Sovereign AI has spurred wave of new AI strategies

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Executive Summary

Sovereign AI initially emerged as an extension of the concept of data sovereignty. Recently, it has gained traction amid growing concerns over the dominance of U.S.-based large language models and the escalating technological rivalry between the U.S. and China. At its core, Sovereign AI represents a nation's effort to bolster its strategic autonomy by developing domestic AI capabilities. For Japan, embracing Sovereign AI is not just a matter of innovation—it's essential to safeguarding long-term economic competitiveness in a rapidly evolving global landscape.

Sovereign AI

Sovereign AI is gaining popularity as a concept that says countries or organizations should control and utilize all the data, computing infrastructure and other technologies required to develop, train and deploy their own AIs. AI foundation models trained on news, literature and other data native to their country of deployment are better attuned to local dialects, culture and practices. Sovereign AI made its advent around 2023 as an analogue to Europe's data sovereignty movement. It gained traction globally after Nvidia announced its support for governments' sovereign AI initiatives at its annual conference in March 2024.

One major driver behind the sovereign AI trend is fear of an economic divide developing between AI have and have-not nations. In the generative AI space, US companies such as startups OpenAI and Anthropic and hyperscalers Meta, Google and Amazon have jumped out to an early lead by developing large language models (LLMs) ahead of competitors in other countries. The US AI industry is now facing intensifying completion from China, where companies like Baidu and DeepSeek have made globally high-profile AI R&D breakthroughs.

Development of Gen-AI models requires data centers equipped with leading-edge GPUs and access to abundant electric power. Few countries enjoy stable availability of such resources. Japan's economic and technological competitiveness going forward may be largely determined by whether it can domestically develop its own large-scale Gen-AI models. Building proprietary AI systems has become an urgent imperative from the standpoint of economic security and, by extension, national sovereignty.

Sovereign AI's role in national AI strategies

Sovereign AI is becoming a cornerstone of national AI strategies. A case in point is the Canadian Sovereign AI Compute Strategy unveiled by the Canadian government in March 2025. As its name implies, AI sovereignty is integral to the new strategy, under which Canada plans to strategically invest in strengthening its domestic AI development capabilities. Specific initiatives include investments of up to C$700mn to support the Canadian AI ecosystem and up to C$1bn to build public supercomputing infrastructure for AI. Additionally, Canada has set up a C$300mn fund to help Canadian businesses acquire GPUs and other computing resources needed for AI development.

The UK government announced its AI strategy, the UK AI Opportunities Action Plan, in January 2025. In addition to providing computing resources for both the public sector and private companies, the plan calls for establishment of (1) AI Growth Zones to accelerate construction of AI data centers, (2) a National Data Library as a central repository for datasets for developing high-quality applications and (3) UK Sovereign AI, a new governmental unit with a mission of maximizing the UK's stake in AI.

Numerous other countries have adopted similar AI strategies, albeit without "sovereign" in their names. One example is the European Commission's AI Continent Action Plan released on April 9, 2025. It involves investing €200bn to build a safe, trustworthy, innovative and sovereign European AI ecosystem[1]. Under the plan, the EU will set up at least 13 AI factories and up to five AI gigafactories and mobilize €20bn of funding to facilitate private investment in the gigafactories. The plan's other initiatives include arranging access to high-quality data, promoting AI utilization in strategic sectors and strengthening AI skills and talent.

In China, one of the government's national goals is to promote development of AI technologies, data collection and data utilization by Chinese companies based on a strong state-led strategy. China has adopted a direct and comprehensive approach to sovereign AI in pursuit of technological self-sufficiency and stringent state control of its domestic AI sector.

The US in recent years has tightened export controls on high-performance chips and other key technologies essential to AI infrastructure and offered new incentives to encourage reshoring of semiconductor production while continuing

NOTE

1) https://commission.europa.eu/topics/eu-competitiveness/ai-continent_en

to place priority on freedom to innovate. The US approach differs qualitatively from the direct sovereignty pursued by other countries. It arguably seeks greater government control over foundational AI technologies and supply chains.

Japan also has started developing homegrown AI foundation models

In Japan, the government is working on ensuring AI safety and reliability in accord with the Cabinet Office's AI Strategy 2022. Meanwhile, the Ministry of Economy, Trade in Industry (METI) is spearheading AI development initiatives, including Cloud Programs and the Generative AI Accelerator Challenge (GENIAC). The former subsidizes GPU installations for AI development while the latter promotes domestic development of AI foundation models. GENIAC's first cohort of developers built foundation models with improved Japanese language processing capabilities in the aim of upgrading Japan's Gen-AI foundation model development capabilities on an ongoing basis. The second cohort built multimodal models trained on combinations of data types that vary depending on the application. The data types included image, audio and geospatial data in addition to Japanese textual data and the models were customized for domain- and/or industry-specific applications[2].

Overseas, open-source LLMs like Meta's Llama and Baidu's Qwen are evolving in competition with closed-source LLMs such as OpenAI's GPT-4 and Google's Gemini[3]. In this highly competitive landscape, can Japan's domestically developed AI foundation models remain viable?

Encouraging examples from other Asian countries suggest that the answer could be yes. TAIDE (Trustworthy AI Dialogue Engine) is a native Taiwanese LLM. "TAIDE is not a Taiwanese version of ChatGPT," said one researcher involved in the project[4]. Although TAIDE has far fewer parameters than the big-name overseas LLMs and was error-prone in its early days, its developers expect Taiwan's AI development capabilities to improve as they upgrade TAIDE through continued training with Taiwanese data.

Similarly, Singapore's SEA-LION (Southeast Asian Languages in One Network) is a suite of AI foundation models trained on data in 11 Southeast Asian languages, including Vietnamese and Thai, in the aim of pan-regional deployment.

2) GENIAC's third (i.e., FY2025) cohort will undertake projects to upgrade IT/communications infrastructure in the post-5G era. METI issued an RFP with a submission window of March-May 2025.

3) https://epoch.ai/blog/open-models-report

4) Alayna Bone, 'Taide: Taiwan' s Own AI Project Highlights Geopolitical Implications', May 6, 2024

These sovereign AI initiatives demonstrate more than just a desire for technological independence. They also help cultivate domestic AI talent and strengthen national innovation ecosystems. To maintain its geopolitical standing, Japan should resolutely commit to not falling behind in the sovereign AI development race.

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