ACCELERATING DIGITALISATION, DIGITAL RIGHTS IN COVID ERA

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Born out of the ashes of the pandemic is a deeper government commitment towards the technological adoption and digitalisation agenda. Since 2020, a number of policies have been introduced, including the Malaysia Cyber Security Strategy 2020–2024 and Malaysia Digital Economy Blueprint. The recovery plans under Penjana were aimed at easing the burden of digitalisation for micro, small and medium enterprises, helping 45,000 get onboard e-commerce platforms while assisting more than 200,000 to adopt digitalisation solutions.[1] Meanwhile, Pelan Jalinan Digital Negara (Jendela) aims to build quality access to the internet, whether it is by 4G coverage or fixed broadband services.

There are a few trends that emerged as significant for Malaysia's adoption of technologies during the pandemic.

The first is the accelerated integration of technology in people's lives, which can be illustrated by the rise of the platform economy fulfilling various needs. Platforms, such as Ebay, Lazada, Shopee and Grab, offer solutions from logistics to food delivery, thus serving as technologically enabled interlocutors to fulfil the needs of the new normal. During the crisis, e-commerce income reached RM896.4 billion in 2020, an increase of 32.7% compared with 2019.[2]

Google, Temasek and Bain & Company's annual Southeast Asia e-economy 2021 report[3] stated that Malaysia recorded three million new digital consumers since the start of the pandemic. At the conclusion of the report, 94% of the new consumers surveyed intend to use digital services at present, with 98% adopting for good digital services moving forward.[4] Malaysia's information and communications technology (ICT) industry contributed 22.6% to GDP, where the manufacturing sector was the largest contributor to the gross value added to e-commerce, which increased e-commerce market growth in Malaysia.[5]

The second is the modernisation and adoption of technologies by the government to improve the delivery of governance and services. This is best exemplified by MySejahtera, Malaysia's contact-tracing super app that began as a tool to trace movements of infected individuals to its later iteration to highlight hot spots, ratify vaccination status with a digital certificate and facilitate vaccine appointments, among others.

MySejahtera's growth was slow. The application was launched at the end of the first quarter in 2020, but there were only 2.5 million downloads by mid-June[6] or an estimated 7% of the population. However, policies such as those making it compulsory for all visitors to check-in on MySejahtera prior to entering premises combined with RM50 e-wallet credit encouraged more downloads.[7] According to a State of Mobile 2022 report, MySejahtera has the highest install penetrations and open rates among other international Covid-19 apps installed on Android. The Health Ministry's primary app was downloaded by 85% of active Android devices in Malaysia with 92% opening the app after installation.[8]

Under the Malaysia Digital Economy Blueprint and open-data initiatives, government adoption of data and analytical tools would increase. During the pandemic, Mimos developed AI-based text analytics system with other data analysis technologies to identify areas of concern for Malaysians.[9] The tool is meant to improve governance and policymaking where social media listening is said to improve decision-making.[10]

Further, as the MyDigital initiative aims to propagate big data, efforts such as the Statistics Department's big data analysis job market insights and My Job Profile improved the efficiency of the labour market[11] as Mampu and the National Water Research Institute of Malaysia aim to use data to forecast climate change patterns up to 100 years.[12] The government also utilised various communication channels to deliver information, inclusive of social networking sites.

With the digital economy and e-government developments, the technology adoption makes internet connection a necessity.

The internet users survey by the Malaysian Communications and Multimedia Commission (MCMC) stated that 88.7% of the population used the internet in 2020,[13] an increase from 87.4% in 2018. Of the 2,401 users surveyed, 42% spend more than nine hours a day online. Those spending fewer than four hours dropped to 26% from the 48.8% in 2018 figures. The increase in internet usage is also reflected in the increase of technological adoptions, such as video and voice calls, financial activity and cloud storage. These figures are on the rise, despite lower figures of those using the internet for work-related activities or to buy and sell online.

The structure of access via devices has also shifted. Individual access via computers and mobile phones increased slightly from 72.1% to 80% and mobile phone access from 97.9% to 98.2% between 2018 and 2020. This is a shift from the 6.3% increase of computer-facilitated access per household compared with 2018 figures.[14]

These figures indicate that Malaysians are spending a longer time online, with the need of personal devices for such connectivity. The growth of digital consumers and adoption of digital services raise concerns for safety in digital spaces. MyCERT's[15] statistics indicate that cybersecurity incidences have been on the rise in the last five years with fraud, intrusions and malicious codes registering the highest cases each year. This raises the argument for the need to build awareness and capacities for digital rights, which would protect and enable Malaysians to have safe experiences online.

What are digital rights?

