

The Readiness of Malaysia Digital Economy: A Study of Three Government Policies from 1991 to 2020

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Abstract

The Malaysian government has foreseen the importance of the digital economy to the nation since 1996. In 1996 and 1998, respectively, the Malaysia Digital Economy Development (MDEC) and Malaysian Communications and Multimedia Commission (MCMC) were established to regulate the industry and articulate digital economy initiatives both from public and private sectors. This study aims to review the digital economy policies introduced by three governments, i.e. Barisan Nasional, Pakatan Harapan and Perikatan Nasional, since the Independence in 1957 until 2020. Each ruling government has announced its digital economy initiatives as significant contributors to the national economic development. The review of the policies will include the Malaysia Plans, yearly budgets and economic stimulus packages. The outcome of this review will significantly help to evaluate the country's readiness in embarking on the digital economy, and provide recommendations for future digital economy initiatives.

Keywords: digital economy, policy, Malaysia Digital Economy Development (MDEC), Malaysian Communications and Multimedia Commission (MCMC)

1. Introduction

Malaya gained its Independence from the British in 1957. In 1963, Singapore, Sarawak and Sabah joined the Federation of Malaya to form Malaysia. Two years later, Singapore left the federation to become an independent state. Since Independence, Parti Perikatan (Alliance party), which consisted of UMNO, MCA and MIC had won the elections and formed the government. These three parties representing three main ethnics in Malaysia, i.e. Malay, Chinese and Indian. In 1969, there was a racial riot due to the inequality of wealth distribution among races. This historical incident had changed the policy framework designed by the government. A coalition of parties was subsequently formed involving a newly-formed progressive party (Gerakan), an Islamic party (PAS), and parties representing Sabah and Sarawak's states. This new coalition is known as Barisan Nasional (National Front). The BN ruled the country until the 14th General Election on May 10, 2018. A new coalition party known as Pakatan Harapan (Alliance of Hope), comprising Parti Pribumi Bersatu Malaysia (Bersatu), PKR, DAP, and Parti Amanah Negara (Amanah) and Warisan, won the election, marking the first defeat of Barisan Nasional (BN) since 1955 (Pakatan Harapan Wins 14th General Election, n. d.). However, the reign of this coalition led by Dr Mahathir Mohamad lasted only 22 months when Bersatu and a fraction of Members of the Parliament from PKR joined BN and PAS to form a new government. In March 2020, this new government was formed under the Perikatan Nasional (PN) banner (National Alliance), led by Muhyiddin Yasin, the eighth Prime Minister, now faces more immediate challenges such as the government's instability and the global COVID-19 pandemic (The Diplomat, 2020).

During the ruling of these three governments, the Eleventh Malaysia Plan was announced. Malaysia Plan is a comprehensive outline of the government in designing their development policies and strategies framework. This policy and strategic plan are also referred to as Malaysia 5-Year Plan (PMO, 2020). The BN government introduced the first Malaysia Plan in 1965 that mainly focused on its development agenda. Malaysia Plan helps the government to outline the strategic plan and agenda aims in 5 years. The Malaysia Plan has created the

changes and direction of a government development plan based on political needs (Mac, 1977). In order to project a more extended strategic plan and policy, the government introduced the nation's vision that covers two Malaysia Plans in a minimum of 10 years. In 1971, during the Second Malaysia Plan, the new BN coalition government led by Abdul Razak, introduced New Economic Policy (NEP) launched for 30 years, until 1990. The NEP was aimed to achieve national unity through redistributive policies with two objectives (Jomo, 2004). The goals were to eradicate poverty regardless of race and restructure society by eliminating the economic function based on race (Jomo, 2004).

