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Sovereign AI Drives Innovation With Efficiency In The APAC Public Sector

GenAI promises to transform how public sector organizations operate, including the way their employees do their jobs and how users interact with them. While public sector organizations in APAC strive to balance opportunity with caution, many are increasingly casting their eyes upon sovereign AI as a new strategic imperative to uphold national autonomy in the digital age.

WHILE AMBITIOUS, PUBLIC SECTOR ORGANIZATIONS IN APAC ARE APPROACHING GENAI ADOPTION WITH CAUTION

Public sector adoption of genAI is steadily increasing, but with a distinctly cautious and strategic approach. Sixty-two percent of public sector leaders have implemented or are expanding implementation of genAI. However, they are taking a more systematic approach to deployment as compared to their private sector counterparts. Public sector leaders are predominantly focused on creating a strategy around managing the risks from the use of genAI (77%), having processes in place to minimize bias in genAI models (74%), and establishing structured training for working with genAI (81%).

This caution bleeds into the genAI use cases pursued by the public sector. Public sector efforts have largely focused on internal use cases that drive efficiency, while public-facing applications remain in development (see Figure 1). Forrester's research supports this trend, reporting adoption rates at 56% for internal genAI use cases in the public sector and 46% for external use cases.[1] Unlike in the private sector where AI is leveraged to gain competitive advantage, public sector leaders must carefully manage the societal impact of genAI, particularly the risk of eroding public trust through poorly executed, public-facing applications.

FIGURE 1

Top Five GenAI Use Cases The Public Sector Is Currently Using/Expanding Usage Of Vs. Is Currently Piloting/ Planning To Use In The Next 12 Months

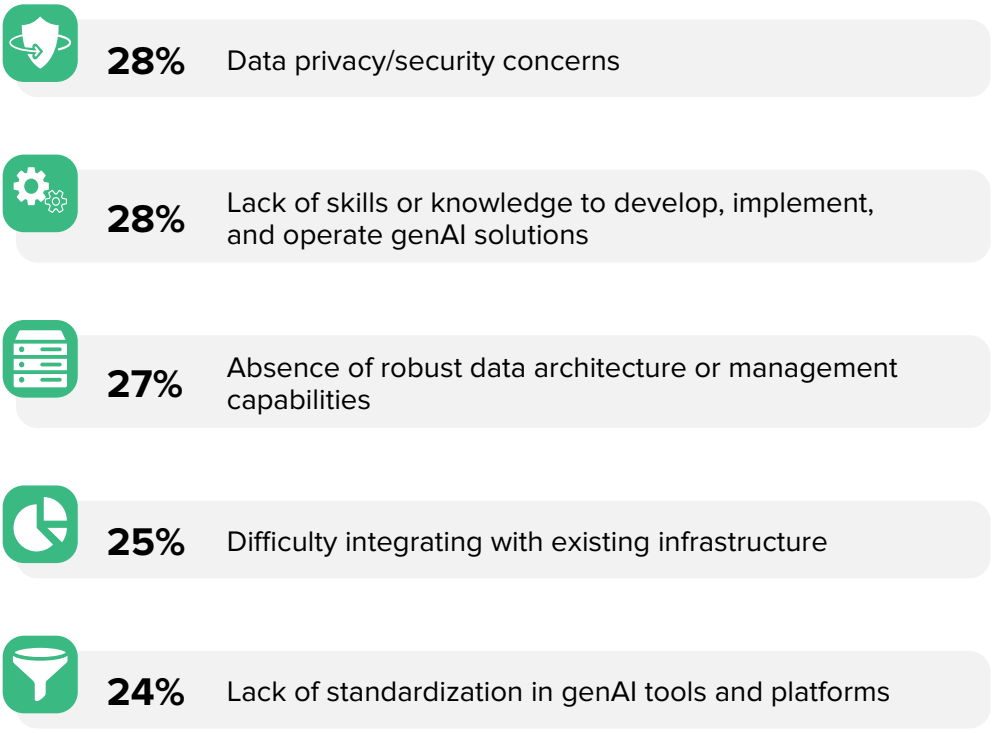
Base: 115 business and IT decision-makers with responsibility over their organization's genAI strategy
Source: Forrester's Q1 2025 GenAI Survey [E-62530]

INFRASTRUCTURAL GAPS IMPEDE THE PUBLIC SECTORS' MANDATE TO BALANCE INNOVATION WITH SOCIETAL RESPONSIBILITY

Foundational infrastructure gaps are slowing the pace of genAI integration. The prominence of data privacy (56%) and security (52%) as top concerns underscores the need for robust governance frameworks and secure-by-design architectures. Yet, technical barriers such as limited genAI development skills (28%), weak data architecture (27%), and integration challenges (25%) reveal the limitations of legacy systems and a pressing need to modernize and invest in scalable and interoperable platforms (see Figure 2).