On 28 September 2021, the communications and multimedia minister said internet access will be viewed as a human right to ensure that no community is left behind.[16] Closing the gaps and ensuring access to the internet is necessary, especially as government services, economic opportunities and further social mobility move online. These are the future trajectories of Malaysia enshrined in the MyDigital initiative and the 12th Malaysia Plan, hinging on the

development of digital for the future. The challenge of access was tested during the pandemic when pupils had to trek distances for connectivity[17] while freedom of movement could be denied to individuals without access to MySejahtera[18] or experiencing glitches with the app.[19]

Digital rights, however, extend beyond connectivity-related factors. The application of human rights in cyberspace can be articulated in two ways.

The first is the view of cyber and technologies as a medium. Thus, further discourse on human rights and cyber would view how the former is affected, distorted and limited by the adoption of technologies. Considerations, such as the protection of children, protection of human rights by older persons, online violence against women and girls, extreme poverty and online spaces as well as the protection of human rights and fundamental freedoms in the midst of other cyber-enabled nefarious acts, such as terrorism, are paramount. Malaysia ranked second in Asia in 2020 for cyberbullying,[20] and between 2020 and July 2021, MCMC received 6,598 complaints of online harassments.[21] However, the technological environment, which has content and data ownership cutting across different jurisdictions and platforms, makes it difficult to address issues swiftly. For instance, compromising images and information can be shared easily between platforms, which can challenge government and non-governmental organisations attempting to take down such content. Platforms, balancing between freedom of expression, privacy and user rights, grapple with approaches to moderate their space from misuse.

The second would identify areas of human rights needed with further adoption of technologies. For instance, artificial intelligence, algorithms and the development of new technologies depend on data collection, whether such information is personally identifiable or anonymous. Data is touted as the oil of the digital economy and, during the pandemic, data breaches occurred, such as the alleged leak of information of four million individuals connected to the National Registration Department due to an exploited API on the Inland Revenue Board's website[22] while errors such as the technical issue from RHB Bank Group, which allowed bank statements of other individuals to be opened with one's own password,[23] compromise personal details or lead to data abuse.

Behavioural and relatively identifiable data are the engines of growth for the digital economy. While the general information about a person retails for less than a dollar,[24] the perceived value for the loss of privacy is estimated to be closer to US$36[25] though figures have escalated to an estimated US$66 million annually for specific demographics (data of American men of Middle Eastern descent fetch the highest price).[26] In addition to the leakage of data impacting on personal lives, processing of data could be used to skew decision-making. Examples include Cambridge Analytica and elections where data obtained legally or illegally was utilised.[27]

While in Malaysia the monetary value of personal data is not explicitly available, it would be interesting to note that the most mature data analytical usage is in the media and entertainment verticals, including news sites and websites.[28] In Malaysia, data analytics can be used to analyse sentiments or shape political impact.[29] In more malicious forms, the use of personal information against an individual can result in cyberbullying or doxing – which if paired with infringements of freedom of expression would be used against journalists and activists. This means that protections from data-related harm have to consider the volume of data collected, purposes of data collection, notifications of data transfers and accountability measures.

The controversy over MySejahtera's management and ownership of data[30] exemplifies the entire lifecycle of data that has to be considered, particularly on the aspect of data transfers and notification to users.

Such mechanisms are necessary for the government and the private sector, especially if the future digital economy collects and processes data to deliver services.

Governance of a digital nation

However, a digital nation where the tides of technology production and usage can shift rapidly poses challenges in governance. For one, the government would face an asymmetry of power, where the production and regulation of technologies are either in the hands of the private sector or located outside of Malaysia. In such situations, the public may find it difficult to seek solutions for the protection of rights in cyberspace, especially if the laws for data usage or content-related harms differ across borders and ownership.

The development of a strong research and development, commercialisation and innovation economy (R&D&C&I) must balance between developing technologies that can adhere to regulations and slamming the breaks on the development of new technologies or platforms. The approach to guide the development of new technologies imbued with values can be found in the European Commission's European Group on Ethics in Science and New Technologies' reports on values for the future that include innovating based on ethics and values.[31] Another example of the marriage between technology and values is Australia's international cyber engagements aimed at developing technologies that protect values, such as human rights online and advocates for diversity, gender equality and women's empowerment.[32]

> **Malaysia's approach to governing cyberspace needs to consider the values that would guide present and future technology development to safeguard and empower the present and future digital nation.**

In conversations with civil society, resources that could be useful to develop ideas include the Feminist Principles of the Internet[33] to uphold principles of access, movements, economy, expression and embodiment in cyber related to advancing, protecting and advocating women's rights. There are elements which might be applicable in Malaysia's cyber realm, such as:

