



From the Desk
of the
Chief Economist

BANK ISLAM

MALAYSIA'S DIGITAL ECONOMY

26 FEBRUARY 2021

ECONOMIC RESEARCH

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What is Digital Economy?

Economic and social activities that involve the production and use of digital technology and individuals, business and government.



Rakyat

- ✓ Creation of **500,000 job opportunities** in the digital economy.
- ✓ 100.0% household with access to internet.
- ✓ All students to have access to online learning.



Business

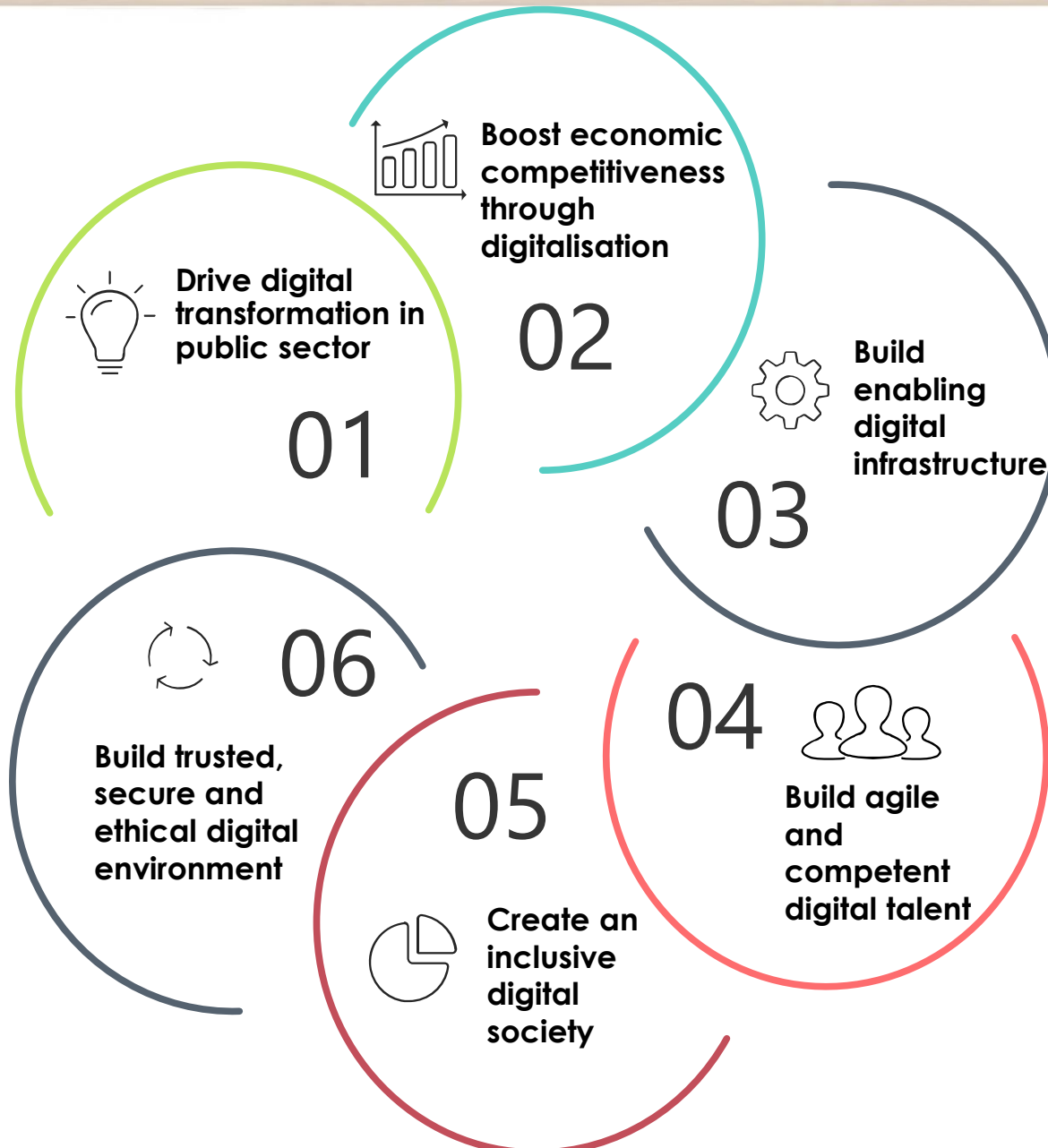
- ✓ By 2025, the digital economy is expected to contribute **22.6% to the country's Gross Domestic Product (GDP)**.
- ✓ **30.0% uplift in productivity** across all sectors by 2030.
- ✓ The government also encourages 875,000 micro, small and medium enterprises (MSMEs) to accept the use of e-commerce.
- ✓ To attract **new investments worth RM70 billion in the digital sector**, from within and outside the country.
- ✓ **Increase the number of start-ups to 5,000.**