FIGURE 2

Top Five Technology Barriers In Adopting GenAI

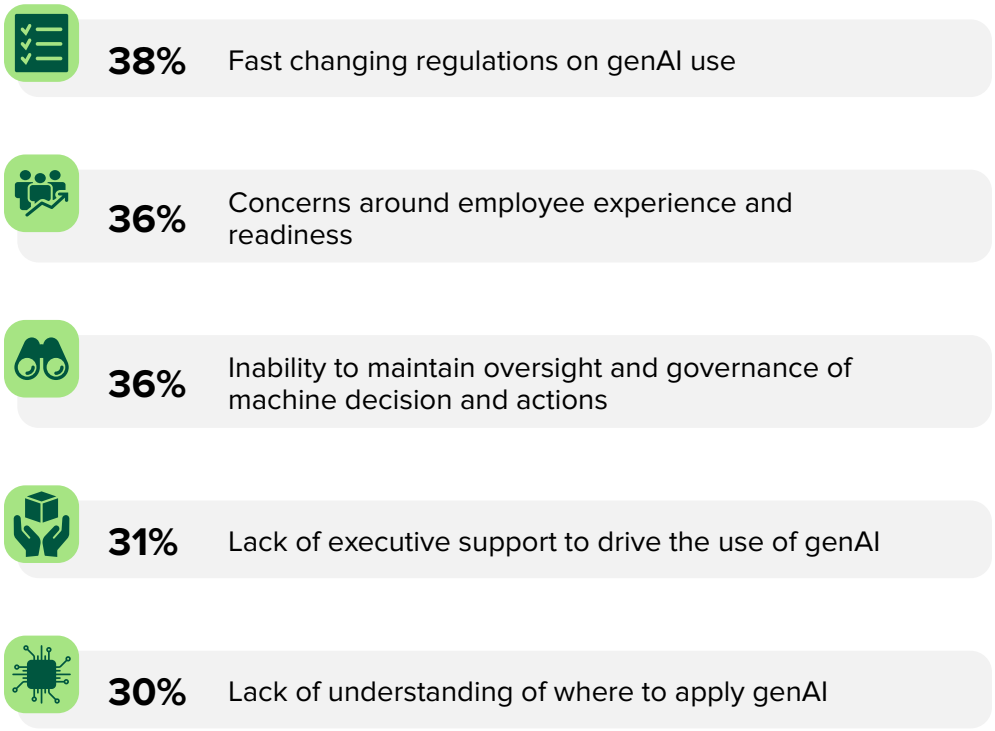


Note: Showing sum of responses for technology barriers that respondents ranked as top three
Base: 115 business and IT decision-makers with responsibility over their organization's genAI strategy
Source: Forrester's Q1 2025 GenAI Survey [E-62530]

On the business side, employee readiness and oversight of machine decisioning (both at 36%) reflect a gap in change management and ethical AI governance (see Figure 3). These challenges collectively demand a coordinated strategy that aligns digital infrastructure upgrades with workforce enablement and policy reform, ensuring genAI initiatives are both secure and sustainable across the public sector.

FIGURE 3

Top Five Business Barriers In Adopting GenAI



Note: Showing sum of responses for technology barriers that respondents ranked as top three
Base: 115 business and IT decision-makers with responsibility over their organization's genAI strategy
Source: Forrester's Q1 2025 GenAI Survey [E-62530]

Cybersecurity and risk management are becoming increasingly complex with the advent of genAI. With data privacy and security ranking as top priorities, leaders must ensure that genAI systems are designed with rigorous safeguards to protect sensitive public sector data. The lack of robust data architecture and integration challenges further complicate the ability to enforce consistent security protocols across legacy and modern systems. Additionally, the inability to maintain oversight of machine decisioning raises governance and accountability risks, which necessitates the development of transparent AI policies and audit mechanisms. These challenges underscore the need for a proactive, trust-centric approach to genAI deployment — one that balances innovation with resilience, compliance, and public confidence.

Data governance and oversight are key to the effective and responsible use of AI. The high concern around data privacy and security places pressure on ensuring that genAI initiatives comply with stringent data protection regulations and ethical standards. The lack of robust data architecture (27%) and limited understanding of genAI application areas (30%) highlight the need for foundational improvements in data management and clearer use-case identification. Moreover, the inability to maintain oversight of machine decisioning raises accountability and transparency issues, requiring the development of governance models that ensure responsible AI usage. These implications call for a holistic approach that strengthens data infrastructure, builds analytical maturity, and fosters trust in AI-driven public services.

