



2023 CYBERSECURITY TRENDS

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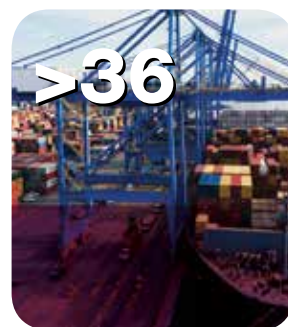
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From the Chairman's Desk

I am pleased to present the latest issue of .MyConvergence magazine.

The mantra today everywhere is to go digital or go bust. The benefits digitalisation brings are obvious. Online technologies and services, high speed connectivity and paperless transactions, to name a few are making lives easier and bringing economic benefits to all.

This global trend is reshaping society everywhere. Malaysia is in the forefront of the digitalisation wave. It is driving transformation in every part of our country, be it urban or digital.

This issue covers a lot of areas that are in the forefront of digitalisation. There are two features on cashless society. One examines our initiatives in this area while another shares the experience of the Kedah State Government's cashless initiative. On the same theme of digitalisation is the article on how courier solutions are empowering businesswomen.

It is a given then that the shift to digital will require a lot of learning or relearning. Internally, the fast-paced nature of our organisation requires continuous upskilling and reskilling of employees to stay ahead in the industry. The article on Organisational Success presents our internal initiatives that foster a culture of excellence and long-term growth and success at MCMC. Another interesting article shares how MCMC is partnering with learning institutions to create programs that enable industry practitioners to upskill themselves through micro-credential courses.

However, while the digital wave has brought about rapid beneficial changes, security threats have also increased in tandem. Day by day, cybercriminals are utilising these same technologies for evil purposes. New advances in areas such as artificial intelligence, machine learning and quantum computing are enabling cybercriminals to build and unleash cyber-attacks that are highly dangerous and sophisticated. Everyone is at risk – individuals, businesses, agencies and even the government.

Fittingly, one article in this issue is about how the global industry is coming together to strengthen mail and parcel security. The logistics and supply chain is global today and one weak link can result in global emergencies.

It is my sincere hope that individuals and organisations understand that a safe cyber world is a shared responsibility. While agencies will do their part to promote and secure our infrastructure, everyone must prepare to meet the increased security demands of this new digital landscape.

The cover story also examines the cybersecurity trends that are likely to be prominent this year.

Warmest regards,
Tan Sri Mohamad Salim bin Fateh Din



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2023 CYBERSECURITY TRENDS

AN EYE ON TRENDS AND THREATS IN MALAYSIA

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Malaysia has experienced rapid growth in its digital economy over the past few years, with an increasing number of businesses and individuals relying on technology for their daily activities. However, this has also led to a rise in cybercrime and cyberattacks, which can cause significant damage to both individuals and organisations. The increase in remote work, cloud usage, AI, and the IoT expands the attack surface, making it imperative to stay alert.

As we venture further into 2023, existing trends may continue and new cybersecurity threats are emerging, and it is essential to be aware of these trends to stay ahead of the game. In this article, we will discuss six cybersecurity trends to watch out for in 2023.

PHISHING

Phishing is a type of cyberattack where cybercriminals employ various social engineering techniques to entice

or trick individuals to take certain actions, or to disclose sensitive information such as login credentials, financial information, or personal information.

MCMC Network Security Centre (MCMC NSC) documented a total of 1653 phishing incidents in 2022. One of the most popular tactics employed in 2022 is the use of malicious Android Package (APK). Victims were being enticed with discounted offerings on social media for services such as cleaning, maid services, video streaming services, grocery delivery and various other services. They were then instructed to download and install malicious Android Package (APK) files onto their phones to complete the booking and payment transactions. The installed APK allowed cybercriminals to obtain and intercept online banking credentials of the victim leading to monetary loss.

Another popular tactic observed is the offerings of fraudulent rewards. Victims were enticed with gifts, vouchers, cash and rebates for various products and services. To claim or redeem the rewards, victims will need

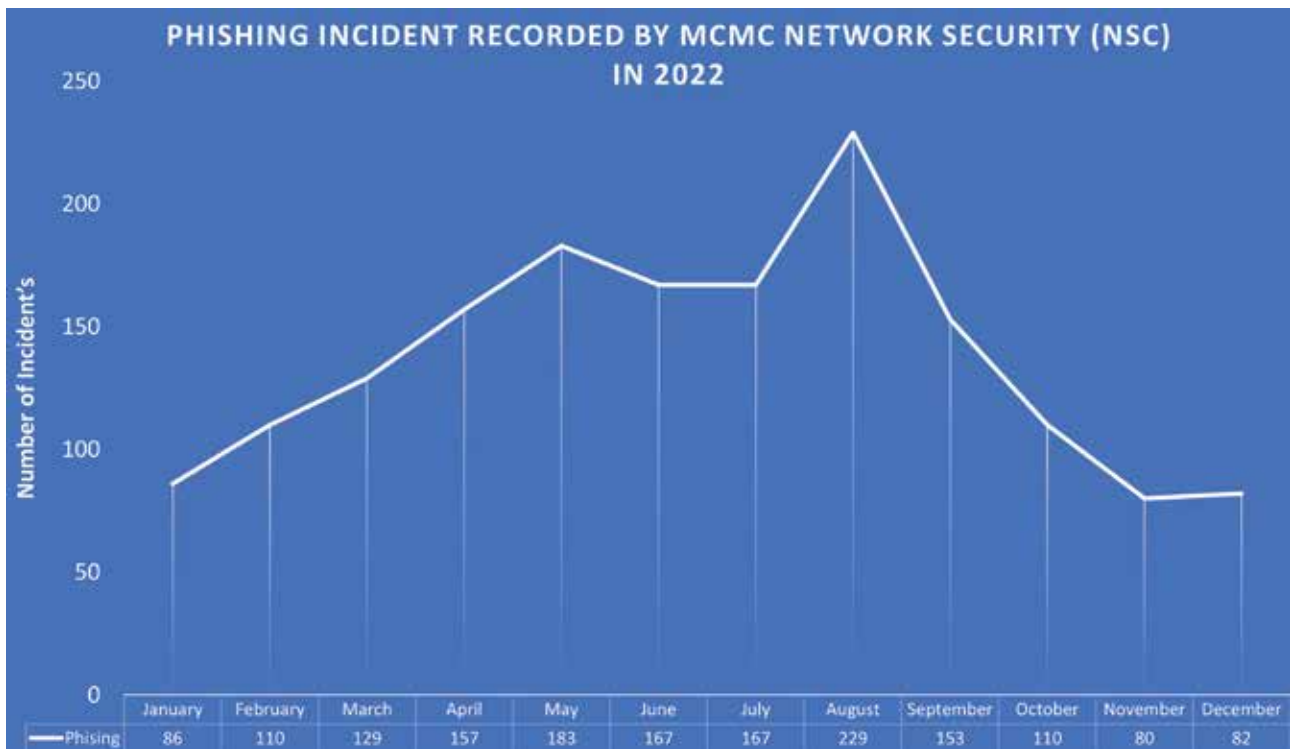


Figure 1: Phishing incidents recorded by MCMC NSC in 2022

to provide online banking credentials or credit card details via fraudulent links provided by the cybercriminals. This tactic often impersonates well-known brands that are popular among Malaysian consumers.

It is likely that phishing will continue to be a significant threat in 2023 and beyond. Phishing technique will continue to evolve and become more sophisticated and convincing, and it will remain a popular tactic for cybercriminals to obtain sensitive information such as login credentials, financial information, or personal information.

RISE OF ARTIFICIAL INTELLIGENCE (AI) AND MACHINE LEARNING (ML)

Artificial Intelligence (AI) and Machine Learning (ML) are rapidly evolving and can be important tools in cybersecurity. AI and ML are being used to detect and prevent cyberattacks, as well as to identify and mitigate vulnerabilities.

In 2023, AI and ML will play increasingly critical roles in cybersecurity. We expect to see more advanced systems and tools that leverage these technologies. One example of AI and ML in cybersecurity is the use of behavioural analysis that uses AI and ML algorithms to analyse user behaviour and detect any unusual or suspicious activity. This technique is particularly useful for detecting insider threats and advanced persistent threats (APTs).

Although AI and ML can be important tools for cyber-defence, they can also be double-edged swords. Cybercriminals are using AI and ML as tools to find and exploit vulnerabilities and launch an attack.

According to Grand View Research¹, the global AI in cybersecurity market size was valued at USD13.29 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 24.3% from 2022 to 2030.

In 2023, we expect to see more usage of AI and ML in cyberattacks, and attacks that will become more sophisticated and challenging to detect. To stay ahead of the curve, businesses and organisations will need to invest in AI-powered security solutions. This includes using AI to enhance threat detection and response capabilities, as well as developing new AI-based techniques to identify and mitigate cyber threats.

QUANTUM COMPUTING AND CYBERSECURITY

Quantum computing is another technology that is rapidly advancing and is expected to have a significant impact on the cybersecurity landscape in 2023. This technology brings both opportunities and challenges and understanding their implications for cybersecurity is critical for organisations and individuals.

Quantum computing facilitates faster and more efficient computing power, but also poses significant risks to

¹ Source: <https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-cybersecurity-market-report>

traditional encryption methods. Quantum computing can break current encryption methods, making them vulnerable to cyberattacks.

In 2023, we can expect to see an increased focus on developing post-quantum cryptography, which is designed to be resistant to quantum computing attacks. Businesses and organisations will need to stay up to date with the latest developments in quantum computing and ensure that their data is secured with quantum-resistant encryption algorithms.

INTERNET OF THINGS (IOT) SECURITY

The Internet of Things (IoT) is expanding rapidly and transforming the way we live and work, and this trend is set to continue in 2023. However, as more devices become connected to the internet, they become potential targets for cybercriminals. IoT devices are often poorly secured, making them vulnerable to hacking and other cyberattacks.

In 2023, we can expect to see an increase in attacks on IoT devices. These attacks could take the form of distributed denial of service (DDoS) attacks, where cybercriminals use multiple devices to flood a network with traffic, or they could involve the exploitation of vulnerabilities in IoT devices to gain access to networks.

To protect against these types of attacks, it is essential to secure IoT devices and to implement strong network security measures such as strong authentication mechanisms, and regularly updating firmware and patching vulnerabilities.

In 2023, we can also expect to see an increased attention on IoT security, focussed on developing more secure IoT devices and improving the security of existing devices.

CLOUD SECURITY

Cloud computing has become a vital component of the digital economy, providing organisations with scalable, flexible, and cost-effective computing resources. However, as more organisations move their operations to the cloud, the risks associated with cloud security also increase and we expect cybercriminals will increasingly target cloud infrastructure.

In addition, cloud services are often targeted by cybercriminals because they can provide access to large amounts of sensitive data. In 2023, we can expect to see more targeted attacks on cloud services. These attacks could involve the exploitation of vulnerabilities in cloud providers' infrastructure or the theft of credentials to gain access to cloud accounts. To protect against these types of attacks, businesses and organisations will need to

implement strong cloud security measures, such as multi-factor authentication and encryption.

In 2023, we can expect to see new tools and techniques for securing cloud environments. Cloud providers will also be expected to take a more proactive approach to cybersecurity, with a focus on providing more robust security features.

RANSOMWARE AND CYBER-EXTORTION

Ransomware is a type of malware that encrypts the victim's data and demands a ransom in exchange for the decryption key. Ransomware attacks have been on the rise globally, and Malaysia is no exception.

Ransomware attacks are particularly damaging because they can cripple businesses and organisations, causing significant financial losses and reputational damage. In 2023, we can expect to see more advanced and sophisticated ransomware attacks, with cybercriminals using techniques such as AI and ML to target specific victims and evade detection.

To protect against ransomware attacks, businesses and organisations in Malaysia need to take proactive measures to secure their networks and educate their employees about the risks. This includes implementing strong network security measures, such as firewalls and intrusion detection systems, and regularly backing up critical data to minimise the impact of a successful attack.

Another trend we can expect to see in 2023 is an increase in cyber-extortion. Cyber-extortion is a type of attack where the cybercriminals threaten to release sensitive data or otherwise harm the victim unless a ransom is paid. This type of attack is particularly damaging against businesses and organisations, and we can expect to see more such attacks occurring.

CONCLUSION

As Malaysia continues to develop its digital infrastructure and economy, cybersecurity will become increasingly important. With cybercrime and cyberattacks on the rise, it is crucial for businesses in Malaysia to take cybersecurity seriously. In addition, the government also has a crucial role to play in cybersecurity to ensure a secure and trusted digital environment for society to prosper and economic growth. This includes driving the cybersecurity agenda of the entire country and the development of a cohesive national cybersecurity strategy with clear implementation plan.

Cyber security is a collective responsibility, and a constantly evolving field. It will take all of us working together to ensure a safer and trusted digital environment.



SHARIL TARMIZI



Mention the name Dato' Sharil Tarmizi and the first association people usually come up with is ex-Chairman of MCMC. What many don't know is that this position was during his second stint at MCMC. .myConvergence speaks to MCMC's sixth Chairman Dato' Sharil; who is the first MCMC staff to become Chairman of MCMC.

The road to MCMC

I share my hometown with Tan Sri Michelle Yeoh. I went to Anderson School in Ipoh before receiving a government scholarship to do law overseas in the UK. I thought I was going to an English speaking country but Wales, where I was sent to, turned out to be a very different place.

Nonetheless, I had a great time there, immersing myself in their unique language and culture.

I studied at Aberystwyth University, back then it was called the University College of Wales, Aberystwyth. I lived in the halls where Prince Charles spent a term in 1969, learning

the Welsh language in preparation to become the Prince of Wales. This was in the early to mid 90s.

After graduation, I then did my bar exams in London at Gray's Inn, one of the four Inns of Court in UK. I then returned to Malaysia. It turned out the Government had no place for me at the time, and I went into the private sector.

My first stop was at Azman Davidson & Co, an illustrious law firm. First at their Ipoh office and later at the KL office. I had the privilege of being trained by lawyers who have gone on to become very senior members of the legal fraternity today.

I was what could be called a construction lawyer. We handled a lot of construction projects and engineering review legal work. So, instead of conventional legal work, I went to construction sites and looked through engineering reviews. This helped me grow my technical side which proved useful later.

Later I went to the law firm of Zaid Ibrahim & Co, as I wanted to learn to do privatisation work, which was the big thing in Malaysia in the 1990s. I got involved in quite a bit of privatisation work there - water, utility, and infrastructure. Then we got involved in the implementation of Putrajaya and Cyberjaya. I was one of the lawyers helping Putrajaya and Cyberjaya take shape. This was the early days of the Multimedia Super Corridor (MSC). Our law firm did a lot of work for tech companies coming in to invest in the MSC.

I found myself moving from privatisation to legal work involving tech and the MSC. This was my first foray into the Communications and Multimedia Act 1998 (CMA 1998), which at that time was still a Bill. One of my clients then, Datuk Harold Read was asked by the first Chairman of CMC (as it was then called), Dr Syed Hussein Mohamed to become a General Manager of CMC. Datuk Harold later asked me to join him and arranged for me to meet Dr Syed Hussein. I was initially not keen as I was on a good professional trajectory in the private sector. Datuk Harold was persuasive, however. He said that what they were going to do at CMC was something no man had ever done before - putting together telecoms and broadcasting and converging everything. This was in early 2000. Nobody quite understood the concept of convergence yet. Although the law was in place, it was still just a policy and idea then. The challenge appealed to the Star Trek side of me, and I decided to take up the offer. My law firm thought I was crazy, taking a huge pay cut to join CMC as a public servant.

Chapter 1, MCMC

I was given a position to lead the Industry Development division. My job was to draft and subsequently implement

the new policies and operations that affected the convergence sector. I led and participated in teams that worked on shared infrastructure for 3G, Digital TV, the National Spectrum Plan and other aspects of spectrum work which included spectrum pricing, spectrum refarming, and spectrum allocation. I also worked on the National Numbering and Electronic Addressing Plan and many other initiatives at that time.

Dr Syed Hussein then retired and Tan Sri Nuraizah Abdul Hamid came in as the second MCMC Chairman. I continued doing industry policy development work. Some of the colleagues I worked with then are still at MCMC, some have retired while some have passed on. Furthering our objective of convergence, we began moving the industry licensing structure from a vertically integrated licensing environment to the current NFP/NSP/ASP environment. Of course, there was pushback from the industry as these licensing changes were unsettling. Today people will say that this current approach is logical and perhaps the best framework today but back then, it was new and scary to the industry.

This work also led us to share our regulatory experience overseas. Tan Sri Nuraizah was keen for Malaysia to share our convergence model to the world. She would insist that CMC officers present at as many international conferences as we could. She even did the presentations herself. I also had the opportunity to present at International Telecommunications Union (ITU) conferences and other international meetings in both the developed world and in developing countries. I made new friends and acquaintances, some of whom I still keep in touch with to this day.

After Tan Sri Nuraizah finished her tenure, I continued to serve Datuk V. Danapalan, the third MCMC Chairman. I worked on areas like Mobile Number Portability, the Numbering and Electronic Addressing and cybersecurity work. This was from 2004 to 2006. I was also promoted in 2004 from senior manager to general manager. By 2006, I felt it was time to move on. Dato' Dr Halim Shafie (now Tan Sri) had just become Chairman and I had already served for 6 years under three Chairmans. I knew Dr Halim from the time he was Deputy Secretary General of the Ministry implementing the CMA 1998 whilst I was still practising as a lawyer. I met Dr Halim and expressed my intention to leave. He asked to help with the transition, which I did and then I left for the private sector.

Chapter 2, MCMC

I went into corporate advisory this time. We did corporate mergers, acquisitions and restructuring work. But my hiatus from MCMC did not last very long. The late Tun Dr. Lim Keng Yaik, who was the Minister when I left, made me an MCMC Commission member. I was the first staff

member to be appointed to the Commission. I was around 36 then. As a Commission member, I was assigned special tasks to undertake and that included helping out the national high-speed broadband (HSBB) rollout under the MyICMS 886 Plan.

Sometime after that in late 2008, Dr Halim and Datuk Shaziman Abu Mansor, who had become Minister taking over from Tun Dr Lim when he retired, asked me to come back to MCMC full time. The organisation had just been restructured as it had gotten quite big. The amount of work at MCMC was immense. What many may not fully grasp is that MCMC covers a lot of other sectors and industries. Telecoms, broadcasting, internet, broadband, cybersecurity, postal, courier services, elements of strategic trade, digital signatures, space segment, border coordination, air space and even space - basically anywhere where there is communications and connectivity.

The timing was perhaps fated as our corporate advisory firm was in the midst of being acquired by Maybank. I came back to MCMC in late 2008, this time as its Chief Operating Officer (COO). In this period, I helped implement many of the policies that I was involved in developing previously. I also worked on the national postal strategy review, revisions to Digital Signature Act, the implementation of digital television (DTV), implementation and rollout of 4G, and the extension of HSBB.

Tan Sri Halim decided to retire in May 2009. The Minister then was Datuk Seri Utama Dr Rais Yatim. I was appointed then to serve as Acting Chairman of MCMC while the government looked for a candidate. After about 6 months, Tan Sri Khalid Ramly was appointed as Chairman No 5. By then, I had worked with all 5 Chairmans of MCMC.

The four previous Chairmans were from related multimedia and communications industries. Tan Sri Khalid came from outside the industry, and he brought a different style to MCMC. While still COO, I was appointed by the Minister to become the Special Advisor to the Minister of Communications and Multimedia, as the Ministry was called then. This was, personally, a challenging period for me. Once Tan Sri Khalid's term ended, the next thing I knew, I was appointed Chairman No. 6, in Oct 2011.

As Chairman, I essentially continued what I was doing but this time with added responsibilities. We completed the Postal Act 2012, and implemented the Strategic Trade Act 2010. This Strategic Trade Act was under the Ministry of International Trade, but because technology items were also included in the list of sensitive technology and materials, the MCMC was the agency in charge.

Datuk Seri Utama Dr Rais, (now Tan Sri), placed focus on increasing broadband penetration and utilisation of ICT. We deployed over 1.6 million netbooks to B40 and M40 households throughout the country. Another line of action was the deployment of over a thousand towers across the country, this was the precursor to the JENDELA Project as the MCMC calls it today. Together with other commission members who shared the same concerns, we travelled all over the country. A lot of this infrastructure was deployed in Sabah and Sarawak and the more rural parts of Semenanjung Malaysia. I was in and out of longhouses and villages and went to places like Sandakan, Lahat Datu, Mulu and Julau and practically drove on the trunk roads from Kota Kinabalu to Kuching. The programmes we implemented were effective. Nationwide cellular coverage increased from around 25% to about 67% when I left MCMC.

What were the highlights and differences of your two MCMC stints?

Every phase had its own challenges. In the first stint, I was still very much a worker. I had bosses and co-workers to help me and to cover me. I was very fortunate that I had supportive bosses at MCMC over the years. When I was Chairman, I realised it was not much fun being a boss. I had other bosses to answer to. There was Parliament, Ministers, Prime Minister, all sorts of select committees. Expectations were growing. People wanted broadband yesterday, better quality of service everywhere. Messaging was become prevalent and negative content was becoming a concern. There was sharing of sensitive videos. Being Chairman of MCMC became a very tough assignment. Incidentally, I remember being interviewed back then on sensitive content issues by a young man on an online show called The Fairly Current Show. This young man is now the Minister of Communications and Digital, YB Fahmi Fadzil.

Nevertheless, I have deep personal satisfaction having been given the opportunity to be involved in so many initiatives that have changed the multimedia and communications landscape of Malaysia. It was a privilege to be involved in so many undertakings such as the introduction of 3G and 4G and the sharing of mobile radio infrastructure and number portability and setting up Malaysia's first Internet Exchange as well as the digitalisation of television in Malaysia. I was able to work on and complete some key legislation that govern so many important areas. Our efforts to reduce the digital divide and improve broadband connectivity were other initiatives that have great impact on Malaysians to this day. The current JENDELA program that is furthering the mission of bringing digital technologies and services to every corner of Malaysia and is building from the initial towers we put up in rural areas between 2011 and 2013.

I am especially pleased that we were able to introduce the 'Klik dengan Bijak' programme that aimed to educate people that content control was at their fingertips. We wanted to teach people that this new freedom that is brought about by the Internet and convergence, comes with responsibility. This was in response to the content issues that were coming up. We also did the Get Malaysian Businesses Online Programme, together with Google. I am especially proud of the internet campaign called "Segalanya Mungkin Dengan Jalur Lebar" in which we promoted rural online businesses such as the lady who was selling seaweed online.

What are your thoughts on MCMC's role in today's environment?

I think the role of the regulator even back then has changed from that of being just a regulator to an industry developer. If you look at the Objects section of the CMA 1998, seven out of the ten National Policy Objectives talk about industry development. Only three objectives are about regulation and control.

People today speak about regulatory sandboxes and safe zones for innovation and development. All these were already set out in the CMA 1998. It lays out MCMC's objectives to provide a facilitative environment that will allow for new technologies and developers to build new services. We need to continue to foster that. People forget that MCMC is not just a regulator. Everybody expects MCMC to look at social media, internet and internet regulation. Even this was addressed in the CMA 1998 way back in 1998. This was the concept of self-regulation where the government is not going to police what you do, you police what you do yourself. The government will facilitate what you want to do in a safe environment. I think this bears repeating again and again.

Regulation is just ONE of the things that MCMC does. Industry development is the bigger agenda. If MCMC only focused on regulation back then, there would not have been 3G, 4G and digital terrestrial television today. We would not have built a thousand towers then or deployed so many netbooks. MCMC, as an industry development agency must continue to look at creating a facilitative environment that will improve our daily lives.


You appear to be doing so many things post MCMC, how would you describe yourself today?

I left MCMC in December 2014. I was 45; young enough to restart in the private sector. I went back to corporate advisory work and corporate restructuring. Since then, I

have been fortunate to be involved in many interesting corporate deals. One of the most notable and public ones, was the investment by Geely into Proton and the sale of Lotus to Geely in 2017. I also sit on quite a few boards of large public companies and organisations, three of which are Lotus Cars Group UK, Pos Malaysia Berhad and Lagenda Properties Berhad. I am also an Authority Member of the Civil Aviation Authority of Malaysia and serve on the board of directors of Amanat Lebuhraya Rakyat Berhad, a non-profit initiative that is working to take highways out of private hands and return them to the rakyat. I have also just completed my 2 year tenure on the board of Digital Nasional Berhad, the 5G service provider. I am quite proud to say we were able to take 5G coverage from zero in March 2021 to 55% coverage over populated areas in March 2023. I also sit on the Advisory Board of the United Nations University in Macau.