- Access to the internet and devices
- Good governance and access to information
- Diffusing the power structures in the governance of the internet
- Preserving freedom of expression and means that facilitate the freedom of expression
- Building ethics and politics of consent into the culture, design, policies and terms of service of internet platforms
- Right to privacy
- Control over personal history and memory on the internet
- Safe cyber experience for children
- Protection against online harassment and technology related violence

Regulations that need to be updated can be mapped and assessed. One definite area is the Personal Data Protection Act (PDPA) 2010, which was already considering updates with the consultation paper circulated right before the pandemic hit a high in February 2020.[34] Such updates would have to consider mandatory data breach notifications, data portability laws, parameters of data collection and responsibilities in data processing. Also on the spectrum of discussions of privacy are government obligations in data usage. As the government digitises and becomes a data user and regulator, the government would need to consider the policy implications of data processing as well as data breaches to remain accountable to a population becoming more digitally adept, especially as technologies become more complex.

In crafting ways forward, Malaysia must ensure synergy between ministries and agencies while building on existing efforts identified in the Malaysia Cyber Security Strategy 2020–2024. The challenge is the dispersed roles and responsibility strewn throughout ministries, particularly to tackle harms that can originate from the usage of devices.

The National Cyber Security Agency is the main body responsible for developing policies on cybersecurity while the Royal Malaysia Police (RMP) are the enforcement arm for laws inclusive of cybercrime. As further processes to improve forensics and cybercrime coordination is discussed in the United Nations, the conversation to search for Malaysian values in governance of technologies can occur in ministries, such as the Ministry of Science and Technology and the Ministry of Multimedia and Communication.

The Ministry of Multimedia and Communication, especially, has the hefty task of building infrastructure while empowering various other facilities, mediums and environment in a digital ecosystem. The ministry houses several agencies, including Bernama, Finas, MCMC, Malaysia Development Economic Corporation (MDEC), MyNIC, Cybersecurity Malaysia and MyCreative Ventures. Thus, by extension, it has jurisdiction to galvanise processes over issues, such as data protection (under the Personal Data Protection Department that is an agency under MCMC), misinformation (through Sebenarnya.my), content regulation inclusive of those leading to hate speech, extremism or other forms of violence (under MCMC), freedom of information and expression (under MCMC and Finas) and cybersecurity (with technical expertise under Cybersecurity Malaysia), especially under the Communications and Multimedia Act 1998, PDPA 2010 and Perbadanan Kemajuan Filem Nasional Malaysia Act 1981.

Despite the jurisdiction, conversations to build the foundations of digital citizenship are not pervasive, especially on setting security-by-design standards for new technologies, anti-surveillance laws or principles as an approach to data overcollection, protection against online harms and approaches to negotiate with big technological firms on responsibilities.

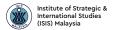**Digital rights, digital nation and digital citizenship**

A safe digital nation can only be developed with a whole-of-society approach, where digital citizenship means to engage positively in the digital environment.[35]

Cyberspace is a multi-stakeholder environment and empowering a digitally literate society to play a larger role to hold accountability would be needed to ensure processes for a stable cyberspace moves forward.

Malaysia may be lacking a robust civil society, whether in terms of people from the technical sector or those advocating cyber-based human rights, who could act as valid cross-jurisdictional constituents, especially where certain cyber issues are out of the jurisdiction for governments. According to Statista, in January 2022, Malaysia had the second most active social network penetration among the countries selected at 91.7%, above the worldwide average of 58.4%.[36] The high participation on platforms places Malaysians online as valid constituents for the platforms offering digital services. Therefore, building greater awareness on online harms could create greater accountability mechanisms from services that stem from abroad. Such organisations do exist in Malaysia, such as IO Foundation, Sinar Project and CybHER, to hold accountability for the management of data, transparency in governance and protection of women. As harms from cyber can trickle to personal experiences, a multi-stakeholder process with a greater role for civil society would be healthy for the stability of present and future cyberspace.

Malaysia was relatively well connected before the pandemic. However, as the pandemic accelerated digital adoption, the technological genie emerged from the bottle. During the pandemic, social media became the space for civic engagement where efforts, such as #KitaJagaKita and #BenderaPutih, utilised social-networking sites to galvanise efforts with the aim of delivering aid to those in need. Lazada and Shopee offered tickets for animal adoption in Zoo Negara[37] while Lazada offered farmers facing logistics challenges a platform to sell their produce directly to customers.[38] It was reported that about 70 tonnes of produce were salvaged and delivered to homes.[39] The maturity of Malaysia's cyberspace also coincides with a digital community mainly using cyber to communicate, engage in online
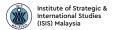
communities and seek information.[40] The digital space holds the potential to unlock new frontiers for politics, economic and societal development. However, to harness the good in a digital Malaysia, mechanisms must be developed that would protect present and future Malaysians from potential abuse and harms.

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