Government

- ✓ 100.0% civil servants to possess digital literacy.
- ✓ **80.0% end-to-end online government services.**
- ✓ All ministries and agencies to provide cashless payment option in 2022.
- ✓ **80.0% usage of cloud storage** across the government in 2022.

Targets



Amount	Initiatives
RM21 billion	<ul style="list-style-type: none"> ✓ It will be invested over the next five years through the National Digital Network (JENDELA) project to strengthen the existing connectivity. ✓ This fixed line optical fibre network will cover almost 100% populated areas in stages - from 7.5 million premises by the end of 2022 to 9 million premises by the end of 2025.
RM1.65 billion	<ul style="list-style-type: none"> ✓ It will be invested by several telecommunication companies to strengthen connectivity to the international submarine cable network until the year 2023.
RM15 billion	<ul style="list-style-type: none"> ✓ It will be invested over a period of ten years for the implementation of 5G nationwide. ✓ This will create approximately a total of 105,000 job opportunities.
RM12 billion - RM15 billion	<ul style="list-style-type: none"> ✓ It will be invested by Cloud Service Provider (CSP) companies over the next five years. ✓ Government has so far given conditional approvals to four CSP companies - Microsoft, Google, Amazon and Telekom Malaysia - to build and manage hyper-scale data centers and cloud services

Source: Malaysia Digital Economy Blueprint

**Phase 1:
2021-2022**

Accelerate adoption towards strengthening the digital foundation

- ✓ Data and digital intelligence at the heart of the digital economy in Malaysia, with the government leading this effort.
- ✓ Conducive regulatory framework that can expedite digital infrastructure development.
- ✓ Increased confidence to use technology across all levels of society.

**Phase 2:
2023-2025**

Drive digital transformation and inclusion

- ✓ A government with extensive use of e-government services, where technologies and data are used effectively to benefit the public and businesses.
- ✓ Local champions with the potential to become regional leaders are identified and groomed.
- ✓ Faster and increased rollout of a broadband infrastructure projects.
- ✓ Competent and agile workforce that adds greater value to the economic sectors, as well as to the communities.
- ✓ Equitable access to opportunities to uplift socioeconomic status.
- ✓ Increased trust in the management of personal data and data privacy agencies.
- ✓ Agile regulations for the gig economy while ensuring unhindered business innovation.

**Phase 3:
2026-2030**

Become a regional market producer for digital products and digital solutions provider

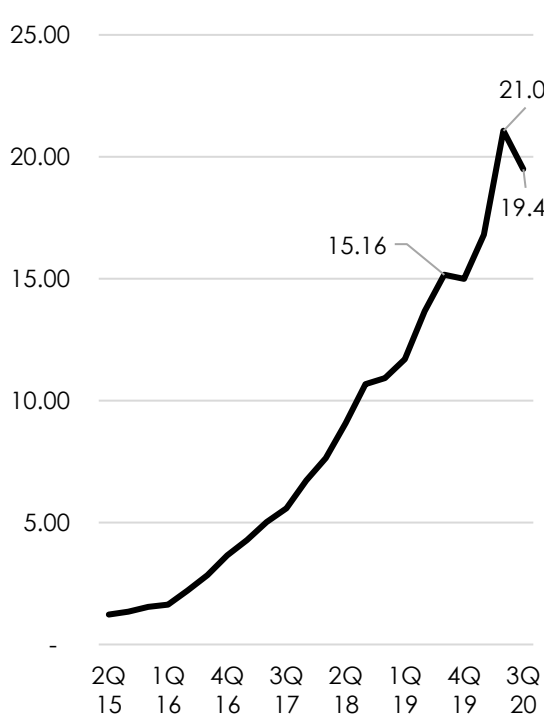
- ✓ A data-driven government where processes are highly digitalised and data is at the centre of its administration that connects the society, businesses and government.
- ✓ High ease of doing business, where the government provides a highly conducive environment for businesses to start and operate.
- ✓ A high quality pool of digital talent and a inclusive digital society.
- ✓ Increased cyber security awareness among businesses and society members.

