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SYNOPSIS

While the global AI race is led by the US and China, a group of small states is leveraging AI to secure autonomy, enhance security, and expand global influence. From embedding themselves in the global AI value chains to shaping AI governance, these small states demonstrate the strategic use of technology to punch above their weight.

COMMENTARY

In recent publications, including Stanford University's *AI Index Report 2025* and the United Nations Trade and Development (UNCTAD)'s *Technology and Innovation Report 2025*, the United States and China continue to dominate the headlines in the global AI race. Both powers continue to lead in AI model development, private investment, research output, and patent filings. But beyond their bilateral competition, a group of small states is emerging as significant players in the AI arena.

Switzerland and Finland now host two of the world's most powerful supercomputers – Alps and LUMI, respectively. Ireland and Sweden are positioning themselves as key hubs for data infrastructure. Singapore has consistently ranked among the top on the Global AI Index. For these small states, AI is more than a tool for economic or technological progress – it is a strategic asset used to secure autonomy, enhance security, and expand global influence.

Structural Constraints and Vulnerabilities of Small States

Due to structural limitations, small states often depend on larger powers for security, markets, and technology. This dependence limits their autonomy and exposes them to coercion. This was evident in the 2022 diplomatic row between Lithuania and China,

Qatar's 2017 blockade by the Arab League, and the 2007 state-linked cyberattack on Estonia. Another example was Ireland, which was unable to block EU rulings on its tax arrangements with Apple.

However, small states are not passive actors in the face of structural constraints and growing geopolitical tensions.

Entrenching in the Global AI Value Chain

By embedding in critical nodes (e.g., infrastructure, capital, and talent), small states can anchor themselves as indispensable players. The deeper the entrenchment, the greater their bargaining power and the higher the cost of coercion by larger powers.

In this regard, Singapore has positioned itself as an important AI launchpad for global tech firms. Google has committed over US$850 million to the city-state, while Amazon Web Services (AWS) is investing an additional S$12 billion (approximately US$9.42 billion) by 2028. Microsoft co-developed MERaLiON with A*STAR as a regional initiative. NVIDIA launched a regional accelerator, while Alibaba pilots its AI suite Aidge. Huawei established a dedicated cloud and AI lab as early as 2019.

Heavy investment in digital infrastructure reinforces this role – Singapore hosts two national supercomputers (ASPIRE 2A/2A+) and over 70 data centres, as well as more than 25 subsea cables, including the critical 21,700km SEA-ME-WE-6 linking Asia and Europe. With cable capacity set to double, the robust infrastructure that enables high-speed, low-latency networks further solidifies Singapore's position as a critical AI node.

Similarly, Ireland has entrenched itself as the "Silicon Valley" of Europe, thanks to its pro-business environment, low taxes, access to capital, and talent pool. Global tech giants, including Google, Meta, and Microsoft, currently base their AI R&D in Dublin.

Switzerland plays to the strength of its pharmaceutical industry and corporatist model. The network of private sector organisations (e.g., Roche and Novartis), academia (e.g., ETH Zurich and EPFL), and policymakers gives Switzerland a strong lead in fundamental AI research and the deployment of specialised applications, such as AI-driven robotics, medical imaging, and drug discovery.

Building Indigenous Capability

The goal for small states is not to become an AI superpower, but rather to reduce their overreliance on external inputs that can expose them to the risk of disruption or exclusion. As one regional AI developer noted, "What if the Western powers decide to turn their models off?"

Singapore's National AI Strategy 2.0, backed by over S$1 billion (approximately US$785 million) in public investment, focused on building domestic capacity. It aims to triple the AI talent pool to 15,000 and to propagate AI use among small and medium enterprises and individual workers. Finland has developed one of the world's fastest supercomputers, which powers advanced research across various sectors within the country. Sweden hosts AI Sweden, a national centre for applied AI that coordinates

innovation across sectors, while Denmark anchors Digital Dogme, a national alliance focused on the ethical and public-sector deployment of AI.

AI can also be integrated into national security systems. Estonia has pursued a "Kratt" AI strategy where AI is embedded into its cybersecurity defences. In parallel, Singapore has integrated AI into its security architecture across the Ministry of Defence (MINDEF) and the Ministry of Home Affairs (MHA) to strengthen national security. The Digital and Intelligence Service (DIS), the newest arm of the Singapore Armed Forces, consolidates a full stack of AI capabilities under one roof to support strategic surveillance, operational simulation, and cyber defence.

Shaping Global Norms and Governance

Small states are gaining traction as honest brokers in the development of AI governance frameworks. The Nordic countries are at the forefront of AI governance, anchoring their approach in a strong commitment to human rights and shared values of equality, transparency, inclusivity, and ethical responsibility.

Singapore plays a key role in global AI governance, partnering with the OECD, EU, and ASEAN. It co-launched with Rwanda the *AI Playbook for Small States* (a compilation of AI strategies from the members of the Forum of Small States) and introduced the *Singapore Consensus* on AI safety. Through initiatives like *AI Verify*, Singapore positions itself as an inclusive convenor and norm-setter in international AI policy, working with like-minded partners.

Estonia, building on its reputation for e-governance, hosts NATO's Cooperative Cyber Defence Centre of Excellence and contributes to EU discussions on AI policy. Its credibility in digital governance enables it to shape influence on AI use in security and public service contexts.

Strategic Alignment and Posturing

Instead of choosing sides in the emerging tech bifurcation, Singapore adopts a strategy of flexible partnerships. It hosts major US and Chinese tech firms alike. This dual engagement reflects Singapore's pragmatic and non-alignment posture, as seen in the balanced handling of Huawei 5G participation and WuXi Biologics, despite US restrictions. By maintaining constructive ties with both tech ecosystems, Singapore avoids entanglement in the great power rivalry and positions itself as a reliable and neutral partner, earning the moniker "Digital Switzerland".

Within the EU, Nordic countries pursue soft balancing – supporting the EU AI Act while pushing for Nordic-centric regulation. This gives them room to shape EU policy without compromising their own preferences. Ireland, despite its integration into the EU digital market, has exercised Protocol 21 to partially opt out of the EU AI Act, with the aim of preserving regulatory autonomy.

Conclusion

As Singapore's Prime Minister Lawrence Wong observed at the 2025 Summer Davos, the world is entering a transitional period without a clear new world order – a

dangerous time, especially for small states, should hard power and the law of the jungle return.

Structural asymmetries persist, as AI deployment depends on computing power, chips, talent, energy, and data; resources concentrated in major powers. Some may seek to weaponise this interdependence. While AI does not level the playing field, it has opened new spaces for agency.

Yet, small states are not passive actors “doing nothing”. Instead, they are entrenching themselves in key global nodes, building local capabilities, and working with like-minded partners to shape inclusive international norms. Small states are learning to use AI as a force multiplier to secure autonomy, enhance security, and expand their influence.

In this evolving landscape, the most strategic actors are not necessarily the largest, but those that can use technology strategically to shape outcomes beyond their weight.

Pong Soon Wu is a PhD student at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU), Singapore. His research examines how small states utilise artificial intelligence to exercise agency and navigate great power competition, thereby advancing their strategic interests.

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