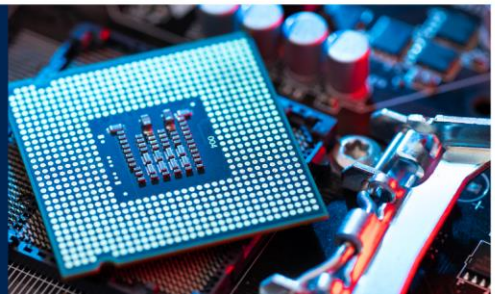
U.S. Chamber of Commerce International Affairs | U.S.-Japan Business Council | JUBC Japan-U.S. Business Council

Digital Economy



Cutting-edge digital technologies play a central role across all industries in today's economy. AI has become a driving force for economic growth and the importance of ICT infrastructure has surged. At the same time, cyberattacks are becoming increasingly sophisticated and targeted at global supply chains, such that addressing these threats has become a top priority for governments around the world. As trusted partners sharing common values, the United States and Japan should further deepen cooperation to expand a digital economy that balances trust and competitiveness under the shared principles of freedom, democracy, and the rule of law. Further, as both nations promote sustainable growth through enhanced partnership in the digital economy—addressing societal challenges and fostering development that benefits all—the Japan-U.S. Business Council and the U.S.-Japan Business Council (hereinafter referred to as "the Councils") recommend policymakers consider the following policy recommendations.

1. Promote Trustworthy, Free Data Flows

- **Promote Free Data Flows: Counteracting data localization policies and strengthening international cooperation.**
  As globalization and the digital economy expand, the promotion of trustworthy and free data flows remains a challenge. Data localization policies pursued by some nations not only hinder the global operations of businesses but also risk undermining international cooperation. The Councils recognize that, while data localization policies claim to enhance security, they actually increase compliance costs, stifle innovation, and increase cybersecurity risks. This drastically reduces operational efficiency, making the free flow of data a priority for economic viability. We urge the U.S. and Japanese governments to counter efforts at data localization through continued support for cross-border data flows.

- **Establish International Standards: Utilizing forums such as the Global Cross-Border Privacy Rules (CBPR) and the Data Free Flow with Trust (DFFT) expert community to develop market-oriented operational rules.**
  In this regard, we support the two governments in advancing institutional adjustments and interoperability between bilateral frameworks, taking into account principles and guideline formulations in forums such as the OECD and APEC. We advocate for continued exploration of flexible, market-oriented operational rules through established mechanisms like the Global CBPR Forum and the working groups under the OECD DFFT Experts Community.

- **Develop an Industrial Data Interoperability Framework: Early formulation of common principles for international interoperability, governance, and transparency in industrial data sharing.**
  We also believe that, based on the implementation needs of the industrial sector, institutional and technical connectivity should be strategically promoted to realize a reliable industrial data sharing infrastructure. In particular, we call on both governments to initiate public-private discussions on common principles for interoperability, governance, and transparency, in a manner that supports the activities of globally operating private enterprises.

- **Mutual Recognition of Data Protection Standards: Standardizing cross-border personal data transfer regulations between Japan and the U.S. to reduce compliance burdens on enterprises.**
  Both the U.S. and Japan maintain regulations on the cross-border transfer of sensitive personal data, requiring compliance by foreign enterprises holding either countries' persons' data, in addition to various state-level laws in the United States. We believe that Japan and the U.S. should work toward mutual recognition of these regulations to create operational efficiencies for businesses while still protecting consumer data.

- **Advance Technological Innovation: Leading global research and development efforts to ensure safe and trusted data flow while protecting sensitive information.**
  Most importantly, we assert that data fluidity and the protection of sensitive information are not mutually exclusive. We urge both governments to lead efforts in R&D and the establishment of technical solutions in these domains, demonstrating innovation leadership amid evolving digital landscapes.

2. Strengthen U.S.-Japan Leadership in the Promotion of Emerging Technologies

- **Strategic Collaboration on Advanced Semiconductor Technologies: Strengthening the resilience and risk diversification of semiconductor supply chains.**
  Advanced semiconductors, serving as essential foundations for next-generation technologies such as AI, quantum, and energy efficiency advancements, play a critical role in the global digital ecosystem. The Councils believe that the U.S. and Japan should further enhance strategic cooperation to maintain leadership positions in these competitive technological domains.

  Semiconductors are the backbone of global digital infrastructure, and the stability of this sector is crucial for ensuring the resilience of industrial supply chains and economic security. Given their strategic importance in the development and production of advanced semiconductor technologies, the U.S. and Japan must work together to address vulnerabilities within the supply chain. Building on the ongoing dialogue and cooperation between the two nations regarding economic security and supply chain resilience, the Councils advocate for strengthened public-private frameworks—led by the U.S. Department of Commerce and Japan's Ministry of Economy, Trade and Industry—to promote resilience and risk diversification within the semiconductor supply chain.

