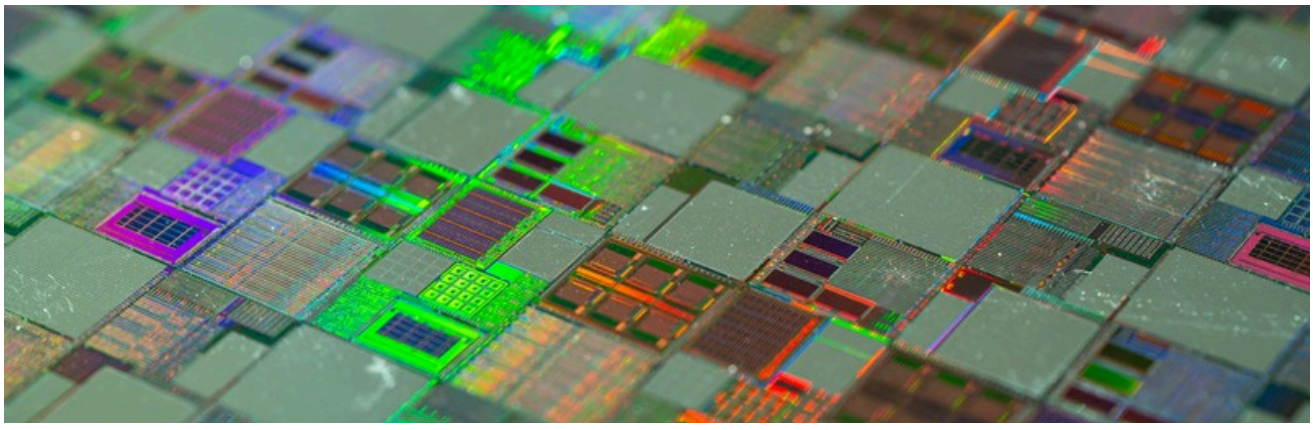
In the context of the unprecedented advances in AI, and the increasingly evident political, social and economic impacts of the technology, the need for greater understanding of government approaches to AI is pressing. While the global community of practice is producing much valuable work on the governance of AI broadly, the specific dynamics of how AI is governed in federal systems is currently underexplored. As shown through the Forum's work on digitalization, **federal and multilevel countries have unique characteristics that provide both opportunities and challenges for AI governance that unitary countries do not.** In this context, the workshop provided a venue for a multi-disciplinary group of academics, practitioners, and government officials to exchange knowledge on key issues of AI and federalism in different federal countries. It built both on the Forum's work in digitalization in federal systems and a scoping workshop on AI held in October 2024.

The discussions provide the foundation for cross-country comparative analysis and the development of knowledge for policy makers and researchers. Moving forward, the Forum and Publius will work to support enhanced understanding of the relationship between federalism and AI, building on the contributions and conversations at the workshop, through both policy-focused and academic publications to be developed over the next year.

Dealing with Definitions: What is AI and What is it For?

As a term that has come to encompass a wide range of different, continuously evolving technologies, defining where the boundaries of AI lie can be challenging. Governments in federal countries typically use AI as an umbrella term to refer to various predictive, generative and autonomous technologies emerging from developments in the field of computer science. While these different forms of technologies are distinct, they are not mutually exclusive. They may variously utilise machine learning, large language models, agentic systems and other models and techniques to perform tasks which previously would have required human input.

For governments, AI technologies represent both a significant opportunity and a challenge. The potential economic benefits of the AI are anticipated to boost growth and productivity, while AI-assisted scientific research is already leading to new breakthroughs. The use of new, powerful AI tools may enable governments to more efficiently meet the expectations of citizens regarding the accessibility, functionality, and cost of public services. But governments are also responsible for ensuring that AI does not harm citizens and the societies in which they live. They are thus accountable for setting the policy and regulatory frameworks AI operates under, and establishing the guard rails that can protect against the inherent risks associated with the spread of AI across the public and private sector.

