

# Using emerging technologies for agile governance



There is an urgent need for an agile approach to governing emerging technologies and the social interaction structures they enable. Agile governance is defined as adaptive, human-centered, inclusive and sustainable policy-making, which acknowledges that policy development is no longer limited to governments but rather is an increasingly multi-stakeholder effort. Countries in the Asia-Pacific Region are known to be among the promoters of futuristic technology-led societies. But what are the general attitudes and perception of the citizens towards government use of technologies? What is the general response to digital initiatives launched by the Government? Threat or anticipation? As expected, citizens' perception is strictly connected to the cultural environment, independent of the goals of the initiatives.

## Technology and public opinion

High-levels of satisfaction is registered in Singapore and South Korea, where technology advancement is a priority and majority of the population not only accepts, but also supports the sacrifice of some privacy for increased safety, through the use of tech systems. In Singapore, a study by the Institute of Policy Studies (IPS) released in May 2020 on attitudes towards the use of surveillance technologies in the fight against Covid-19 reported that the type of technology and how it is used determines public acceptability. It is more favourable towards the use of surveillance cameras than tracking personal mobile devices. The experience with MERS outbreak in 2015 convinced Korean public opinion (74%), that “pandemic-related restrictions on freedom of movement are entirely reasonable and appropriate”, resulting in 60% willingness to give up on some privacy to help track and contain the spread of the virus.<sup>1</sup> A different approach has been used in Japan, where the use of a tracking app as a countermeasure against COVID-19 was delayed on the part of

the Government itself to ensure personal data protection. Additionally, citizens' attention to personal information disclosure is high, reflected in one third of complaints made on the Complaint Mediation Line provided by the Personal Information Protection Commission (PPC).<sup>2</sup> This is quite interesting considering that the Japanese are generally receptive of new technologies.

Privacy concerns also divide public opinion elsewhere, although in slightly different ways. In China, for instance, the frequent use of surveillance cameras is a good example, where despite frequent propaganda on how facial recognition helped the police to locate and arrest fugitives, the public's opinion remained skeptical, generating concerns about abusive control from the Government. The latter is also a major fear in Australia, despite its democracy and general acceptance of technologies. For instance, the introduction of an algorithm for the calculation of debt towards the state, incurred by receiving social security, led to the robodebt<sup>3</sup>

<sup>1</sup> 2020 Edelman Trust Barometer Spring Update

<sup>2</sup> <https://www.ppc.go.jp/en/>

<sup>3</sup> <https://www.crikey.com.au/2020/06/03/what-is-robodebt-what-happens-if-you-are-overpaid-by-centrelink/>

inquiry, whereby, people were assigned disproportionately high debts and fines for late payments.

In India, citizens' perception towards the use of technology from the Government is generally positive, but more than in other countries, doubts are raised on specific initiatives. Currently, the Government is the largest entity in the digital ecosystem; digitalisation is especially aimed at reducing administrative and banking procedures, and transformation of the delivery system. Among others, the most recent Direct Benefit Transfer Scheme DBT is the largest technology driven initiative globally to transfer wages, subsidies and other benefits of government schemes directly into the bank accounts of the beneficiaries. It has succeeded in weeding out fake and duplicate beneficiaries, prevented leakages and middle men, and reduced the time taken for the payments to reach the beneficiaries<sup>4</sup>. However, issues such as lack of knowledge of transfers, geographical inaccessibility to banking system, administrative

issues and processing errors have been highlighted as some of the lacunae in this initiative. Despite beneficiaries in some states having more awareness than the others, officials suggest that the efficiencies brought in by the system have resulted in a larger section (70%) of the population having a positive perception of the scheme.

Similar to the Indian government, the Australian one aims to slim the procedures and provide a seamless experience for citizens by eliminating the need to deal with multiple agencies and layers of government. This goal is reflected in the Australian Digital Transformation Strategy released in 2018, introducing online procedures for information and services. However, if the geography in India separates citizens on IT literacy and banking access, the streamlining of the personal data held by different jurisdictions and public agencies constitutes a practical challenge in Australia, which involves concerns about privacy and anonymity.