Whilst I sit on large public listed boards and work on large corporate matters, I also spend a lot of time at the other end of the business spectrum; mentoring, advising and investing in startups. I help companies in the Endeavour Malaysia ecosystem to scale up. I am an active angel investor and mentor several tech startups operating in areas such as artificial intelligence (AI), data analytics and natural language processing, green tech, Internet of Things(IoT), transport and mobility and smart city solutions, not just in Malaysia but also in Singapore and other parts of the world. Some of these startups are building very cutting edge technologies that I am quite excited about. Quite a few of my investments were done through pitchIN, an equity crowdfunding platform, which by the way was co-founded by an ex-MCMC staff. Equity crowdfunding allows you to invest in a small way into startups. I am also involved in two venture funds; Artem Ventures, an ESG focused fund as well as ScaleUp Malaysia.

I was also recently appointed by the Minister of Transport to chair a digital advisory committee consisting of ICT experts from various industries to assist in the digitalisation efforts of the ministry.

Looking at the things I do now, I consider myself very fortunate to have the opportunity to be involved in so many interesting spaces. I am involved in the air, ground, automotive, highway, housing and logistics verticals. I sometimes joke with people that not only do I share my hometown with Tan Sri Michelle Yeoh, like her in that movie; I am now in almost everything, everywhere; all at once. And that is just the way I like it, keeping myself busy. 



VIRTUES OF CASH AND THE POWER OF A CASHLESS SOCIETY

MCMC'S INDUSTRY DEVELOPMENT INITIATIVES TO PROMOTE WIDESPREAD DIGITAL ADOPTION

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Cash is the physical currency that allows people to make transactions and exchange value in a tangible way. In finance and accounting, cash refers to money (currency) that is readily available for use. It may be kept in physical or digital form or invested in a short-term money market product. Whilst in economics, cash refers only to money that is in its physical form¹. This includes all types of legal tenders, such as bills and coins. It is a reserve for making payments and is an important part of macroeconomic policies, including the money supply².

Paper bills and metal coins are two of the most used forms of money, but there are other types of cash that people and businesses use. In Malaysia, Bank Negara Malaysia began issuing currency notes in June 1967. These banknotes were in five denominations: \$1, \$5, \$10, \$50 and \$100. A \$1,000 denomination note was issued on 2 September 1968.

The authority to issue currency is vested in Bank Negara Malaysia (BNM, The Central Bank of Malaysia), under The Central Bank of Malaya Ordinance, 1958, which formed the Central Bank of Malaya (Bank Negara Tanah Melayu) in January 1959. However, the Board of Commissioners of Currency Malaya and British Borneo continued to issue currency until 12 June 1967³.

VIRTUES OF CASH

Cash has several virtues, making it an important and useful tool in our daily lives. The virtues associated with cash (Figure 1) are as follows:

1. It ensures your freedom and autonomy: banknotes and coins are the only form of money that people can keep without involving a third party.
2. It is legal tender: creditors such as shops and restaurants cannot refuse cash unless both they

¹ Corporate Finance Institute, "Cash, The Lifeblood of Business", 13 March 2023; <https://corporatefinanceinstitute.com/resources/accounting/cash-money/>

² *ibid.*

³ Bank Negara Malaysia, "The First Series"; <https://www.bnm.gov.my/-/the-first-series-past>



Figure 1: The Virtues of Cash

Adapted from: European Central Bank, "The Role of Cash", https://www.ecb.europa.eu/euro/cash_strategy/cash_role/html/index.en.html

- and the customer have agreed on another means of payment in advance.
3. **Universality:** Cash is widely accepted and recognised as a form of payment, making it a universal medium of exchange. It can be used to buy goods and services almost anywhere in the world without the need for a bank account or credit card.
 4. **Tangibility:** Cash is a physical object that you can hold in your hand, which can make it easier to understand and manage your finances. It can also be helpful for people who are more comfortable with traditional forms of payment and are not as familiar with digital transactions.
 5. **Privacy and anonymity:** Cash transactions are anonymous, providing privacy and security that digital transactions cannot match. When you pay with cash, there is no record of the transaction, which can be a desirable feature for people who value their privacy.
 6. **It is inclusive:** Cash provides payment and savings options for people with limited or no access to digital money, making it crucial for socially vulnerable citizens such as the elderly or lower-income groups.
 7. **Control:** With cash, you have complete control over your spending. You can only spend what you have. This helps you stay within your budget. It can also be helpful for people who are trying to get out of debt or who want to limit their credit exposure.

8. **It is fast and convenient:** Cash is easy to use and can settle a payment instantly. It requires no special equipment or technology, making it accessible to everyone. It is also accepted in situations where other forms of payment, such as credit cards or electronic transfers, may not be accepted.

The virtues of cash make it an important part of our economy and daily lives. However, there are drawbacks to using cash, such as:

1. **Risk of loss or theft:** Cash can be lost or stolen and is difficult to recover.
2. **Difficulty in tracking transactions:** Cash transactions can be difficult to track, making it harder to detect fraud or money laundering.
3. **Cost:** The production, transportation, and storage of physical cash can be expensive for governments, banks, and businesses.

POWER OF A CASHLESS SOCIETY

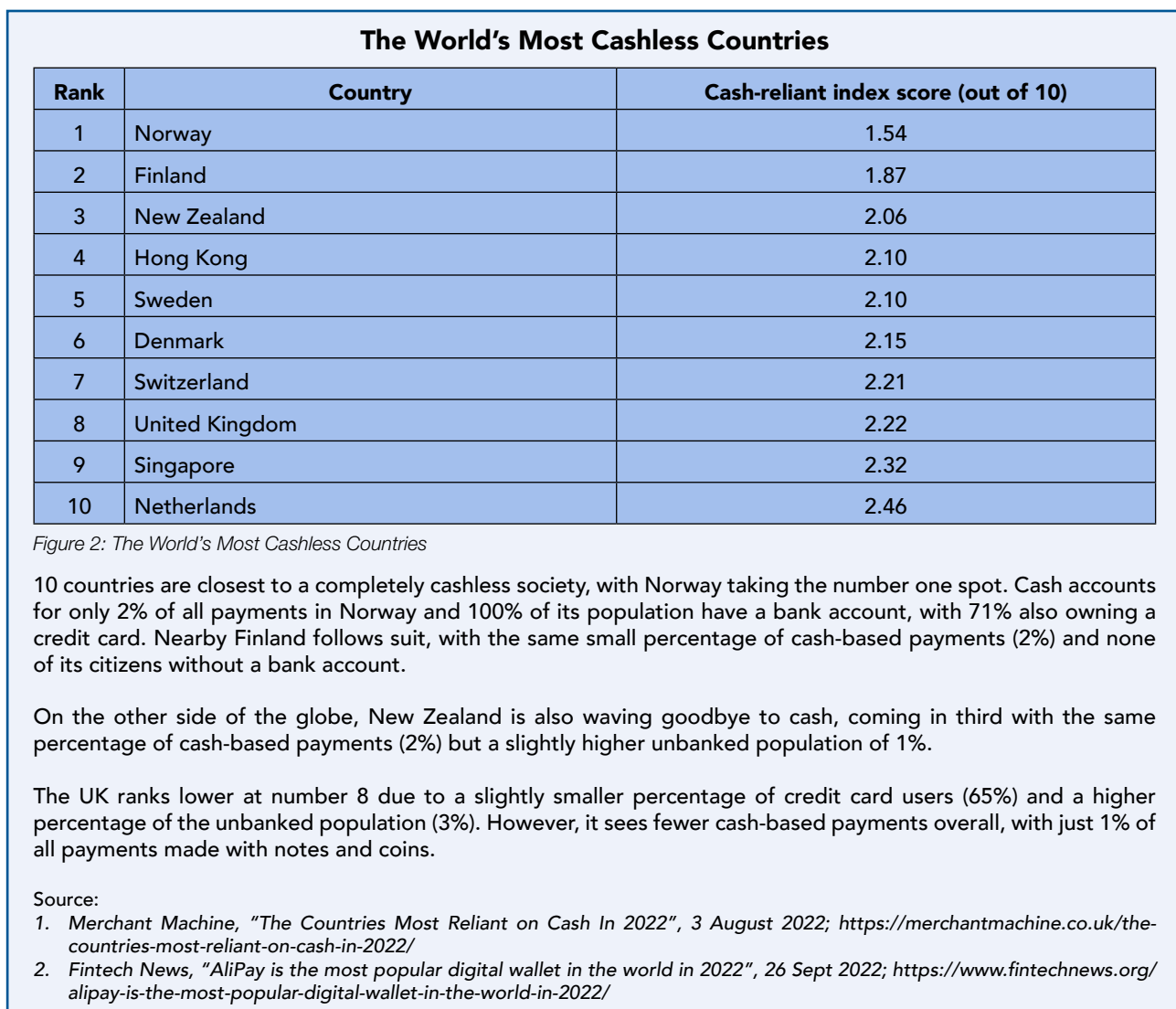
While cash remains an important and valuable tool for everyday transactions, other forms of payment, such as digital transactions are growing in traction in the digital economy. Table 1 lists key benefits and challenges in promoting widespread digital adoption and a cashless society.

Benefits	Challenges
Speed and Convenience: Cashless payments can be faster and more convenient than cash. With digital payments, individuals can make payments without the need for physical cash or even leaving their homes.	Technological limitations: Not everyone can access the technology needed for cashless payments, particularly in developing countries or rural areas.
Security: Cashless payments can be more secure than cash transactions, particularly if they use advanced encryption and authentication technologies.	Security risks: Cashless payments can be vulnerable to cyberattacks and other security threats that put personal and financial information at risk.
Financial inclusion: Cashless payments can help people who do not have access to traditional banking services, particularly in developing countries, by enabling them to make digital transactions using mobile phones or other devices.	Exclusion: Cashless payments can exclude people who do not have access to banking services or who prefer to use cash.
Promoting digital adoption: By encouraging the use of digital payments, a cashless society can promote the widespread adoption of digital technology. This can lead to further technological advancements and benefits as well as contribute to the digital economy, which is in line with the Malaysian Digital Economy Blueprint: Core 5: Creating an inclusive digital society.	

Table 1: Benefits and Challenges of a Cashless Society

In conclusion, both cash and cashless payments have their advantages and disadvantages. While a cashless society has the potential to promote digital adoption

and financial inclusion, it is important to address the challenges and ensure that everyone has access to fast, secure, convenient, and affordable payment options.



CASHLESS SOCIETY PROGRAMME BY MCMC INDUSTRY DEVELOPMENT SECTOR

The rationale of the Cashless Society Programme

MCMC's Industry Development component serves to promote utilisation and create demand for digital infrastructure and services. It also promotes and create awareness for digital adoption, which will contribute to increased GDP growth. Targets identified under national plans such as *Rancangan Malaysia Kedua-Belas* (RMK-12), Malaysia Digital Economy Blueprint (MyDigital) and National Fourth Industrial Revolution (4IR) are supported. The MyDigital Blueprint expects the digital economy to propel digitalisation within the Malaysian ecosystem, with the digital economy's contribution to GDP growing to 25.5% by 2025.

Bank Negara Malaysia (BNM) aims to transform the country into a cashless society⁴ while equally serving the 8% unbanked population, or approximately 2.6 million Malaysians, made up mainly of women, youth, and

individuals from low-income backgrounds and Malaysians in rural areas⁵.

Apart from the initiative for the unbanked, ongoing efforts are underway to uplift the Micro / Small Medium Enterprise (MSME/SME) sector. Being a predominantly cash-based sector contributing to 38.2% of the national GDP⁶, the ease and speed of transactions are prevalent issues for the MSME. This presents an opportunity for MCMC to overcome this by facilitating discussions between the government, industry regulators, industry players, and the end user; to enable cashless payment methods such as e-wallets.

The demand for e-wallet services in the country has grown to 80% and merchants are receptive to it, citing survivability and convenience post-pandemic⁷. The MasterCard Impact Study 2020 indicated that Malaysia has a 40% take-up of e-wallet use⁸. While this growth is encouraging, there is a need for a concentrated effort to push adoption among the public that is not actively using e-wallets or is yet to be exposed to the use of e-wallets at all.

VISION CASHLESS SOCIETY IN MALAYSIA	
OBJECTIVE	Creating a thriving cashless society via the adoption of digital payment & digital premise (digital platform & digital presence) for the wholesale & retail segments
PILLAR	PUSAT EKONOMI DIGITAL (PEDI) & LOCAL STATE GOVERNMENT (PBT)
TRACKS	Policy Intervention & Implementation
	Wholesale & Retail
	Legislative changes & implementation by the state governments Cashless payment as pre-condition for all business licensees to be set — new & renewal of the existing licence issued by PBT
	Digital Platform - Small traders/merchants/business licence holders to adopt hybrid sales via physical and online business operation
Digital Payment - Communities surrounding PEDI to transact via DuitNow QR code	Digital Presence - Small traders/merchants/business licence holders to embark on digital marketing via digitalisation programme (website creating, or on social media platforms)
Awareness and Promotion Campaign	
KEY SUCCESS FACTOR	Number of cashless transaction adoption by users & merchants
	Number of merchants on-boarded on digital platforms

Figure 3: MCMC IDS, Cashless Society Programme Framework

⁴ Bank Negara Malaysia, "Governor's Keynote Address at the Malaysian E-Payments Excellence Awards (MEEA) 2018 - 'the Resurgence of Payments in a Digital World.'", 2018; www.bnm.gov.my/-/governor-s-keynote-address-at-the-malaysian-e-payments-excellence-awards-meea-2018-the-resurgence-of-payments-in-a-digital-world

⁵ Digital News Asia, "Bringing Relationships Back with Digital Banking.", 8 Nov. 2021, www.digitalnewsasia.com/insights/bringing-relationships-back-digital-banking.

⁶ Department of Statistics Malaysia, "Small and Medium Enterprises (SMEs) Performance 2020.", 28 July 2021, www.dosm.gov.my/v1/index.php?r=column/cthemebByCat&cat=159&bul_id=KzdrS25pRTZ1VGFkcTINyOFecZBYUT09&menu_id=TE5CRUZCbh4ZTZMODZlBmk2aWRROQT09

⁷ The Malaysian Reserve, Zukri. "Pandemic Pushes More than 80% Growth for E-Wallet Players", 18 Oct. 2021, <https://themalaysianreserve.com/2021/10/18/pandemic-pushes-more-than-80-growth-for-e-wallet-players/>

⁸ New Straits Times, Ismail, Izwan. "E-Wallet Use in Malaysia Growing.", 18 Apr. 2021, www.nst.com.my/opinion/columnists/2021/04/683345/e-wallet-use-malaysia-growing.

Action lines

A cashless society in its simplest terms is a society in which purchases of services and or goods are made by credit cards, electronic funds and QR rather than cash or cheque. MCMC's Cashless Society Programme aims to push for a cashless society via the widespread adoption of digital payment and digital premise for the wholesale and retail segments. MCMC envisions the key to the success of a cashless society in Malaysia is to inculcate among the public that "digital is convenient, secure, fast and easy". The Cashless Society Programme uses a two-pronged approach to promote cashless adoption: Policy Intervention and Implementation of Digital Payment and Digital Premise.

Policy Intervention and Implementation include policy intervention by the state government to promote the adoption of digital payment. MCMC proposes that business licence applications and renewals are tied to cashless payment adoption akin to the enforcement in Putrajaya in line with the Retail Digitalisation Initiative (ReDI)⁹. The main objective of such an approach is to ensure the sustainability of cashless technology adoption.

Digital Payment aims to drive cashless payment adoption among local communities and SMEs, especially market traders, by leveraging the policy for cashless payment. The definition of digital cashless payments refers to methods including, but not limited to, e-wallets, DuitNow QR codes, credit cards, debit cards and mobile banking.

Digital payment can then be the first step to push for Digital Premise, which has two (2) tracks, namely, Digital Platform and Digital Presence.

The Digital Platform track provides a means for traders and retailers, particularly petty traders, to adopt hybrid sales via physical and online business operations. This Digital Platform aims to improve the market reach of these small traders/retailers whilst increasing trust between consumers and traders to allow for digital transactions.

The Digital Presence track aims to establish footprints in the digital space for these small traders/retailers. Business owners may opt beyond digital platforms and have their own websites or use social media platforms to market their services/produce or sell online.

This robust ecosystem of cashless payment, digital presence and digital platform presents an opportunity for traders to adopt a hybrid method where they conduct their business in a face-to-face manner and complement sales through the e-wallet providers' online marketplace. Such diversity can better protect traders and ensure business

continuity even during unprecedented events such as pandemics or natural disasters.

CASHLESS INITIATIVES

Cashless Society Programme in Melaka – "Cashless Melaka"

The Cashless Society agenda in Melaka is based on the national aspirations under the Malaysian Digital Economy Blueprint: Core 5: Creating an inclusive digital society.

It is also guided by the State's aspirations namely,

1. *Melakaku Maju Jaya Strategic Plan 2035* (PSMJ 2035), Flagship 7: Education and Technology
2. Smart Melaka Blueprint 2035
3. Budget 2023 for the State of Melaka

Implementing the Cashless Society agenda needs focus on three cores, namely infrastructure, policy and society.

Melaka has been selected as the first state to launch this Cashless Society as the 4G broadband coverage in Melaka has reached 99.63% in 2022. Meanwhile, high-speed fibre optic access in business and residential premises has reached 86.3% throughout the state, which is a positive development in terms of infrastructure and readiness of the state.

MCMC has recommended a new licence condition for business licences, which will require merchants and traders to have a cashless payment platform as an alternative payment option for their customers when they are applying for or renewing their business licence with local councils. This proposal was presented to the state government through the Malacca State Digital Council Meeting (MELDIC) and brought by Unit Kerajaan Tempatan (UKT) to the State Government Council Meeting early 2023. As a result, the latest guidelines on licence application released by UKT - Garis Panduan "Melaka Mesra Peniaga" Tahun 2023, has specified the requirements of providing cashless payments under "Bil. 9 Syarat Lesen Bahagian XVII, Peniaga digalakkan mengguna pembayaran Tanpa Tunai (Cashless)".

To increase the awareness of the importance and benefits of cashless to consumers and merchants, MCMC focuses on promotion and awareness campaigns in Melaka, with the collaboration of five strategic partners, vis-à-vis financial service providers (FSPs) / digital platform providers namely Payments Network Malaysia Sdn Bhd (PayNet), TNG Digital Sdn Bhd, Axiata Digital Ecode Sdn Bhd (Boost), Maybank MAE and Delivery Hero Malaysia Sdn Bhd (Foodpanda).

⁹ ReDI is an initiative by KPDNHEP, with collaboration between the ministry and various government and private agencies; namely, Federal Territories Ministry, Housing & Local Government Ministry, Bank Negara Malaysia (BNM), Companies Commission of Malaysia (SSM), Maybank and Touch n' Go (TNG).

All MCMC strategic partners provide special incentives for users and merchants on their digital platforms. MCMC is also contributing incentives in the form of cashback to consumers who shop using TnG, Boost, Maybank MAE e-wallet applications and Foodpanda food delivery throughout this promotion and awareness campaign.

Cashless Melaka kicked off on 17 March 2023 during the “Briefing Session for Bazaar Ramadhan and Bazaar Aidilfitri Negeri Melaka”, organised by UKT, *Jabatan Ketua Menteri Melaka*. Post this, FSPs launched the Cashless Month awareness and promotion campaign in conjunction with the Bazaar Ramadhan and Bazaar Aidilfitri. Two pilot projects, as well as a Cashless Carnival are scheduled in second half of 2023, which will conclude Phase One of this Cashless Society Programme in Melaka.

Cashless@PEDi Roadshow

Payments Network Malaysia Sdn Bhd (PayNet) and MCMC Industry Development Sector initiated a pilot project named Cashless@PEDi Roadshow at 28 Pusat Ekonomi Digital (PEDi) around Malaysia. The objective of this pilot project is to cultivate and familiarise the usage of cashless payments among suburban and rural communities.

The roadshow incorporated exhibitions and activities at the PEDi. Local communities were exposed to the information and advantages of cashless payment methods. Visitors will be able to enjoy a cashless shopping experience through various e-payment methods operated



Figure 4: Melaka e-Tunai Marketing Materials Produced by FSPs

by PayNet, such as debit cards (MyDebit), JomPay, DuitNowQR, FPX and so on.

At the end of the pilot project, 6,299 visitors visited the roadshows and made 6,617 digital transactions.

CONCLUSION

MCMC Industry Development Sector is in the midst of charting plans to scale up the Cashless Society Programme nationwide that will guide the adoption of cashless payment programmes between 2023 and 2026 via PEDi nationwide, continued collaboration with state governments and collaborations with other key government agencies. All with the aim of ensuring continued widespread digital adoption and financial inclusion. my.gov.my

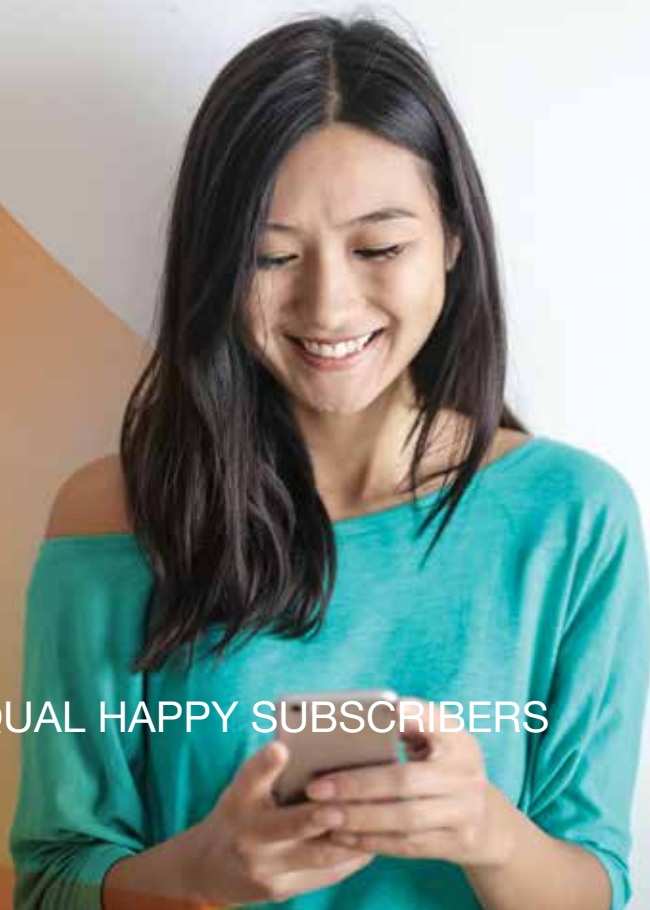


Image 1: Snapshots of Cashless@PEDi Roadshow Pilot Project

A DELIGHTFUL CONSUMER EXPERIENCE

INFORMED TELCO CONSUMERS EQUAL HAPPY SUBSCRIBERS

Nurul Jannah binti Ahmad Kamaruzaman
Nazrien Nazli
Siti Nornadia Jalaludin
Policy & Stakeholder Affairs Dept (CFM)



In this digital era, customers have more choices and louder voices when it comes to communication service providers. Telecommunication services are viewed as commodities these days. The industry is evolving at an accelerating pace and telcos need to step up to attract and retain their customers. User expectations have evolved particularly post-pandemic, and providers must understand user requirements to succeed amidst the fast-paced changing industry landscape. With inflation occurring worldwide, customers are forced to relook at the value they receive for every ringgit spent. If service providers want to remain relevant and competitive, they must give customers a strong reason to stay.

Customers nowadays look at the overall experience, with every touchpoint they have with a company being important. This starts from the moment they first hear about the packages offered and goes up to the point they call the customer service team to complain about their products or services. If they are no longer satisfied, they may opt to change providers. Therefore, telco companies should not take consumer experience lightly because there will always be other providers available in the market providing quality consumer experience.

In essence, consumer experience is the consumers' holistic perception of their experience with a business or brand. The better the experience, the more loyal consumers are to their telco service providers. The number of consumer complaints and potential contract terminations or port outs are reduced and positively affect the consumer retention rate.