OUR VIEW

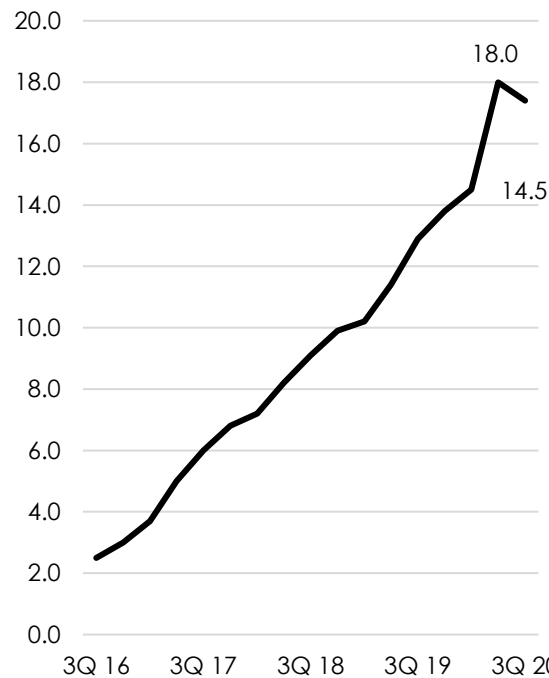
DEMAND FOR DATA – IT HAS BEEN GROWING EXPONENTIALLY

- ✓ There is no denying that demand for data has been rising exponentially. The proliferation of social media, e-commerce and e-learning are some of the key catalysts. The key question is the outcome and how the government can facilitate the process.

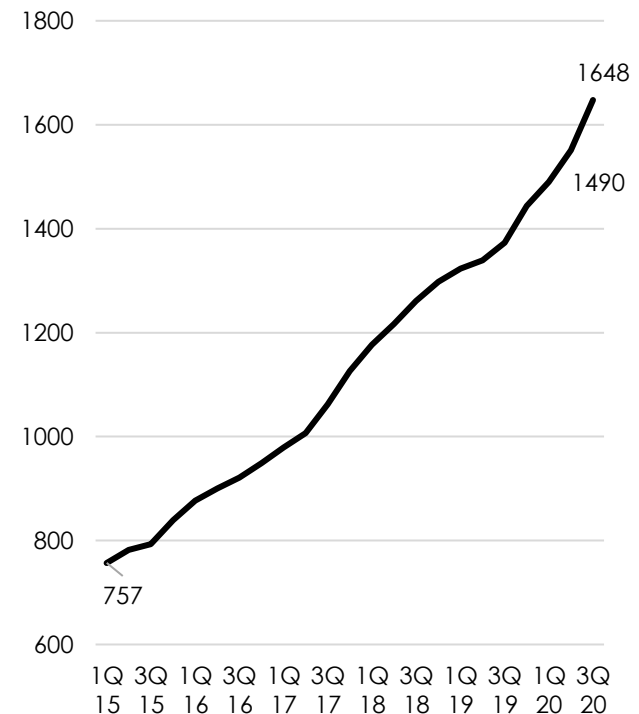
Maxis - Data usage (GB / mth)