In 1991, in the Sixth Malaysia Plan, the government led by Dr Mahathir announced the New Development Plan (NDP) for ten years. The fourth Prime Minister had a more extended vision for the nation by launching Vision 2020. The Vision 2020 addressed Malaysia's future course and how Malaysians should develop Malaysia into an industrialised country (PMO, 2020). The vision aspired the nation to achieve a self-sufficient industrialised nation by the year 2020. This long term 30-year strategic plan of Vision 2020 seems to overshadow the 10-year NDP. The Vision 2020 encompasses all aspects of life, from economic prosperity, social well-being, educational world-class, political stability, and psychological balance (PMO, 2020). Before the end of Vision 2020, in 2017, Najib Razak as the sixth Prime Minister launched National Transformation 2050 (Perkhidmatan Awam Malaysia, n. d.). This long-term strategic plan was a continuous trajectory plan of Vision 2020. TN50 is a new version of New Economics Policy and Vision 2020, a trend for Malaysia to have a development plan once in 30 years (Abas et al., 2018; Abas & Aziz, 2018). The Transformation Nasional 2050 is a 30-year plan prepared for the 12th Malaysia Plan and presented in the 2017 Budget and the government blueprint. The aspiration of TN50 is to build one nation that excels in five areas: society, environment, economy, technology and innovation and governance (Abas et al., 2018). However, following the BN government's defeat in 2018, the PH government has introduced Shared Prosperity Vision 2030 (*SPV2030-Summary-En*, n. d.) to become a policy framework to be launched in 2021 under the 12th Malaysia Plan. This ten-year government blueprint aims to increase the income of all ethnic groups, particularly the natives comprising the B40 (lower income group), the hardcore poor, the economically poor, those in economic transition, the disabled, youths, women, children and senior citizens (PMO, 2020). The PH government also has addressed its commitment to continue TN50 initiatives as this blueprint will provide continuity from SPV2030 (Seri & Rizanizam, 2018). On the other hand, the eighth Prime Minister Muhyiddin Yasin, who spearheads the PN government has confirmed that the government will give priority to the long-term agenda under SPV2030 (The Star, 2021).

2. Objectives of the Study

This paper aims to review the digital economy policies introduced by the three governments. The Malaysia Plans are the strategic development plan and policy for the nation, and they comprise long-term strategic plans. This paper will focus on all digital initiatives based on the Malaysia Plans, starting from Vision 2020. The main reason to choose Vision 2020 over the NEP is because the latter's initiatives were not significant in the study; the strategic plan outlined in the NEP did not indicate a digital economy agenda. The Vision 2020, on the other hand, focused on becoming a developed nation and addressed the digital infrastructure development initiatives. The TN50 and Shared Prosperity Vision 2030 are the other two government blueprints that have become aspirations and essential contents for the development of the 12th Malaysia Plan (2021-2026). Thus, the study aims to discuss all initiatives in the annual budget and stimulus packages of these policies. From the findings, we hope to understand the landscape of digital policy frameworks introduced by the three governments and how this landscape has influenced the present government policy.

3. Methodology

This paper reviews the policies that include the Malaysia Plans, yearly budgets and economic stimulus packages. The review of all Malaysian policies and initiatives outlined in the annual budget started from 1991 when the Vision 2020 was introduced. The annual budget is essential to be reviewed and discussed because it will provide all the yearly development plans based on the five-year Malaysia Plan. Besides, the digital economic stimulus package initiative announced by the government was non-budgeted initiatives. Therefore, the initiatives announced will contribute to the main discussion in the paper. This review's outcomes will significantly help to evaluate the country's readiness in embarking the digital economy and provide recommendations for future digital economy initiatives.

4. Results

4.1 The Digital Economic Initiatives

The government under BN launched Vision 2020 in 1991. This 30-year development plan aimed to turn the developing country status into a developed nation by 2020. The government had orchestrated appropriate

assistance schemes and aimed to raise the employees' management expertise, technological know-how, and skills in many sectors (Vision 2020, n. d.). Thus, for the nation to propel these disciplines, new networks, contacts, and unique approaches will require new knowledge, new connections, and unique approaches towards dealing with foreign laws, rules, and regulation by adopting the National Plan of Action for Industrial Technology Development Plan (Kandan, 1997). The government realised that institutional and supporting infrastructure needed to be put in place. Therefore, in the sixth Malaysia Plan starting from its 1991 budget onwards, the government began to initiate budget allocations for technology and multimedia infrastructure. To provide the impetus of this 30-year long term policy, the government launched Multimedia Super Corridor (MSC) in 1996. Inspired by Silicon Valley's success in California, the MSC's area covers Kuala Lumpur, Putra Jaya, Cyber Jaya and Kuala Lumpur International Airport (KLIA). There are seven flagship areas to accelerate Vision 2020 and transform Malaysia into a developed state by 2020, namely the e-government, multi-purpose cards, smart schools, telemedicine, R&D Cluster, worldwide manufacturing, and borderless marketing (*DocShare.Tips*, n. d.). These prominent areas provide a development framework for the government's policies and plans when implementing the yearly budget initiatives.