For us to deliberate further on how to improve this experience, we must understand the underlying factors that influence a consumer's overall experience. This starts from critical information they should know prior to registering for any telco service and the related Terms & Conditions (T&Cs). Service providers are also obliged to provide accurate and complete information through implementation of Critical Information Summary (CIS). Other factors are Fair Usage Policy (FUP), the consumers' entitlement to compensation in the event the service is compromised and the correct platform to escalate customer complaints.

UNDERSTANDING THE TERMS & CONDITIONS

When consumers buy a new mobile, internet, or landline service, they should make sure they understand what they are signing up for. A contract is a legal document that binds the parties involved to certain terms and conditions. It explains:

- the quality of the product or services they are buying;
- what the contract includes and excludes, limits, or restricts;
- all fees and charges and the length of the service contract;
- what happens when they no longer want those products or services (termination of services); and
- anything else they or the telco must do.

Consumers should also be aware that they are entering a contract if they:

- sign a contract document;

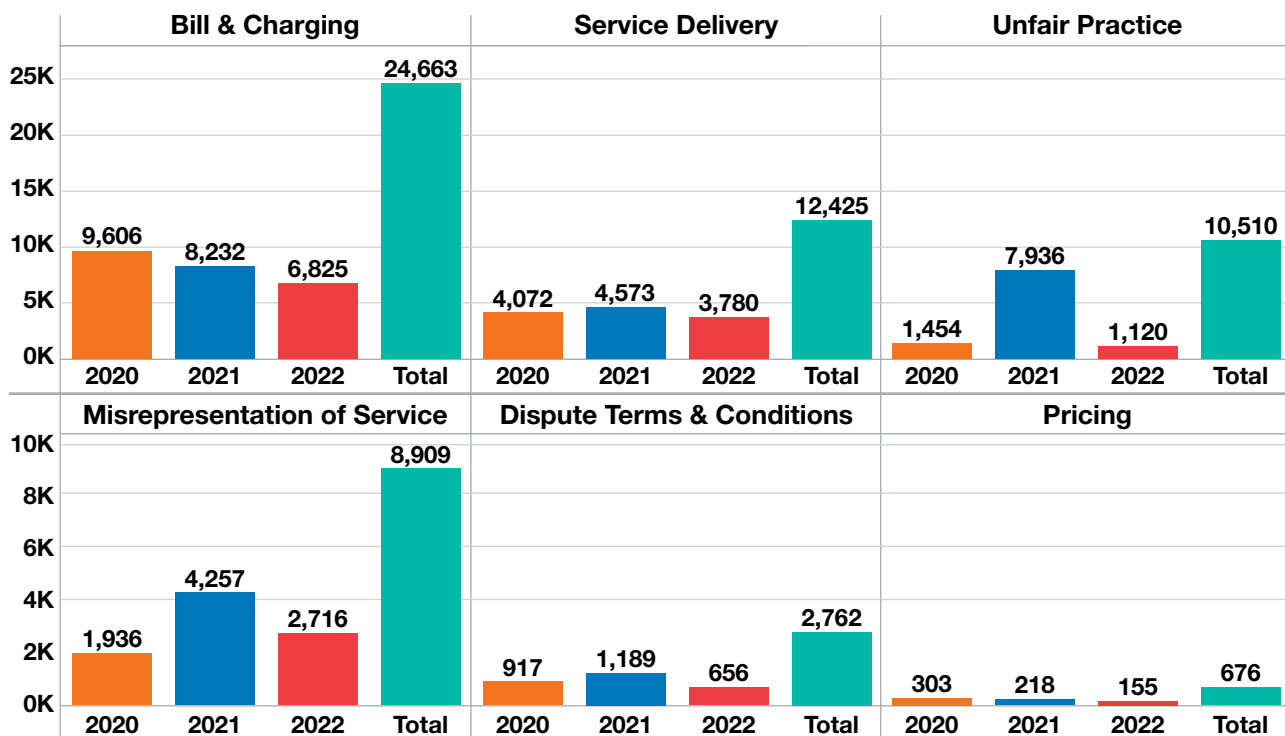


Figure 1: Comparison of Complaints Received Y-O-Y (GCC related complaints)

- agree to the contract over the phone; or
- agree to the contract in person, such as in a store or shopping centre.

While consumers should read everything carefully before signing a contract, including the fine print, realistically not many people actually go through and understand the T&Cs. A 2017 Deloitte survey of 2,000 consumers in the United States found that 91% of people consented to legal terms and services conditions with mobile service providers without reading them. For younger people, aged between 18-34, the rate is even higher at 97%.¹ The reason for this is because the language used in T&Cs is too complex and long winded for most.

CRITICAL INFORMATION SUMMARY (CIS)

This is where Critical Information Summary (CIS) comes into place. Many developing countries require service providers to set out a range of essential information about a product or service provided by an organisation. The Australian Communications and Media Authority (ACMA), for example, made it compulsory in 2013. CIS is also widely used in other industries such as banking and real estate. Malaysia is following suit in meeting these standards.

The new General Consumer Code of Conduct (GCC) is the reference for consumers to understand their rights and the responsibilities and that of their service providers better. The GCC is a self-regulating industry code

under the purview of Communications & Multimedia Consumer Forum of Malaysia (CFM). GCC sets out acceptable standards applicable in the communications and multimedia industry. These must be adhered to by service providers to ensure efficient and quality delivery of services.

The newly reviewed 2022 GCC has included a new article under the Provision of Information. Article 3.2.1 that requires service providers to provide a summary of their service offerings to consumers. This document is referred to as the Critical Information Summary (CIS) and shall comprise of the following information:

- Description of a Service:** This should provide the consumer with a clear understanding of what services they will be receiving.
- Contract Period:** It helps the consumer understand how long they will be committed to the service.
- Limitations of Service:** This section should detail any limitations or restrictions that come with the service being offered. This helps the consumer understand what they can and cannot do with the service.
- Charges Involved:** This is a breakdown of the costs associated with the service being offered. It should be clear, transparent, and detailed to include any fees, charges or taxes that may apply.
- Contact Details for Customer Service:** This section provides the consumer with the contact details for the service provider's customer service team.

Figure 1 shows why service providers should clearly define their T&Cs in a simplified manner, particularly under the

¹ Guynn, J. (2020, January 29). What you need to know before clicking 'I agree' on that terms of service agreement or privacy policy. USA Today. Retrieved March 29, 2023, from <https://www.usatoday.com/story/tech/2020/01/28/not-reading-the-small-print-is-privacy-policy-fail/4565274002/>

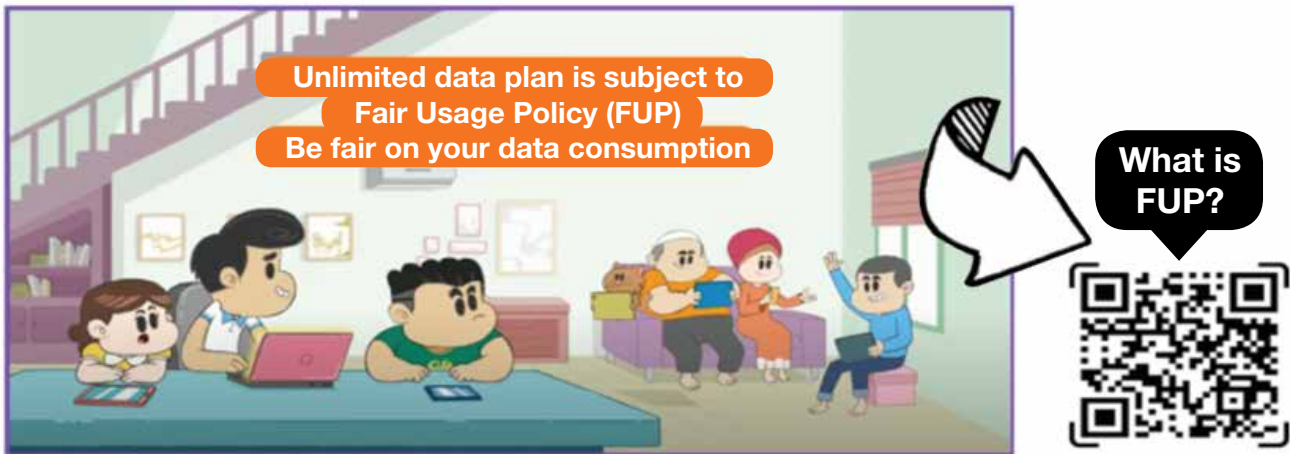


Figure 2: Understanding Fair Usage Policy (FUP)

‘Bill & Charging’ category. Despite the gradual decrease in complaints for this category from 2020 to 2022, it is still alarming that this constitutes a major portion of the overall complaints received, making up 41% of the complaints over 3 years. Consumers too have highlighted similar issues during complaint handling mediations conducted by CFM.

These issues are specifically addressed by the CIS and should no longer be a recurring complaint once it is clearly displayed in the document. The significant drop in complaints in 2022 in the categories presented above suggests that increased consumer awareness of their rights and responsibilities results in a decrease of complaints received.

The CIS will help consumers clearly understand the terms and service providers must define the packages offered to avoid any misunderstandings and confusion among consumers. In comparison to T&Cs, the CIS document will be separated from the main contract, must be easily accessible on the service provider’s websites and standardised among telcos for consumer’s ease of reference.

FAIR USAGE POLICY (FUP)

Another area of concern frequently identified by consumers is the Fair Usage Policy (FUP). It has a significant impact on consumer’s mobile data experience and consumption. FUP is imposed by telcos, typically on their unlimited internet mobile plans, to ensure that all customers get a fair share of the limited bandwidth available and prevent network congestion. It is a policy that allows service providers to manage network traffic and prevent excessive usage by certain users. This helps to prevent any one user from hogging a big chunk of the bandwidth, causing sluggish performance for other users.

In Malaysia, many service providers promote their data packages by using the term “Unlimited Data”. Such promotional advertisements and superlative words can be confusing for consumers who may believe that they would

be getting unlimited data. Consumers are unaware that once they have hit the data cap, their internet speed will consequently slow down after that threshold is reached.

For example, a package may advertise “Unlimited Data”, but the fine print may reveal that data speed will be capped at 32kbps after usage exceeds 150GB. This simply means that while the consumer may still have ‘unlimited’ data, activities such as surfing the internet or opening social media will be much slower or might even be unusable.

Article 3.1.3 (d) (ii) (g) of the GCC pertains to the advertisement practices of service providers. This provision prohibits service providers from using the term “unlimited” or its equivalent in their advertising materials unless they make available sufficient terms and conditions of the service to the consumer. Service providers cannot claim that their services are unlimited or have no restrictions without transparently disclosing all the relevant terms and conditions associated with the service.

The use of the term “unlimited” is prohibited to prevent service providers from misleading consumers with false claims of unlimited data services. Such marketing strategies are very misleading for consumers who are not aware of the limitations of these packages they are signing up for. By disclosing all the important terms and conditions, data limits and speed caps, service providers are providing greater transparency and allowing consumers to make informed decisions prior to subscription.

COMPENSATION FOR SERVICE DISRUPTIONS

A consumer has the right to claim compensation in cases of breach of a Consumer Code and any relevant mandatory standards that have been issued and will be issued from time to time by the Malaysian Communications and Multimedia Commission (MCMC). It is accepted that compensation is not meant to penalise Code Subjects (Service Providers) nor to unjustly enrich the consumer²

² Communications & Multimedia Consumer Forum of Malaysia. (2022). General Consumer Code of Practice for the Communications and Multimedia Industry Malaysia: Article 7.4 Compensation. Malaysia.

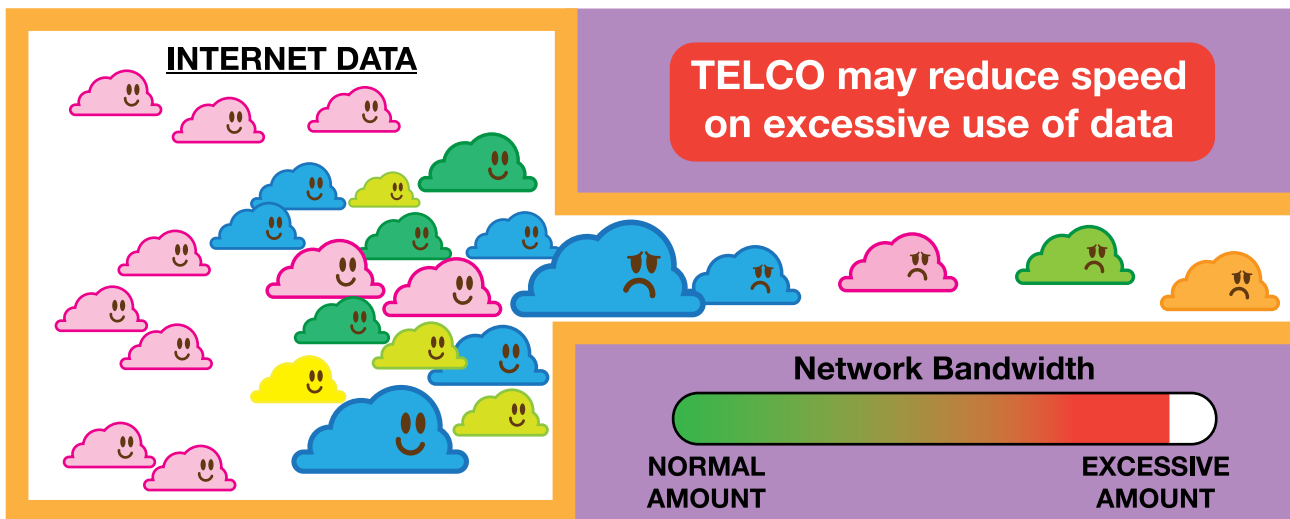


Figure 3: Visualization of FUP

The amount and type of compensation a consumer may receive depends on the severity of the issue and the terms of the contract they signed with the service provider. Compensation packages may be in monetary or non-monetary form, and may vary either in the form of refund, rebates, waivers, free activation, etc.³ Consumer rights and compensation laws may vary from country to country. Therefore, it is crucial that consumers understand the compensation policies of the service providers and the consumer rights in their country.

Consumers should always document and maintain a record of all transactions and communications with the service provider as evidence for compensation consideration. Compensation packages might be made available on service provider websites. However, consumers should note that there is no direct formula for compensation and are advised to contact their service provider for further reference on the compensation process.

MCMC and CFM are not obligated to compensate consumers for any service failures by their service providers. CFM may suggest the consumer file a claim with the Tribunal for Consumer Claims (TTPM) if consumer suffers monetary loss and wishes to claim a specific amount of money from their respective service providers. Prior to filing a claim with TTPM, the consumer is advised to file a complaint with CFM first, and CFM will then provide further information and guidance on the matter.

THE COMPLAINT PROCESS

It can be frustrating for consumers when they feel they are not getting the service they deserve and paid for. When faced with an issue, consumers must know the right parties to channel their complaints to. Figure 4 shows the complaints process flow for telco issues.

The complaints process may look tedious and time-consuming, but it also provides consumers an avenue to voice their concerns and hold service providers accountable for the quality of their service.

Firstly, consumers are advised to contact their service providers directly on their contact channels to report the issue encountered. Importantly, consumers should provide specific details about the issue they are facing equipped with date, time, and location of the problem (if related to coverage and network issues). This allows service providers to understand the situation better and take the necessary actions.

However, if the issue persists and consumers are dissatisfied with the feedback given and action taken by their service providers, they may escalate their issue to the Communication and Multimedia Consumer Forum of Malaysia (CFM). CFM is a forum designated by MCMC that acts to protect the rights of consumers in the Communication and Multimedia sector. This is in line with the requirements of the Communication and Multimedia Act 1998 which facilitates industry self-regulation. Complaints addressed to CFM may be directed to aduan@cfm.my or <https://aduan.mcmc.gov.my/>.

When filing a complaint with CFM, consumers should include all relevant information about the issue and their correspondence with the service provider. CFM will investigate the complaint received and work together with the service provider to find a mutually beneficial solution for both parties. It is important to remember that complaint resolution may take time and require several interaction sessions between the consumer, service provider and CFM.

³ Communications & Multimedia Consumer Forum of Malaysia. (2022). General Consumer Code of Practice for the Communications and Multimedia Industry Malaysia: Article 7.4.2 Compensation. Malaysia.

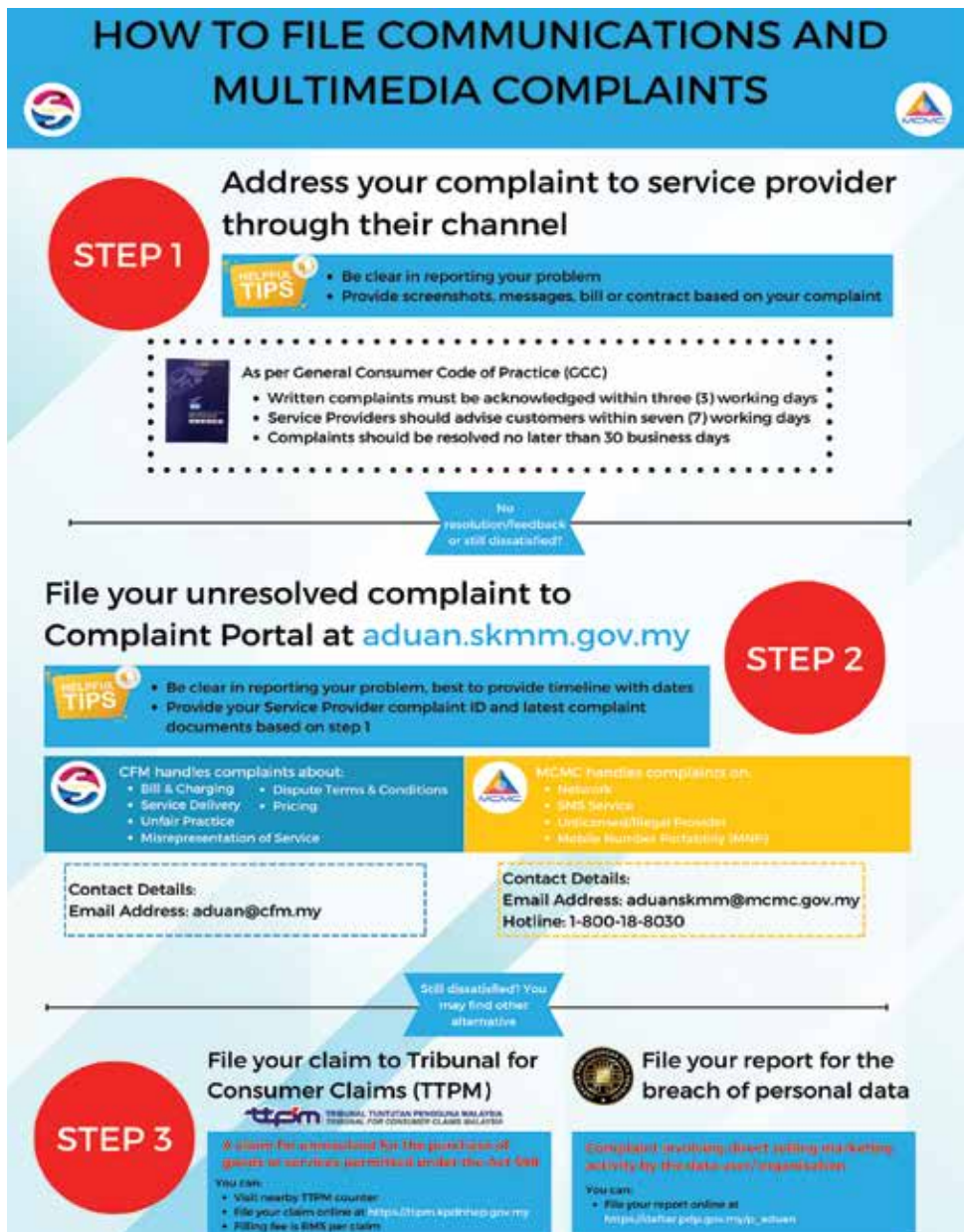


Figure 4: Complaint Process Flow Infographic

All in all, complaints management is an essential component of customer service and business success for telcos. Not only is it the means to gather valuable customer insight, but it also helps service providers' progress to improvements that lead to reduced costs, increased profitability and increased positive consumer experience.

CONCLUSION

While subscribing to a telecommunication service might seem an exciting albeit complex process, consumers should be reminded of the key factors highlighted in this article such as consumer's rights and responsibilities, understanding the terms & conditions (T&Cs), Critical Information Summary (CIS), Fair Usage Policy (FUP), compensation for service disruptions and complaint process. Consumers deserve to get the best value for money for the services subscribed.

It is important to remember while telecommunication services have become an integral part of our lives, like many industries, they are not without their own set of challenges. Improving the consumer experience especially in such a fast-paced industry is still a learning curve and it requires the cooperation of both service providers and consumers. Consumers are the most important assets for telcos, so they need to improve and innovate the consumer experience to increase customer retention and loyalty.

While expecting service providers to be more consumer centric and improve their consumer experience, consumers need to self-educate themselves better too. Consumers might also be interested to keep themselves up to date with consumer protection laws and regulations by following the Communications and Multimedia Consumer Forum of Malaysia or the Malaysian Communication and Multimedia Commission (MCMC) for more information about the communications and multimedia industry. my



COURIER SOLUTIONS EMPOWERING LOCAL WOMEN-LED MSMEs

Fadlynn Ilyani Zulkarim
Deputy Director, Courier Department

Solutions offered by courier companies are assisting many women-led MSMEs to prosper in these difficult times. Leveraging on these solutions are enabling women-led MSMEs to compete and participate in the digital economy efficiently.

THE EVER-CHANGING DIGITAL ECONOMY LANDSCAPE

The digital consumer landscape has changed dramatically in the short span of a few years. The Covid-19 pandemic that forced the whole world into lockdown necessitated businesses to shift from in-person dealings to online transactions and people adapting to home-based lifestyles.

Naturally, e-commerce flourished in 2020 and 2021. According to the September 2022 Bain & Company and Meta's annual SYNC Southeast Asia report titled "*Southeast Asia, the home for digital transformation*", which looks at the digital economy and the future of e-commerce in the region, the share of digital consumers in Malaysia

grew by 5% from 2020 to 2021, reaching 88% or 22 million of Malaysia's consumer population.

This is the highest by percentage share in Southeast Asia, closely followed by Indonesia (80% or 165 million people) and Singapore (79% or 4 million people) (Meta and Bain & Company, 2022).

Malaysia is not left out of the boom of social commerce, where social media platforms such as Facebook, Instagram, and TikTok let merchants promote and sell products and services; creating fun and convenient ways for consumers to do in-platform shopping. Social media is not only used to stay connected with loved ones, but also to browse, shop and submit reviews online.

This trend is further invigorated by the fact that Internet access and smartphone usage continue to grow in Malaysia, recording 46.4% fixed broadband penetration and 143.7% mobile cellular penetration as of Q3 2022 (MCMC, 2022).

While the digital economy continues to flourish and remain strong as people are now comfortable with the “new normal”, the post-Covid world faces other uncertainties in terms of escalating geopolitical tensions, global recession, and a possible resurgence of the Covid-19 pandemic. However, digital habits are here to stay post-pandemic and we should all be ready to embrace what lies in the future.



Image 1: Dropping off parcels and documents for courier

A NATION TOWARDS DIGITALISATION

The Malaysia Digital Economy Blueprint (MDEB), launched in 2021, is a broad and comprehensive plan involving multiple participants and collaborators in all areas of society, economy, and government. As part of the country's MyDIGITAL aspiration, the digitisation of micro, small and medium enterprises (MSME) have been

identified as one of the drivers of change driving the country's development.

In 2021, Malaysia has exceeded the MyDIGITAL target of 875,000 MSMEs adopting e-commerce by 2025, which is four years ahead of schedule with over 890,000 MSMEs adopting e-commerce. The target has now been revised to 1.1 million MSMEs by the year 2025 (Pay Pal, 2022).

In a report by SME Corp Malaysia in 2022, 97.4% or 1,226,494 businesses in Malaysia are categorised as Micro, Small, and Medium Enterprises (MSMEs), and yet only 20% of them are owned by women. While women make up 48% percent of the overall Malaysian population, they largely remain underrepresented in businesses. This indicates that women have the potential to grow their already significant contributions to the nation's economy.

The Malaysian government is taking measures to strategically support women entrepreneurs. It is imperative to ensure the sustainability of women-owned MSMEs by encouraging them to adopt digital technology, by increasing awareness and accelerating their take-up of available incentives, subsidies or assistance programmes by the various ministries and agencies.