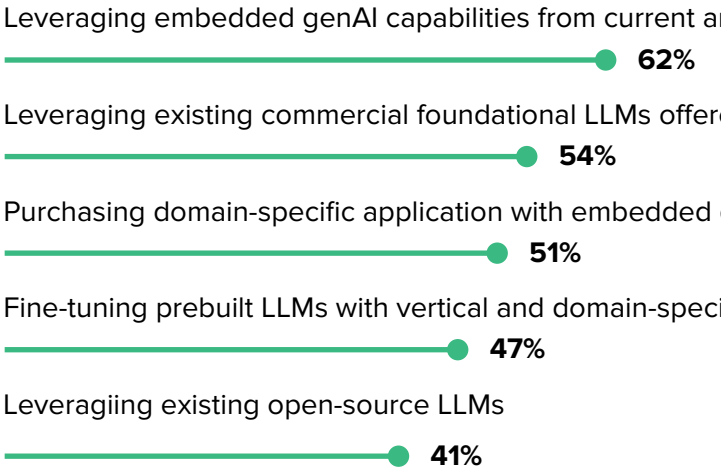
WHILE NO PANACEA, SOVEREIGN AI HOLDS THE KEY TO OVERCOMING STRUCTURAL BARRIERS

Commercially supported adoption models win the favor of public sector leaders. To address key challenges as part of their genAI strategy, public sector leaders plan to tap on commercially supported adoption models such as embedded genAI capabilities from current and new vendors (62%) as well as existing commercial foundational large language models (LLMs) offered by vendors (54%) (see Figure 4). With mature LLMs in place, organizations can thus handle complex tasks that streamline business operations.[2]

Cloud-based deployments are also critical, with more than half of public sector leaders indicating that they are planning to or already using public (66%) and hybrid cloud (59%) for their genAI delivery models (see Figure 5). Besides offering robust infrastructure for foundation models and the infrastructure needed to train and deploy custom models, cloud providers also facilitate the handling of large data sets and variable demand through global infrastructure.[3]

FIGURE 4

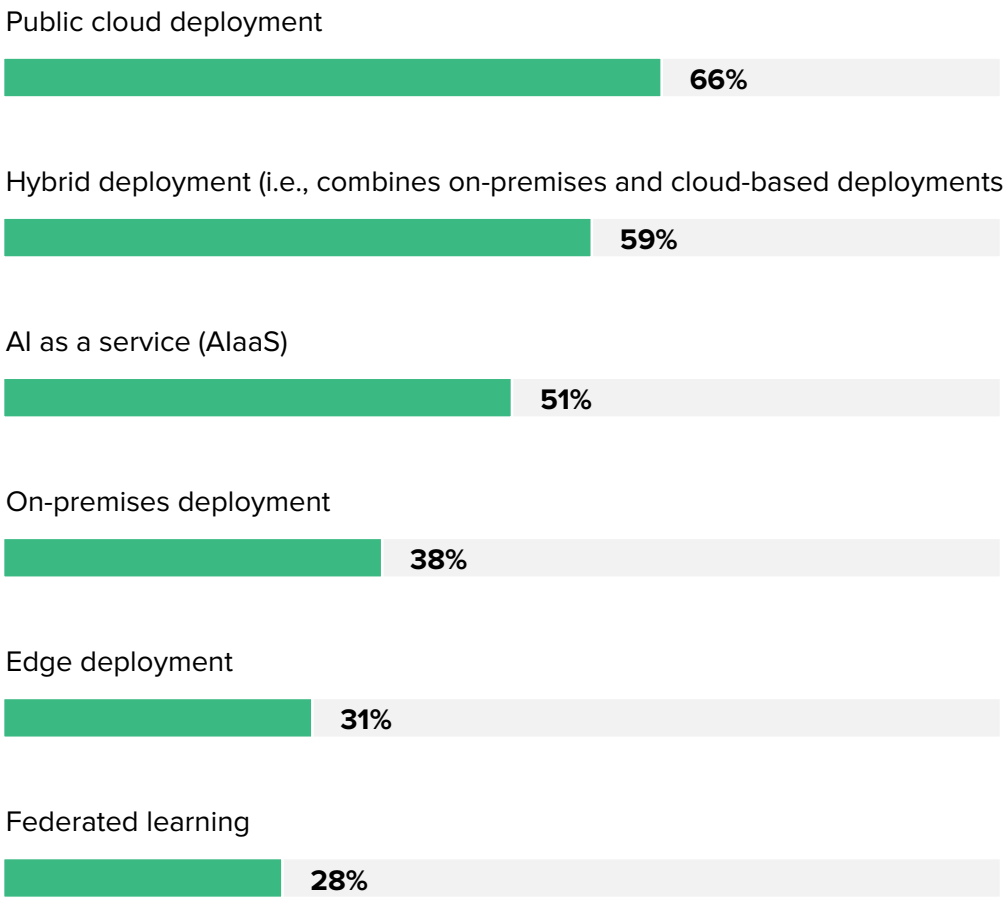
Top Five GenAI Adoption Approaches Favored By The Public Sector As Part Of Their GenAI Strategy



