

Singapore

How to build a government-defining digital strategy from the start



Singapore Parliament is the official seat of the Singapore government

In 2000, Singapore's leaders took the decision to go straight to the most modern approaches and technologies to deliver government services efficiently

Challenge

The Singapore government set itself a challenge in 2000 to become the world's leading user of digital technology. The vision, set out in the [e-Government Action Plan](#), was to transform service delivery to individual citizens and to businesses so that it was relevant and responsive to their needs. Prime Minister Lee Hsien Loong championed the vision, and this support at the top emphasised the scale of the ambition as well as providing a powerful mandate for transformation.

Solution

With the vision set, the government invested in information technology infrastructure and in building digital skills. In 2006, [digital immigration checks began](#). The following year, citizens could file tax returns online. In 2011, the government expanded

its ambition with the [eGov 2015 Masterplan](#), which included an aim to send information to citizens via mobile services. The plan has been updated in subsequent years. In 2013, Singapore's government unveiled its National Cyber Security Masterplan 2018. The Smart National Platform followed the next year, as GovTech, a statutory board of the government of Singapore under the Prime Minister's office, evolved to deliver these plans. While the early stages of Singapore's digital transformation relied on on-premises databases, by October 2018 the government said that the cloud could offer what the country needed to optimise the relevance and responsiveness of its services, and [Prime Minister Lee Hsien Loong announced that the government would be moving a part of its IT systems onto commercial clouds](#).

He said: "Putting systems and services in the cloud brings many benefits. Developers have access to more toolkits and better software services, and can upgrade and improve your systems more easily. Operating and maintenance costs can be much lower – sometimes by orders of magnitude. We can scale services up or down easily and quickly by sharing computing resources. We can run systems 24/7, without having to provide for expensive dedicated backups and hot standbys. Today, nearly all government IT systems are located on premises. We are this way because when we built these systems, cloud technology did not exist but for many government systems, cloud technology is now a viable and often will be, an attractive option."

Though cost was a consideration it "was not the [primary motive](#)", said Chan Cheow Hoe, Government Chief Digital Technology Officer and Deputy Chief Executive of GovTech. Other factors included the ability to leverage innovative services and solutions such as application programming interfaces (APIs) and software as a service (SaaS). Singapore needed to reform its procurement processes so that agencies could buy cloud services from commercial providers and access these innovations. GovTech set up the Government on Commercial Cloud (GCC) IT system.

[Another breakthrough](#) was the realisation that services had to be designed for the citizen, rather than the user in the government organisation. One example of this is the [Moments of Life](#) app, which simplified the process of birth registration and immunisation records, cutting the time users typically need to spend from 60 minutes to 15 minutes. This [evolved to become LifeSG](#), offering users access to more than 40 services, personalised and available on mobile phones. Other initiatives include [Singpass](#), each resident's digital identity, which allows easy and secure access to more than 2,000 government and private sector services online and in person. According to GovTech, 95% of government transactions are digital from end to end (March 2023).

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Lee Hsien Loong
Prime Minister of Singapore