4.2 e-Government

The e-Government is one of the seven areas of flagships under MSC meant to reinvent the country into the Information Age (Shafie, n.d.). For 'modernising and reforming' the public sector in administrative reforms, the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) was formed and placed under the Prime Minister Department (Jeong & Nor Fadzlina, 2012). Leading the initiative is the Prime Minister's Office and other ministries by 2000 (*Home - MDEC*, n. d.). This area also targeted more than 100,000 government staff to use various multimedia applications to serve the public and businesses. Some of the applications developed under this area include MyEG, Human Resources system, hospital information system, and integrated immigration system.

4.3 Smart School

The Ministry of Education (MoE) was given a task to ensure that the schools have Internet access within two years to enhance information technology (IT) literacy and develop software applications, curricula, courseware, teacher and staff training, and infrastructure (MDC, 2016). The schools have benefited from the Internet capacity and laptop borrowing to B40 students in selected schools and iBestariNet programme (MDC, 2016). The Senior Minister (Education), Mohd Radzi Jidin informed that the schools nationwide would receive upgraded Internet broadband up to 800 Mbps through the Government Integrated Telecommunication Network or MyGovnet initiative (Hakim, 2020). He added that under the Budget 2020 allocation, JENDELA initiative would benefit 430 schools for better Internet network (The Rakyat Post, 2020).

4.4 Telemedicine

The Ministry of Health (MoH) was given a task to incorporate all technology and multimedia applications into the healthcare system. The critical elements of telemedicine include distance learning; remote consultation, diagnosis, and treatment; virtual patient records; and a national, electronic medical network (MDC, 2016). The pilot project of telemedicine city will be at Serdang city to utilise R & D's universities' expertise to create a multimedia ecosystem for the hospitals to adopt. Currently, the Serdang Hospital has been utilising the hospital information system, e-consultancy and e-GL under Human Resources Management Information System (HRMIS).

4.5 R&D Cluster

The government entrusted the Ministry of Science, Technology and Innovation (MOSTI) to plan the forefront of R&D next-generation multimedia technologies by developing collaborative R&D centres between corporations and universities. Located in CyberJaya, Multimedia University will be the catalyst in creating a research community (MDC, 2016). Some of the outcomes were R&D research grants, incubators, a seed fund for start-up companies via Cradle and MAGIC and monetary incentive to SMEs. One of this initiative's success stories was a seed grant benefited by Grab company to kick off its MyTeksi application for taxi e-hailing and later changed to Grab application.

4.6 National Multipurpose Card

The national multi-purpose cards were issued to all Malaysian citizens by 2000 to replace the non-electronic identity cards. This smart card aims to serve as a national identity card, an "electronic purse" for purchasing small-ticket items, a credit card, telephone card, club membership card, and will ultimately be used in all electronic transactions with the Government (MDC, 2016). Currently, the National smartcard is known as

myKad. It serves as an identity card, e-wallet, e-registration for government agencies and financial institutions, and a passport for entering Sabah and Sarawak autonomy states.

4.7 Borderless Marketing Centre

Multimedia Development Corporation (MDC) was established in 1996 to oversee MSC laws, policies, and infrastructure, serving as an excellent platform for companies' customer service operations, such as telemarketing, technical support, "backroom" data processing, and local customisation of marketing materials (MDC, 2016). Later in 1998, Malaysia Communication and Multimedia Commission (MCMC) monitored the industry's regulatory; and Bank Negara (Central Bank) monitored any electronic monetary transactions related. Subsequently, in 1998, MDC was transformed to Malaysia Development Economic Cooperation (MDEC) to focus more on assisting the industry in driving Malaysians to learn digital skills, enable digitally-powered businesses, and drive digital sector investments (*Home - MDEC*, n. d.). MDEC aims to lead the nation's digital economy by contributing 20% to the country's GDP (highest among ASEAN nations) and 30% to ASEAN internet economy (*Home - MDEC*, n. d.). To date, MDEC has developed an e-commerce platform known as e-Rezeki, e-incubator, e-training for individuals and corporations, and many others.