  The Councils urge both governments to continue operating their semiconductor incentive programs (e.g., the U.S. CHIPS Act and Japan's semiconductor competitiveness initiatives) in an open and transparent manner, such as through collaborative G2G dialogues, such as the annual Government/Authorities Meeting on Semiconductors (GAMS), as well as by fostering collaboration among U.S. and Japanese firms. These programs should comprehensively support a broad range of activities, from R&D to manufacturing, with a particular emphasis on activating joint development projects.

- **Diversify Semiconductor Supply Chains: Enhancing coordination with Asian countries to promote the dispersion of critical supply chains within the region.**
  To further strengthen the resilience of the semiconductor supply chain, the Councils call on the U.S. and Japan to take leadership in fostering cooperation with aligned countries within the Asia-Pacific region, promoting diversification and redundancy within critical supply chains.

- **Quantum Technology Development and Standardization: Promoting collaborative R&D and practical implementation of quantum technologies while supporting private-sector participation in international standard-setting.**
  Emerging quantum technologies—including quantum computing, quantum communications, and quantum sensing—have the potential to drive transformative disruptions in the next-generation digital economy. To establish technological dominance in these fields, the U.S. and Japan should advance their collaborative efforts in quantum technology development, with a focus on the practical implementation of projects such as quantum cryptography networks and quantum computing systems.

  The Councils request continued support from both governments in securing supply chains for essential materials (e.g., superconducting materials, and photodetectors) critical to quantum technologies, and in facilitating industry participation in the development of international standards (e.g., ITU-T, ISO/IEC QC series) pertaining to quantum technologies. Additionally, in light of the importance of secure communications, the Councils seek deepened collaboration between the U.S. and Japan to establish interoperability for quantum-secure communication systems and to further strengthen joint efforts in this technological domain.

3. Advance the Implementation of Trusted AI

- **Applying agile governance practices informed by the NIST and METI frameworks to promote transparent, accountable, and risk-aware AI development while ensuring alignment with evolving U.S. and Japan, and contributing to broader international discussion.**

  As AI technology advances rapidly, its applications are expected to expand further, not only for consumer use but also for industrial applications such as robotics. AI serves as an indispensable foundation for building resilient and efficient societies while enhancing economic productivity. However, misuse of AI could pose serious risks to society and could harm economic growth and the resilience of U.S. and Japan's economies.

  As AI technology evolves rapidly, its transformative potential continues to expand—from consumer applications to industrial innovations like robotics. AI is a foundational driver of economic productivity and a key enabler of resilient, efficient societies. To ensure its benefits are fully realized, agile governance approaches—grounded in frameworks such as NIST and METI—are essential for promoting transparency, accountability, and trust. At the same time, proactive risk management is critical to prevent misuse that could undermine public confidence and economic stability in both the U.S. and Japan.

  To maximize the economic benefits of AI, the development of human-centered and trustworthy AI is essential. The Councils welcomed the emphasis placed by Japanese Prime Minister Shigeru Ishiba and U.S. President Donald Trump at the June G7 summit on human-centric AI.

  We believe that establishing trust is foundational for the successful and secure deployment of AI. Based on this principle, we encourage the U.S. and Japanese governments to adopt practices that enable the use of trusted vendors, support trusted enterprises, and build trusted governments.

  To this end, the Councils welcome the approach of both nations in strengthening collaboration between their AI institutions, within the framework of the Hiroshima AI Process, which promotes voluntary and internationally harmonized efforts to enhance AI governance among businesses.

- **Data Standardization and Workforce Development: Supporting data flows, intellectual property protections, and AI skills development to deepen public understanding of AI technologies.**

  To ensure that all stakeholders in the AI ecosystem responsibly develop and use AI, it is crucial to support transparent, multi-stakeholder approaches by like-minded countries to AI governance, based on internationally recognized standards and frameworks. The U.S. National Institute of Standards and Technology's (NIST) AI Risk Management Framework (AI RMF) and Japan's Ministry of Economy, Trade and Industry (METI) AI Governance Framework both emphasize agile governance, a risk-based approach, safety, transparency, and accountability, while fostering innovation.

  The recently released U.S. AI Action Plan underscores the importance of innovation, infrastructure development, and international leadership. Building on this, Japan and the U.S. can jointly promote flexible, industry-driven governance models. A framework based on guidelines and consensus—complemented by appropriate regulation where necessary—can provide a strong foundation for broader adoption and international inspiration in AI governance.

