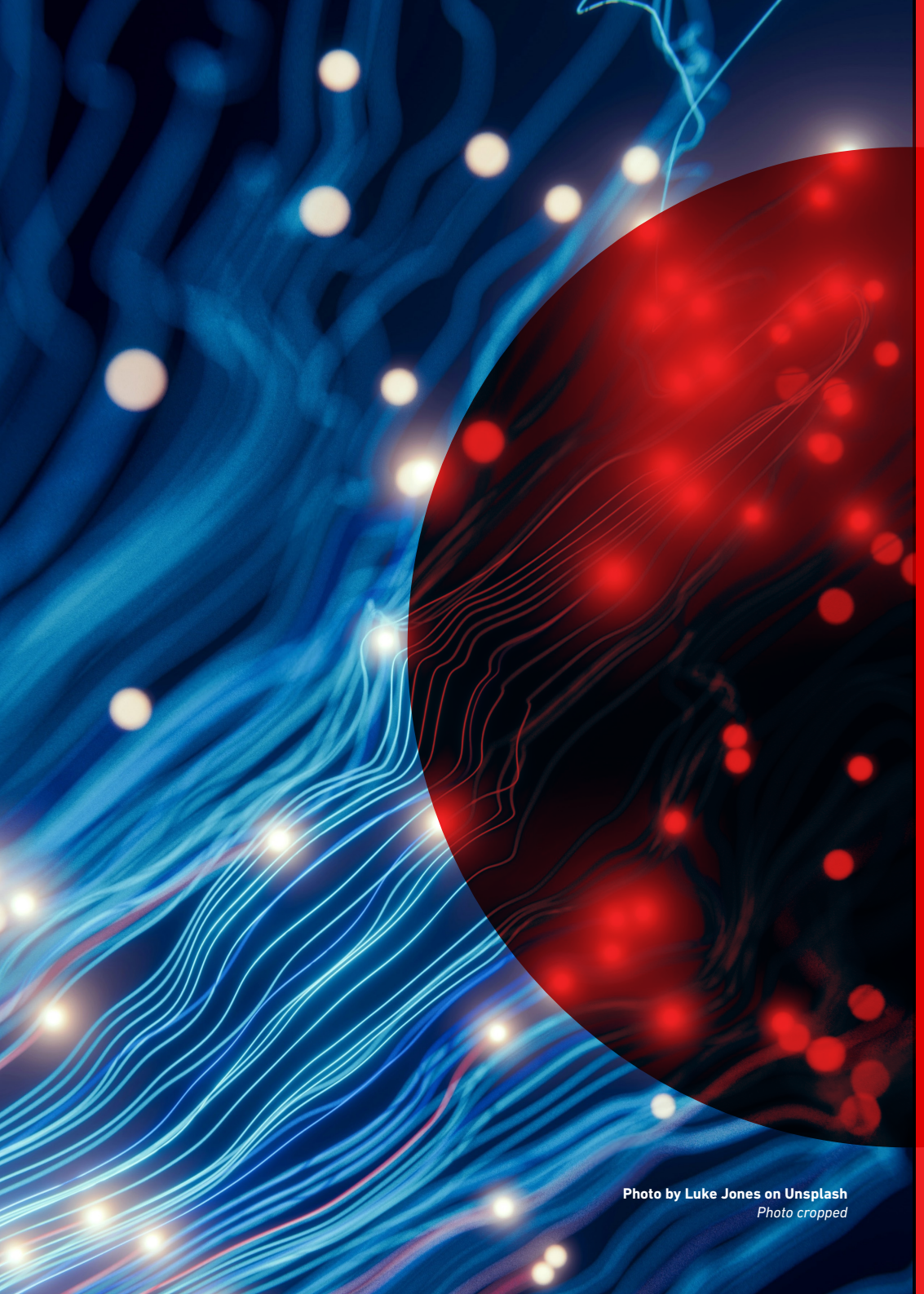


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Regulating (at) the Tech Frontier

Bridging Japan's Digital Divide: Public–Private Partnerships for AI-Era Governance



Matteo Posarelli
Dual Degree Master of Public Administration / Master of Public Policy, London School of Economics and University of Tokyo, 2024-2026

EXECUTIVE SUMMARY

The relationship between governments and the private sector has become increasingly fractured, where governments may hinder technological advancement through regulation, and corporations maintain protectionist stances. This fracture results in an adversarial environment rather than a sandbox for innovation. In contrast, a collaborative relationship can foster ambitious, technologically sophisticated projects that redefine what governance can achieve. Government and leading private-sector companies must work together to restore faith in governance by delivering technologically advanced and socially responsible public services. Public-private partnerships (PPPs) can bridge this divide and harness science and technology to better society at critical moments.