GOVERNMENT SUPPORT FOR MSMEs IN BUDGET 2023

Prime Minister and Finance Minister, YAB Dato' Seri Anwar Ibrahim recognised the importance of MSMEs and is cognisant of the fact that the pandemic has



Image 2: Preparing ecommerce parcels

affected them in many ways. Hence, under the country's budget Belanjawan Madani 2023, some incentives were introduced to "ensure local MSMEs are again competitive and able to increase their business capacity."

Under the 2023 budget, MSMEs can enjoy a reduced tax rate of 15% on the first RM150,000 earned. On top of that, a RM1.7 billion fund has been allocated for MSMEs through institutions and agencies such as Bank Negara Malaysia (BNM), Bank Simpanan Nasional (BSN), and Tabung Ekonomi Kumpulan Usaha Niaga (TEKUN); as well as RM300 million for micro businesses owned by women and youth entrepreneurs (Ringgit Plus, 2023).

In creating a sustainable ecosystem for businesses, there are many factors to be taken into account, and one of them is picking a solution provider in the form of a shipping partner.

MSMEs, for instance, can greatly benefit from all the added value services offered by courier players. Apart from solely delivering items from Point A to Point B, the provider of choice could also offer integrated solutions such as automated online marketplace and shipping and tracking features. This will give merchants added confidence when fulfilling orders.

The courier industry could help women entrepreneurs in many ways, including:

- **Accessibility:** The growth of online marketplaces are enabling women entrepreneurs to reach customers all over the world, with the help of courier services. Parcel delivery companies can pick up shipments from the doorstep of the seller and deliver them to the buyer, making it easier for women entrepreneurs to sell their products without the need for a brick-and-mortar store.
- **Flexibility:** Courier services offer a range of delivery options, including same-day, next-day, and international delivery, enabling women entrepreneurs to adapt to their customers' needs and accommodate last-minute orders no matter where they are based.
- **Cost-Effective:** Courier companies provide affordable and reliable shipping options. They require no minimum order quantities and offer competitive rates, making it easier for women entrepreneurs to grow their businesses without breaking their budget.
- **Time-Saving:** By outsourcing their delivery needs to couriers, women entrepreneurs can focus on more important aspects of their business, such as product development, marketing, and sales. This helps them save time and ensures that their shipments are delivered in a timely and efficient manner.
- **Security:** Courier companies offer a range of delivery options, including express and tracked delivery, which ensures that women entrepreneurs' shipments are secure and trackable. This gives them peace of mind

knowing that their packages are delivered safely to their customers.

THE SWEET SMELL OF SUCCESS

Suhaila Jusoh, 46, started diversifying into business during the Movement Control Order (MCO) as a side income. A fan of fragrances herself, she started getting perfumes from other wholesale suppliers to sell to friends, before creating her own brand called Orfeo Perfume.

Orfeo is Italian for Orpheus, a legendary figure in Greek mythology, which means "the darkness of night".



Image 3: Suhaila Jusoh, founder of Orfeo

From 35ml Eau de Perfume bottles to pocket sized ones at 15ml, Suhaila took her time to establish the brand. "It is my own new product, and I was slowly concentrating on the branding and introducing it to the masses. I didn't make much in the first few months," she said.

After MCO was relaxed, she started selling them on platforms such as Sunway eMall, Shopee and TikTok.

Now, the mother of four from Kelantan said that her products have reached the entire country, including Sabah and Sarawak. As a home-based business, she sends her products using courier services such as Ninja Van and J&T Express, depending on her customer's request.

"Since I have customers outside of Kelantan, I can't possibly do cash on delivery (COD) all the time. So, I will have to deliver them using the available courier service. The courier companies will usually give discounts if I have a lot of parcels to send out and may even pick them up directly at home," she added, noting the convenience it gives in running her business.

Now, Suhaila sells around 2,000 to 3,000 perfumes bottles a month, and the Malaysian Microsoft Digital Entrepreneur Ambassador has now diversified her Orfeo products to air fresheners and hijab awning fabric starch spray, with other products in the works.



Figure 1: The various products offered by Orfeo

BEAUTY SERVED BETTER

Tan Siew Peng is the co-founder of Easydo Exclusive Sdn Bhd, Easydo, a local beauty and skincare brand that has been in the market for more than 20 years.

For her, the pandemic was the catalyst of her transition from a beautician to an online beauty influencer. The 41-year-old would share (with her online viewers on social media platforms) how to use Easydo beauty products and the correct ways to take care of the skin.

“Before this, the beauty industry runs a typical business style, where you would usually wait in the beauty centre for a customer to walk in. However, when the Covid-19 pandemic hit, I got creative and I gathered courage to do a live streaming on Facebook to share beauty tips and tricks,” she shared.

Through live streaming, Easydo’s market expanded beyond Malaysia to Southeast Asian countries such as Singapore, Brunei, and Indonesia, as well as South Korea, Australia, and the United Kingdom. The company partnered with



Image 4: Easydo team with GDEX

GDEX, selecting them as their primary delivery and courier service provider.

As part of GDEX’s initiative to support MSMEs, the GDEX x EasyDo trucks were launched in November 2022 to help the business with nationwide brand exposure through the GDEX Fleet Advertising.

Tan, who won the Best Social Media Influencer Award at the JCI Pearl Women Entrepreneur Awards 2022, said, “I have successfully expanded my business network, thanks to GDEX. We have a good partnership, and they are doing a good job in protecting customer data.”



Image 5: Easydo’s collaboration with GDEX as their primary delivery and courier service provider

SPICING IT UP

For executive assistant Anis Lowe, her foray into the F&B business started from potluck sessions at the office.

“I brought *sambal ikan bilis* for a colleague’s birthday party one time and everybody loved it. They started ordering *sambal* from me and eventually I started to sell them. It really helped me financially as at the time, I was raising three school-going kids all by myself. In 2020, I officially registered Tok Mami Kitchen and Mart with the Companies Commission of Malaysia (SSM),” she said.

Slowly increasing the range of products, Anis is now selling a variety of frozen *sambal*, *rendang*, and other Malay dishes as well. Other best sellers include her *sambal garing*, *sambal kantan*, and mixed *serunding halia*.



Image 6: Anis Lowe with her selection of ready-to-eat sambal



Once she started promoting her products on Facebook, the demand for her sambal garing started pouring in from many customers. For more than three years, she was selling to customers within the Klang Valley through COD.

“When I registered my products in my online shop on Shopee, I started getting orders from all over Malaysia. Currently, I have a prepaid account with Ninjavan and by far, this is the best courier company I have experienced. This is because their system is effective, responsive, and reliable,” said Anis, who hails from Kuala Lumpur.

“The moment I create a new order, I will immediately get an email for the air waybill (AWB). Meanwhile, on the customer’s side, they will get a message on their parcel details. It allows them to check their orders in real time – which is really helpful as I don’t have to keep an eye on the tracking at all! Customers are very happy because they do not need to wait too long for their order to arrive too,” added the 49-year-old.

Since its humble beginnings in 2016, Anis has seen a huge jump in sales, with orders coming in from all over Malaysia, and to countries such as Singapore, Australia, and the United Kingdom. Courier has definitely played a big role in expanding her small home-based business to outstation customers.

THE ONLY WAY IS FORWARD

The pandemic was not easy for many MSMEs - let alone women-owned businesses – but a great number of them embarked on their digital transformation journey to help them survive during that challenging times.

Women entrepreneurs could tap on the technology and digital solutions provided by various logistics companies. Partnering and outsourcing their courier service requirements can ensure their businesses continue to flourish and succeed.

The faster we can achieve female economic empowerment, the better it will be for the medium to long-term economic growth prospects of Malaysia. [my](#)



STRENGTHENING MAIL AND PARCEL SECURITY THROUGH STRATEGIC PARTNERSHIPS

Bashiroh Yaakub
Deputy Director
Postal Department

The COVID-19 pandemic has accelerated the trend of online shopping worldwide. Consumers continue to shift towards e-Commerce as the default method of shopping. We anticipate this trend will continue to pressure the industry in the coming years. With the forecast of global parcel volume doubling to 256 billion parcels in 2027, it is clear there is a lot to do across the industry to prepare for the anticipated continuity of the trend, increasing complexity of huge parcel handling, and the exponential growth of the e-Commerce sector in the next few years.

With the anticipated increase in parcel volume, the security aspects of the delivery networks merit particular attention. The postal network is considered highly vulnerable

to illicit trade, crime and terrorism. There is much vulnerability for individual criminals or organised crime to exploit in trade lanes, facilities, means of transport, shipments, products, staff and human resources, and data systems. The security of citizens, reputation of governments and economic stability will be at stake. Therefore, good security planning and regulations must be in place to support and protect the postal and courier

Explosive device found near German market 'targeted DHL' (The Guardian, 3 December 2017)



Royal Mail postmen are delivering vast amounts of drugs including cocaine, ecstasy and cannabis bought on the dark web every day (Mail Online, 5 January 2017)

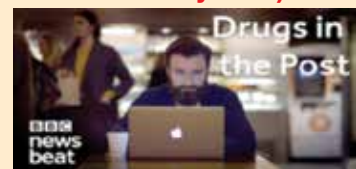


Image 1: Illegal activities over delivery networks across the world

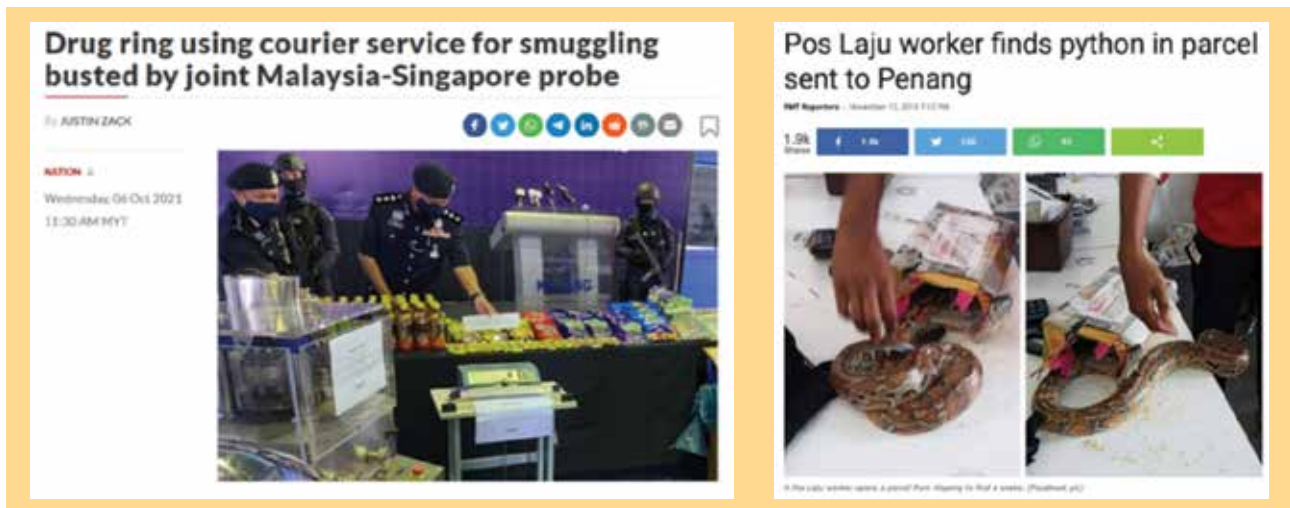


Image 2: Illegal activities over delivery networks in Malaysia

employees, their networks, and customers as part of the defence mechanisms against illegal trafficking, crime or dangerous manipulation.

POSTAL AND COURIER THREATS

For the Malaysian Communications and Multimedia Commission (MCMC) as a regulator, the use of postal and courier channels as a tool for illegal purposes is a major concern. For instance, in the United Kingdom, the Government states that the current threat level from terrorism is substantial and the use of postal and courier-borne items containing an explosive, incendiary, or hazardous material is a well-known tactic used by the domestic extremist. Hence, the UK Government guidance states that all organisations should develop a security plan that is “appropriate to the organisation and in proportionate to the risks it faces. This plan should include how an organisation will determine and manage postal or courier-borne threats”.¹

Trust and confidence are at risk when the public considers the postal and courier service to be a potential threat to their health and safety. Mail or parcels delivered through postal, or courier services present various potentially significant vulnerabilities. There are cases where terrorist and extremist groups have used postal and courier services to deliver hazardous items to target recipients. Delivered items through postal and courier, which include letters, packets and parcels (including bulk items), may contain explosive or incendiary devices, sharp objects or blades, firearm components, offensive materials, chemical, biological or radiological materials or devices, pharmaceutical drugs, wildlife and counterfeit items.

In addition to the above, postal and courier operators are also vulnerable to cyber-attacks due to handling an increasing amount of operational data and processing millions of transactions every day. Operational systems are increasingly becoming more vulnerable to cyber-

attacks and the impact becomes more extensive. Security threats like ransomware are serious concerns due to the use of increasingly sophisticated types of computer viruses.

Therefore, to prevent such crimes and improve postal and courier security, collaboration with other relevant law enforcement agencies is required. The working relationship with various external partners is reinforced by their specialised units and experts that facilitate the exchange of information, expertise and provides effective instruments for preparedness and prevention of postal and courier crimes.

PARTNERSHIP TOWARD ACHIEVING THE COMMON GOALS

MCMC recognises the integral role that other government agencies play in the fight against the illegal transporting of prohibited and illegal items through postal and courier channels. In this effort, the strategic partnership between related agencies such as the Royal Malaysia Police, Royal Malaysian Customs Department, Ministry of Health, Ministry of Domestic Trade and Cost of Living, Atomic Energy Licensing Board, Ministry of International Trade and Industry, Department of Wildlife and National Parks, other related agencies and non-government organisations is crucial in combating the use of postal and courier channels for criminal purposes. Active development of such partnerships with these and other authorities facilitates the exchange of information and expertise and provides effective instruments for preparedness and prevention of crime via postal and courier channels.

At the global level, Malaysia will continue working with the Universal Postal Union (UPU) and others to improve our capability to fight against the trafficking of illegal items via postal and courier channels. UPU has enhanced the security of the postal chain by establishing a special UPU Transport Group that is responsible for all modes

¹ <https://app.croneri.co.uk/feature-articles/postal-threats-and-security-management>



Figure 1: Strategic partnerships between related agencies to combat illegal activities over postal and courier channels.

of mail transportation and all mail transport matters, including letters, parcels, and Express Mail Service (EMS). Its aim is to make the transport system as efficient, secured and speedy as possible, since transportation and flow of information are key elements in the UPU supply chain.

UPU also pays special attention to International Air Transport Association (IATA) cooperation. The IATA-UPU Contact Committee has a fundamental strategic objective to optimise the Post/airline relationship in order to maximise the quality of service. Safety and security of the postal sector is recognised by the UPU as a critical aspect of supporting worldwide commerce and communication. The UPU has established the Postal Security Group (PSG) to facilitate the development of a security standard and best practices among postal administrations around the world.² The Group is comprised of security experts and is charged with the development of global and regional security strategies to assist the world's postal administrations in their security missions. Its mission is "to establish worldwide postal security, encourage and promote the creation of postal security services in all UPU member countries, and to establish contact with international organisations".

With the assistance of the UPU, PSG organises security training courses regionally to support the development of worldwide postal security units and the education of specialists for each aspect of crime prevention.

In summary, partnership with other agencies at the domestic and international levels is pertinent to strengthening mail and parcel security. Active cooperation and inter-agencies strategic partnerships are necessary for developing good security planning and regulations for postal and courier industries which later contributes

to protecting, employees, customers, facilities, and the whole network.

NATIONAL MAIL AND PARCEL SECURITY WORKSHOP AND SEMINAR

MCMC through the Postal, Courier & E-Commerce Services Division (PCESD) organised a Workshop and Seminar on Mail and Parcel Security from the 29th to 30th of November 2022 to serve as a platform to create awareness and share information on security measures and regulatory standards by experts who have been involved in the specialised field as well as from relevant authorities.

The Workshop and Seminar was attended by major industry players, related government agencies, Postal Forum, and MCMC internal stakeholders including State Offices with more than 100 participants.

The objective of the Workshop was to engage with public and private participants to:

- understand the threats and risks or security dangers and enable the participants to do a risk assessment;
- encourage sharing of experiences by participants regarding the handling of postal articles containing dangerous, prohibited, or illegal items;
- develop the standard of procedures for opening postal articles in circumstances where there are reasonable grounds to suspect that it is suspicious, will cause a health risk, or will cause physical danger to a person or property; and
- establish an effective cooperation/networking platform between law enforcement officials.

² <https://www.upu.int/en/Postal-Solutions/Programmes-Services/Postal-Supply-Chain/Security>

Throughout the Workshop session that was held on the first day of the program, the participants contributed thoughtful ideas and suggestions regarding best practices, security features for mail and parcel delivery systems, the scope of standard regulation, as well as capacity building for sector workers in the postal and courier industry to deal with the issue of exploitation of the postal and courier network for the delivery of dangerous, prohibited and illegal materials.

In a nutshell, the inaugural workshop served to gain input from relevant authorities and industry players to mitigate security risks in relation to mail and parcels and enhance the safety, security, and resilience of international and domestic postal and courier networks for the smooth functioning of trade, commerce and digital economy. The proceedings of the workshop were largely facilitated by the United States Postal Inspection Service (USPIS) via Mr. Keith Nusbaum, a USPIS postal inspector, with the assistance of dedicated facilitators in each of the working groups.



Image 3: Snapshots during the Workshop on Mail and Parcel Security on 29th November 2022



Image 4: Mr. Keith Nusbaum from USPIS facilitating the workshop

The Seminar on 30th November 2022 served to highlight the need for organisations to have good security planning and to support the proposed establishment of a security framework. The idea is to learn from experts security measures that can be implemented for the postal and courier supply chain. The information shared at the Seminar also captured the requirements for security measures.

The speakers for the Seminar comprised the following experts across various authorities:

- a) Mr. Keith Nusbaum – Postal Inspector and Programs Manager for the Global Security Group, United States Postal Inspection Service;
- b) Puan ACP Mazleen Mohd Nasir – Assistant Director Intel/International Liaison, Narcotic Crime Investigation Department, PDRM;
- c) Tuan Anuar Ibrahim – Senior Assistant Director of Customs, Passenger Examination Section, Penang International Airport, JKDM; and
- d) Tuan Abdul Halim Abu Naim – Senior Principal Assistant Director, Inspection and Entry Point Control Section, Pharmacy Enforcement Division, KKM.

The speakers shared their knowledge, experiences, and intelligence information regarding cases of misuse of postal and courier networks for the delivery of dangerous, prohibited and illegal materials, related law enforcement activities as well as preventive measures that have been implemented. The industry took advantage of the seminar platform to gain enlightenment on security issues related to mail and parcel delivery operations in addition to suggested solutions by national and international security experts.

Moving forward, PCESD recommends the following post-workshop action plan for the development of the various deliverables:

- To develop a guideline on minimum security standards for postal and courier industry;

- To establish a task force with relevant government agencies, authorities and representatives from industry players which actively provides oversight of regulatory policy procedures and goals, supports, and implements regulatory policy, and thereby fosters regulatory quality in ensuring mail and parcel security is protected;
- To develop training modules for the industry in the areas of security; and
- To create awareness and knowledge sharing with service providers.

CONCLUSION

A strong security strategy, dedicated training programs for postal and courier operators' employees and cooperation with external partners will yield positive results in crime reduction and strengthening security in the postal and courier network. Application of modern technology, investments in personnel and cooperation with external organisations are key elements in improving postal and courier security and fighting against crime. The challenges surrounding the security of postal and courier supply chains will remain high in the future. The open nature of the postal and courier system as well as the massive volumes of shipments are amongst the top reasons driving vulnerabilities in the system and making security enhancements a complex and costly exercise.

Both national and international collaboration between postal and courier operators should be increased especially in the areas of crime prevention, detection and recovery activities as well as awareness. Inter-agency partnerships in particular with Royal Malaysia Police and Customs Department should be enhanced in designing and implementing security standards for postal and courier sectors. [my](#)



Image 5: Participants in Seminar on Mail and Parcel Security on 30th November 2022



IMMERSING IN ORGANISATIONAL SUCCESS AND PEOPLE DEVELOPMENT

Zainal Afnan Zainul Awaluddin
Deputy Director
Strategic HR Department

Haryati Suradi
Head of Department
Strategic HR Department

Organisational success and people development are two interconnected propositions that are required for a business to grow and accomplish its day-to-day objectives. Companies have both growing needs for high-performing employees and well-designed organisations to help them stay competitive and satisfy the needs of their consumers in today's ever-changing business climate.

In this article, we will address the importance of immersing oneself in organisational success and people development through Malaysian Communications and Multimedia Commission (MCMC)'s initiatives which have fostered a culture of excellence and long-term growth and success. The fast-paced nature of our organisation requires continuous upskilling and reskilling of employees to stay ahead in the industry. With the advancements in technology, there is a constant requirement for employees to be re-equipped with the latest knowledge and skills to effectively regulate and monitor the industry.

By investing in its people's development, MCMC has ensured that employees are equipped with the necessary skills to carry out their day-to-day responsibilities effectively and are able to carry out MCMC's roles effectively. MCMC has created an environment that allows individuals to thrive while also reaching their full potential.

MCMC EMPLOYEE VALUE PROPOSITION EMPOWERS AND TRANSFORMS OUR PEOPLE

Our Employee Value Proposition (EVP) plays a pivotal role in our organisation's employee engagement and employer branding. EVP is an approach to distinguish an organisation from others by providing unique perks to retain talents. This approach inspires and encourages a positive and healthy work culture and reduces the organisation's turnover rate. A successful EVP can assist organisations in developing a culture in which employees



797 (2019) 813 (2020) 879 (2021)

Total number of Employees by gender

2019	2020	2021	2022
403	408	434	510
394	405	445	488

■ Male ■ Female

Number of employees by age group

Year	2019	2020	2021	2022
Age Group	No. of Employees			
60 - 69	0	0	0	3
50 - 59	63	72	61	83
40 - 49	156	180	167	264
30 - 39	450	449	478	495
20 - 29	128	112	173	153

Number of employees by grade level

Year	2019	2020	2021	2022
Grade	No. of Employees			
CHAIRMAN	1	1	1	1
P11	0	1	2	1
P10	3	3	5	5
P9	1	1	1	6
P8	22	24	23	27
P7	38	36	49	54
P6	58	59	78	106
P5	153	167	188	281
P4	291	293	289	302
S3	39	37	63	48
S2	160	162	147	134
S1	31	29	33	33

Number of employees by contract type

Year	Permanent	Contract of Service	Contract For Service	Temporary	Seconded In
No. of Employees					
2019	751	25	20	1	0
2020	786	0	27	0	0
2021	802	0	75	0	2
2022	786	152	58	0	2

Figure 1: MCMC's Employee Profile

are driven and more involved in their tasks, resulting in improved performance and satisfaction.

The three parts of our employee value proposition are defined as: 'Be A Game Changer', 'Expand Your Horizons', and 'Build a Successful Career'.

EMPLOYEE WELFARE AND EXPERIENCE

Employee welfare refers to an employee's physical, emotional, and financial well-being, whereas employee experience comprises all elements of an employee's outcome of their interrelationship with the organisation.

MCMC's initiatives in these areas include flexible working arrangements, comprehensive health and wellness programs, and continuous training and development opportunities.

Job seekers today value holistically healthy work environments. MCMC has differentiated itself from other employers and has attracted top talent by delivering a good employee experience and positive workplace culture that encourages cooperation, creativity, and teamwork. MCMC has developed a society that practices inclusion, respect, and support by emphasising employee welfare and employee experience. This generates a feeling of community and belongingness among employees.



BE A GAME CHANGER

Be part of the regulator for the communications & multimedia industry in Malaysia that will continue to disrupt and create a positive impact to accelerate an innovative future for the nation.



EXPAND YOUR HORIZON

Through rapid evolution of technology and our aspiration to accelerate the future for the nation, there will be many opportunities for you to discover that will provide valuable exposures and meaningful experience for your future.



BUILD A SUCCESSFUL CAREER

We stay committed to investing in our people through a structured career management programme so you can continue to stay progressive in accelerating your future, complemented with a competitive total rewards.