Digi - Monthly GB per user



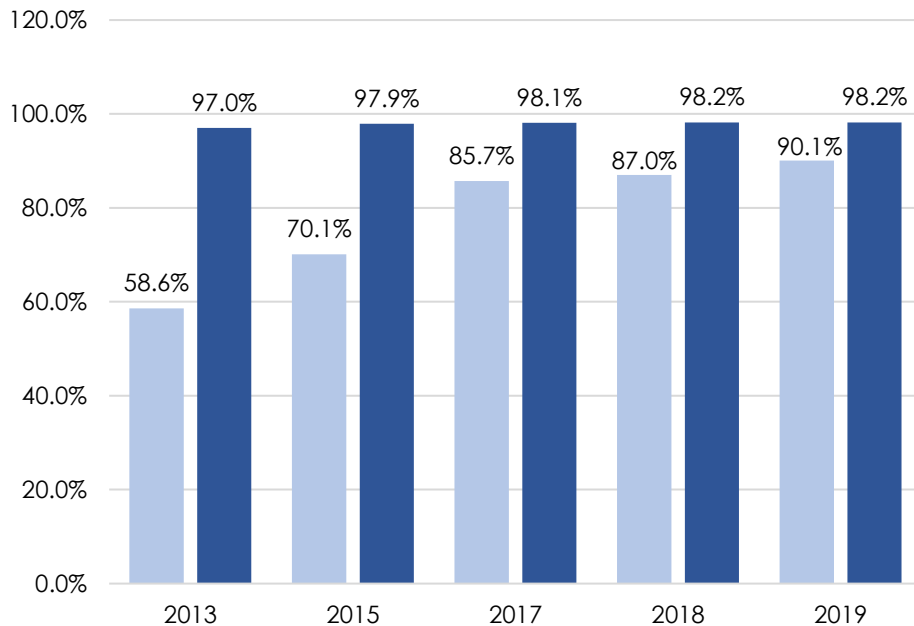
Number of UNIFI Customers in '000



Source: Company's' Presentation Deck

- ✓ According to the Department of Statistic Malaysia (DOSM), the internet and mobile penetration have been rising gradually.
- ✓ The internet penetration rate by household increased to 90.1% in 2019 from 58.6% in 2013 while the mobile phone penetration rose to 98.2% in 2019 from 97.0% in 2013.

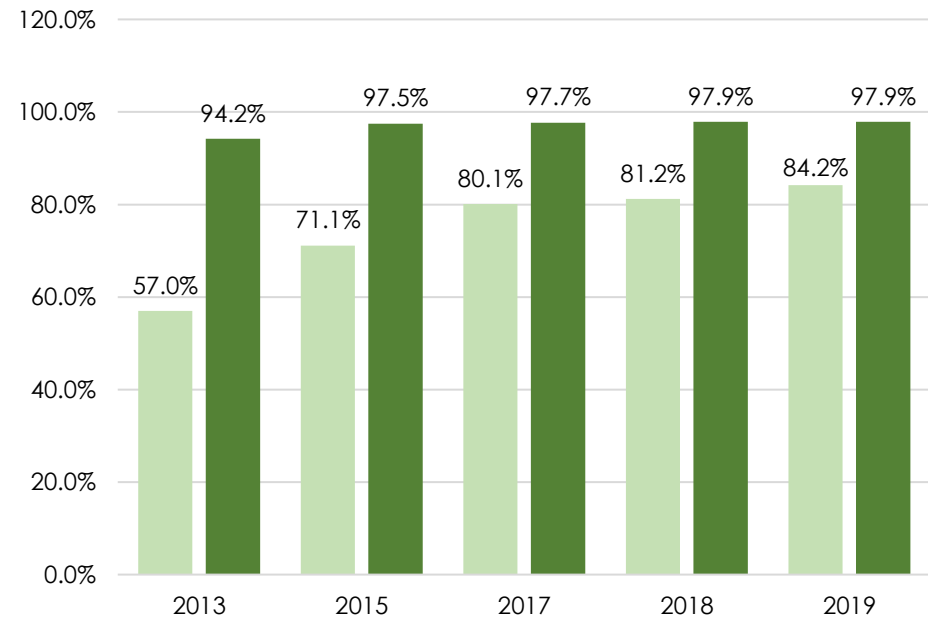
Internet and Mobile Phone Penetration Rate by Households, %