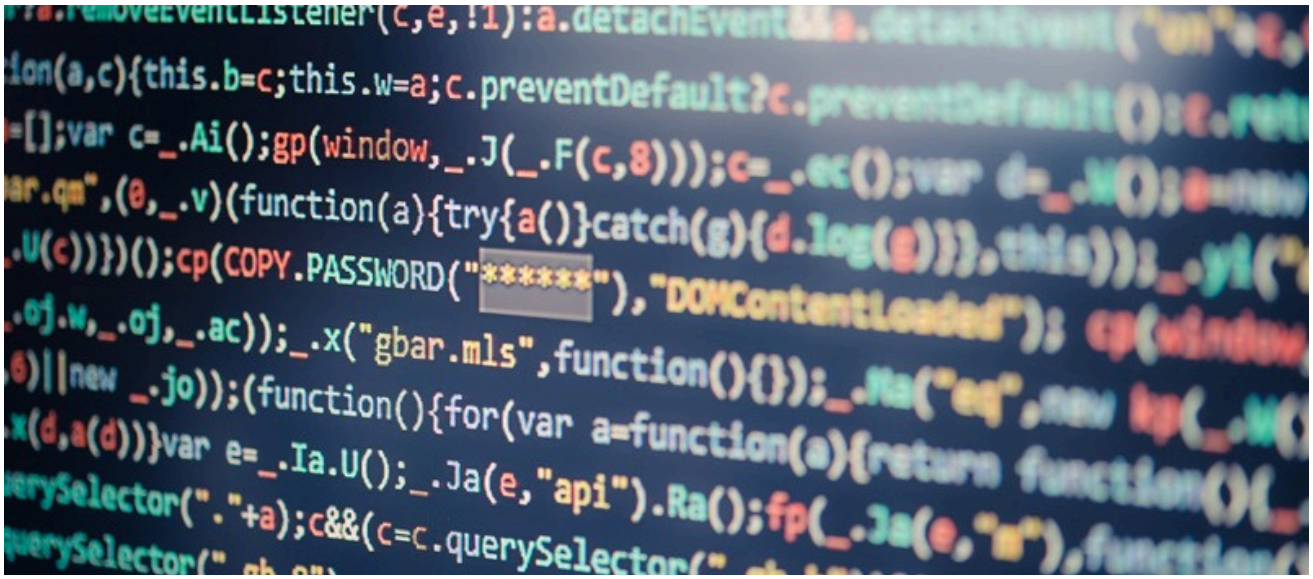


The broad definition of AI and the cross-cutting nature of the technology across different domains presents a complex and dynamic policy challenge for countries with multiple levels of government that may have different jurisdictional functions and priorities. Furthermore, there are diverse perspectives on the rationale or function for AI in different countries. While governments in federations often differ in their perspectives on the primary rationale for AI, in accordance with their priorities, there is much overlap between them. For example, in federal countries, governments may view AI as a means to:

- **Support economic growth and productivity**
- **Enhance the accuracy, efficiency, accountability, accessibility and legitimacy of public services**
- **Enhance national security in the face of external and internal threats**
- **Secure individual and collective rights, alongside tech and data sovereignty**
- **Foster innovation in the public and private sectors while mitigating risk of harm**

The experiences of federations in adopting, managing, regulating and deploying AI to date reveal four key common themes discussed extensively at the workshop:

- **Asymmetry**
- **Coordination**
- **Implementation/Operationalization Gap**
- **Politics of AI in Federations**



Asymmetric AI Capacity, Development and Resources

Asymmetry is, at this point in time, a feature characteristic of AI ecosystems in federal countries. The asymmetry of AI in federal systems is furthermore multi-dimensional. **Asymmetry can be found in the variations in resources, power, infrastructure (including data), policy and priorities across the geographic, electoral and administrative boundaries of federations.** While territorial asymmetry is a condition familiar in many federal countries, in the context of AI, workshop participants primarily discussed it as a barrier to the implementation of a cohesive approach to AI across federations. The sometimes profound differences in the capacity and resources between different governments in federations, shapes the policy action that can be taken on AI at national, subnational and local levels.

