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## **Do We Need A Broader Smart Nation Narrative?**

*By Tan Teck Boon*

### **Synopsis**

*The Smart Nation initiative heralds an era of unprecedented automation and connectivity. There are also risks. To keep the Smart Nation initiative on an even keel, Singaporeans need to develop a deeper appreciation of the high-tech drive.*

### **Commentary**

IT HAS been more than two years since Prime Minister Lee Hsien Loong launched the Smart Nation initiative. When announced in November 2014, the Smart Nation initiative was unprecedented in that it would transform Singapore into the world's first smart nation – an ultra-modern nation-state where cutting-edge technology is weaved into the lives of citizens.

Sure, governments around the world are building smart cities at a rapid pace, but Singapore would be the first to turn the entire country into a mega-smart city. Signs of this high-tech drive can be seen across the island.

### **Smart City Singapore**

In line with this Smart City drive, two housing estates, Yuhua and Punggol, have placed smart homes on trial presumably, to assess their suitability for wider implementation down the road. Outfitted with the latest smart sensors and gadgets, these futuristic homes are not just eco-friendly and energy efficient but also safer for elderly residents.

The country's less-than-perfect transportation system is getting a high-tech upgrade too. Designed to solve the so-called first-and-last-mile problem, self-driving taxis are already plying the One-North business district area. Fuel-efficient and significantly

safer, these high-tech vehicles will one-day complement the country's fixed route transportation system and help ease traffic gridlocks.

The smart nation will also leverage on telemedicine – a term referring to medical care delivered remotely – to provide better healthcare for citizens. By leveraging on Internet-enabled medical devices, teleconferencing equipment and wearable health trackers, patients will soon be receiving medical care in their homes freeing them from making non-essential visits to the hospital. The result will be a more efficient and streamlined healthcare system.

These are just a few examples of the benefits the Smart Nation initiative will deliver.

### **Potential Risks**

Nonetheless, this high-tech push also has risks for the nation. It is entirely possible that unwelcomed consequences will follow. The most worrisome fallout is likely to be cybersecurity. The reason is that the extensive application of digital technology in the smart nation could also inadvertently expose the country to large-scale cyberattacks and data theft.

We saw what malicious hackers are capable of when a handful of them managed to breach the database of Target and stole the credit card numbers of 40 million customers apparently by hacking the US retailer's Internet-enabled heating and air-conditioning system. What if malicious hackers turn their attention to the digital devices and systems that power the smart nation?

As the smart nation comes online, Singaporeans should also recognise why it is vitally important for the country to embark on this high-tech drive. Indeed, with a deeper appreciation of the Smart Nation initiative, citizens will be less likely to waver in the event of a massive digital breach, for example. More precisely, the country should recognise that the high-tech drive is in many ways, a necessity and that relinquishing it is not really an option.

### **Underline Natural Constraints and Vulnerabilities**

We often take for granted that Singapore meets almost all of its energy needs from a small handful of countries and that Malaysia provides a substantial amount of the country's water supply. It would be worth pointing out that the Smart Nation initiative will help the country get more out of these precious resources. Coupled with government policies to promote resource efficiency, the water and energy saving technologies that come with the smart nation will ensure that Singapore remains viable even as demand for these vital necessities shoot up.

It is also worth underlining the fact that the Smart Nation initiative will optimise land use in space-constrained Singapore. The country is undergoing rapid population ageing and the government projected that one in four citizens, or 900,000 Singaporeans, will be aged 65 and above by 2030. Two years ago, that figure stood at just 440,000. In land-scarce Singapore, building more nursing homes is not the answer. But thanks to smart homes and telemedicine, elderly citizens will one day be

able to “age in place” while drawing on the support of their community and loved ones.

Currently, the amount of land in Singapore devoted to roads is roughly 12 percent – a figure not significantly different from that devoted to housing. Experts have noted that a fleet of shared self-driving cars could slash the number of vehicles in Singapore by two-thirds. With fewer cars on the road, there will be less traffic congestion and more land can be devoted to recreational use, housing and even farming – not roads. In short, the smart nation will optimise precious land resources.

### **Broader Smart Nation Narrative?**

The Smart Nation initiative is as much about the application of cutting-edge technology as it is about improving the quality of citizens’ lives. As we go forward, it may also be necessary to broaden the Smart Nation narrative.

Unlike other countries, going “smart” is not a matter of choice for Singapore but one might contend, a necessity to cope with the country’s natural constraints and vulnerabilities. Broadening the smart nation narrative to encompass this key facet will help ensure that confidence in this high-tech drive does not waver during difficult and challenging times.

As Singapore transforms into a smart nation, there will be unwelcomed consequences. However, we can keep them at bay by recognising the deeper significance of the Smart Nation initiative. That will ensure that the high-tech drive stays on course. With some luck, a broader smart nation narrative will even set the country on the path of a smarter nation.

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