Figure 2: MCMC Employee Value Proposition

This positive and supportive work environment is reinforced by MCMC's investments in employee welfare and employee experiences through our many programs such as the MCMC Induction Programme and MCMC Kasih Careline Counselling Centre.

MCMC'S EMPLOYEE DEVELOPMENT

MCMC approaches employee development enthusiastically as we believe in creating strong and positive values through the development of the employees. Our approach is comprehensive. It considers the learning demands, has individual development plans to support career advancement and retention, and integrates our culture and values.

Today's society is an ever evolving and dynamic landscape of culture, values, and technology. Consequently, it is quintessential for MCMC to enhance its employee development initiatives as continuous professional development is an all-important element of organisational success. An equal opportunity workforce is crucial in this process because it assures that every employee, regardless of race, gender, or other factors, has the same opportunity to succeed.

Organisations have access to the greatest talent possible by offering equal opportunity workforce employment. MCMC has a well-defined structure for employee development called the **MCMC's Career Management Framework**.

MCMC CAREER MANAGEMENT FRAMEWORK

The MCMC Career Management Framework enables employees to have a clear grasp of their professional path and possibilities for advancement within the organisation

and assists them on their path to success. It comprises of 4 components units, namely 'Know Your Business – CTPR', 'Lead Tomorrow - Digital Leadership Continuum', 'Manage Today - MCMC BCM', and 'Functional Mastery - MCMC Functional Competency'. Each unit aims to improve an employee's knowledge, skills, and competency in a certain area and assist them in achieving their professional objectives.

The first component, '**Know Your Business – CTPR**', is designed to refine the employee's business knowledge. This unit includes four training plans: CTPR Foundation (P4), CTPR Advanced 1 (P5), CTPR Advanced 2 (P5), and CTPR Masterclass (P6 and above). These development programs are tailored to the employee's level/grades and would provide them with a thorough grasp of MCMC's core business functions.

The second component, '**Lead Tomorrow - Digital Leadership Continuum**', is intended to develop employees' leadership skills. This unit is divided into three development plans: ALPs (P4-P5), All-Star (P6-P7), and E-Series (P8 and above). This leadership programme is governed by the full MCMC Leadership Framework, which is then attuned to specific target groups.

'**Manage Today - MCMC BCM**', is intended to represent important behaviours of the employees. This unit is built on MCMC's vision and mission, as well as the key principles of authority, integrity, and competence. The M-Series incorporates the MCMC Behavioural Competency Model (BCM), and the learning module consists of Customer Orientation, Operational Efficiency, Linkages, and Teaming Model (COLT).

The fourth component, '**Functional Mastery - MCMC Functional Competency**' guides employees towards mastering their professional expertise. MCMC's Human Capital Division (HCD) proposes a Functional Mastery

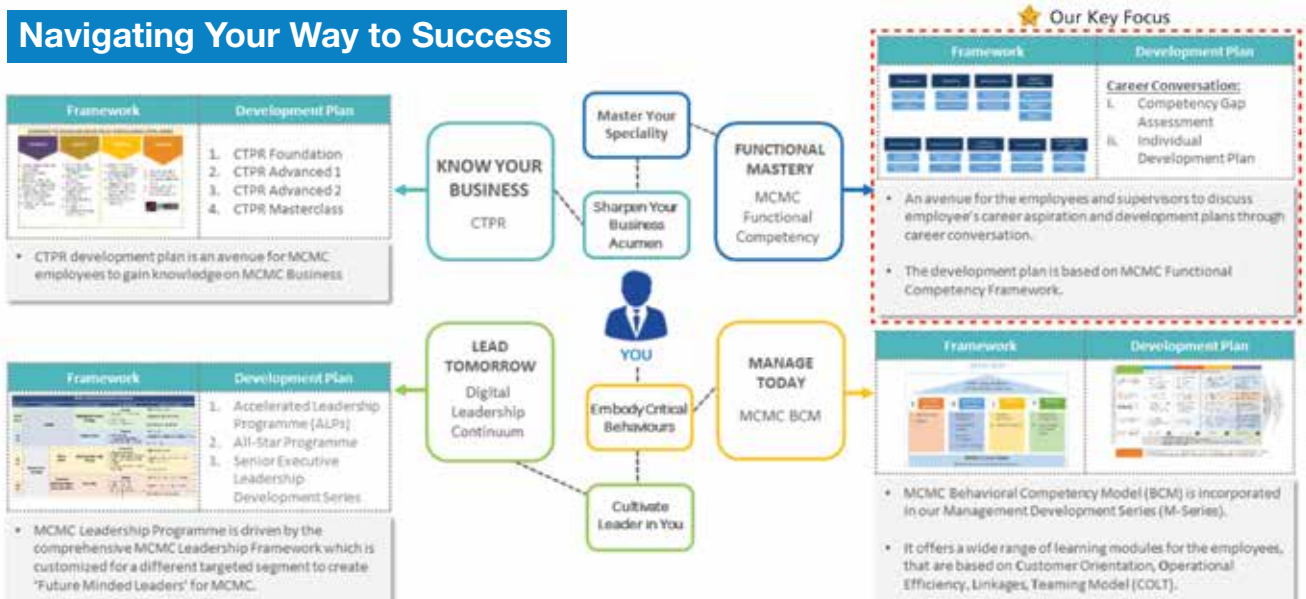


Figure 3: Navigating your way to success

MCMC Leadership Development Framework					
Job Grade	Leadership Program		Digital Leadership Lifecycle	Leadership Continuum	Traits/Competencies/Drivers
P10 & Above	E-Series		Mastering the Hierarchy Challenge	Visionary <ul style="list-style-type: none"> ✓ Redefining ideas of openness and transparency ✓ Forge Strategic Alliances ✓ Counter cultural paradigm 	Traits: Curiosity, confidence Competencies: Cultivates innovation Drivers: Structure, independence
P8 P9			Energising Team	Strategic <ul style="list-style-type: none"> ✓ Circle of influence ✓ Engaging & inspiring their people ✓ Let go traditional thinking of power 	Traits: Confidence Competencies: Strategic vision, engages and inspires Drivers: Challenge
P6 P7	Mastery Series (All Staff)	All-Star (HiPer)	Nurturing Breakthrough Thinking	Sustainable <ul style="list-style-type: none"> ✓ Cultivating breakthroughs ✓ Thinking and delivering novel solutions ✓ Rebalancing their views on risk and innovation ✓ Fail fast, change directions and embrace fluid thinking 	Traits: Curiosity, risk-taking Competencies: Cultivates innovation, strategic thinking, drives results Drivers: Independence
P4 P5		All-Star	Finding Flex	Flexible <ul style="list-style-type: none"> ✓ To be connected & nimble ✓ Rapidly flex and adapt ✓ Adjust & create trade-offs ✓ Oscillating quickly between discipline & broad thinking 	Traits: Adaptability and tolerance of ambiguity Competencies: Manages ambiguity, drives results Drivers: Structure and independence
		Accelerated Leadership Program Series (ALPs) (HiPo)			

Figure 4: MCMC “Future Leaders” Accelerated Leadership Program Series (ALPs)

Development Plan, which comprises a Functional Competency Assessment and an Individual Development Plan (IDP). These initiatives encourage individuals and their supervisors to discuss and explore an employee’s career goals and track their growth objectives.

The MCMC Functional Competency Framework serves as the foundation for their development strategy. It gives our employees a clear image of their career path and the opportunities for advancement within the organisation. Employees can leverage the framework to improve their knowledge, skills, and competencies in specific areas, develop leadership skills, and embody important behaviours, whilst mastering their specialisation.

MCMC’S LEADERSHIP DEVELOPMENT FRAMEWORK

MCMC strongly acknowledges that the development of its employees is key to the organisation’s success. With these aspirations in mind, MCMC has established a leadership

development framework to assist in the development of our high potential and high performing employees.

The leadership development framework at MCMC is intended to cultivate talents, enhance skills, and improve organisational performance. These include a variety of efforts such as coaching, mentoring, work rotations, and leadership development programs.

In 2020, MCMC launched its very first Accelerated Leadership Programme Series (ALPs) to prepare high potential talent at the Executive level for leadership roles. This program reflects MCMC’s commitment to talent development and its efforts to foster a culture of continuous learning and growth.

The ALPs program is divided into three primary stages of development – Learn, Apply, and Share. The ‘**Learn**’ stage has the purpose of developing a theoretical grasp of the learning modules. The ‘**Apply**’ stage entails thinking, reflecting, and making sense of what was learned. Then, to

MCMC’s ‘Future Leaders’ Accelerated Leadership Program Series (ALPs)



Image 1: MCMC’s ALPs Graduates

strengthen comprehension, the 'Share' stage encourages direct sparring with thought leaders.

MCMC's ALPs program prepares talents for future challenges and has the capability to fulfil its goal and vision. It has empowered participants to gain the skills and knowledge required to prosper in our ever evolving industry. We believe that through this program our talents would sustain long-term leadership skills, and effectively undertake mid-management roles in their career paths.

MCMC EMPLOYER BRANDING EFFORTS BRING SUCCESS

In 2022, MCMC received recognition for its effort in employer branding, crisis management, and leadership development. We are proud to announce that MCMC received several awards.

The **Employee Experience Awards** for Best Crisis Management and Leadership and Best Response to Covid-19 recognised MCMC's response to the Covid-19 outbreak, applauding the organisation's capacity to manage the pandemic's challenges while strongly maintaining its responsibility to employee welfare. MCMC had taken immediate and proactive measures to safeguard the safety and well-being of its personnel. The

Commission implemented a strong crisis management strategy, allowing its personnel to continue working remotely while maintaining the continuity of its services.

The **Human Resources Excellence Awards** acknowledged MCMC's perseverance in leadership development, recognising the organisation's ventures to improve leadership capabilities within its personnel. The **M100 Awards 2022**, which commemorated Malaysia's top 100 employers, awarded MCMC the 2nd Runner-Up in the Government Regulatory Bodies category. Apart from that, MCMC was also ranked 29th in the Employer of Choice ranking in Malaysia. The **Malaysia - International HR Awards 2022 (MIHRA)** also selected MCMC as the Gold Winner of the Employer of Choice – Public Sector.

On top of that, the *Lembaga Zakat Selangor* has named MCMC as one of the top employers that corroborate with their Zakat payment campaign and have been awarded a gold plaque as an appreciation for the collaboration. These recognitions reflect the organisation's image as a great employer that values the well-being, career development, and professional progress of employees, as well as its solid human resource policies, programs, and practices that have greatly contributed to the organisation's performance and employee satisfaction. [.my](#)

MCMC Awards achievements



Image 2: MCMC's Human Capital Division at Various HR Awards in 2022



STRATEGIC TRADE ACT 2010

FACILITATING TRADE IN A SECURE TRADING ENVIRONMENT

Sare Fatin Hatizi Mohd Huzsaire
Deputy Director, Strategic Trade Department

Malaysia has an export control regime that is primarily aimed at ensuring national security, preventing the proliferation of Weapons of Mass Destruction (WMD), and complying with international non-proliferation obligations. In Malaysia, export controls on strategic items are regulated by the Strategic Trade Act (STA) 2010.

A strategic item is something that serves dual purposes – it has practical applications in everyday life as well as the potential to be used in military or sensitive activities. Examples include technologies, materials, or products that can be used in both regular and specialised contexts. However, when these strategic items end up in the wrong hands, they can become tools for developing and producing WMD. These weapons, such as nuclear, chemical, or biological arms, have the capacity to cause

significant harm to people, infrastructure, and entire regions. The global proliferation of WMD poses a serious threat to worldwide peace and security, with potential grave consequences for the safety and well-being of people across the globe.

Moreover, the misuse of strategic items can also carry economic implications. This may result in sanctions and trade restrictions, leading to economic losses for countries involved in such activities. Additionally, it can cause harm to international relationships and trust between nations, leading to political and diplomatic tensions. Therefore, it is essential to ensure that the trade and transfer of strategic items are closely monitored and regulated to prevent misuse. The international community has established various agreements, conventions, and regimes to control the transfer and use of strategic items.

Category	Domain
0	Nuclear and Miscellaneous
1	Materials, Chemicals, Microorganisms and Toxin
2	Materials Processing
3	Electronics
4	Computers
5	Part 1 – Telecommunications and Part 2 – Information Security
6	Sensors and Lasers
7	Navigation and Avionics
8	Marine
9	Aerospace and Propulsion

Table 1: Dual-Use Items

BACKGROUND OF STRATEGIC TRADE ACT (STA) 2010

The Strategic Trade Act (STA) 2010, is the legislation that controls the export, transshipment, transit and brokering of strategic items and technology, including arms and related material, as well as activities that will or may facilitate the design, development, production and delivery of WMD. STA is consistent with Malaysia's international obligations on national security.

The STA fulfils Malaysia's obligations under United Nations Security Council Resolution (UNSCR) 1540 which requested member states to establish an export control system for the purpose of non - proliferation of WMD. As a member state, Malaysia is obligated to exercise control over exports of strategic items that could potentially be used for proliferation of WMD activities. STA was published in the Government Gazette on 10th June 2010 and came into force on 1st January 2011.

WHAT ARE THE STRATEGIC ITEMS?

The Strategic Items categories in Malaysia's Strategic Trade (Strategic Items) List are derived from the European Union (EU) List. The items controlled under STA encompass goods and technology, which are categorised into Part I - Military items and Part II - Dual-use items, as outlined below:

- I. Military Items - weapons, arms, military supplies, and equipment that may readily be used for military purposes.
- II. Dual-Use Items - goods, software and technology that can be used for both civilian and military applications. The categories of the Dual-Use Items are displayed in the Table 1.

Some examples of strategic items include High-Performance Computing (HPC) or supercomputers. HPC is designed to perform complex calculations and

simulations at incredibly high speeds. It excels in civilian uses, such as weather prediction and climate research, and is equally crucial in military tasks like code-breaking and data analysis.

Another example involves encryption items, encompassing encryption goods, software, and technology, such as encryption chips and encryption integrated circuits. Encryption is used to protect data from theft, alteration, or compromise, which is achieved by scrambling data into a secret code that only a unique digital key can unlock. In civilian applications, encryption items play a crucial role in securing online banking transactions, credit card systems, and various financial data. For military applications, encryption items are employed to safeguard communication systems, data storage systems, and satellite communications, thereby preventing unauthorised access to sensitive information and communications.

LICENSING AND ENFORCEMENT AGENCIES IN STA 2010

As the custodian of the STA, the Ministry of Investment, Trade and Industry (MITI) has established the Strategic Trade Secretariat (STS) to serve as the focal point for the implementation of STA in Malaysia. It is led by the Strategic Trade Controller, who is mandated by the STA to perform the following functions:

- Dealing with strategic items, unlisted items (items that may be used in a restricted activity but are not prescribed as strategic items), and restricted activities;
- Issuing guidelines for the implementation of the STA;
- Seeking assistance from any government, international organisation, or person in the implementation of the STA; and
- Undertaking any task incidental or conducive to the performance of its functions.

Licensing Agencies	Enforcement Agencies
<ul style="list-style-type: none"> • STS, MITI • Malaysian Communications and Multimedia Commission (MCMC) • Department of Atomic Energy Malaysia (Atom Malaysia) • Pharmaceutical Services Division, Ministry of Health (PSD) 	<ul style="list-style-type: none"> • STS, MITI • MCMC • Atom Malaysia • Royal Malaysian Customs • Royal Malaysian Police • Malaysian Maritime Enforcement Agency • PSD • Central Bank of Malaysia • Securities Commission Malaysia • Labuan Financial Services Authority

Table 2: List of licensing and enforcement agencies under STA

The implementation of STA is also supported by other relevant Authorities who are given the mandate either as a licensing agency or enforcement agency or both as shown in Table 2.

As one of the implementing agencies under the STA, MCMC serves as:

- I. the licensing agency for the issuance of export permits for strategic items and technology related to Computers, Telecommunications and Information Security; and
- II. The enforcement agency to enforce the law as prescribed in the STA and its regulations.

WHAT STA GOVERNS

STA requires a person to obtain a permit for transactions involving strategic items in the activities listed in Table 3.

Meanwhile, for transactions involving unlisted items and restricted activities, a person is required to notify the relevant Authority of his intention to export in 30 days if:

- he is informed by the relevant Authority;
- otherwise knows; or
- has reason to believe that the unlisted item will or may be used for a restricted activity.

As for the mechanism of national implementation of obligations under UNSCR, the coverage of STA can be applicable to all United Nation (UN) multilateral sanctions including restricted and prohibited end-users. The restricted and prohibited end-users are individuals, entities, countries, and destinations that are designated by the UNSCR or Minister of MITI following their suspected involvement in any restricted activities.

Under the STA, individuals and companies that wish to export or transfer strategic items to countries listed in the Restricted End Users Country List (UN Sanctions List)

must apply for a special permit from STS, MITI. They are responsible for evaluating and processing applications for special permits. The following is a list of the 13 countries currently on the UN Sanctions List:

No.	Country
1	Afghanistan
2	Democratic Republic of Congo
3	Eritria
4	Iran
5	Iraq
6	Ivory Coast
7	Lebanon
8	Liberia
9	Libya
10	North Korea
11	Rwanda
12	Somalia
13	Sudan

OFFENCES AND PENALTIES UNDER STA

Violation of the STA is punishable by fines, imprisonment, or a death sentence in the most extreme cases. STA prescribes specific offences committed under the STA such as:

- export, transshipment or transit of strategic items without a permit;
- export, transshipment or transit of strategic items or unlisted items to restricted end-user without special permit;

Transactions of Strategic Items	Definition
Export	<ul style="list-style-type: none"> To take out of Malaysia any items by land, sea, or air. To transmit technology by any means to a destination outside Malaysia.
Transit	<ul style="list-style-type: none"> To bring items from any country into Malaysia by land, sea or air, where the items are to be taken out from Malaysia.
Transshipment	<ul style="list-style-type: none"> To remove items from which they were brought into Malaysia. To place the items on the same or another conveyance for the purpose of taking them out of Malaysia.
Brokering	<ul style="list-style-type: none"> Negotiates or arranges or facilitates the purchasing, financing, conveying, sale, or supply of items.

Table 3: Transactions of Strategic Items

- export, transshipment or transit of strategic items or unlisted items to prohibited end-user;
- technical assistance for use in connection with restricted activity; and/or
- brokering without registration

CATEGORIES OF STA PERMITS

STA establishes four distinct permit categories for exports, transshipment and transit. It is essential for businesses involved in trading of strategic items to secure the appropriate permits and comply with STA's requirements. The distribution of permit categories is outlined in Table 4.

MCMC, through the Strategic Trade Department (STDD), is responsible for managing the implementation of the regulatory framework established by STA for strategic items categorised under Category 4 (Computers) and Category 5 (Telecommunications and Information Security). This responsibility includes verifying and issuing STA Permits.

In 2022, MCMC granted and issued 1,125 permits out of a total of 1,150 permit applications. This reflects a decrease of 27.9% in permit applications compared to the previous year, primarily attributed to the global supply chain disruption impacting Malaysia's semiconductor industry, COVID-19 control measures enforced by various supplier countries, and trade sanctions due to the Russia-Ukraine conflict. The trend in permit issuance from 2011 to 2022 is illustrated in Figure 1 on the following page.

Information Security remains the most exported strategic item and continues to be in high demand due to the growing importance of data protection, communication technologies, and digitalisation. Permit applications by category are shown in Figure 2 on the following page.

CONCLUSION

The main benefit of export control is that it helps countries to protect their national security, foreign policy interests, and economic competitiveness by regulating the export of sensitive technologies and products.

Permit Category	Frequency	Destination	Validity	ICP ¹ Requirement
Single	One time	Single country	≤ 6 months	No
Multiple	Multiple time	Multiple country	≤ 2 years	Yes
Bulk	Multiple time	Single country	≤ 2 years	Yes
Special	One time	Single country (Restricted end user)	≤ 1 year	No

Table 4: Categories of STA Permits

¹ ICP or Internal Compliance Programme is a set of procedures required for monitoring compliance with export control legislation placed within the company. This enables them to apply for multiple-use and bulk permits with a validity period of two years as opposed to single permits that have a six-month validity period.

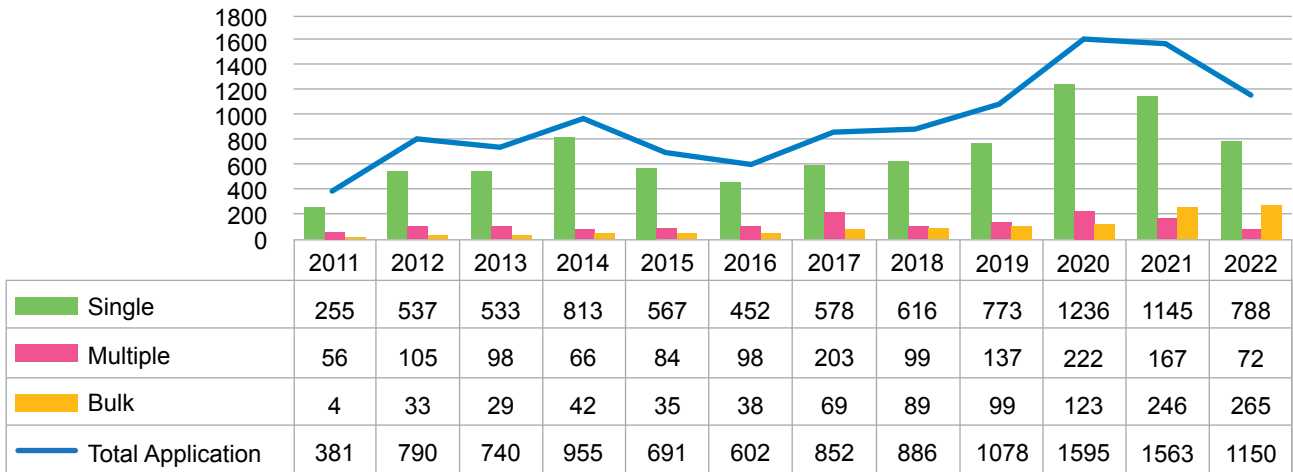


Figure 1: Permit Issuance Trend from 2011 until 2022

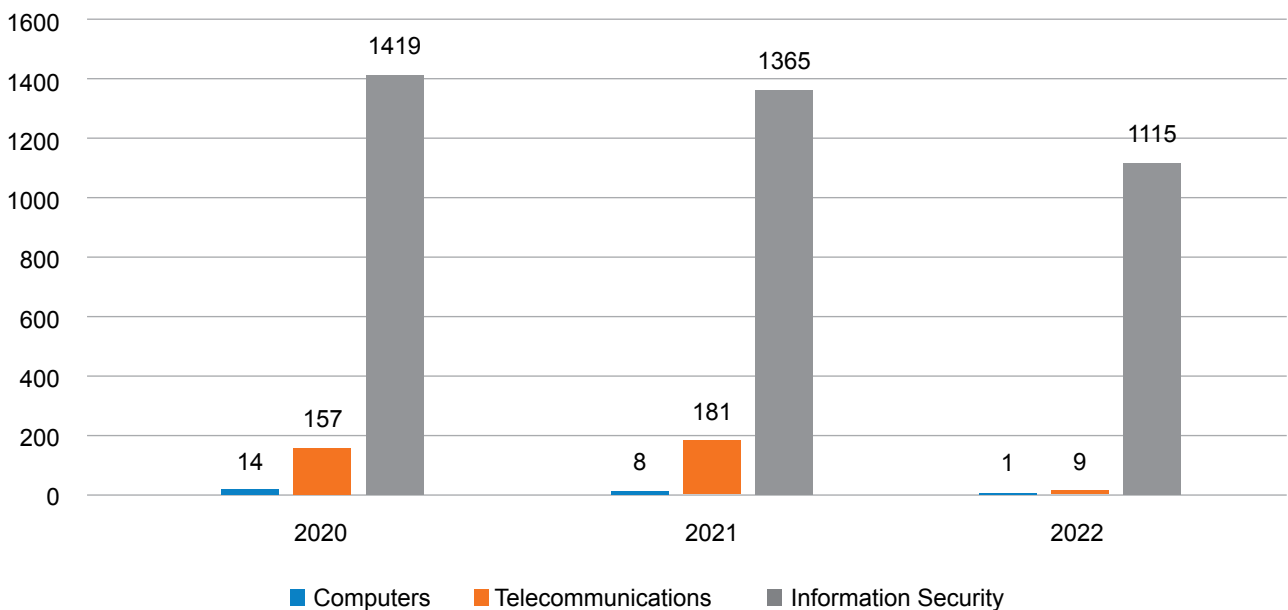


Figure 2: Permit Applications by Category

Export control helps to prevent the proliferation of sensitive technologies, such as WMD, by restricting their transfer to other countries or non-state actors that may pose a threat to national security and protect domestic industries and companies from unfair competition by preventing the export of sensitive technologies that could be used to create similar products abroad and as a tool of foreign policy to encourage other countries to comply with international norms and

standards, or to incentivise them to engage in peaceful diplomatic relations.