Asymmetry in resources (economic, infrastructural, human) may contribute to a fragmented AI landscape of subnational policies and AI implementation approaches, which may run counter to national AI agendas. Vertical and horizontal power dynamics are also significant. Participants highlighted that some countries possess multiple economically powerful constituent units, each with substantial AI resources (in education, the economy, or infrastructure) and the capacity to develop and implement sophisticated AI strategies. In other federations, the technological and economic capacity to leverage AI effectively is concentrated in a single constituent unit, with other states/provinces unable to keep pace with these leaders, exacerbating the uneven nature of AI development. Brazil provides an instructive example here. Although Brazil is highly digitized in a global context, the workshop highlighted the proactive leadership of the state of Goiás as a factor in the advancements it has made in AI. In contrast to some of its subnational peers whose AI progress remains nascent, Goiás is the first Brazilian state to pass its own AI laws and establish formal education programs on AI. This example demonstrates the idea that constituent unit asymmetries can therefore manifest both in the resources they can draw on and in their approaches to the adoption of AI.

Much of the asymmetry in AI in federations is reflective of historic foundations of digitalization. **The fragmentation of digital infrastructure and services that exists in many federations means that some constituent units are better prepared than others to leverage existing digital assets to accelerate AI adoption.** Some constituent units are yet to create the robust, interoperable systems needed for digitalization, let alone those which will be required to take advantage of AI. If the anticipated economic benefits of AI are realized, it may exacerbate the inequalities between the 'have' and 'have not' constituent units further. To reduce the negative impacts of asymmetry on AI adoption, there is therefore a need for lagging constituent units to accelerate their digitalization processes, optimize them for AI, and establish the policy and legislative frameworks that mitigate the associated risks.

While asymmetry may pose a challenge to country-wide policy cohesion, it also provides opportunities in federal structures. In several countries, the federal government sets the top-level direction of AI policy through a national strategy, typically addressing issues such as economic development, security issues, rights protection, education, and service delivery. However, many of the policy areas touched by these strategies are under the auspices of the constituent units, who are responsible for putting the principles of national strategies into practice. They are thus able to (in theory) develop policies and approaches tailored to the priorities, threats and opportunities for AI within their jurisdictions. Moreover, the ability of the constituent units to regulate AI in accordance with their powers not only enables them to create an AI ecosystem that fosters innovation and results at local levels, but also to ward against perceived federal encroachment. Where asymmetries exist that inhibit federations from developing a cohesive approach to AI, the role of existing and new intergovernmental relations mechanisms is therefore critical. This, in turn raises the central question of coordination.

Internal and External Coordination Challenges

The cross-cutting nature of AI and its prospective applicability in a variety of domains throughout the public and private sectors presents a substantial challenge to federal systems. The technology does not fit neatly into the clear division of powers that underpin governance institutions in federal countries. Moreover, the inputs required for AI – from the physical infrastructure to the data which enables it to function – have to be aligned between government both horizontally and vertically to maximise its utility. And to a much greater extent than with previous digitalization initiatives, coordination is required with the private sector actors developing the AI systems to be deployed in federations. There is thus a key question as to whether the existing coordination mechanisms, institutions and practices in federations are sufficient to address the complexities that AI poses to governments.

As recurring theme within the discussions, workshop participants identified different levels and approaches to coordination in federations. Vertical and horizontal coordination occurs to align approaches on AI infrastructure, data sharing and risk management. Horizonal coordination between constituent units on a regional level is providing opportunities for policy learning and convergence, as well as sharing of expertise and resources. Federations such as Germany have established new intergovernmental bodies focused explicitly on AI, in an effort to address the deficiencies in coordination that historically characterised the approach to digitalization in the country. The role of polycentric agreements, which facilitate the creation of a framework of overlapping rules and practices to support coherence in policy implementation and data sharing, are seen as particularly important in more highly decentralized federations with highly autonomous constituent units, such as Canada. Indeed, in Canada, this is especially significant in consideration of the physical infrastructure, energy and water required for AI proliferation. The resources used to implement AI are often unevenly distributed territorially, and therefore coordination is crucial to marshal these resources to enable the value of AI to benefit the members of the federation equitably.