Base: 115 business and IT decision-makers with responsibility over their organization's genAI strategy
Source: Forrester's Q1 2025 GenAI Survey [E-62530]

FIGURE 5

GenAI Delivery Models That The Public Sector Is Using/ Planning To Use



Base: 115 business and IT decision-makers with responsibility over their organization's genAI strategy
Source: Forrester's Q1 2025 GenAI Survey [E-62530]

Customization for national needs highlights a growing demand for sovereign AI. Public sector leaders' preference for domain-specific LLMs (51%) and vertical and domain specific fine-tuning (47%) indicates that for public sector organizations, sovereign AI is no longer a good-to-have, but an urgent priority. By developing domain-specific models locally, countries can reduce reliance on global tech providers, aligning with the goals of sovereign AI. In addition, vertical fine-tuning

ensures models comply with local laws and ethical standards, which is critical for sovereign AI in sectors like defense, law enforcement, and public health.

SOVEREIGNTY IS AT THE CENTER OF PUBLIC SECTOR LEADERS' DIGITAL AND GENAI STRATEGIES

Sovereign AI emerges as the new strategic imperative for APAC public sector leaders. Driven by the need to uphold national autonomy in the digital age, sovereign AI enables governments to enforce alignment with domestic regulations such as the Australian Privacy Principles (APPs) and Singapore's Personal Data Protection Act (PDPA) while safeguarding national security and ensuring AI systems reflect local cultural and linguistic contexts. By retaining control over data, infrastructure, and algorithmic governance, sovereign AI empowers nations to mitigate external risks, preserve public trust, and shape AI development in ways that serve their unique societal values and strategic interests.

To deploy sovereign AI, organizations need to have the capacity to independently develop, manage, and utilize AI systems by using sovereign infrastructure, data, talent, networks, and LLMs. With data centers being at the heart of sovereign AI ecosystems, organizations training AI models with their data also need to make sure that sensitive data and workloads remain in the country when digital sovereignty constraints demand it.[4]

The future of digital sovereignty is "glocal", hybrid, and adaptive. Global vendors will partner with local consultancies and tech firms to deliver their services with sovereign features in a "glocal" model. Even where local options are already available, "glocal" options promise to bring the best of both worlds to organizations.

Public sector leaders will also do well to remember that a sovereign IT strategy does not mean on-premises or cloud by default. Tech decision-makers need to look at hybrid and multicloud environments to find the most appropriate setup for each, given their specific performance, cost, and sovereignty requirements.

Lastly, achieving digital sovereignty is a moving target; changing political headwinds mean that the nature and number of workloads with sovereign requirements will evolve. Public sector organizations preparing for digital sovereignty must think in terms of workload portability and flexible vendor choices to optimize their IT strategies over time. Tech leaders will have to build workloads for portability, mitigate vendor lock-in to allow rapid switching, and promote flexibility by using open standards.[5]

Appendix A: Methodology

In this study, Forrester conducted an online survey of 115 public sector decision-makers at organizations in Australia, India, and Singapore to evaluate the state of genAI adoption in APAC. Survey participants included vice president- and C-level executive-equivalents in the public sector with influence over their organization's genAI strategy. Questions provided to the participants asked the current stage of genAI adoption, challenges faced, as well as preferred adoption approaches. Respondents were offered a small incentive as a thank you for time spent on the survey. The study began in April 2025 and was completed in the same month.

Project Team:
Amelia Lau, Market Impact Consultant

SiDing Wang, Market Impact Consultant

Yi Qin Teow, Principal Market Impact Consultant

Appendix B: Endnotes

[1] Source: The State Of Generative AI In The Public Sector, 2024, Forrester Research, Inc., June 21, 2024.
[2] Source: Predictions 2025: Enterprise Software, Forrester Research, Inc., October 22, 2024.
[3] Source: Predictions 2025: Enterprise Software, Forrester Research, Inc., October 22, 2024.
[4] Source: Top 10 Emerging Innovations In The Data Center, 2025, Forrester Research, Inc., March 17, 2025.
[5] Source: Digital Sovereignty Is Your Alternative To Digital Chaos, Forrester Research, Inc., July 9, 2025.