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## The need for digitising governance

The lack of digital literacy and integrated approach to government services, which led Australia from being an early leader in digital governance to falling behind in the global context, have been tackled in Singapore, as the key to keeping citizens engaged in the country's efforts to maximise the opportunities of a digital society. A unique effort to centralise and digitalise G2C (Government-to-Citizen) and G2B (Government-to-Business) services has led to the creation of the SingPass and CorpPass online portals. The introduction of SingPass in 2003 was one of the first steps made by the Singapore Government to digitalise its services. SingPass and CorpPass

able users to access their health records, file their taxes, apply for trade licenses, register a newborn or bid for business opportunities securely and conveniently. In general, digital technologies allow city administrators to better understand needs of the residents, and therefore, provide better services. This is especially true in immense and diverse countries like China, where adopting digital technologies allow the government to improve governance and strengthen control.

However, digitalisation goes beyond slim and quick administrative procedures. In the Singaporean vision “digitalisation should fuel

<sup>4</sup> <https://www.livemint.com/news/india/govt-saved-rs-1-7-trillion-via-direct-transfer-of-subsidies-says-president-11580457232905.html>

the national economy for years to come, it should help to optimise state governance and Singapore's society as a whole to move into the digital age". In particular, the Smart National Plan announced in 2014 aimed to make the city-state an attractive location for business, and support companies in their digitalisation journey to become more efficient while creating jobs and recruiting talents. On top of strengthening the physical and digital infrastructure, the goal was, and still is, to train the workforce, as well as adapt policies and regulations to find a balance between making Singapore competitive and protecting the public interest. When it comes to a long term and everlasting goal, the Chinese government encourages the transition to digital economy in the traditional sectors. China aims to move the industry higher up in the value chain and provide more value-added services. Infrastructure development that supports technology needs of today and tomorrow is required to meet such goals; hence the Chinese government has made tremendous investments in infrastructure upgrade of, e.g. 5G, as well as in relevant competencies including broadband network, data storage, computing and analytics.

Japan and South Korea highlight digital transformation and citizens' information and participation into decision making processes as the main aspects of embracing governance. The Japanese e-Gov portal in the local language<sup>5</sup> offers citizens digital access to administrative documents, budgetary explanations, white papers, statistical reports, policy evaluations, press briefings/reports, and others. The government also accepts public opinion online. Between 2003 and 2008, 'Participatory Government' became a slogan in South Korea and the first e-participation system<sup>6</sup> (e-people and [www.open.go.kr](http://www.open.go.kr)) made

its appearance, followed by 'Government 3.'<sup>7</sup> (2012-2017), which prioritised transparency and communication. The most recent initiative was 'A Nation of the People, a just Republic of Korea' that focused on the public participation in policy-making processes and online petitions<sup>8</sup>. Of particular relevance is the new initiative (April 2020) towards foreign citizens in South Korea: Korean government opened a policy proposal website in 14 languages for foreigners living in the country.<sup>9</sup> In terms of voting for national elections, Japan will test digital participation in 2022 with online voting<sup>10</sup>, starting with citizens living abroad. The argument to introduce online voting, initially picked up after natural disasters, prevented some of the population from voting. Discussions were accelerated after the COVID-19 pandemic. The government made a field study in February 2020 in Tokyo using a dedicated app for smartphones; prior to this, a field study was developed at Prefecture level for online voting using blockchain technology<sup>11</sup> in August 2018, and a second study that added facial recognition technology was conducted in August 2019. Both systems require a 'My Number' personal identification card issued by the government. However, the issuance rate of the My Number card was at 16.8% as of 1 June 2020 after four years of introduction, mainly due to concerns over personal data protection. The low penetration rate may pose a risk to the spread of electronic voting.

Public participation in decision-making through democratic procedure such as voting is, instead, limited in China. In order to open up channels for public engagement, the State Council (China's parliament) called for every level of government to set up and proactively use social media platforms such as Weibo (Chinese equivalent of Twitter), WeChat and Tiktok to enhance interaction, collect

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<sup>5</sup> <https://www.e-gov.go.jp/>

<sup>6</sup> A Comparative Study of Governance in State Management: Focusing on the Roh Moo-hyun Government and the Lee Myung-bak Government <http://s-space.snu.ac.kr/bitstream/10371/86755/1/6.%20%20A%20Comparative%20Study%20of%20Governance%20in%20State%20Management.pdf>