Regulatory barriers, mistrust, and misalignment of priorities continue to weaken cooperation between governments and private-sector actors. Even as countries recognize the need to balance emerging-technology regulation with innovation incentives, the absence of a productive dialogue reinforces stagnation and erodes public trust. Japan's experience demonstrates that when digital capacity gaps widen, governments face growing difficulty in delivering efficient, resilient, and technologically sophisticated public services. PPPs offer a viable path forward by aligning incentives, reducing structural mistrust, and enabling governments to deploy advanced technologies that they are often unable to build alone.

Japan's collaboration with Amazon Web Services (AWS) to modernize its digital infrastructure illustrates that PPPs can deliver strategic value not only in improving public-sector capability, but also in accelerating national digital transformation. The arrangement demonstrates a broader lesson: PPPs will be indispensable for Japan's AI-driven modernization and for strengthening governance capacity in an increasingly technology-centric global landscape.

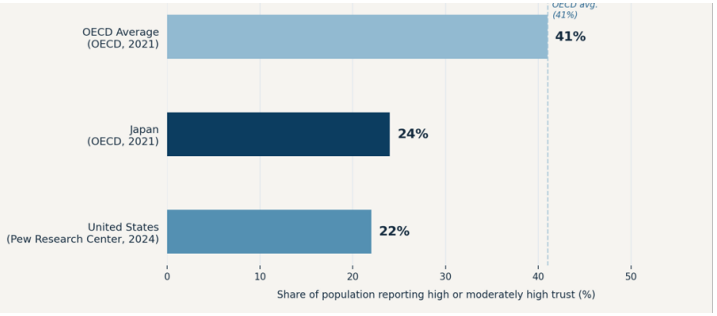
ISSUE ANALYSIS: THE PUBLIC–PRIVATE MISALIGNMENT

Regulatory barriers, mistrust, and misalignment of priorities impact the current state of the government–private sector relationship. A primary objective for private-sector entities is to be competitive in an ever-evolving market; thus, constant innovation is required. When high-level regulation occurs, achieving the level of innovation needed becomes increasingly complex. Research by MIT Digital Economy Fellow John Van Reenen (2023) notes this disconnect and the inevitable stagnation. In the American Economic Review, Aghion, Bergeaud and Van Reenen (2023) utilize quantitative strategies to determine the aggregate effects of regulation on innovation in France and conclude that regulatory costs discourage firms just below regulatory thresholds from innovating, measured by the volume of patent applications. Excessive red tape therefore discourages innovation and widens the distance between public and private actors. Worldwide, countries like the United Kingdom acknowledge this issue by vowing to streamline red tape for emerging technologies like artificial intelligence (Department for Science, Innovation and Technology 2025).

However, a lack of regulation is equally problematic: without clear guidance, private-sector organizations may face a complete strategic pivot when regulation eventually finalizes (Eggers, Turley and Kishnani 2018). A lack of trust, encompassing both sectors, creates further dissonance. Government and the private sector must find a middle ground where innovation is met with realistic regulation. When the public trusts neither entity, the result is a cycle of skepticism that weakens collaboration and erodes faith in both sides.

In 2024, the Pew Research Center found that only 22% of US adults trusted the federal government to do the right thing always or most of the time—a concerningly low figure, as citizens and governments exist within a social contract founded on trust (Pew Research Center 2024). Japan faces a comparable deficit: the OECD's 2021 Survey recorded only 24% of Japanese respondents with high or moderately high trust in national government against an OECD average of 41% (OECD 2023), compounded by over 21,000 personal information breach cases in fiscal year 2024, a 58% year-on-year increase (Personal Information Protection Commission 2025). These converging deficits strengthen the case for PPPs as a mechanism for rebuilding the social contract through transparent digital service delivery. Large corporations also make decisions with a protectionist mindset driven by profit and monetary incentives. The UNODC Civil Society Unit (2024) notes that private-sector actors can be reluctant to cooperate with government agencies due to concerns related to data privacy, regulatory compliance, or fears of damaging their reputation. According to IBM Security (2024), frequent erosions of user trust—such as data breaches—average a cost of about USD 4.88 million per breach. Applying this to the context of a U.S. supercorporation like Meta highlights a moral hazard: the average cost of addressing a data breach accounts for only 0.003% of their 2024 revenue (Meta 2025). Gaining trust seems insurmountable when both sectors consistently fail to amend public doubt. Thus, PPPs offer a mechanism to align incentives, foster accountability, and create a sandbox-based environment for collaboration.

