

Insights from Singapore's Smart Nation 2.0 for Taiwan's AI Development

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Since the inception of its "Smart Nation" initiative in 2014, Singapore has been guided by the philosophy of "technology improving citizens' lives." This vision emphasizes creating a better, more meaningful, and fulfilling life for its people while driving economic growth. Over the past decade, Singapore has made remarkable progress in digital infrastructure and technology applications, establishing itself as a leader in digital transformation. Recognizing the transformative impact of generative artificial intelligence (Generative AI), Singapore introduced the enhanced "Smart Nation 2.0" in 2024. This upgraded strategy places generative AI at its core and aims to foster economic growth, strengthen community connections, and build digital trust, paving the way for a more innovative and inclusive future.

The "Smart Nation 2.0" strategy is a testament to Singapore's proactive approach to leveraging technology for national development. Its emphasis on economic growth is reflected in initiatives like "AI for Science," which promotes interdisciplinary applications of AI in fields such as biomedical research and materials science. By attracting world-class talent and institutions, Singapore is building a globally recognized AI ecosystem that pushes the boundaries of innovation. At the same time, the strategy underscores the importance of digital inclusion, using technology to enhance social cohesion. Efforts such as digital health education and cybersecurity initiatives ensure that technology is not only a tool for advancement but also a means of connecting and strengthening communities. Furthermore, digital trust forms a cornerstone of Smart Nation 2.0, with Singapore implementing measures like the "Digital Infrastructure Act" to safeguard the stability and security of its digital foundations. By enhancing transparency and ensuring reliability, the government fosters public confidence in technology, laying a strong foundation for its adoption into daily life.

In contrast, Taiwan's "Smart Nation Plan" (2021-2025) adopts a broader, more systemic approach, with the goal of achieving an innovative, inclusive, and sustainable smart nation by 2030. While Taiwan's plan does not explicitly prioritize generative AI

as a core technology, it focuses on building digital infrastructure and driving economic innovation, particularly through initiatives such as the "5+2 Industry Innovation Plan" and six strategic industries. Singapore's policies stand out for their adaptability and responsiveness to technological trends, while Taiwan emphasizes comprehensive planning to ensure balanced development across digital infrastructure and social inclusion. The differences between the two strategies highlight distinct approaches to digital transformation, each shaped by unique national contexts and priorities.

Singapore's experience offers valuable lessons for Taiwan in several key areas. One of the most striking aspects of Singapore's success is its forward-looking and continuous policy adjustments. From its foundational work in digital infrastructure to the integration of generative AI into its strategic vision, Singapore demonstrates the importance of agility in policymaking. For Taiwan, accelerating the pace of policy adjustments and incorporating cutting-edge technologies like generative AI into its strategic framework will be critical for seizing global technological opportunities. Another area where Singapore excels is its investment in resources and talent cultivation. The country has made significant efforts to introduce AI knowledge at an early stage in its education system, ensuring that its workforce is well-prepared for the demands of a digital future. Additionally, Singapore's proactive approach to attracting global talent has strengthened its local expertise and reinforced its position as a global technology leader. Taiwan, while making strides in its talent optimization strategies, still faces challenges in systemic investment in AI education and high-level talent development. Addressing these gaps will be essential for Taiwan to compete effectively on the global stage.

International collaboration is another key strength of Singapore's approach. By establishing itself as a hub for technological innovation in Southeast Asia, Singapore has attracted leading international technology enterprises and research institutions. This global perspective has allowed Singapore to remain at the forefront of AI advancements. For Taiwan, leveraging its robust AI hardware manufacturing capabilities to forge partnerships with international software developers offers a pathway to strengthen its role in the global AI ecosystem. Such collaborations can help Taiwan integrate its hardware strengths with cutting-edge software innovations, elevating its global standing.

Finally, Singapore's focus on addressing the social impacts of digital transformation provides an important lesson in ensuring that technology serves as a tool for inclusivity. Initiatives aimed at preventing digital exclusion and promoting

social cohesion reflect Singapore's commitment to using technology to benefit all segments of society. In comparison, Taiwan's efforts to expand digital access and bridge the digital divide, particularly in rural and underserved areas, require more concrete and targeted strategies to ensure that the benefits of its Smart Nation initiatives are equitably distributed.

In conclusion, Singapore's Smart Nation 2.0 demonstrates the power of strategic foresight, adaptability, and inclusivity in shaping a nation's digital future. Its focus on generative AI, talent development, global collaboration, and social impact provides a comprehensive blueprint for digital transformation. By learning from Singapore's experience and integrating these insights into its own strategies, Taiwan can accelerate its journey toward becoming a truly innovative and inclusive smart nation, positioning itself as a competitive player in the global digital economy.

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