<sup>7</sup> Routledge Handbook of Korean Politics and Public Administration [Moon, Chung -in, Moon, M. Jae]

<sup>8</sup> Blue House or "Cheong Wa Dae" petition <https://www1.president.go.kr/petitions> (in Korean) <http://www.koreaherald.com/view.php?ud=20191107000693>

<sup>9</sup> [http://world.kbs.co.kr/service/news\\_view.htm?lang=e&Seq\\_Code=152589](http://world.kbs.co.kr/service/news_view.htm?lang=e&Seq_Code=152589)

<sup>10</sup> <https://www.japantimes.co.jp/news/2019/07/19/national/politics-diplomacy/japan-test-online-voting-overseas-citizens/>

feedback from the public and better understand public opinions. Such a step, despite being small and often being mocked as a merely ‘symbolic gesture’, is already linked to the tremendous efforts of an administration that still lacks in digital know-how. Until now, a total of 170,000 social media accounts of different levels of government administrations and public organisations—from local community administrators all the way up to the State Council have become an outlet for public opinions to influence decision-making. Another example of how governments are looking

at ways to engage their citizens in policy-making is through whole-of-government crowdsourcing portal to seek ideas and solutions from citizens, based on the challenges and events created by the government agencies. For example, the data collected through the portal called ‘Ideas!’ in Singapore, can be transformed into useful insights using real-time analytics and reporting tools. Public can access Ideas!. This feature allows citizens to highlight issues that are on the ground, helping the Singapore government to better understand their citizens.

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## Challenges in the APAC region

Despite the progresses and futuristic vision in the Asia-Pacific region, lack of digital literacy, level of inclusiveness for elderlies and low income citizens, prevention of manipulative actions<sup>12</sup>, geographical and administrative division, and privacy concerns seem to be the main challenges in the transition to a digital governance, economy and society. In addition, since the reveal of the PRISM program in China in 2013, there has been a push to replace foreign softwares and hardwares

with domestic ones. Alibaba was on the forefront of the campaign, followed by domestic financial institutions (such as the People’s Bank of China) and government administrations (such as the central ministries). The trade war with the United States which suspended import of key supplies for Chinese tech giants Huawei and ZTE, further consolidated this development. Although the localisation initiative creates incentives for domestic hardware and software developers,

<sup>12</sup> <https://thediplomat.com/2018/11/what-is-next-for-south-koreas-official-online-petition-channel/>



China still has a long way to go before becoming fully independent from foreign technologies. According to the Medium and Long Term Science and Technology Development Plan of China (2005-2020), the country aims to reduce dependence on foreign technologies to 30% by the end of 2020. In order to support the localisation of core technologies, the Chinese Ministry of Science and Technology has announced the financing of the multi-billion dollar “National Science and Technology Mega Projects” among other research grants, with the aim of bridging the existing technology gap.

As governments and policy-makers find themselves increasingly constrained to react quickly in view of the speed of technological innovation, society also sees a new role for the private sector and academia to work alongside public officials. In South Korea, for instance, experts from academia and industry were called to be part of the Presidential Committee on the Fourth Industrial Revolution (PCFIR). Launched in 2017, it aims to “coordinate important policy matters pertaining to the development and acquisition of new science and technology,

including, artificial intelligence (AI) and data technology, as well as new industries and services necessary for Korean society’s adaptation to the 4th Industrial Revolution.”<sup>13</sup> Unfortunately, due to the confusion in relation to national priorities (government innovation vs. job creation), scarce authority and lack of coordination with existing ministries and external experts, the PCFIR has failed so far to remove old regulations<sup>14</sup> that were originally meant for traditional industries and services. Tie-ups between the public sector and private sector, to co-develop solutions for the city-nation first, and the region later, is the approach taken by Singapore. Tech companies are continuing to invest in Singapore and public-private partnerships (PPPs) with the Government are thriving.

From this summary about challenges and initiatives in the Asia-Pacific region, it is clear that having a good and holistic citizen engagement practice is essential to successfully implement initiatives and achieve social outcomes. It also gives communities the opportunity to drive the process of development that shape their lives for the better.

<sup>13</sup> <https://www.4th-ir.go.kr/home/en>

<sup>14</sup> Developing Digital Governance South Korea as a Global Digital Government Leader | Choong-sik Chung | Routledge 2020