Source: DOSM

■ Internet ■ Mobile Phone

Internet and Mobile Phone Penetration Rate by Individuals, %



■ Internet ■ Mobile Phone

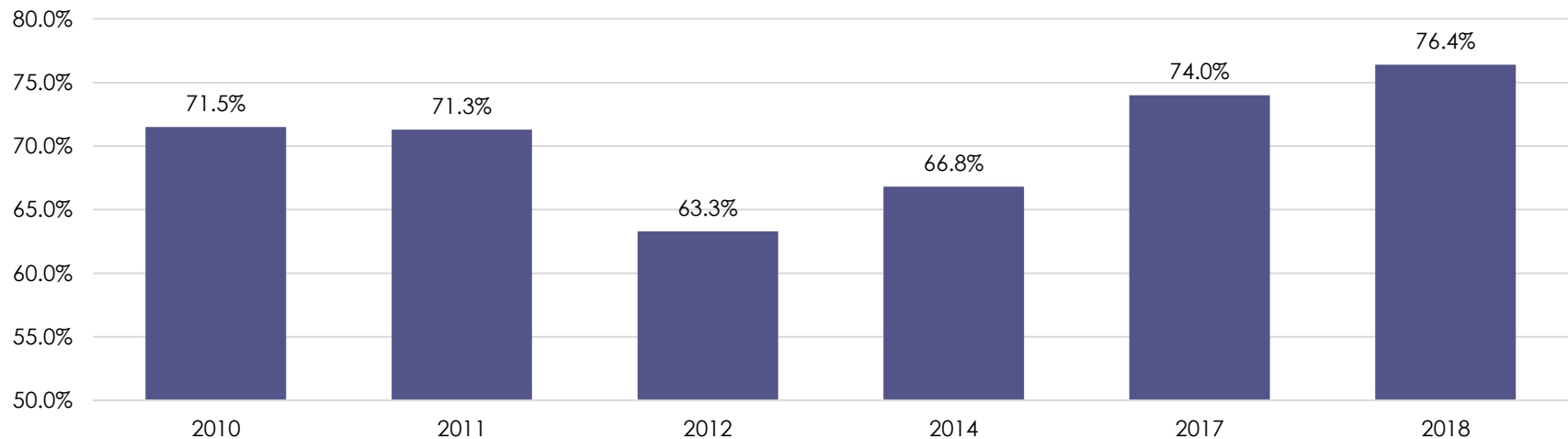
- ✓ Data speed is paramount to ensure a meaningful transition towards digital economy.
- ✓ The main hurdle is the total investment in the network infrastructure.
- ✓ MyDigital has indicated a total of RM15 billion worth of investment will be invested over 10 years whereby the government Special Purpose Vehicle (SPV) will be tasked to own, implement and manage nationwide 5G infrastructure.
- ✓ If this were to materialise, this would help alleviate the Telcos capex whereby the existing players are deemed to be heavily indebted. Their debt-to-equity ratios and net debt-to-EBITDA ratios have been more than 1.0x.

Debt-to-Equity Ratio						
Company	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020	4Q2020
Maxis	1.22	1.27	1.28	1.27	1.25	1.38
Digi	7.96	7.80	7.73	8.44	7.79	9.00
Axiata	1.14	1.16	1.22	1.20	1.40	1.01
Net Debt-to-EBITDA Ratio						
Maxis	2.16	2.14	2.18	2.26	2.44	2.41
Digi	1.40	1.40	1.40	1.50	1.50	1.70
Axiata	1.97	2.02	2.05	2.06	1.88	1.89

Sources: Bloomberg, Company's Financial Results

- ✓ The pandemic shocks have led the surge in demand for e-learning. This would mean owning the smart devices are equally important in order to ensure the digital experience would be seamless and to facilitate the transition to the new normal effectively.
- ✓ However, the anecdotal evidence has shown that the vulnerable group especially the low-income families are facing a serious challenge as the prices can be costly.

Smartphone Ownership



Source: MCMC

New normal	Impact
Flexible Working Arrangement (FWA)	<ul style="list-style-type: none">- Reduce carbon footprint as the need to go to the workplace will be greatly reduced.- Lower demand for office spaces as work can be done irrespective of the geographical location.- Demand for residential properties could be increased especially outside the city.
E-learning	<ul style="list-style-type: none">- The learning space will no longer be defined by the size of the classroom.- The existing syllabus would need to be revised to suit the digital environment.
E-commerce	<ul style="list-style-type: none">- Would give more entrepreneurs, especially those in rural areas a chance to make full use of what e-commerce has to offer, and subsequently help improve their livelihood.

- ✓ **Digitalisation is a key feature to remain competitive.** If Malaysia does not accelerate its efforts towards becoming a digital nation, we may lose out on opportunities in terms of attracting foreign investments into the country. The availability of digital infrastructure such as data centres would definitely be a key point to consider when international companies intend to expand in Malaysia. Southeast Asia's data centre market is expected to reach USD3.5 billion by 2024.
- ✓ **Digital inclusion will be wider with better infrastructure.** With digital connectivity being one of the emphasis of the National Digital Economy Blueprint, more people and students will have access to information technology-related resources and skills which will help steer transformation especially in rural areas.
- ✓ **Economies of scale will be higher under digitalized efforts.** As digitalization will aid processes to be more efficient, there is no doubt that output of industries can be produced at a faster rate without compromising standards and quality. Therefore, Malaysia will be at the forefront of meeting industrial needs.
- ✓ **Wider range of economic activities can be captured via a digital economy.** A country could leverage on more resources via the digital economy regardless of sector as systems will become more seamless.

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