Overall, export control is an important policy tool that can help countries to protect their national security, economic competitiveness, and foreign policy interests, while also promoting international cooperation and collaboration. [smj](#)



IS TELEVISION BROADCASTING STILL RELEVANT IN MALAYSIA?

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An interesting fact to note is that the Television (TV) broadcasting medium still plays the same role it has played for decades, which is as a source of entertainment and information. However, with the penetration of new digital content such as online streaming, the traditional TV broadcasting era appears to have become a legacy technology. Over-the-Top (OTT) platforms have expanded rapidly and offer a wide range of compelling content. The consumption pattern of consumers has completely changed. The number of Malaysian subscribers on OTT platforms is rapidly increasing due to the enhanced network quality, stronger internet connectivity, and capable smartphones.¹ Because of these key factors, the online streaming industry is expected to increase at a faster pace in the upcoming five years when compared with traditional TV broadcasting.

In this sense, the question facing the TV industry is whether TV broadcasting is still relevant to the public or has become an obsolete technology.

TV BROADCASTING REVOLUTION

The evolution of TV broadcasting has undergone several transitions over the years to cater to the needs of viewers and to meet technological outreach. Apart from terrestrial TV, Malaysia has adopted several broadcasting technologies such as cable TV, satellite TV, IPTV and OTT etc. to provide choices to the public and to serve the needs of the viewers.

More recently, Malaysian broadcasters recognised the need to offer greater flexibility and convenience to their viewers in how they access their favourite TV channels. They began to provide flexible ways to watch TV through linear channel service by using various mobile devices such as computer, laptop, smartphone and tablet. They also began to digitise their content and migrate it onto online platforms, enabling users to access past episodes and favourite content on-demand via video-on-demand (VoD) services in OTT platforms. The first major OTT

¹ The Malaysian Reserve, 3rd August 2020, Rahimi Yunus, Increasing streaming subscribers signals viewing preferences.

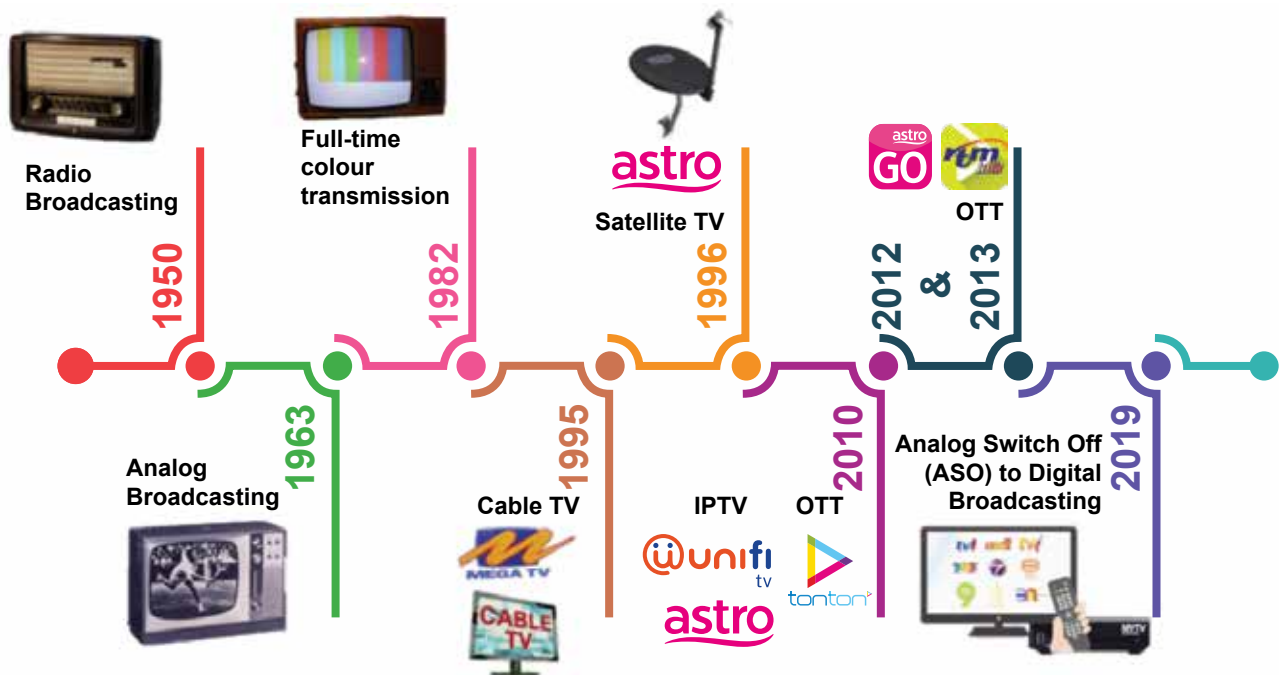


Figure 1: Revolution of TV broadcasting in Malaysia

service to launch in Malaysia was Tonton, introduced by Media Prima Berhad in 2010. Two years later, local broadcasters began enhancing their services by introducing their own OTT platforms. Astro, the major pay-TV broadcaster in Malaysia, launched its own OTT service in May 2012, initially named Astro-On-The-Go and now known as Astro Go. RTM, the national broadcaster in Malaysia, also entered the OTT market by launching its own platform in 2013, initially named MyKlik and now known as RTM Klik. These platforms have revolutionised the way Malaysians consume TV content, providing them with the freedom to watch their favorite shows and movies anytime, anywhere, on any device.

Thus, although digital content is getting more popular among the younger generation, television broadcasting is still important to the public and have not diminished. According to McQuail’s theory, “Television is still probably the single most potent influence in the accelerating media globalisation process, partly because its visual character helps it to pass barriers of language.”²

ANALOGUE SWITCH-OFF (ASO) AND MIGRATION TO DIGITAL TERRESTRIAL TELEVISION (DTT)

The Ministry of Communications and Multimedia Malaysia, currently known as Ministry of Communications and Digital and the Malaysian Communications and Multimedia Commission (MCMC) have played an important role in the transition of the Malaysian TV broadcasting industry from analogue TV to the Digital Terrestrial TV system delivered through myFreeview’s

free service. The ASO was led by the MCMC as the regulatory body. MYTV Broadcasting Sdn Bhd was appointed to execute this project as a Common Integrated Infrastructure Provider (CIIP). The DTT project in Malaysia is part of the national agenda to transform the nationwide broadcasting industry through digitalisation. This has the aim of improving the living standards of Malaysians as the country gears up towards developed nation status and is part of the key initiatives of the 11th Malaysia Plan (11MP). MYTV has successfully reached 95.3% of the population through a total of 44 DTT transmission stations nationwide. In addition, MYTV also launched its Direct-to-Home (DTH) service in November 2018 to complement DTT service coverage by ensuring 100% Free-to-Air (FTA) digital TV service coverage including blind spots and remote areas. The nationwide analogue television broadcasting network were switched off from 21 July to 31 October 2019 in line with ASEAN’s commitment to complete analogue switch off by 2020 to ensure spectrum harmonisation between the ASEAN member countries.³ Prior to ASO, there were only 7 channels. As of today, Malaysians are able to enjoy 16 TV and 11 radio channels on the DTT platform through MYTV without any subscription fees.

DIGITAL TV BROADCASTING PAVES THE WAY TO A NEW LIFESTYLE

While the move towards the digitalisation of TV broadcasting is very much driven by the aim to improve living standards, economic factors are also involved. It is cheaper to maintain compared to the analogue

² McQuail’s Mass Communication Theory 6th edition, 2010, Denis McQuail, McQuail’s Mass Communication Theory.

³ MCMC, my Convergence version Issue 19, 15 November 2019, Azlina Mohd Yusof & Nik Nurul Munirah Mohd Zuhdi, *The Journey to DTT – Implementing the Transition to Digital Terrestrial Television (DTT)*.



Figure 2: Announcement of ASO and images of ASO events in various regions

system. Digital television broadcasting also offers other benefits such as improved reception and picture quality, more television channels, high-definition television and readiness for further upgrade to Ultra High Definition (UHD) quality, electronic programming guide on TV screen, better sound quality with Dolby Digital surround sound feature and more benefits and advancement opportunities in the future. The convergence of digital TV broadcast with the internet connection provides consumers with more powerful features. This integration



Figure 3: TV and radio channels on MYTV platform pre and post ASO

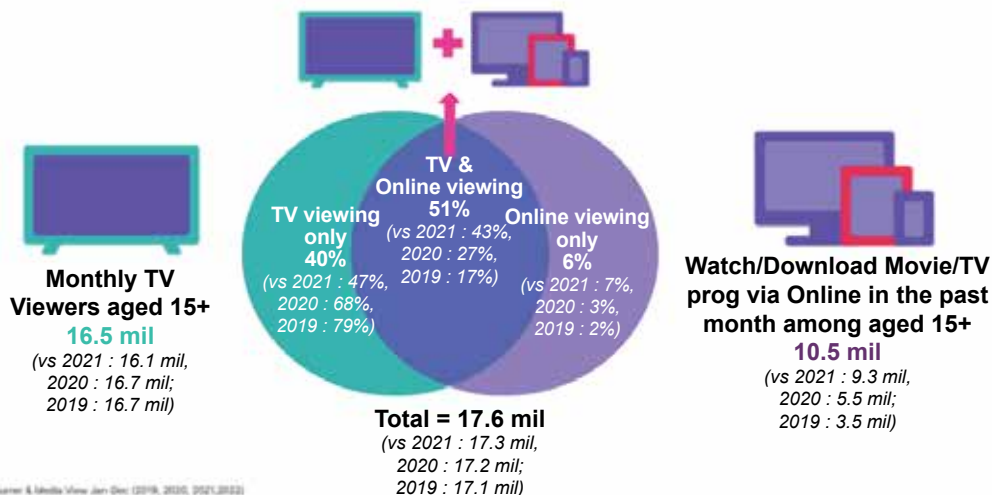
can provide Video-On-Demand (VOD) and Catch-up services.

Another advancement of broadcasting service that could be provided through digital TV broadcasting is Regional Broadcasting (RB). It refers to a scenario when a television station simultaneously broadcasts different programmes, continuity, or advertisements to different parts of its coverage area. This feature allows targeted programming specifically to a particular region, such as local news or advertisements targeted to a particular area. One of the biggest benefits of RB is that it gives localised businesses or small and medium enterprises (SMEs) the ability to promote their products or businesses directly to their target group at lower costs.

It is anticipated that broadcasters will enjoy additional revenue via regional advertising as well as attract new viewers through localised content. RB could be the game changer that will see an increase in ADEX, viewership and stimulate the local content industry.

MALAYSIANS ARE STILL RELYING ON TV AS THEIR MAIN MEDIUM FOR INFORMATION AND ENTERTAINMENT

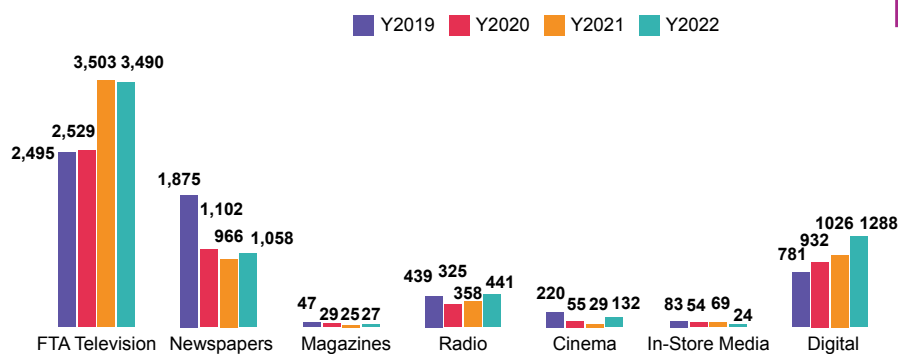
Based on the report produced by Nielsen (Figure 4), TV only viewers are around 40% of total viewers. Online only



Source: Nielsen Consumer & Media View Jan-Dec (2019, 2020, 2021, 2022)
Note: All people 15+ in Peninsular Malaysia
Copyright © 2022 The Nielsen Company S.B.I. LLC. Confidential and proprietary. Do not distribute.

Figure 4: TV and Online platform viewers for 2019 to 2022

Adspend in RM (mil)



Source: Nielsen Ad Intel, Jan - Dec 2019, 2020, 2021 & 2022
Media Types Reported: FTA Television, Newspaper and Magazines, Radio, In-Store Media, Cinema, Digital
Adspend values are based on industry CPM rates (digital) and published rates/cards (other media)

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Figure 5: Advertisement spend growth for 2019 to 2022

FTA TV

- Increased spend across 8 out of 16 FTA channels vs 2021
- 1 new FTA Channel (Suke TV)
- 184 brands advertised in FTA vs 2021

Digital

- 3,004 more brands vs 2021
- More ad spots by some digital top-spenders vs 2021

Newspaper

- Increase no. of insertion for 2022 vs 2021

Radio

- Radio spenders increasing the # spots vs 2021

Nielsen

platform viewers are a minority, at about 6% only. The Malaysian viewing trend has changed as the majority tend to watch from both TV broadcasting and online streaming platforms. The TV broadcasting and online streaming viewing has grown significantly in the past 4 years from 17%, 27%, 43% and 51% in 2019, 2020, 2021 and 2022 respectively.

In Malaysia, the most popular media is still television, with Malaysians spending a lot of time on it. According to the report from Statista, Malaysian spend on average 3.5 hours on watching television and the time spent was high even before the Covid-19 pandemic.⁴ Most Malaysians prefer to watch their live event or live programme (e.g Live football match, live event, live announcement from government and etc.) directly from a TV broadcasting platform than an online streaming platform. The reason is due to the quality of TV content, as video resolution on TV is much higher and is not interrupted due to internet connectivity.

ONE OF THE BEST MEDIUMS FOR MEDIA AGENCIES AND ADVERTISERS

Television advertising plays a key role in conveying product information. According to Nielsen, 10% of Malaysian consumers rank television as their number one source of new product information and 46% rank television advertising second as their top sources of influence when looking to buy new products. Furthermore, although this may be one of the things audiences dislike the most about television, advertisements cannot be skipped.

According to the report produced by Nielsen as shown in Figure 5, the highest Adex growth for the last 4 years from

2019 – 2022 still goes to FTA TV platform where the total Adspend is around RM12,017mil. This translates to about 51% of the total Adex market share. The Adex spend for FTA TV also increased across 8 out of 16 channels when compared with 2021. This report clearly shows that the TV broadcasting is still the best platform for the media agencies.

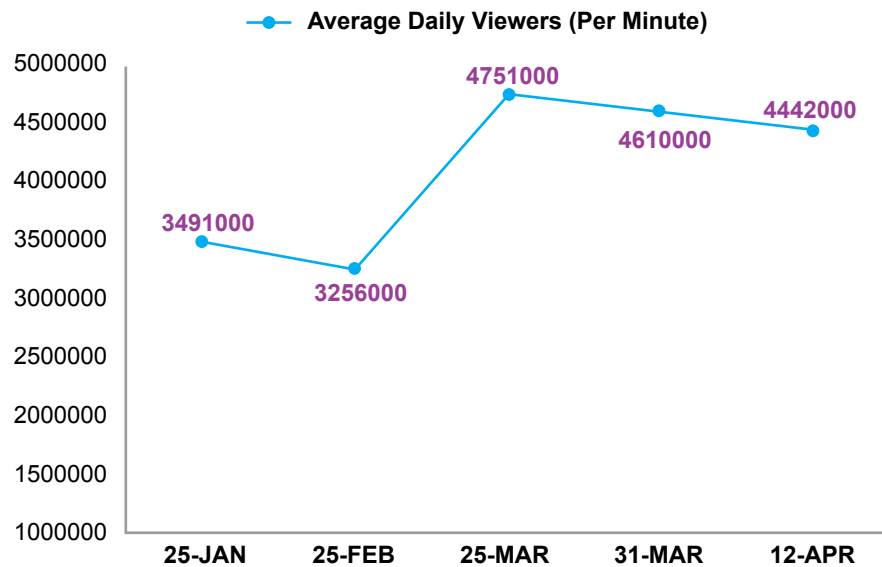
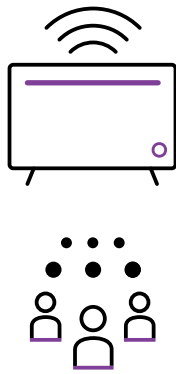
TV BROADCASTING PLAYS A VITAL ROLE FOR THE PUBLIC

TV broadcasting still plays a crucial role in many ways. One of its important roles is to curb the dissemination of fake news, a role that it has played since its advent. MCMC and Kementerian Komunikasi dan Digital (KKD) combat fake news which is highly pervasive on digital platforms through TV broadcasting. The rakyat get unbiased, trustworthy news sources on TV broadcasting. TV broadcasting continues to be the government's main medium for any official announcements.

TV broadcasting also plays an important role in conveying any emergency warnings during disasters and providing traffic information during festival seasons or public holidays. The Malaysian demographic is urban, suburban and rural, and TV broadcasting is the best medium of communication for conveying this information to the rakyat efficiently.

It is also an important component in promoting local content especially to foreign tourists who watch TV in Malaysia. The unique cultures in Malaysia are promoted through multilingual and multi-racial TV channels. For example, the TV8 channel has become the main channel for the Chinese community, while the TV Okey and TVS channels are focused on Sabah and Sarawak.

⁴ Statista, Statista Report, 6 October 2022, Statista Research Department, Average time watching TV in Malaysia from 2014 to 2021(in hours and minutes).



Source: Nielsen Television Audience Measurement (TAM), 25 January - 12 April

Figure 6: TV and Online platform viewers for 2019 to 2022

THE ROLE OF TV BROADCASTING DURING COVID-19

Due to the Covid-19 pandemic and social distancing orders, people’s leisure activities changed. The priority for the public was to get the latest news and updates about Covid-19. Notably, TV broadcasting played a crucial role in disseminating accurate and trusted information about Covid-19 responses and protocols. While there is no denying that there was an increase in the use of digital platforms, especially in retail, education and shopping activities, TV broadcasting was an important medium in providing reliable information and interesting content during the lockdown.

According to the Nielsen report as in Figure 6, Malaysia’s Movement Control Order (MCO) has had the most impact on consumers who typically watched less TV before COVID-19. TV viewership increased by an average of 30%. To explain it a bit more simply, at the end of January, the total time viewing television by the population was around 34 million hours. However, by 12 April, this had increased to 44 million hours, a startling increase. Significantly, growth was observed on both paid and free-to-air platforms. The average daily time spent watching television increased from 5 hours 36 minutes before the MCO to 7 hours 7 minutes during the MCO.

Another success story for TV was its role in education during the pandemic. The Ministry of Education (MoE) ensured the continuation of schooling via online education. According to the Department of Statistics

Malaysia, 90.1% and 91.0% of Malaysia’s households have access to the internet and smartphones, respectively. Thus, school classes relying on the internet connection was the best measure available. However, for some rural areas and B40 families, who cannot afford internet access and or with the limited internet connectivity, MoE and broadcasters collaborated to provide education content through TV. On February 2021, MoE announced that NTV7 would be rebranded via a takeover as an educational TV channel known as DidikTV KPM, with the channel focusing on educational content based on the SPM curriculum and co-curriculum.

CONCLUSION

There is no denying that TV viewing habits have changed considerably. The mass adoption of smartphones with affordable internet services allows online streaming platforms to become an increasingly dominant feature. However, based on data shown earlier, TV is still relevant and accepted by the public.

The evolution of the TV broadcasting in Malaysia is undoubtedly in tandem with international technological advancement. Traditional TV technology can now be used with new media to deliver content. This has allowed consumers to choose their types of viewing, whether online or traditional broadcast TV. Online and streaming may be popular, but TV broadcasting is still popular and remain relevant. TV broadcasting is here to stay, and news of its demise is greatly exaggerated.

DIGITALISATION IN THE RESHAPING OF THE MALAYSIAN EMPLOYMENT LANDSCAPE

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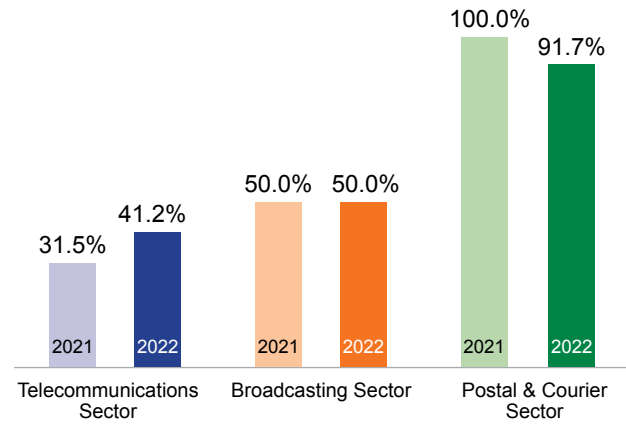
Digitalisation is a shift from manual approach to an electronic approach by leveraging on technology and the Internet. This later reduces the need for hardcopy documents and minimises the amount of paperwork. Parallel to the pervasive usage of mobile phones in the beginning of 21st century, digital transformation continues to affect the economic landscape leading to a shift in employment from traditional jobs to digitally oriented works. This also led to an inevitable surge in the digitalised sectors in Malaysia that include online shopping, digital payment, digital banking, remote work and learning, telehealth, online entertainment and supply chain.

Malaysian government has been actively promoting the adoption of digital technologies in various sectors to drive economic growth and enhance productivity. The investment activity in Malaysia increased through the acquisition of new machinery and equipment by the

private and public sectors in 2022. Private firms increased their investment in automation and digitalisation from 2.6% in 2021 to 7.6% in 2022, which contributed to the high investment in key industries such as information and communications technology (ICT) and electrical and electronics (E&E). The public sectors also showed a significant increment in their investment growth from -11.3% in 2021 to 5.3% in 2022, focusing on the oil and gas (O&G) and telecommunications sectors¹.



¹ Bank Negara Malaysia. (2023, March 29). Economic & Monetary Review 2022.



Source: Industry
Figure 1: Technology Adoption in C&M Industry by Sectors

TECHNOLOGY ADOPTION IN C&M INDUSTRY

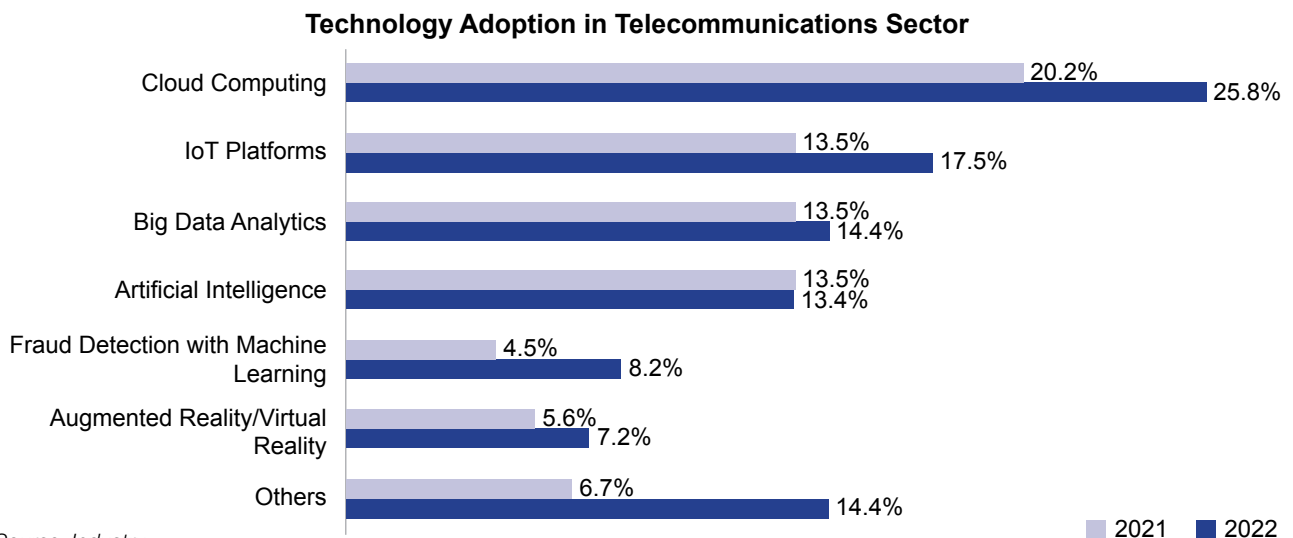
A survey on technology adoption in the Communications and Multimedia (C&M) industry recorded 54.4% (2021: 59.6%)² businesses that have implemented technological solutions in their operations in 2022. Figure 1 shows the fragmentation of adoption rate by businesses in telecommunications, broadcasting and postal & courier sectors in 2021 and 2022. Overall, the industry continues their effort in adopting new technologies and embracing distinguished innovations in their operations.