The effectiveness of AI-enabled public goods delivery will to a great extent depend on how well federal systems can adapt amid uneven capacity and ongoing interdependence. **There is recognition that there is a need to create mutually interlinked systems that enable coordination not only across government sectors but also with the private sector at the local level, ensuring needs are met comprehensively.** The centrality of coordination with the private sector is particularly significant in federations where government has weak AI capacity. In Nepal, for example, the vast majority of the research, development and deployment of AI is being driven by private sector companies, making them an essential partner if governments in the country wish to expand and maximize the public-goods potential of the technology.

Security concerns intersect importantly with issues of privacy. To use AI effectively in public goods delivery, data must be shared – and ideally be interoperable – between different jurisdictions. However, horizontal and vertical data sharing can be challenging when governments, as custodians of their constituent's personal data, have different privacy regimes. In the United States this dynamic has emerged as a point of tension between the federal and state governments. While the federal government has yet to legislate or regulate data privacy for AI, states such as California, New York, and Colorado are putting in place their own regimes which may or may not align with the federal government's approach. This tension also manifests in coordination with the private sector, particularly when governments and constituents lack trust in how businesses will use sensitive and personal data.

Implementation and Operationalization Gap

At this point in time, a common trend seen across multiple federations is the gap between government strategies for the adoption and deployment of AI, and the extent of implementation and operationalization. Identifying the source of this gap, its relation to established asymmetries, and determining how it may be closed, is an important question for federations looking to maximize the positive impacts of AI.

The gap between strategy and implementation is primarily vertical. Federal governments in various countries have established high-level AI strategies and frameworks to establish key principles in a national context. Implementation, however, is frequently under the jurisdiction or responsibility of the constituent units. Within a constituent unit, the provincial or state government may set the terms, with local governments then left to operationalize them on the ground. In theory, this allows for tailored solutions to be delivered at the local level while maintaining a broadly cohesive approach across the country. The current experiences of federations such as Pakistan, Ethiopia and Brazil, however, suggest this is proving a challenge.

Several factors can contribute to this gap. **The first is a lack of capacity at constituent unit and local levels to implement the AI mechanisms and practices needed to align with high-level strategies.** This is a common issue of ambition-reality misalignment across federations. AI is expensive, resource-intensive, and unpredictable. Establishing a plan to develop a robust AI ecosystem without accounting for the capacity of the partners in the federation responsible for making it function can result in a gap between stated goals and the ability to achieve them. Arguably this challenge extends beyond the national level: European federations bound by the terms of the EU Artificial Intelligence Act have a broad template within which they have to build their AI processes, but somewhat limited guidance on how this can be implemented under resource constraints.

Another key factor preventing the narrowing of the implementation gap is political misalignment. In federations, constituent units are under no obligation to follow the federal lead in areas which are under their exclusive jurisdiction. In scenarios where the constituent units disagree with the federal level strategy, they may reject implementation and develop alternative approaches in accordance with their priorities and those of their constituents. This presents a gap not necessarily in operational terms, but in the cohesion of approaches across the country.

There are indications that some federations are drawing on prior experiences of implementation gaps in digitalization in their approach to AI. Some are developing new institutional mechanisms to address AI adoption. Germany's digitalization ecosystem, for example, has historically been characterised by fragmentation across the different Länder. Recognizing this, a new intergovernmental relations mechanism – the Permanent Conference of Digital Ministers – has been established to support vertical coordination on AI. But the effectiveness of such mechanisms in closing implementation gaps in AI strategy remains to be seen. The Permanent Conference of Digital Ministers has no ability to make binding decisions and is reliant on the political will of the participating federal and Länder ministers to set the agenda for the conference and follow through with agreements made.

Politics of AI in Federations

Finally, the importance of the politics of AI in federations cannot be underestimated when it comes to the relationship between the technology and federal governance. More specifically, approaches and outcomes appear to be shaped by the intersection of AI politics with federal political cultures.

The intra- and inter-party political dynamics within a federal country – both at federal and constituent unit level – impact action on AI. **While AI is recognized as pressing priority, the ways in which federal and constituent unit governments prioritize different aspects of the issue depend on the political climate, socio-economic conditions, and other factors that drive political decision making within a given federation.** Workshop participants highlighted that while governments in almost all federations actively working towards AI optimization and regulation, the extent to which it is the top governance priority varies. In Germany for example, while AI is recognized as an issue governments must address, it is of secondary importance in comparison to other more urgent issues of boosting economic growth and ensuring territorial security. Variation in the ways in which governments prioritize AI as a policy issue, and the consequent choices they make in their approaches are significant.

