

# ACCELERATING THE TRANSITION TO A DIGITAL NATION

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## 5G will be a game changer for Malaysia's digital landscape

IT must come as a surprise to many that Malaysia's data consumption far outstrips that of our Asean neighbours.

On average, Malaysia consumes 16.64GB/month, compared to Thailand at 11.02GB/month and Singapore at 5.88GB/month. For 2020, given the impact of the Covid-19 pandemic, it is estimated that data consumption had increased by more than 30%.

The market has seen exponential growth in capacity usage and mobile networks, with traffic rapidly evolving from voice to data, then data to streamed data and onwards to video streaming data in under a decade. This was underscored during the Covid-19 pandemic which saw unprecedented demand and starkly highlighted the digital divide between those with connectivity and those who do not.

In analysing the situation in Malaysia, for a long while many of us Malaysians have gone from fixed line services to mobile services. Due to the open market in Malaysia, the limited spectrum resource is spread to numerous telecommunications providers. With the evolution of traffic over the network as highlighted above, this certainly puts undue pressure on a mobile network.

Hence, any approach for new networks will have to take into consideration the attenuating situation so that the nation and its end-users will have a better quality of experience over the mobile networks.

### 5G rollout

Much has been said about 5G networks, as with all mobile networks the only way they can carry the huge data load at the speed made available by the new technology is when these key principles are considered:

1. The mobile network can be likened to a highway in the sky that must be complemented by a highway on the ground to ensure that data carried is seamless without any bottleneck. For this, a strong fibre optic network is crucial to connect to the 5G mobile network.

2. To ensure that the mobile net-



5G enables a huge leap forward in speed, capacity and connectivity, offering a seamless experience for next-generation digital applications. – 123rf.com

work has the capacity, it must have the right amount of spectrum, without having to be shared.

3. When deploying a new network, it will be deployed at high-priority areas initially, as such the consideration to prevent digital divide must be made consciously.

Malaysia began to associate itself with the new technology since early 2020 when the 5G Malaysia Demonstration Projects (5GDP) in Langkawi were announced. Subsequently 71 use cases across 50 5G live sites in seven states – Kedah, Pahang, Penang, Perak, Selangor, Terengganu and Wilayah Persekutuan Kuala Lumpur – were implemented by the private sector, facilitated by Malaysian Communications and Multimedia Commission (MCMC).

The 5GDP is still active till June 2021. With the recent announcement of MyDIGITAL wherein a component of it being the announcement of 5G rollout, it is anticipated that it would reinvigorate key industries including the hard-hit oil and gas, agriculture, manufacturing, telecommunications and tourism sectors.

For instance, in the oil and gas sector through 5GDP, 5G brings a

major technology breakthrough for industry digitalisation and automation especially in the operations, production and maintenance aspects. This was amply demonstrated in Terengganu where ANYmal robots and drones were used to remote control a water plant at the PETRONAS-owned INSTEP training institute.

Through these use cases we gained insights into the impact that 5G, IR 4.0 and complementing technologies such as artificial intelligence (AI), big data and cloud computing will have on each economic sector. We also learned that adopting 5G technology and other related technologies would require a strong business reason as well as business adaptation to realise the huge benefits.

During the Covid-19 pandemic, even with 4G, we saw industries take advantage by developing ride-sharing services, meal delivery, etc. 5G will be a game-changer for Malaysia as it takes the speeds and possibilities of 4G and multiplies it tenfold.

Businesses will be able to offer new products, services, business models and entire industries will be born as 5G provides a huge leap

forward in speed, capacity and connectivity. 5G enables a seamless experience for the next-generation digital applications, Internet-of-things (IoT) applications such as telemedicine and augmented reality, as well as drone deliveries to name a few.

### Towards MyDIGITAL

As alluded above, the rollout of 5G must consider the key principles so that we do not end up having the same challenges of yesterday that was sorely felt during the pandemic.

As such to ensure that digital divide risk is minimal and existing businesses can continue to flourish and prepare themselves for 5G adoption and adaptation, continued investment in fibre optics and 4G networks as succinctly provided in the Government's Jalanan Digital Negara (JENDELA) initiative must be facilitated strongly.

JENDELA has provided its first quarterly report since its announcement on Aug 29 2020 which saw many of the set targets for the quarter being surpassed thanks to the gallant effort of the industry. Yes, it does add capex pressure on the telecommunications providers but with a wider network, better quality and an improved quality of experience for users, it can only be positive for the telecommunication providers as customers will use more of the service resulting in better income to the providers and thereof better profitability.

The necessity for continued fibre optic and 4G investment necessitates an adoption of a new approach that will help the new 5G network be of a higher capacity, reduce duplication of infrastructure and not impose undue burden on existing telecommunication providers. The new approach will provide an opportunity to reduce cost of the new network that can be passed to end users. I am sure as users ourselves we will look forward to such a possibility.

As usual there will be naysayers and sceptics. That is all fine as that only provides the impetus to ensure that the implementation of the new approach be made transparently, fairly and speedily. The

various agencies tasked with it will certainly up the ante to rise to the occasion as the successful implementation will be a key component of the larger digital infrastructure for the success of MyDIGITAL.

The swifter transition to 5G for Malaysia will undoubtedly bring social benefits such as reducing carbon footprint, improved connectivity supporting an increased productivity for SMEs whilst at the same time allow for the promotion of work-life balance.

The lessening of the need to travel could offer potential to reduce urban-rural migration as jobs, disruptive business models, new skills and processes create work opportunities even in rural locations as well as to work seamlessly from home.

Hence, 5G is not just a great leveller but also a means towards a greater opportunity that breaks down the walls of limitations – a much needed enabler to help the post-pandemic world transit to the new normal in several ways.

There have been questions as to why conduct a 5G rollout when we are still fixing the 4G networks. The rationale is that "time and tide waits for no man".

Hence, we cannot as a nation afford to do things sequentially. We need to have the 5G rollout as we aggressively improve fibre optic coverage and 4G expansion in parallel. By taking this approach it helps the nation to be stronger and more attractive to investors. As a trading nation we must constantly stay abreast of the needs of investors for Malaysia to remain as the country of choice for investment.

MyDIGITAL is a forward-looking plan that is aggressive but implementable. As Einstein once said: "Insanity is doing the same thing over and over again and expecting different results."

As a Malaysian I would like to see the country be a better new Malaysia that others would envy for doing things well even if done differently. Believe in ourselves and always aim for the stars.

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