Cloud Computing, Internet of Things (IoT) Platforms and Big Data Analytics (BDA) are the top three technologies implemented by service providers in the telecommunications sector. Telekom Malaysia (TM) utilised Telco Cloud as their private cloud platform to host Virtual Network Function (VNF) that allows them to promptly add services, adapt to changes in network

demand, and efficiently manage central and decentralised resources. Alternatively, other telecommunications companies leveraged on public cloud solutions such as Amazon Web Services (AWS), Huawei and Alibaba Cloud. Other service providers namely CelcomDigi, Maxis and TM highlighted their IoT deployment in gaining vehicle telematics information and drivers behaviour for asset tracking and safety monitoring.

Further, BDA and Cloud Computing remained the most common technological solution adopted in the sector. Awesome Broadcasting, Media Prima and Measat Broadcast Network Systems noted that they have implemented both BDA and Cloud Computing technologies in 2022. The application of Cloud Computing in this sector such as Cloud-Based Image Processing and Cloud Media Storage Hosting are cost-effective and efficient in delivering content³. An OTT platform of Radio Televisyen Malaysia (RTM), RTMKlik leveraged the capabilities of IPSB Technology and AWS Cloudfront

Telecommunications Sector



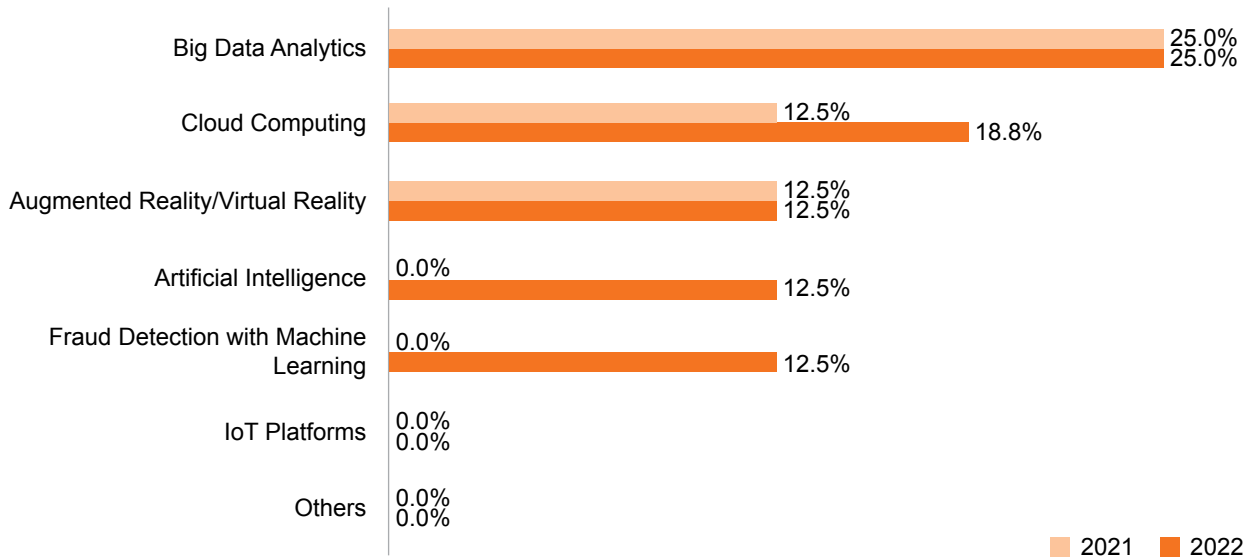
Source: Industry
Figure 2: Technology Adoption in Telecommunications Sector

² Survey on Industry Performance Report 2022 & 2021.

³ Kleinerman, K. (2022, July 11). Cloud Computing in the Media and Entertainment Industry.

Broadcasting Sector

Technology Adoption in Broadcasting Sector



Source: Industry

Figure 3: Technology Adoption in Broadcasting Sector

to provide seamless experience for a total of 34 million viewers of FIFA Qatar World Cup 2022⁴. Additionally, the highly synergistic application of BDA and Cloud Computing allows service providers to analyse consumers' behaviour across various platforms.

(Amazon EC2) to provide security, flexible cloud computing capacity and scalable workloads⁵. This technological solution enables Pos Malaysia to improve postal services, particularly with seamless delivery during peak periods such as promotional sales and festive seasons.

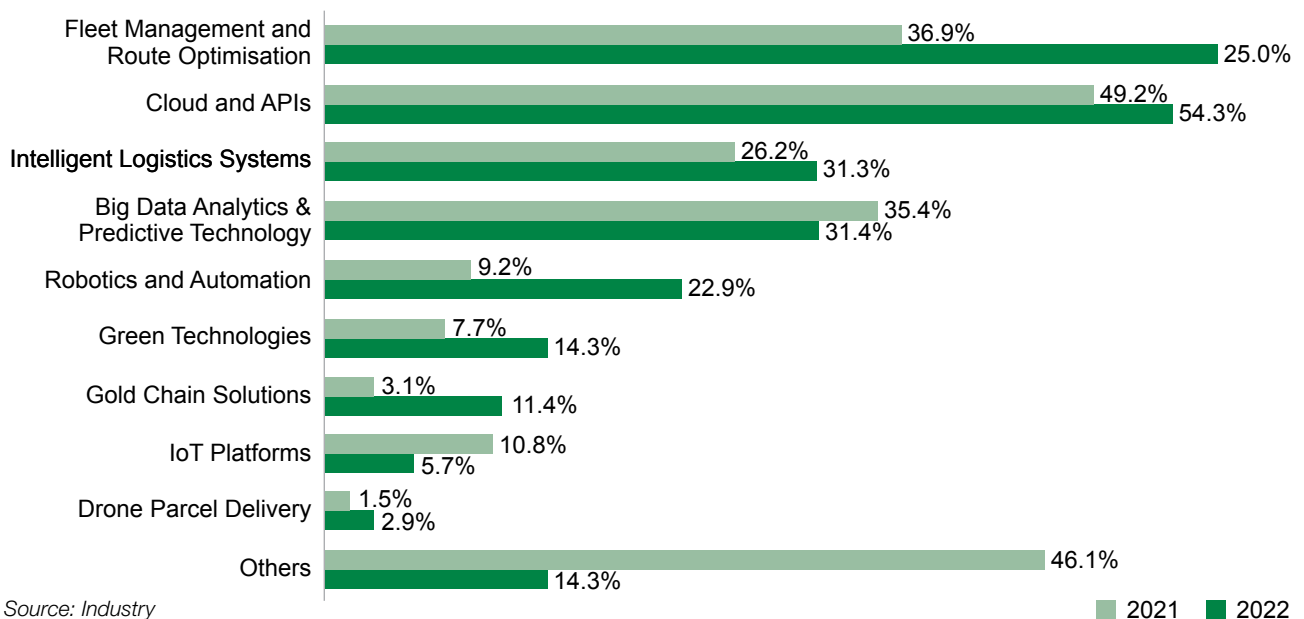
POSTAL & COURIER SECTOR

Postal and courier service providers have been actively digitalising their operations. Pos Malaysia had migrated 60 critical applications to Amazon Web Services (AWS) in June 2022 and use Amazon Elastic Compute Cloud

On the other hand, Fleet Management and Route Optimisation, Cloud and Application Programming Interfaces (APIs), and Intelligent Logistics Systems were frequently used in 2022 by courier service providers.

Postal & Courier Sector

Technology Adoption in Courier Sector



Source: Industry

Figure 4: Technology Adoption in Courier Sector

⁴ IPSB. (2022, December 30). Success Story: RTMKLIK & IPSB Technology – Seamless Viewing for the FIFA World Cup Qatar 2022.

⁵ Kuzhanthaivel, A. (2023, January 11). Pos Malaysia Berhad builds on AWS to transform operations and enhance customer experience.

The implementation of Fleet Management and Route Optimisation technology grew further to 57.1% in 2022 and service providers claimed that they managed to improve parcel management, tracking and delivery by utilising the technology. Lazada Express have adopted all top five technologies listed in Figure 4 and stated that they were able to simplify their operational work, reduce manual works and minimise human errors.

Predominantly, the industry is increasingly leveraging technology to streamline their operations, reduce costs, and improve efficiency. One of the most significant impacts of digitalisation on employment in Malaysia has been the emergence of new job categories. These include roles such as digital marketing specialists, social media managers, data analysts, programmers, and cybersecurity experts. These new jobs require a specific set of skills, including digital literacy, data analysis, digital business and sales skills and technical expertise. Further, the World Economic Forum forecasted that 50% of all current employees are required to go through re-skilling by 2025.

TRANSFORMATION IN EMPLOYMENT LANDSCAPE

Job demands in digital field has brought about changes in an organisation's priority areas. Talent and skills in technology have been listed as the top three industries that are expected to grow in Malaysia in 2023, along with manufacturing and construction⁶. The engineering and information technology sectors have grown tremendously, concurrent with the emergence of the digital wave.

Engineering Sector

The engineering sector in Malaysia is poised for growth despite the suspension of some major infrastructure projects and slowing growth in the manufacturing sector. It is observed that talents who possess both technical knowledge and soft skills are the most sought after by employers across different industries.



Information Technology

Likewise in the information technology area, individuals with hybrid skills of technical knowledge and soft skills are very much in demand to take up new roles and holding bigger responsibilities. Employers in this sector are unable to get the right candidates to perform certain tasks due to insufficient talent, particularly in digital marketing, e-commerce and big data.

Banking and Financial Services

Customers have started considering alternative digital solutions and experiencing their benefits for their financial needs. Traditional banks can only stay ahead with digitalisation, hence appropriate innovation must be initiated. It is forecast that there will be a surge in demand for more banking specialists to assist in the digital transformation process.

Human Resources and Administrative

It is observed that the current workforce requires a revamp through upskilling and reskilling of manpower to adapt to the new challenges and obstacles ahead due to digitalisation. Malaysia Salary and Employment Outlook 2021-2022 indicates positive growth in March 2021 (+58,700 people) by 0.4% from February 2021. The number of employed people was on a declining trend since April 2020. The employment-to-population ratio rose by 0.2%, to a record of 65.4%. It is an indication of a recovering economy that has created more job vacancies.

Sales and Marketing

Virtual platforms have become the preferred choice of contact for any business dealings. The use of digital methods continues to rise and businesses are tapping into the unique lifestyle of consumers while creating niche needs and upskilling of existing teams will continue and become a pre-requisite to stay relevant to current times. Data from LinkedIn shows an astounding increase of 48% for more digital marketers and content creators according to Malaysia Salary and Employment Outlook 2021-2022.

⁶ Sunil, P. (2023, January 17). Expected 2023 salaries in Malaysia's high-growth industries: IT, manufacturing, and construction.

Supply Chain & Logistics

An increase in the workforce will be necessary to accommodate the fast-growing e-commerce space in Malaysia. Free trade zones and fulfilment centres will see an increase in new jobs creation. Undeniably, the supply chains and logistics sectors are on the way to be the top performers in 2021, quoted by Malaysia Salary and Employment Outlook 2021-2022.

MALAYSIAN PREPAREDNESS TOWARDS DIGITALISATION

In line with this development, Kelly Services reported the increasing need for digital skills among employees in Malaysia as reflected in the Malaysia Salary Guide 2019. The report shows that demand for digital talent is fast growing despite a comparative shortfall of supply, a sign that Malaysia is facing challenges in building its digital workforce. There is a real need to prepare talents for digital jobs, regardless of their working experience. Excerpt from a survey by Randstad Malaysia Recruitment Agency in 2018, denotes that almost 90% of the workforce in Malaysia admit their lack of competency in digital skills, which further mirrored the increase in the percentage of unemployed graduates who are lacking in digital skills.

The Malaysian government has reacted accordingly in view of this development, where various policies and initiatives were introduced for workers in organisations to enrol in trainings for upskilling purposes. In 2022, the Government allocated RM1.1 billion⁷ for training and upskilling programmes targeting 220,000 participants.

Employers must prepare their employees to increase adaptability to the current workforce landscape to promote career advancement, reduce knowledge gaps and increase confidence level towards digital knowledge and skills. At an individual level, upskilling helps employees in their career advancement, hence employers must be able to identify priority areas and skills gaps based on the employees' performance and strength.

In October 2022, Dr Sean Seah, Chairman of PIKOM, the National Tech Association of Malaysia, noted that a total of RM750 million has been allocated for talents upskilling, which emphasised technology related training courses for all talents across the board. A huge investment is required to ensure digital transformation in organisations meets its objective. It was indicated that apart from increased market share, companies undergoing a digital transformation experienced better customer engagement and higher employee morale. Young Malaysian workers and job seekers are encouraged to diversify their skills so that they can fit in all kinds of jobs and have higher chances to build their career in their field of interest.

UPSKILLING AND RESKILLING INITIATIVES IN THE C&M INDUSTRY

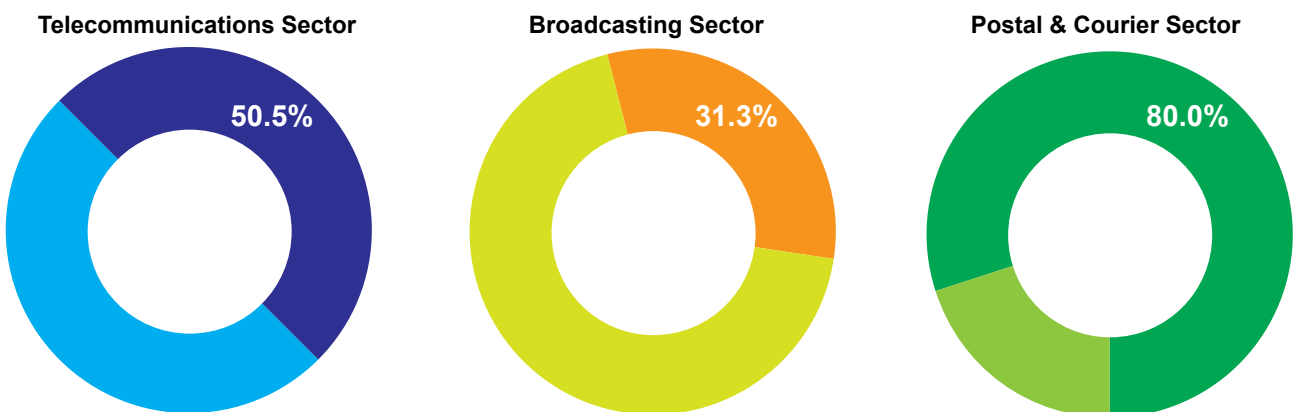
Digitalisation has transformed many traditional jobs, making them more tech-centric and also enabled remote work. This also encouraged companies to adopt digital tools and platforms to facilitate remote work and further created new job opportunities for individuals to work from home.

Figure 5 indicates the percentage of service providers in the C&M industry who have provided upskilling and reskilling initiatives in 2022. This reflected industry's effort in providing training and building new competency for their employees with regards to improving employees' capabilities in managing new technology.

Telecommunications Sector

CelcomDigi highlighted the importance to balance the cooperation between people, processes and technology to ensure that the integration is executed efficiently. Mostly, service providers focused on strengthening their employees' skillset in utilising emerging technologies such as Cloud and Edge Computing, 5G, AI, IoT and cybersecurity. BT Systems noted that Business and Technical Skills such as Data Analytics, Fundamentals in

Upskilling & Reskilling Initiatives by Sectors



Source: Industry
Figure 5: Upskilling & Reskilling Initiatives by Sectors

⁷ Ministry of Finance. (2022). Budget 2022 Measures.

IT Solution (USD Million)	2019	2020	2021	2022	2023	2024	2025	2026	CAGR (2021-2026)
Cloud Computing	143	160	186	215	250	290	336	389	15.9%
Mobility	9	10	12	14	16	18	20	22	13.3%
Data Centre and Hosting	26	27	29	32	36	41	46	51	12.1%
Security	38	41	47	52	59	66	74	83	12.1%
Application Development and Management	76	78	83	92	103	115	129	144	11.8%
Data and Analytics	27	29	33	36	39	43	46	50	8.8%
Networking	106	122	136	147	158	169	179	191	7.1%
Storage	36	38	43	45	48	51	55	58	6.5%

Figure 6: ICT Market Forecasts for Information Technology Sector in Malaysia

Note: Market sizes from 2022 to 2026 have been forecasted.

Source: GlobalData Market Opportunity Forecasts to 2026: ICT in the Information Technology Sector.

Programming and Fundamentals in Data Science are the top core skills required for employees to remain relevant in this digital and technology driven age.

Broadcasting Sector

Berita Nasional Malaysia (BERNAMA) claimed that a continuous learning platform to enhance employees' capabilities is a crucial foundation in building a strong level of digital adoption. Other broadcasters also expressed their eagerness in providing multiple platforms to encourage employees to enrol in digital training. For example, Awesome Broadcasting focussed on training provided by HRDCorp, while Astro offers internal learning programmes and scholarships for their employees.

Postal & Courier Sector

Pos Malaysia had signed a Memorandum of Agreement (MoA) with Saito University College to provide the integration of learning opportunities and practical exposure in improving the competency of future logistics professionals⁸. Meanwhile, the courier sector focused on providing courses related to e-commerce logistics, data analytics, e-payment applications, software training and media competency. These training courses were either offered in their respective internal training programmes and platforms such as City-Link Apps and Teleport University, or by outsourcing to foreign professionals.

The industry portrayed a strong passion in providing the necessary training and building digital competencies among employees. Training and development opportunities have become a top criterion for IT professionals when they are making career decisions⁹. This illustrates that employees are also actively seeking opportunities to increase their competencies concerning the proliferation of technology that is shifting the employment landscape.

OUTLOOK

GlobalData highlighted the following IT Solutions that are expected to have the highest compounded annual growth rate (CAGR) in Malaysia. Cloud Computing remained as the most prominent IT Solution with 15.9% CAGR, followed by Mobility (13.3%) and Data Centre and Hosting and Security at 12.1%.

A study by Cisco reported that 74% Malaysian preferred hybrid working environment, while a study by Microsoft recorded that 62% business leaders in Malaysia are considering to redesign office space and accommodate employees for hybrid working¹⁰. These results are parallel with the top four IT Solutions that are forecasted to have the highest growth in Figure 6 as these technologies are crucial in supporting the hybrid work trend.

Cloud Computing will continue to be significant as the implementation can reduce operational and administrative costs, improve customer satisfaction and allow greater business agility¹¹. Moreover, mobility¹² is also gaining higher importance as most businesses are implementing hybrid working model and flexible working arrangements as an alternative to promote productivity. Lastly, Data Centre and Hosting and Security are essential in managing businesses critical data, network and storage.

CONCLUSION

Digitalisation has had a significant impact on the employment landscape in Malaysia, creating new job opportunities while also transforming traditional jobs. While this transformation has not been without its challenges, the adoption of digital technologies is likely to continue to shape the employment landscape in Malaysia for the foreseeable future. [my](#)

⁸ Pos Malaysia. (24, March 2022). Pos Malaysia Partners Saito University College for Talent Development of Future Logistics Professionals.

⁹ Randstad. (2023, January 27). Malaysia's Technology Industry Outlook and Salary Trends 2023.

¹⁰ ONEs. (2022, October 21). Hybrid work trends in Malaysia a business leader needs to know in 2023 and onward.

¹¹ Makarchuk, R. (2023, March 20). Cloud Technology in Telecom Industry: New Revenue Streams and Opportunities.

¹² GlobalData refers mobility to devices, applications, software infrastructure and services that enable the convenience of remote working through portable devices.



MICRO-CREDENTIALS FOR ACCELERATING CAPACITY AND CAPABILITY DEVELOPMENT IN COMMUNICATIONS AND MULTIMEDIA INDUSTRY

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Nadia Farizah Badrudden
Head of Department
Training Centre Department

As guided by the Communications and Multimedia Act 1998's 10 National Policy Objectives, the Malaysian Communications and Multimedia Commission (MCMC) is committed to developing industry capabilities and facilitating the efficient allocation of resources.

With the rapid advancement in technology, and strong policy support via MyDIGITAL, IR4.0 etc, MCMC sees the need to accelerate further the adoption of digital technology by the various stakeholders. 5G technology presents the opportunity for MCMC to work closely with the industry and academia to ensure that the entire workforce is equipped with the most up-to-date knowledge, digitally ready, and meets the nation's continuous development needs.

One of the ways for MCMC to do this is via collaboration and partnerships with universities, learning institutions, and relevant bodies, associations, or societies. MCMC's recent collaborations with Multimedia University and Universiti Teknologi Malaysia, among others, revealed a

strong demand for MCMC to provide a linkage between academia and the industry through industry-led courses. Our Masterclass in Converged Telecommunications Policy and Regulations (CTPR) programme with MMU and the International Mobile Industry Association, the GSMA is a testament to the abovementioned demand.

FOURTH INDUSTRIAL REVOLUTION (IR4.0)

The Fourth Industrial Revolution (IR4.0) is witnessing a rapid integration of new smart and innovative technologies. Traditional jobs are being pushed into the digital age while new job roles are being created. The demand now is for workers to be proficient in multiple disciplines.

However, skills mismatch has been a persistent issue in Malaysia. The competence of job applicants does not match industry needs. According to the Ministry of Education figures, Malaysia produces approximately 300,000 graduates each year. Although this percentage



Figure 1: National Policy Objectives 8 and 9 of MCMC Act 1998

is relatively high, according to the Labour Force Survey Report, Malaysia Q4 2022, the rate of skill-related underemployment to employed persons with higher education was still high at 37.4%, a slight decrease of 1.1% from Q4 2021. This indicates that their skills and capabilities are not being fully utilised, implying a mismatch between their qualifications and the skills required in their current role. This is particularly worrying since it can worsen the economy, resulting in societal implications such as unemployment, recruiting difficulties, outdated skills, and people not performing to their total capacity.

According to research conducted by Dr. Zul Hasni, UTM and MCMC through the Digital Society Research Grant titled “A Conceptual Framework for the Development of Malaysia’s 5G Skilled Workforce for Industry 5.0,” the C&M industry in Malaysia is facing challenges related to low workforce readiness for 5G industries and a mismatch of skills and competencies for 5G industrial needs. The reason for this is the lack of information on relevant and important technical competencies and skills of the workforce for 5G sectors, along with a limited approach to the capacity development initiative of the 5G workforce in Malaysia. The research concludes that the programme aimed at enhancing capabilities requires a longer duration to align with the industry’s requirements. The reports note that employers in Malaysia are resorting to hiring foreign workers to execute 5G-related projects due to a shortage of proficient professionals. Moreover, the implementation of 5G network has the potential to cause the replacement of jobs due to automation (Haldorai et al., 2021; Jetha et al., 2021)¹ and artificial intelligence (Rahman et al., 2022²; Haldorai et al., 2021). Consequently, there is a need for new skill sets and educational initiatives, as indicated by Li (2022)³, and Chew et al. (2020)⁴.

MICRO-CREDENTIAL ROLES IN UPSKILLING THE CURRENT WORKFORCE

The Workmonitor Report 2022 by Randstad stated that 89% of the respondents acknowledged that ongoing changes in the job market require additional training and development to remain relevant. Workers know how vital it is to enhance their skill sets and knowledge through upskilling. The report also stated that more than 9 in 10 Malaysian respondents would like their employer to conduct a skills assessment test to ascertain the essential skills needed to sustain their employability. However, despite their willingness to upskill themselves, many employees are overwhelmed by their work deadlines and substantial workloads.⁵

There is a need for an innovative learning model that can adequately address the demands of upskilling and retraining in the current workforce parallel with adult learning principles. Malaysians need the flexibility and ability to learn and obtain formal qualifications in ways that are best suited to their needs, skills, and experience. Additionally, according to the Human Resource Development Corporation (HRD Corp) statistics, the vast majority (96%) of training programmes are not certification programmes. Rather than seeking professional recognition, participants in these programmes seek to increase their proficiency in a particular area of practice or a specific set of skills. Additionally, the high cost and duration of higher education studies have pushed Institutions of Higher Learning (IHLs) to seek innovative ways and solutions to develop and offer alternative education opportunities such as micro-credential certification programmes.