4.8 Worldwide Manufacturing Web Marketing

The Ministry of International Trade and Industry (MITI) was entrusted with establishing regional hubs to control, monitor, and deliver operational support to their regional networks of design, manufacturing, and distribution centres (MDC, 2016). The MSC status companies would benefit from this network by using the MSC's low-cost, high-performance information and logistics networks and regional operations. One of the government's strategic initiatives was introducing the Digital Free Trade Zone (DFTZ) in 1998 to attract more foreign investors. DFTZ will provide physical and virtual zones to help SMEs capitalise on the convergence of the digital economy's exponential growth and cross-border e-commerce activities. The project of DFTZ aims to double the nation's e-Commerce growth and increase the GDP contribution to RM211 billion (approximately US\$47.68 billion) by the year 2020 (Matrade, 2020).

4.9 Digital Initiatives in Budget

In this review of policies, it is crucial to revisit the Budgets from 2010 to 2021. Whilst the current initiatives have been more focused on the usage of the applications and developing talents, the government policies manifested by the Budgets from 1991 to 2010 were more on developing ICT infrastructure, adopting new technology and designing new law and regulation to regulate the industry.

In the 2010 Budget, the government first allocated RM11.3 billion to speed up High-Speed Broadband implementation in Malaysia (Treasury, 2009). It aimed to increase the percentage of broadband coverage in Malaysia. Second, the government allowed the public servants to take a loan to purchase a laptop up to RM5,000 per person (Treasury, 2009). Third, in the 2011 Budget, three initiatives were given to promote the digital economy development (Treasury, 2010):

- 1) An allocation of RM119 millions to promote digital contents via MY Creative Content programme.
- 2) An exemption of the import duty and sales taxes for all broadband equipment until 2012, and an exemption of 10 % of sales taxes for mobile phones and PDA.
- 3) Incorporation between digital initiatives with the economic corridor, KL International Financial District and Exchange Traded Fund (ETF).

Fourth, in the 2012 Budget, there was no direct budget allocated for the digital economy initiative. However, the government allocated RM200 million of a fund to establish MyCreative Venture Capital to support seven National Key Research Areas (NKRA) outlined in the budget. The fund was to support the initiative for a financial structure such as Kuala Lumpur International Financial District (KLIFD) and Exchange Traded Fund (ETF) (Menteri et al., n. d.). Fifth, in the 2013 Budget, there was no direct initiative for digital economy, but included in the allocation proposal was to establish an international financial hub (Tun Razak Exchange-TRX) valued at RM26 Billions (Treasury, 2012). Sixth, in the 2014 Budget, RM11.3 Billion was allocated for High-Speed Broadband (HSSB), including constructing 1000 telecommunication towers in three years with a cost of RM850 millions (Treasury, 2013). Seventh, in the 2015 Budget, the HSSB continuity plan allocated RM2.7 billions to be spent in three years (Treasury, 2014). Eighth, in the 2016 Budget, MCMC was allocated RM1.2 billion to upgrade the Internet speed of rural areas from 5 megabits per second into 20 Megabit per second. Meanwhile, RM250 millions were allocated for the National Digital Broadcast programme to digitalise National TV and Radio broadcast (Treasury, 2015). Ninth, in the 2017 Budget, the government allocated RM162 millions for MDEC to create an e-commerce ecosystem and Malaysia digital hub. The government had also