To a far greater extent than digitalization, AI is source of political contestation. Perspectives vary on how AI should be managed and deployed, and on the relative balance between its benefits and risks, reflecting the views of constituents. In federations, different governments holding different perspectives on how to approach AI may create political tensions that increase the difficulty of coordination and risk of fragmentation. Data centre construction, for instance, is a particularly contentious issue in constituent units with limited water and energy infrastructure. The key question is whether a cohesive approach to AI is possible across a federation with differing political perspectives on AI. Recognizing that governments in federations, at both the vertical and horizonal levels, do not always align politically on AI, may be the first step in managing challenges of coordination.

The political considerations of AI extend beyond the national. International frameworks like the EU Artificial Intelligence Act establishes supranational regulations on AI which provide a foundation for practice. Translating this into strategies that can meet political dynamics at national and constituent unit levels adds another layer of complexity. The interoperability of AI systems is another consideration. Switzerland, for example, as a highly integrated partner but not a formal member of the EU, faces the question of whether it develops its AI approach to align with EU frameworks, and thus benefit from the prospective interoperability in the future, or whether it pursues a different approach based on its own priorities and those of the cantons.

Finally, the political economy of AI in federations, and especially the incentives of key decision makers, deserves greater attention. Questions such as what drives the decision-making of different governments on AI issues and how that informs policy making in federations are important. Why do some actors pursue a cooperative or a more competitive approach in federal systems, and what are the consequences? In this context, the financing of AI in federal systems is also relevant. Exploring these questions across different federations may provide insights that enhance understanding of the pathways of AI adoption and deployment in federal systems.

Future Work

The evolution of AI is proceeding at such a rapid pace that federations are responding to a technological revolution that currently has no clear end point in sight. As the conversations at the workshop made clear, AI is a highly complex and cross-cutting subject in federations. The challenge of governing AI, and of governing in a world of AI, with all of the possibilities and risks that it entails, raise several critical questions. As workshop participants highlighted, two are particularly important. Firstly, what are specific dynamics of AI adoption, management, and deployment in federal governance systems? Secondly, what are the practical implications of these federalism-specific AI dynamics for policy making on AI in federations?

Federalism-Specific Dynamics

Many of the challenges AI presents to government – those of infrastructure, trust, legitimacy, safety, security and financing – apply regardless of the governance model, whether federal or unitary. But prior experience, including in digitalization, tells us that **federations operate differently when it comes to cross-cutting policy challenges**. Identifying the specific opportunities and risks of AI governance in federal systems, and the approaches governments are taking in response, can support enhanced understanding of how federations react in the face of a technological revolution. Comparative analysis, grounded in empirical experience, is necessary to provide insights into how federalism shapes AI governance, and potentially into how AI is shaping federal governance institutions and practices.

Practical Implications for Policy-Making

Equally important to understanding what distinguishes the dynamics of AI governance in federal systems, is exploring what the implications of those dynamics are for policy making in AI in federations. **Enhanced knowledge of the federalism-specific dynamics of AI can facilitate the development of better policy approaches to adoption, deployment, and management.** Comparative analysis can support the identification of the range of possible policy options, and which approaches may be more effective in different contexts. As the technology is already being integrated into both the internal operation of governments and in service delivery, there is a pressing need for policy makers in federations to be equipped with the knowledge they need to make informed decisions on AI to achieve better outcomes.

These key questions provide a solid foundation for further exploration of one of the acute governance challenges of the twenty-first century. The Forum and its international partners are committed to working to further the understanding of the relationship between AI and federal governance and developing practical knowledge to support better policy making. The Forum looks forward to sharing the outcomes of this work in the coming years.

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Acknowledgments

This workshop was made possible through the financial support of the Forum of Federations' institutional partners. The Forum also acknowledges the financial contribution of the James Madison Charitable Trust to this activity.

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