FIGURE 1: PUBLIC TRUST IN NATIONAL GOVERNMENT: UNITED STATES, JAPAN, AND OECD AVERAGE



Pew Research Center (2024); OECD, Government at a Glance (2023). Note: Survey methodologies differ across sources. US figure: share trusting the federal government to do the right thing "just about always" or "most of the time" (Pew, April 2024). OECD.Japan figures derived from 2021 OECD Survey on Drivers of Trust in Public Institutions (high or moderately high trust, 0–10 scale).

CASE STUDY: UTILIZING AWS TECHNOLOGY TO BRIDGE JAPAN'S DIGITAL GAP

Japan's ambition to realize a digital society is an ongoing pursuit to address decades of economic and technological stagnation. The country's complacency with analogue technologies and an overreliance on paper bureaucracy during the lost decades has caused it to lag significantly behind global peers, ranking 31st out of 67 economies according to the IMD's World Digital Competitiveness Ranking 2024 (IMD 2024). The COVID-19 pandemic was a critical moment for national, municipal, and prefectural governments as they realized that Japan was not digitally capable of handling a pandemic. Brummer and Ueno (2024) observe that Japan's ability to collect infection and hospitalization data was severely lacking. Recognizing this moment as a crisis, the Government of Japan established the Digital Agency (DA) in 2021 to tackle digital discrepancies and foster positive digital transformation (Cabinet Secretariat IT Strategy Office 2023).

A primary DA initiative was establishing a government cloud to enhance data storage, transfer, and processing, however; private-sector involvement was essential due to the government's limited technological capacity. The DA enlisted Amazon Web Services (AWS) to provide cloud infrastructure and deployment capabilities for 12 central ministries, 1,788 local governments, and semi-public sector organizations (covering medical, educational, and disaster prevention services, among others; the source does not enumerate these separately) (Usami and Toyohara 2024). AWS was one of two cloud firms selected for partnership because it is an industry leader in cloud innovation, data security, and compliance, ensuring government data is secure and accessible (Suzuki 2021). AWS now surpasses over 245 countries and territories, providing cloud and IT solutions across government, defense, and education sectors (AWS 2024; Robinson 2022; AWS 2021). This PPP differs from traditional deployment approaches due to the level of integration and post-deployment development commitments from both parties. Through this partnership, the DA gains access to effective cloud technology, while AWS strengthens its footprint in the public sector and the Japanese market.

Modernizing Japan's cloud infrastructure is not straightforward: legacy systems, governance fragmentation, and a steep learning curve create significant barriers. The AWS collaboration reflects transition-oriented governance principles, where multi-stakeholder participation is essential to co-develop solutions. Without AWS's support, the DA may not have been able to take its first step toward the government cloud.

AWS and the DA have also engaged in several short-term transition experiments to accelerate adoption. Examples include allocating cloud startup resources in Ibaraki Prefecture, advancing digital transformation through smart agriculture in Kochi Prefecture, and facilitating the digitalization of immigration consulting in Aomori Prefecture (Usami 2022). AWS's long-term commitment to Japan is further demonstrated by Nikkei Asia's reporting that AWS will invest an additional USD 15 billion in expanding its data center network over five years (Takatsuki 2024). These initiatives underscore the role PPPs can play in not only addressing immediate technological gaps but also building a sustainable foundation for innovation across regions and sectors.

POLICY IMPLICATIONS FOR PPPS IN AI AND DIGITAL MODERNISATION

The partnership between AWS and the Government of Japan highlights how governments and private-sector actors can effectively collaborate, especially when societal transformation is necessary. The alignment between the two parties highlights three key metrics for impactful PPPs: incentive alignment, shared risk, and long-term commitment. Much of the disconnect associated with government–private dynamics stems from misaligned incentives, which do not allow the parties to communicate or see the same goal. The AWS case suggests a policy alignment where the DA's digital transformation goals intersect with AWS's cloud computing interests.