proposed establishing a Digital Free Trade Zone, i.e. the first in the world. Lastly, MCMC was allocated RM1 billion to ensure that nationwide Internet coverage reaches 20 MB per second (Treasury, 2016). Tenth, in the 2018 Budget, the government allocated RM100 million to create local e-commerce platforms such as e-Rezeki, e-Ladang and e-Usahawan under MDEC programmes. Besides, the government gave a RM5,000 grant for each taxi driver and e-hailing driver to purchase a new car. In the same year, the government allocated RM83.5 million to establish DFTZ at Aeropolis, KLIA (Treasury, 2017). Eleventh, in the 2019 Budget, all funds under Malaysia Technology Development Corporation, Malaysia Debt Ventures Bhd, Malaysia Venture Capital Management Bhd, Kumpulan Modal Perdana Sdn Bhd and Cradle Fund were consolidated as one fund. Besides, the government allocated RM210 millions to implement readiness assessment towards IR 4.0 leap. 500 SMEs were targeted to change into IR 4.0 technology (*MINISTRY OF FINANCE MALAYSIA 2018 BUDGET*, n. d.). Twelfth, in the 2020 Budget, the government prioritised to promote a cashless society by allocating RM450 millions to give one-time RM30 digital stimulus to Malaysians aged 18 and above with annual income less than RM100,000 under e-Tunai Rakyat programme. Also, RM50 was credited into an e-wallet account for those aged 18 to 20 years under e-Belia programme. The distribution was done via the e-wallet companies appointed by the government. The government had also allocated RM27 millions to enhance the country's cybersecurity (Treasury, 2019). In June 2020, after the lock down due to the COVID-19 pandemic, the government launched an economic stimulus package to help businesses recover from the pandemic's impact. Under Pelan Jana Semula Ekonomi Malaysia (PENJANA), the government provided few vital initiatives until December 2020 to promote the digital economy (Treasury, 2020). The initiatives were; (1) RM750 million quantum of allocation to support the gig economy, including RM250 million for a training fund for local businesses to serve international clients while working from home. (2) Flexible Work From Home incentive provided tax deduction to an employer, individual income tax exemption up to RM5,000 to an employee who received a handphone, laptop or tablet from the employer and special income tax relief up to RM2,500 to employees who purchase handphone, laptop or tablet. (3) Free 1Gb per day between 8 am to 6 pm to Malaysians for education, video conference and news were provided by participating telecommunication companies. (4) RM70 million of the fund was allocated to encourage adoption of e-commerce by micro-enterprises and SMEs in the nation. (5) RM70 million was allocated to co-fund digital discount vouchers with local online companies. This initiative aimed to encourage online spending by Malaysians. (6) RM700 million was allocated for loan and grants for Small and Medium Enterprises (SMEs) and Mid-Tier Companies (MTCs) to digitalise operations and trade channels. (7) RM5 million was allocated to set-up online. (8) A matching grant of RM600 million was established to match institutional private capital investment including early-stage technology fund managers. (9) RM100 million was announced to promote innovation and creativity via the establishment of Innovation Sandbox. (10) RM20 million was allocated to accelerate the e-government system to be less face to face transaction, and (11) RM50 e-wallet value was offered to all Malaysians aged 18 and above; and earning less than RM100,000 annually. This initiative involved an allocation of RM750 million. Lastly, in the 2021 Budget which was presented in October 2020, the government provided e-wallet to two million youths aged 18 to 20, and university students under the PENJANA Programme. This allocation involved a value of RM200 millions (Treasury, 2020).

5. Is Malaysia Ready for the Digital Economy?

From this study, the authors believe that this digital economy is a global paradigm shift that Malaysians have to adopt and adapt. The citizens will continue to experience a phenomenon in which they have no choice but to utilise these digital "enablers". A report issued by PWC in 2018 shows that Malaysia has 86% of Internet penetration and 64% of Mobile Penetration rate (PWC, 2018). According to the Mastercard Impact Study 2020 (The Edge Markets, n. d.), Malaysia leads the Southeast Asia region in terms of mobile and digital wallet adaptation with 40%, compared to 36% for the Philippines and 27% for Thailand and 26% for Singapore. This statistic indicates that the adaptation of cashless transactions of 8% percentage presented by the government during the 2019 Budget has increased tremendously. The increase was caused by the government's incentive to inject cash via e-wallet platforms to Malaysians.

Malaysia also has agencies such as MCMC, MDEC and Bank Negara to monitor the industry and provide various incentives to encourage Malaysia's digital economy development and development. Digital infrastructure was invested since the beginning of Vision 2020 (under the Sixth Malaysia Plan) such as Multimedia Super Corridor, e-government, telemedicine, smart school and more. Now with the presence of the pandemic and the Movement Control Order (of various phases), Malaysians are using e-wallet applications to avoid physical transactions. The authors firmly believe that Malaysia is now ready for this digital economy as part of its economic ecosystem. The readiness is based on several factors;

1) The economic and stimulus programmes have provided e-cash in the form of e-wallet Applications via

PENJANA, 2020 and 2021 budgets. These budget incentives have sped up the adoption rate of the e-wallet application among Malaysians.

