Why trust is a critical part of Malaysia's digital infrastructure

Trust in RESILIENCE

BY MIKE GRAHAM

There has been no shortage of news reports on Malaysian companies adopting technologies of Industry 4.0 in a bid to shore up a first-mover advantage in the digital economy. We have seen this happening among manufacturing companies, real estate and financial services organisations, among other sectors.

Most businesses would agree that building a digital society is the way forward, against the backdrop of recent initiatives like the six projects recently announced under the National Fiberisation Connectivity Plan (NFCP) and the study to establish a National Digital ID framework to enhance service delivery to Malaysians. But are initiatives like these really taking into account what the people need for their future, versus what the nation can supply in terms of infrastructure and resources? How can access to information and digital know-how be equalised?

In this article — the third in the PwC series on restarting Malaysia — we look at the state of Malaysia's digital infrastructure on the back of the Covid-19 crisis. The developments of the past few months have sharpened our focus on digital priorities as a nation. There is a heightened need for digital initiatives and investment to bridge the gap among individuals and communities, including the disadvantaged, for equal access to education, employment and social mobility.

In fact, a small Baltic nation — Estonia — could provide a blueprint for Malaysia to consider. The impossibility of physically serving a small population of 1.3 million people spread across a large territory spurred a private and public sector development programme that now sees Estonia as one of the most developed national digital infrastructures in the world. A digital signature is preferable to a physical one, taxes take only a few minutes to file, and online elections have been a fact of life since 2005.

When the Covid-19 crisis struck, this investment paid off, largely based on the trust they built among their people. Estonia's digital public services continued mostly uninterrupted, enabling citizens to continue registering businesses and properties, applying for social benefits or even enjoying certain family benefits, triggered automatically by the birth of a child.

State of the infrastructure and what we may be missing

When we think of digital infrastructure, we typically focus on networks of cabling, towers and data centres (essentially the hardware, software and structures). But infrastructure should also include intangible components that safeguard, regulate and encourage its usage, that is, intellectual property rights (IPR), policies, initiatives that build trust among the people (for instance, trust in big data), identity and data protection, and education.

Let us first look at the supply of physical infrastructure. Malaysia's infrastructure appears well-established in terms of mobile network coverage and number of data centres, among other indicators. Yet, Malaysia ranks 63 in the International Telecommunications Union's (ITU) ICT Development Index 2017.

To boost development, the NFCP was published in March last year, setting out a list of desired targets. In February this year, RM3 billion from the Universal Service Provision (USP) fund was earmarked to help realise those ambitions — including providing connectivity to 151 Orang Asli settlements and the replacement of 377,360 copper broadband subscribers to fibre to uplift the socioeconomic well-being of the rakyat.

Those announcements were made before the Movement Control Order (MCO). The ambitions of NFCP will need to reflect a post-Covid-19 world, with many of us working from home or conducting our daily activities virtually.

Even before the pandemic, the Department of Statistics Malaysia reported that 84% of Malaysians are avid users of the internet, with 62% of those in the 25-29 age group using mobile banking. According to PwC's Global Consumer Insights survey 2020, there has been an increase in the take-up of digital-enabled functions after the outbreak, with 45% of respondents reporting an increase in online shopping using mobile phones, and more than half of consumers increasing their media consumption via video and messaging apps and social media. This trend bodes well for 5G networks, which will hopefully improve our digital competitiveness on the global stage.

However, while plans were underway to allocate the 5G spectrum to a single consortium before the crisis, there are indications that this idea has evolved in the last six months.

Does a licensee continue to sweat the nearly 10-year old 4G network, leveraging advances in microwave technology to avoid costly fiberisation? Or should they invest in edge computing capability with the right 5G network architecture to optimise the nation's bandwidth needs?

Any changes in the approach to rolling out 5G in Malaysia will need to be made clear to prospective licensees — so that the right infrastructure investment can be channelled, while still encouraging collaboration and competition among the telco operators and enabling them to contribute to digital inclusion.

To that end, early last month, the Malaysian Communications and Multimedia Commission (MCMC) convened a National Digital Infrastructure Lab (NDIL), a joint venture between industry and government, to spur the alignment between licensees and other stakeholders involved, to "quickly ensure greater Internet coverage and quality of broadband services", in the words of Malaysia's Communications and Multimedia Minister Datuk Saifuddin Abdullah.

Perhaps the physical infrastructure side is covered?

So where does demand come in? Form follows function, as the saying goes. I believe the development of digital use cases, government policy and adoption plans, alongside the private sector, will drive the demand needed for the supply side infrastructure to follow, in terms of what is needed, when and where.

This includes public policies conceived to drive wholesale changes like the US government's target of going paperless by 2022, Sweden's desire to be cashless by 2023 and Singapore's Smart Nation agenda.

Locally, the National Digital ID Blueprint, the Digital Economy Blueprint and the 4IR policy are just a few of the efforts designed to set policy to drive increased digital demand. The very last thing we want is the digital economy to co-exist with the traditional economy; they must co-evolve. This co-evolution should be founded on trust, and equally reflect the intangible infrastructure needed, driven by proper communication strategies to create a truly digital society.

Trust is also infrastructure

Trust and acceptance within society is a prerequisite for technology adoption and infrastructure usage.

Throughout Malaysia, different levels of understanding and receptiveness stemming from demographic differences are to be expected. For instance, there is a higher ratio of aged population in less-urbanised states compared to the capital of the country, which may affect their rate of technology adoption. Driving awareness of digital technology, particularly, is a crucial enabler in helping the wider society understand why change is needed and how it affects them.

Privacy issues, for instance, can impact people in different ways, especially now that everyone is leaving a data trail for Covid-19 contact tracing. The "test and trace" app in England is currently receiving some negative press after it was revealed that the initiative was launched without assessing its impact on privacy.

Having the right physical infrastructure to support much-needed tracing capability to manage the pandemic must be balanced with safeguards that build trust. Even the best cyber security initiatives will need to be continuously assessed and refined. Locally, the MySejahtera app was tested by the National Cyber Security Agency (NACSA) and the public was reassured that their personal information will only be used to manage and mitigate the outbreak.

Conclusion

While some basic safeguards are in place, more can be done to enhance readiness in terms of data protection and ethical use of data and government-citizen engagements.

As the world pivots to embrace digital a little more warmly, we need to begin looking at how excellent infrastructure (beyond physical) should only be a means to an end if we are to pave the road forward for the nation's socioeconomic development.

There are opportunities for public-private partnerships in achieving this, especially in hastening digitalisation of public and essential services, from setting up a business and opening bank accounts to scaling up the logistics industry for a platform economy, not forgetting the need to ensure that people are upskilled to take advantage of the digital economy. Ultimately, our actions now will steer Malaysia towards becoming a digital leader in the region in the near future. E

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