  In the development of AI, it is important to continue supporting data privacy, cross-border data flows, robust intellectual property protection, voluntary global AI standards, digital transformation in the public sector, and workforce development to ensure the availability of necessary technology and skills for AI adoption.

  To address the digital divide, education systems must be reformed through policy changes that better prepare students at both the K-12 and higher education levels to utilize and develop AI and machine learning systems. Furthermore, both governments should raise public awareness about the innovations and benefits of AI across the economy and society to help all citizens better understand how to maximize its use in daily life.

  The Councils recognize that strengthening the workforce and human capital-through cultivating engineers for

research and development that supports the social implementation of Ai, as well as reskilling and upskilling the labor force-is essential.

- **Energy-Efficient AI Infrastructure: Advancing technological innovations for low-consumption data centers.**
  In support of the development and deployment of AI, the U.S. and Japan should focus on promoting investment in future-proof data centers and broadband infrastructure with affordable, reliable, and energy-efficient power, alongside encouraging strategic investments and best practices for AI-ready networks.

  The Councils recognize the potential for data centers to drive energy innovation by thoughtfully considering their environmental impact and collaborating with new and existing energy providers to meet their power needs. Optimizing data center energy efficiency through energy-saving innovations—such as next-generation semiconductor technologies (high-density integration, optoelectronic integration, silicon carbide materials, power devices), efficient cooling systems, water-use policies, and energy management—is crucial for achieving sustainable development goals with AI.

- **AI Cybersecurity: Strengthening resilient AI infrastructure and promoting policies for robust cybersecurity measures.**
  To achieve a truly resilient AI infrastructure, the U.S. and Japan should encourage strong AI cybersecurity policies and funding programs. This should not be considered a secondary requirement, following investments in infrastructure, but rather a primary necessity as infrastructure projects are approved and launched. As AI is then designed, developed and deployed, it can benefit from a resilient infrastructure, but will need equally strong cybersecurity policies to ensure that the U.S. and Japan can safely reap the benefits of the AI revolution.

4. Develop and Promote a Resilient and Reliable Next-Generation ICT Infrastructure

- **Adoption of Open Technologies: Supporting the design of open and interoperable network infrastructures for 5G and beyond, ensuring universal compatibility.**
  The Councils recognize that, amid rising cybersecurity threats and geopolitical instability, strengthening and ensuring the reliability of communication infrastructure is an urgent priority, particularly from the perspective of economic security.

  Building on recent collaborative efforts between the U.S. and Japan to promote safe and trusted digital connectivity, we urge both governments to continue advancing public policies that foster the development and voluntary adoption of clear, secure, and trusted Information and Communications Technology (ICT) 5G solutions and beyond. These policies should encourage the use of virtual, open, interoperable, and standards-based network technologies and solutions—including those for Radio Access Networks (RANs), optical transport, and network management—both domestically and internationally.

- **Diversify Supply Chains: Mitigating geopolitical risks through joint development of 6G and satellite communication technologies.**
  The U.S. and Japan should collaborate on ensuring trusted vendors and supply chains, emphasizing the need for trustworthy technology from reliable sources, while avoiding restrictions based on country of origin to maintain supply chain resiliency. The two countries should prioritize the deployment of trusted vendor equipment within digital networks to safeguard against cyber threats and enhance data security, seeking to foster greater interoperability, security, resiliency, and competition within ICT networks, ultimately strengthening defenses against malicious actors and ensuring a robust and secure digital economy.

  We believe that an open and interoperable architecture in the wireless domain is particularly valuable for enhancing economic security, as it expands the selection of trusted vendors and diversifies supply chains. Further, we advocate for accelerating the adoption of open RAN technologies in 5G and beyond, establishing seamless interoperability between products from the U.S., Japan, and like-minded partners within a hybrid supply model. This approach can reduce dependency on any single country while also engaging with international standards organizations to mitigate geopolitical risks.

In the context of 6G development, which will incorporate cutting-edge technologies such as ultra-high-speed optical communications (terabit-scale) and Non-Terrestrial Networks (NTN), we emphasize the importance of supporting free and transparent rulemaking by the U.S. and Japanese governments.

- **The Importance of Multilayered Networks: Expanding the use of non-terrestrial communication networks.** Recognizing that the resilience and reliability of the broader information and communications network depend on a multi-layered approach, we call for the development, deployment, and maintenance of infrastructure that integrates not only terrestrial networks, including submarine cables, but also non-terrestrial systems like Low Earth Orbit (LEO) satellite constellations. Expanding the use of LEO satellites can enhance disaster resilience and provide coverage in remote areas, making joint research and development in satellite data links and anti-jamming technologies a priority from an economic security standpoint.