2) Infrastructure built by the government will provide Internet networks throughout the country, including rural, i.e. MSC, JENDELA, Digital Free Trade Zone, Etc.

3) Online business opportunities in a marketplace with excellent potential will encourage online companies' growth from within and outside the country, such as Grab, Lazada, Shopee, Ali Baba, Lalamove, Ninja Van, and others. DFTZ has contributed to this significant development in Malaysia's e-wallet market (The Sun Daily, 2017).

4) 5G licence is expected to be awarded by the government, and the 5G infrastructure will boost the usage of digital transactions. Besides, Bank Negara has granted an e-money license to 47 non-banks and six banks to invigorate Malaysia's digital economy (Mohd Muslimin, 2020).

5) Digital Economy is also expected to reduce the rate of corruption or corruption as all transactions will be traceable and provable. The authors foresee that the accountability of the stakeholders will also increase. Financial institutions and government agencies will need a platform and application to ease and secure each transaction.

In addition to the above arguments, the Malaysian government's digital economy policy requires a design to be more inclusive between the public and business. Public policy affects individual people or businesses and digital technology is an enabler in changing the economic possibilities (Waller, 2016). From this perspective, digital economic policy may provide assistance for the success of business continuity and success. For example, in the USA, the digital policy helped to produce only 4% of business discontinuation compared to Africa which has a higher 16 per cent (Ansong & Boateng, 2019). Meanwhile, studies of the growing ICT business start-ups in France indicated that human capital and working experience have no significant impact on the success of the business (Ansong & Boateng, 2019; Lasch, Roy, & Le Yami, 2007). Secondly, The design of future digital economy policy are experiencing the needs to be more digital policymaking such as web-based technology in society, usage of mobile technologies and social media in particular (Clarke & Craft, 2017). This is will help to contribute to the readiness of the people to be a more digitalised society. This process requires effective and efficient communication, public trust and dissemination of required information to the public, especially during crises period (Hartanto, Dalle, Akrim, & Anisah, 2021). For example, the E-Government Act of 2002 by the US government directs regulatory agencies in the coming years to deploy technology to enhance public participation in government decision-making (Coglianese, 2004). This will create a great digital economy policy to promote business participation.

6. Conclusion

From the review of the Malaysia's Plans, yearly budgets and economic stimulus packages over 30 years, it can be concluded that Malaysia has been embarking on long-term strategies in preparing the digital economy ecosystem. These long term strategies include the development of regulating agencies, infrastructure, grants, loans to purchase technology devices, sales and tax rebates, and e-cash. Internet penetration and e-wallet usage have been tremendously increased due to the above incentives and plans.

However, there was no incentive allocated in the Budgets to promote SMEs or small scale hawkers to use QR Pay applications or other cashless payments for their daily business transactions. Therefore, the e-cash distributed to the Malaysians only benefited the e-money companies. One stimulus economic package done by the Thailand government was a subsidy to the citizen 50-50 e-wallet co-payment scheme to small traders (Bangkok Post, 2020). Meanwhile Singapore introduced PayNow as an integrated national cashless payment platform by implementing a standardised QR code (SG QR) to promote a unified cashless payment platform among the merchants (The Business Times, n. d.). Perhaps, these two initiatives taken by the neighbouring countries could also be implemented by Malaysia, in the way forward.

In essence, Malaysia is indeed ready for this digital economy as part of its economic ecosystem. Regarding the continuity of the prior government blueprint for the 12th Malaysia Plan, the current government has expressed its commitment to prioritise the initiatives. This gives Malaysians the confidence in the ruling government to embark on a long term strategic plan for the nation.

It is hoped that the findings of this research will contribute to the best strategies in promoting the digital economy and will become a point of reference for future research. The insights discussed in the paper can hopefully be used as strategic tools for any government, government advisors, think tank organisations, economists and academics to design better policies and plans for the future digital economy.

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