

Four everyday AI competencies to make Singapore's Smart Nation 2.0 work

With rapid advances in technology come new challenges and opportunities.

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With the launch of Singapore's Smart Nation 2.0 strategy by Prime Minister Lawrence Wong this week, the country strides into a future powered by artificial intelligence (AI). This refreshed vision focuses on three key goals: Trust, Growth and Community – ensuring that digital technology improves lives, drives economic progress, and fosters inclusivity.

AI, a key driver of this strategy, is no longer confined to tech firms and laboratories. It is embedded in the apps we use daily, from streaming recommendations to virtual assistants managing our schedules.

While this offers tremendous potential, many may feel anxious about its impact on jobs, safety and social cohesion. The idea of this set of technologies replacing human roles in everything, from administrative work to decision-making, raises

understandable concerns. However, engaging with it does not mean we all need to become developers or data scientists. Instead, most people can focus on acquiring everyday AI skills that allow us to use the technology responsibly and productively. In line with the Government's Smart Nation 2.0 vision, I propose four essential competencies in this technology that will equip Singaporeans to meet the new challenges and seize the opportunities of this AI-driven era.

FOUNDATIONAL COMPETENCE: RECOGNISING AI IN EVERYDAY LIFE

AI is embedded in many aspects of our daily lives, often without our even realising it. For example, on platforms such as OneService, it powers chatbots that answer queries and guide users through municipal services. Similarly, Grab and foodpanda use it to optimise routes, speeding up food deliveries and making them more efficient. Even our interactions with streaming platforms such as

YouTube and Netflix involve AI algorithms that recommend content based on our viewing history.

More critically, online harms such as deepfakes or manipulated videos and images generated using AI are becoming a growing threat. In Singapore, Senior Minister Lee Hsien Loong has repeatedly been the target of deepfake scams, where his likeness is used in investment scam videos to mislead people. As its use in creating such content grows, the ability to recognise AI-manipulated information will become increasingly important.

Singapore's National Library Board launched the Sure (Source, Understand, Research, Evaluate) campaign in 2013, promoting media literacy and responsible consumption of information. With AI-generated content becoming more sophisticated, the Sure campaign is now more relevant than ever. It, too, is evolving to help more users identify deepfakes and AI-manipulated content and equip them to navigate the information landscape of the new era.

TRUST: NAVIGATING ETHICAL CONSIDERATIONS

The Smart Nation 2.0 vision prioritises building trust. As AI becomes more integrated into daily life, ethical challenges emerge, such as biased algorithms or misuse of personal data. Back in 2018, one well-known example was Amazon's machine-learning recruitment tool, which was found to discriminate against female candidates. This discovery underscores the need for rigorous oversight and transparency in the use of such systems.

In Singapore, AI Singapore's White Paper on Ethical

AI outlines key principles that guide the responsible use of this technology. To build everyday trust in it, Singaporeans must be informed about these ethical concerns. Whether it is its use in screening job applications or curating content on social media, critical thinking is essential to ensure that these technologies are used fairly.

By promoting transparency and accountability, we can prevent potential risks such as data misuse, discrimination and biased decision-making. Understanding the ethics of this technology is key to maintaining trust in these systems, ensuring they benefit all Singaporeans equitably and contribute to a safer, more reliable digital environment.

GROWTH: UTILISING AI FOR PRODUCTIVITY

The Smart Nation 2.0 vision also emphasises growth, using AI to empower individuals and businesses to thrive in a digital economy. In the banking sector, such tech tools as DBS NAV Planner provide personalised financial advice by analysing spending patterns and offering tailored saving strategies. Similarly, OCBC utilises AI tools like Wingman and Buddy to automate routine tasks, generate client insights, and enhance customer engagement, making personal finance management more accessible.

In the workplace, these tools are automating mundane tasks across industries. For instance, the public sector has deployed the technology in MyInfo, which streamlines administrative tasks by auto-filling forms for various government services, and AI-driven scheduling assistants are becoming more common in

offices, enabling employees to focus on higher-value work rather than time-consuming tasks.

The technology is also transforming education. The launch of the EdTech Masterplan in 2023 introduced five AI-powered tools into schools, including "learning feedback assistants" for subjects like mathematics, English language, and short-answer questions. These tools deliver real-time feedback on student assignments, supporting students as they learn.

Another tool, the Authoring Copilot, aids teachers in crafting lesson plans by helping them create activities and components based on their input. The implementation of these systems allows educators to dedicate more time to advanced content while providing students with personalised learning experiences.

COMMUNITY: EMBRACING LIFELONG LEARNING

In a rapidly evolving digital world, lifelong learning is critical for Singaporeans to stay ahead. The SkillsFuture initiative, a core pillar of Smart Nation 2.0's goal of community, provides citizens with opportunities to upskill in AI, data analytics and other digital competencies. SkillsFuture helps ensure that Singaporeans, from fresh graduates to retirees, can adapt to the changing digital landscape.

Retail workers in Singapore, for example, are increasingly using tech-driven customer service tools like chatbots to improve shopper experiences, while those in the finance and legal sectors must adapt to AI systems that automate tasks and provide real-time analysis. By taking advantage of SkillsFuture courses,

Singaporeans can transition into higher-value roles that require critical thinking, creativity and the ability to manage AI-powered tools.

As this technology continues to evolve, the ability to learn and adopt new skills quickly will become one of the most valuable assets for Singaporeans, ensuring that no one is left behind in our digital future.

EQUIPPING SINGAPORE FOR THE AGE OF AI

As the lead author of Singapore's Unified Framework for Digital Literacy (UFDL) in 2021, I aimed to create a guide to equip Singaporeans with the skills needed to thrive in a digital world. Although only three years have passed, the rapid advancements in AI have shown that the framework must now evolve. The pace of this development has been astonishing, and the goals of Trust, Growth and Community outlined in Smart Nation 2.0 highlight the importance of updating the UFDL to include AI-specific competencies.

By recognising AI in everyday life, navigating its ethical challenges, utilising it for productivity, and embracing lifelong learning, Singaporeans will be better equipped to succeed in the age of AI. This will not only make Singapore more competitive globally but also foster a more inclusive, future-ready society that benefits everyone.

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