- **Secure Submarine Cables: Collaborating with allied nations to maintain reliable submarine cable infrastructure.**
  Additionally, given the geopolitical implications of non-terrestrial infrastructure such as submarine cables, cooperation with like-minded partners is crucial. The U.S. and Japanese governments should support the private sector in securing funding for third-country submarine cable projects that facilitate smooth project execution with trusted suppliers, including securing construction vessels for deployment.

5. Leverage Cybersecurity for Safe and Secure Infrastructure Development

- **Strengthen International Cooperation: Promoting cross-border cybersecurity measures through frameworks such as the NIST standards.**
  With the rapid advancement of AI and digital technologies, cyber threats to global supply chains have heightened, transcending borders. Both the U.S. and Japan recognize these threats as critical challenges that require a unified response. To counter these threats effectively, we must strengthen the partnership between governments and industries in both countries, while simultaneously leveraging Japanese-U.S. cooperation to expand collaboration with like-minded nations. There is a need for collaboration with the private sector to develop secure AI systems and cybersecurity solutions, promoting the use of AI to address cybersecurity professional shortages, and ensuring the secure development and deployment of AI by mitigating risks through testing and evaluation.

  In the digital era, infrastructure resilience demands a synergistic approach that integrates technology, policy, and international cooperation. Given the increasing diversification and sophistication of cyber threats against critical infrastructure, we recognize the importance of accelerating the shift from prescriptive regulation to a risk-based approach. This enables governments to implement adaptive and technology-driven risk management strategies.

  As the U.S. and Japan take steps to bolster cybersecurity across governments, critical infrastructure, and supply chains, their approaches should adhere to internationally recognized cyber risk management frameworks, such as the NIST Cybersecurity Framework. These frameworks, along with evolving best practices and globally acknowledged standards, empower industries to develop more flexible, up-to-date, and risk-based cybersecurity strategies to counter evolving threats.

  We advocate for increased international cooperation in promoting standards such as the Software Bill of Materials (SBOM), where appropriate, to enhance supply chain cybersecurity. Continued efforts toward mutual recognition of the Internet of Things (IoT) cybersecurity labeling program, along with establishing interoperable policies for secure IoT and software development—such as the Secure Software Development Framework (SSDF)—should be led by Japan and the U.S. through negotiations with emerging economies.

  There is a need for flexible accreditation and certification schemes and fostering international collaboration among other like-minded governments to advance foundational technologies like chips, quantum, and AI through active participation in standards development organizations. It is important to have internationally consistent guidance on transparency and accountability, and alignment of security certifications to internationally recognized schemes to minimize duplicated efforts and facilitate mutual recognition across borders, creating incentives that would drive more secure products and services and their deployment.

- **AI-Powered Threat Mitigation: Advancing joint research in machine learning and quantum cryptography for enhanced detection and defense against cyber threats.**
  To counter cyberattacks leveraging advanced technologies like AI, we emphasize the need for strengthened cooperation between the U.S. and Japan. This includes joint initiatives such as:
  - Developing AI-based cyberattack detection models, integrating machine learning and deepfake detection technologies, along with sharing cyber threat intelligence to enhance the accuracy of training data and analytical algorithms.
  - Collaborating on the development of quantum-secure communication systems, including the establishment of joint technology standards and the implementation of pilot projects to advance quantum cryptography technologies.

  We commend Japan's proactive Cyber Defense Law, which has strengthened its response to cyber threats. We call on the government to ensure close public-private collaboration in shaping policies, reflecting the actual dynamics of cyber threats and responses during the deliberation of subordinate statutes and implementation regulations.

- **Support SMEs: Implementing common standards and cost-reduction measures to enhance the cybersecurity capabilities of small and medium-sized enterprises and startups.**
  Finally, a more aligned international approach to cybersecurity policymaking can streamline the process for small and medium-sized enterprises (SMEs) to enhance their cybersecurity capacities and integrate into global supply chains. We urge measures such as establishing common evaluation standards for cyber defenses applicable to businesses in both countries, providing cost subsidies for cybersecurity measures, and developing joint cloud-based security services. These steps should help minimize costs for SMEs while elevating the resilience of the entire supply chain against cyber threats.

- **Sustainable Digital Economy: Addressing Japan's digital trade deficit, fostering discussions on building a sustainable digital economy.**
  Lastly, the Councils recognize that Japan's growing digital trade deficit poses potential long-term impacts on the competitiveness of domestic industries and sustainability of the economy. As dependence on foreign digital platforms-such as cloud services, OS licensing fees, and online advertising-continues to expand, both countries are called upon to engage in serious discussions on this structural challenge and to explore opportunities for cooperation toward building a sound and sustainable digital economy.