The two also share risk elements, as not only do they invest immense amounts of time and resources, but each party must commit through compromise. For example, the government may ease regulatory frameworks and compliance, while AWS may manually adapt its cloud solutions to cater to Japan's specific data sovereignty and security requirements. The most critical metric for successful PPP execution is a long-term commitment from both sides. Without this shared vision, the partnership risks stagnation or failure. Thus far, AWS and the DA have shown a resilient, enduring commitment to bettering Japan's digital

structure and services, signifying a genuine commitment to public service on both fronts.

Japan's trust deficit and digitalization deficit are mutually reinforcing: citizens without experience of efficient digital public services lack a concrete basis for institutional confidence, and PPP-enabled delivery paired with transparent reporting is the mechanism by which that trust can be rebuilt. Figure 2 maps this.

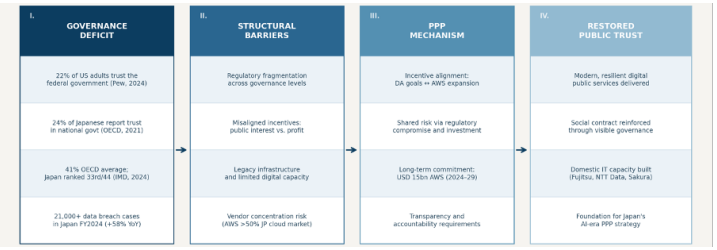
These findings reinforce a broader implication: PPPs will be indispensable for Japan's AI and digital modernization strategy. As artificial intelligence accelerates, governments face increasing pressure to ensure data security, maintain regulatory agility, and deploy advanced digital tools in public administration. Japan's institutional capacity constraints, demographic challenges, and regional disparities make PPPs not merely optional, but necessary to maintain competitiveness and societal resilience. At the bilateral level, SoftBank's chairmanship of the USD 500 billion Stargate AI infrastructure venture alongside OpenAI signals deepening US-Japan convergence in technology development, adding strategic urgency to Japan's domestic PPP agenda (OpenAI 2025).

Long-term digital PPPs generate accountability deficits when technical expertise resides primarily with the private partner, making performance difficult to audit and contractual terms hard to enforce (Hodge and Greve 2007). AWS's dominance in the Japanese cloud market—serving more than 50% of cloud infrastructure users (MM Research Institute 2022)—deepens this risk as growing dependency reduces the DA's negotiating leverage. The 2023 certification of Sakura Internet as the first domestic government cloud provider offers a partial corrective, though supply-side competition remains limited.

POLICY RECOMMENDATIONS

First, to leverage PPPs without compromising Japan's own technology sector, the DA should mandate technology transfer and joint development commitments with domestic firms—such as Fujitsu, NTT Data, and Sakura Internet—as conditions of contract renewal, progressively building domestic cloud capability alongside AWS's global infrastructure. Second, to compensate for the inherent incompleteness of long-term arrangements, all government cloud contracts should embed periodic renegotiation clauses and independent audit rights, with METI and the Cabinet Office providing institutional oversight. Third, digitalization must be made visible to citizens: open publication of performance metrics, breach notification timelines, and service delivery outcomes would allow the public to observe the social contract operating in practice, converting infrastructure investment into renewed institutional trust.

FIGURE 2: ANALYTICAL FRAMEWORK: FROM GOVERNANCE DEFICIT TO RESTORED PUBLIC TRUST THROUGH PPPS



Pew Research Center (2024); OECD (2023); IMD (2024); Japan Personal Information Protection Commission (2024); Usami and Toyohara (2024); MM Research Institute (2022). Author's own elaboration.

CONCLUSION

The dynamic between the government and private sector will never be perfect. There is no regulatory arena where policy interests and compliance align without some discourse and pushback. Moreover, as society becomes increasingly hyper-sectarian, polarization and anxiety dominate the public sphere, making constituents increasingly concerned with government efficiency and the private sector's sense of ethics. This disconnect is a multifaceted problem that does not assign blame to a single side; both the private sector and governments at local and national levels must work together to bridge the gap.

Governments are not adept enough to be proactive in anticipating where new technology is necessary to improve public infrastructure, and the private sector's focus on business interests leads to neglect of broader societal needs. PPPs can be the necessary mechanism to fill in the gaps where the two lack integrity and instead facilitate a sandbox so each can learn, adapt, and serve the public interest more effectively. As society becomes increasingly privately led and dominated by mega-corporations, the sense of social responsibility from the private sector will continue to increase. Thus, the private sector must take the initiative and accept the responsibility to make the government a part of the solution, not the problem. PPPs offer a viable platform for reconciling this divide and ensuring Japan remains globally competitive in an AI-driven world.

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