In light of the preceding, the Malaysian Qualifications Agency (MQA) has introduced a new learning approach called Micro-Credential (MC). This model emphasises

¹ Haldorai, A., Murugan, S. and Ramu, A., 2021. Evolution, challenges, and application of intelligent ICT education: An overview. *Computer Applications in Engineering Education*, 29(3), pp.562-571.

² Rahman, M.M., Khatun, F., Sami, S.I. and Uzzaman, A., 2022. The evolving roles and impacts of 5G enabled technologies in healthcare: The world epidemic COVID-19 issues. *Array*, p.100178.

³ Li, L., 2022. Reskilling and upskilling the future-ready workforce for industry 4.0 and beyond. *Information Systems Frontiers*, pp.1-16.

⁴ Chew, M.Y.L., Teo, E.A.L., Shah, K.W., Kumar, V. and Hussein, G.F., 2020. Evaluating the roadmap of 5G technology implementation for smart building and facilities management in Singapore. *Sustainability*, 12(24), p.10259.

⁵ <https://www.randstad.com.my/hr-trends/workforce-trends/malaysia-labour-market-lacks-skilled-talent-despite-skills-relevancy/>

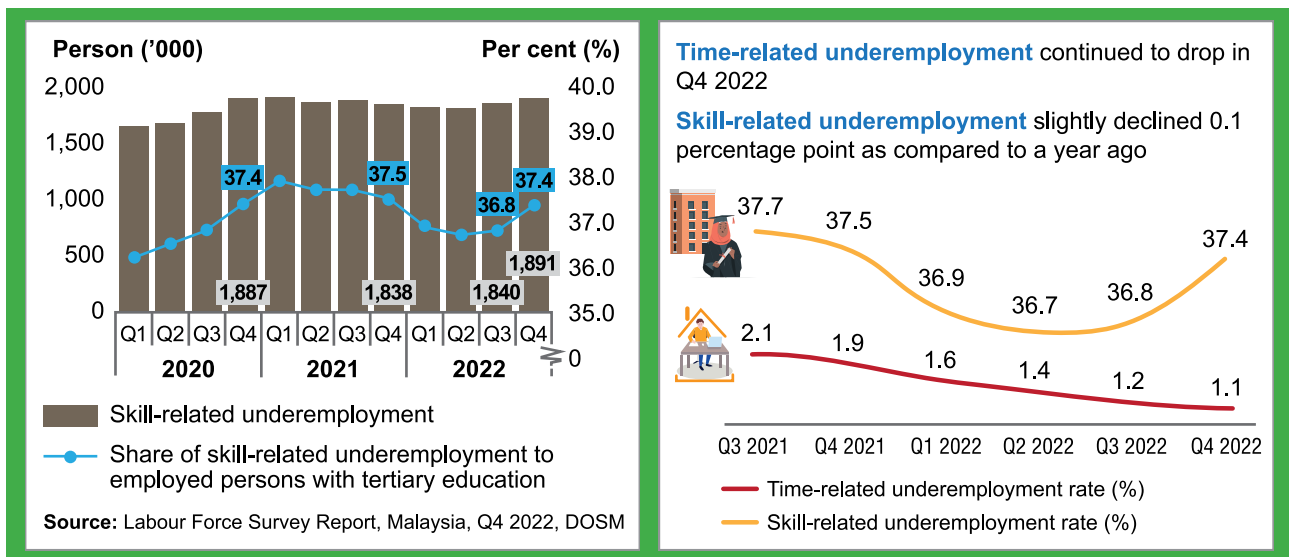


Figure 2: Skill-related underemployment, Malaysia. Source DOSM

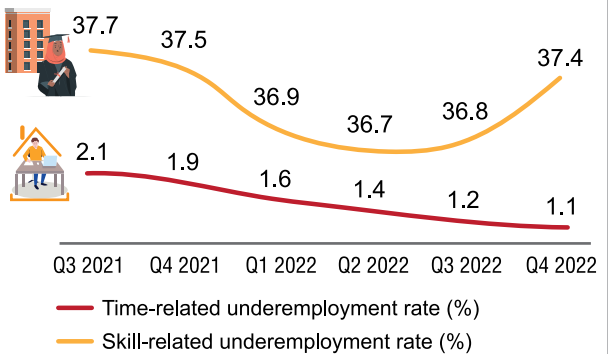
a smaller volume of learning compared to traditional awards, allowing learners to complete their studies within a shorter timeframe.⁶

According to the MQA, unlike a full-fledged course, MC is a certification of learning a smaller set of courses or modules or units which are designed to provide learners with knowledge, skills, values, and competencies in a narrow area of study and practice. These credentials or certifications can be accumulated into more significant credentials and are readily accepted or evaluated as part of the credits contributing to academic degree qualifications. This aligns with the launch of the APEL for Credits (APEL (C)) guidelines by MQA in 2017, recognising Massive Open Online Courses (MOOCs) for credit transfer. These sub-qualifications have a smaller scope with fewer credits and shorter durations than a full-fledged bachelor's or master's degree offered by IHLs. The MC courses are formally subject to accreditation requirements by the MQA. It provides a multiple exit pathway for students at the Malaysian Qualifications Framework (MQF) Levels 6 and 7.

The LinkedIn Survey 2021 stated that 38% of the companies surveyed preferred hiring candidates with solid skills over those with qualifications and experience. Thus, Micro-Credential programmes have the potential to be instrumental in the process of reskilling and upskilling current employees. However, the introduction of micro-

Time-related underemployment continued to drop in Q4 2022

Skill-related underemployment slightly declined 0.1 percentage point as compared to a year ago



credentials is not to replace the existing traditional education methods. Instead, it provides a flexible alternative for individuals who seek to obtain a formal qualification through a flexible education system.

MICRO-CREDENTIAL DEVELOPMENT INITIATIVES BY MCMC ACADEMY

The target of 80% 5G network coverage for populated areas by the end of 2024 requires a skilled and trained workforce in every aspect of 5G. MCMC sees an excellent opportunity to seek potential collaboration partners with IHLs.

MCMC has collaborated with local Universities such as Universiti Teknologi Malaysia (UTM), UCSI University, University Kuala Lumpur (UNIKL), and Multimedia University (MMU) to rapidly develop a suite of MC courses (micro-learning) in the C&M Industry to allow workers to reskill quickly, primarily to meet the demand for a highly trained and digitally savvy workforce. This collaboration is an important mechanism to ensure the quality and relevance of the programmes offered by IHLs are aligned with the government's initiatives to address the issue of the shortage of skilled talent.

The MC courses are currently developed to be consistent with MCMC's Core Competency Areas such as C&M policy

No.	University	MC Area
1	Universiti Teknologi Malaysia (UTM)	5G
2	Multimedia University (MMU)	Cyberlaw
3	Universiti Kuala Lumpur (UniKL)	EMF & Network Security
4	UCSI University	Digital Forensics

Table 1: MCMC's Collaboration Partners to Develop Micro-Credential Courses

⁶ Guidelines to good practices: Micro-Credentials by MQA. Retrieved from <https://www2.mqa.gov.my/qad/v2/garispenduan/2020/GGP%20Micro-credentials%20July%202020.pdf>

and regulations, spectrum management, communications technology, network security, etc. The university determines the titles of these courses upon consultation with MCMC's Subject Matter Experts. For 2023, MCMC and the universities have focused on developing the MC courses outlined in Table 1.

Other countries such as the United States, United Kingdom, and Australia have also offered MCs as upskilling and reskilling programmes for their workforce, including for teachers and industry practitioners. For example, according to several studies (Acree, 2016⁷; DeMonte, 2017⁸; Randall & West, 2020⁹; White, 2021¹⁰), teachers in countries such as Australia and the United States have registered micro-credential certification programmes as part of their training programmes.

However, in Malaysia, MC courses are still in their early stages but are proliferating.¹¹ Nevertheless, the term micro-credential is relatively new to most Malaysians. Thus, MCMC must study the demand for MCs among working adults in the C&M industries and the challenges faced by the IHLs to implement and offer such programmes. This study will provide a background analysis of MC programmes in Malaysia, including the development of MC courses in the C&M industry. It will ensure that our efforts are effective based on the anticipated key evidence, namely the following:

- Rationale and evidence for adopting the MC approach for skill development.

- Suitable classification of C&M skills areas to meet Malaysian 5G workforce requirements.
- MC is the right approach to addressing the industry's talent shortage.
- Recommended MC conceptual framework for successful 5G communications deployment.

MCMC Academy is collaborating with two local universities in this area through the MCMC Digital Society Research Grant (DSRG). UCSI University will conduct a study titled 'How ready are HEPs to implement Multimedia and Communication Micro Credentials? An Assessment of Challenges and Readiness of HEPs', while Open University Malaysia will carry out research on 'Gaining Insights on Micro-credential Courses in Facilitating Capacity Building in Areas of Communications and Multimedia (C&M)'

As MCMC continuously strives to fulfill our role in industry capacity and capability development, MCMC Academy actively seeks partnerships and collaborations with the IHLs to develop MC courses that can help to accelerate capacity and capability development in the C&M industry. MCMC Academy has also partnered with organisations and professional bodies for co-programme development, training, research and knowledge-sharing sessions and we are excited to explore these opportunities with many stakeholders. [smv](#)

⁷ Acree, L. (2016). Seven lessons learned from implementing micro-credentials. Raleigh, NC. Friday Institute for Educational Innovation at the NC State University College of Education.

⁸ DeMonte, J. (2017). Micro-credentials for teachers: What three early adopter states have learned so far. American Institutes for Research.

⁹ Randall, D. L., & West, R. E. (2020). Who cares about open badges? An examination of principals' perceptions of the usefulness of teacher open badges in the United States. *Open Learning: The Journal of Open, Distance, and e-Learning*, 1-19.

¹⁰ White, S. (2021). Developing credit based micro-credentials for the teaching profession: An Australian descriptive case study. *Teachers and Teaching*, 27(7), 696-711.

¹¹ Che Ahmat, N. H., Ahmad Ridzuan, A.H., & Yunos, M. (2022). PERCEPTIONS AND READINESS OF EDUCATORS TOWARD MICRO-CREDENTIAL CERTIFICATION PROGRAMME. *International Journal of Education and Pedagogy*, 4(1), 38-50.



CASHLESS KEDAH

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On 19th February 2021, the government introduced the Malaysia Digital Economy Blueprint known as MyDIGITAL, as a path to transform Malaysia into a digitally-enabled and technology-driven high income nation, and a regional leader in digital economy. It outlined the strategies, initiatives, and targets to build the essential foundation to drive the growth of the digital economy. One of the crucial aspects of MyDigital is bridging the digital divide across social and geographical boundaries. The laid-out strategies adopted a whole-of-nation approach which involved partnerships between the people as well as the public and private sectors to realise the aspirations of MyDIGITAL.

While taking part in the digital economy seems like a natural progression for some advanced states in the country, it requires a big leap for a state like Kedah whose economy is mostly entrenched in the agricultural sector. In comparison with more sophisticated states in the

Klang Valley, the digital gap is apparent in all the three pillars required to build a vibrant digital society in Kedah – People, Business and Government.

As more transactions and services are moving online, digital literacy among all segments of the society is becoming crucial for fostering an inclusive digital economy landscape. This is the time to really look into digital inclusion, which means the empowerment of individuals and societies to effectively use digital technologies and ICT, enabling them to contribute to and benefit from digital transformation.

One of the most effective ways to accelerate digital inclusion is by consciously increasing digitalisation in client facing government services. The federal government, for example, has set clear targets for transforming the public service delivery system, one of which is that all ministries and agencies must provide cashless payment channels by 2022. Transformation has

become increasingly important as a catalyst for reducing transaction costs, fostering growth and supporting the transition towards digitally enabled and inclusive economies.

Taking the cue from the various digital and e-commerce policies and blueprints being hatched in Putrajaya, the state government in Kedah pulled its resources to reinforce the cashless culture. It put together its own payment gateway to enable the people in Kedah to perform various online transactions when dealing with the local government.

CASHLESS KEDAH

Cashless Kedah was launched on 18 July 2022 by the YAB Menteri Besar Dato' Seri Haji Muhammad Sanusi Md Nor, to align cashless transaction facilities provided by state departments and agencies under a single banner. With the slogan, "Kedah Cashless, Senang Ja" (*Cashless Kedah, It's Easy*), the launch served as a jolt to transform the mindset of government servants and the general public in Kedah towards embracing the cashless culture which is the foundation to unlock vast potentials and new innovations in the digital economy.

To reciprocate, a campaign called 'Mai Kita Cashless' was initiated by the Touch 'n Go Group (TNG) and Payment Network Malaysia (Paynet) to enable rural Kedah merchants and consumers to embrace the cashless payment method. Merchants and consumers were enticed by attractive cashback offers for utilising TNG e-wallet and DuitNow QR code as alternatives to cash in their transactions. This rapidly took the cashless wave to the grassroots.

The cashless footprint in Kedah can be traced back even before Cashless Kedah made it to the centre stage. **iBayaq** which is one of the flagship methods of payment under Cashless Kedah, went live in June 2020. It is a web portal which integrates the following online services:-

- iPinjaman – educational loans provided by the State,
- iPendaftaran – search and registration of land matters;
- iDaftar - registration of suppliers, contractors and consultants;
- iSejahtera – loan scheme for small traders
- iForest – issuance of forestry permits; and
- KedahCare – welfare touchpoint for donors and those in need.

Through iBayaq, landowners can now pay their annual quit rents without the hassle of travelling and queuing at the district land office. It is not uncommon for landowners in remote villages to engage runners to pay their quit rents at the district land office. iBayaq now enables them

to settle the payment without leaving their homes and without the runner fees. Less digitally literate folks such as senior citizens can reach out to the younger generation who are more savvy or simply get help from a nearby Pusat Ekonomi Digital (PEDi)¹ to guide them.

iBayaq also allows those who benefited from loan schemes provided by the state such as educational loans and business loans to make their monthly repayments. The buyers and tenants of state government housing schemes may also use the portal to pay their dues. One of the benefits of using online transactions for this group of regular payees is having an organised record of their payments and receipts embedded in the system transaction history.

Since the migration of various online services onto iBayaq, the delivery system of services to the public has seen a remarkable improvement in terms of processing speed and transparency. For example, the process of issuing a permit to enter an area gazetted as a permanent reserved forest is done within minutes after receiving a complete online submission with payment compared to the manual process that previously took a week. Furthermore, the processing timeline back then could be dragged indefinitely if the manual forms were unfortunate enough to land at the desk of an officer in charge when he was away on a long holiday.

Another interesting application integrated onto iBayaq is **KedahCare**, a trusted channel for making and appealing for donations. The donors may choose to donate a sum of money as low as RM1, food supplies, furniture, electrical appliances, medical supplies, clothes and almost anything else. On the other end, those in need of help may register themselves and ask for the kind of assistance they need. The KedahCare team at the Menteri Besar's office does the matchmaking to ensure the donations reach the truly deserved. The KedahCare application showed its ability to coordinate welfare activities with great precision at the micro level during the Baling flood disaster in July 2022. Victims used the application to call out for food supplies, medical assistance, construction materials, and others.

The systematic management of supply and demand through KedahCare could help to avoid oversupply of certain items which may end up as a waste of resources during disasters. The official system backed by the state government and proper procedures could also stave off scammers trying to take advantage of dire incidents by setting up bogus donation accounts or schemes to prey on sympathetic members of the public.

¹ There are 77 PEDi in Kedah built by the Malaysian Communication and Multimedia Commission in rural areas at every district. It is a premise with digital facilities and full-time staff to train the nearby community.



Year	#Transaction	YoY Increment (%)	Collection Value (RM)
2023 (3 months)	78,161		
2022	89,293	183.1%	16,938,273.03
2021	56,990	526.7%	9,251,370.86
2020 (6 months)	9,477		1,756,375.40

Table 1: iBayaq transactions statistics

The convenience and efficiency of iBayaq have drawn 15,000 users to register with the platform as of the first quarter of 2023, even though registration is not compulsory to start using the transaction facility. Users just need to key in reference or account numbers to start making transactions. However, a registered user has the advantage of being able to save a list of favourite payment accounts for faster execution and keep an online history of all transactions.

The decision by the Kedah state government to shut down cash counters at all state government facilities and go 100% cashless beginning 1 January 2023 has further reinforced the cashless culture among the 2.2 million population in the state. Cash counters at government offices are now replaced by a point-of-sale (POS) system. Payments are only accepted by e-wallet, credit cards or debit cards.

Cashless payment when dealing with state departments and agencies is no longer just an option but a must. As a result, the usage of iBayaq has seen an exponential growth over the last several months.

To complement the adoption of iBayaq, the state government has set up 22 units of **Kedah Kiosk** at 15 locations. The kiosks look similar to the touch-screen terminals commonly installed at fast food outlets for self-ordering. The Kedah Kiosk, however, is for the public to make tax and bill payments using e-wallet, credit cards or debit cards. Again, no cash is accepted at the terminals.

The integration of other services onto the iBayaq platform and Kedah Kiosk is ongoing. The immediate plan is to integrate the various services at local councils, namely settlement of assessment rates and traffic compounds. There are also plans to integrate court services which involve payment of fees as well as procedures related to religious affairs including payment of tithe. Some of the

services already have their own online payment system and only require the stakeholders to negotiate onboarding deals.

iBayaq's backend financial processing is supported by the state-owned payment gateway called **KedahPay**. This gives the state more privilege and exclusivity in handling the integration process with other agencies or commercial entities. Already, there are talks within the state power circle of creating a Super App to cater for a variety of services within a single application.

In another effort to bring the cashless culture closer to the ground, the state government is already in talks with the state religious authority and committees representing all mosques in the state to introduce a secure and standard donation system using QR codes. Although some mosques already have QR codes pasted on the walls or notice boards for their congregation to donate to the mosque bank accounts, there is the risk of some unscrupulous opportunists pasting confusing QR codes that lead to their own personal or mule accounts. A standard system for all mosques could improve the security aspect, which is an important trait of cashless transactions besides being fast and efficient.

CONCLUSION

Kedah is absolutely at the forefront among the other states in Malaysia when it comes to driving cashless transformation of public services. The policy makers at the state correctly anticipate the changing social trend and economic headwind blowing towards digitalisation. Instigating a strong cashless culture among the people and a digital mindset within the civil services could reinforce the foundation that fosters an inclusive digital statehood and prepare the population to seize opportunities and prosper in the digital economy environment.



Figure 1: Kedah Cashless kiosk locations

While offering a high level of convenience to the public in dealing with state matters, the cashless drive fulfils the strategic objective of increasing the efficiency of the state revenue collection. In addition, the data on personal particulars and preference diagnostics gathered by the platform could be an asset for future innovations involving data analytics and artificial intelligence.

Moving ahead, Kedah looks forward to attracting strategic investments and innovations which are much needed

to realise the state’s full potential of developing a dynamic and transformative digital economy. With rapid improvements in digital connectivity under the Jalinan Digital Negara (JENDELA), reinforcements of digital skills through Pusat Ekonomi Digital (PEDi), empowerments in digital financial services with Cashless Kedah and other core areas of digital development, Kedah is well-positioned to form strategic partnerships to unleash new economic opportunities, create jobs and transform people’s lives. [my](#)



2022 BATANG KALI LANDSLIDE TRAGEDY

CRITICAL ROLE OF COMMUNICATIONS SERVICES IN RESCUE OPERATIONS

Siti Na'ilah Binti Kamarudin
Deputy Director, Selangor State Office

Source: BERNAMA

On December 16, 2022, Friday, the entire country woke to news that a massive landslide had occurred along the Batang Kali-Genting Highlands Road at around 2.00 am, burying nearly a hundred campers at three (3) campsites, belonging to Father's Organic Farm. The campsite comprised three (3) sectors: Hilltop, Farmview, and Riverside. The height of the landslide was estimated to be 30 meters high with an estimated area of three (3) acres. The disaster led to a suspension of all outdoor recreational activities in Batang Kali and the temporary closure of all picnics and camping spots throughout Selangor. It was described as the worst landslide in Malaysia in 2022, as well as the second deadliest disaster in Malaysian history after the collapse of Highland Towers in 1993, that also occurred within Selangor.

After the first distress call related to the landslide was reported, a Search and Rescue (SAR) team was activated immediately. The team arrived at the incident site at 3.00 am with the main objective of rescuing as many victims

as soon as possible. The SAR team consisted of Malaysian Armed Forces (ATM), Royal Malaysian Police (PDRM) and Malaysian Fire and Rescue Department (JBPM) personnel. In total, the SAR team involved over 700 rescue workers, eleven (11) excavators, and nine (9) police dog units, with additional assistance provided by the Federal Reserve Unit (FRU) and the General Operations Force (PGA). Other departments and agencies involved in this SAR operation included the Ministry of Health (KKM) and the Malaysia Civil Defence Force (APM).

Communications is the most important need for the SAR team at such critical times. The agencies at the incident site needed to coordinate smoothly. Effective communications are not only for the SAR team, but also for the media practitioners on the ground who struggled to spread the necessary and accurate information to the public. The media team prepared and updated the latest information and reports regarding the situation at the ground site through their respective news and media platforms that also included live telecast through social



Image 1: Malaysian Amateur Radio Emergency Service
(Source: MARES Official Facebook Page)

media. Regular media briefings were also done by the SAR teams together with the incident Commander.

In this emergency, communication between departments and rescue agencies at the incident site was supported by the Government Integrated Radio Network (GIRN). GIRN is a network dedicated to 17 enforcement, security and emergency agencies under the National Security Council (MKN). It functions as a critical communication network especially during disasters.

MCMC'S ROLE

The Malaysian Communications and Multimedia Commission (MCMC) through MCMC Selangor State Office (MCMC Selangor) carried out its roles immediately upon receiving information on the landslide incident

from Smart Selangor Operation Center (SSOC) at 9.22 am, Oct 16, 2022. In 20 minutes, the Selangor and Wilayah Persekutuan Emergency, Disaster and Rescue Team (EDRT Selangor and Wilayah Persekutuan) was activated at the direction of Tn Hj Rizal Abd Malek, Head of State, MCMC Selangor. MCMC Selangor instructed all main telecommunication providers, namely Celcom, Digi, Maxis, U Mobile, and TM to immediately analyse and activate their respective moveable communication assets, Cellular On Wheels (COW) down to the incident site. COW is a portable mobile cellular site that provides temporary network and wireless coverage to locations where cellular coverage is minimal or compromised. It provides a fully functional service, via vehicles such as trailers, vans or trucks, to areas affected by natural disaster or areas with large user volume, such as during major events. COW cellular tower equipment and mobile wireless communication machinery include cellular antenna and electronic radio transceiver devices. COW networks backhaul communication is enabled via terrestrial microwave, satellite or wired infrastructure.¹

Upon receiving the instruction, these five (5) main telecommunications providers took immediate action and activated their COW within 24 hours. At the same time, MCMC Selangor also requested assistance from the Malaysian Amateur Radio Emergency Service Society (MARES) to provide alternative communication using amateur radio technology for immediate communications between the rescuers. MARES is a non-profit organisation whose primary existence is to provide emergency radio communication support to various government agencies during emergency and disaster by using amateur radio. Amateur radio is the use of designated radio frequency spectrum for the purposes of private recreation, non-commercial exchange of messages, wireless experimentation, self-training, and emergency communication. The term "amateur" is used to specify persons interested in radio technique solely with a personal aim and without direct pecuniary interest, and to differentiate it from commercial broadcasting, public safety, or professional two-way radio services.²



Image 2: YB Minister of KKD with MCMC Selangor State Director
Press Statement (Source: MCMC Selangor Database)

¹ <https://www.techopedia.com/>

² <https://www.definitions.net/definition/Amateur%20radio>



Image 3: TM's Preparation For Telecommunications Support In Batang Kali Landslide Site (Source: MCMC Selangor Database)

The service providers faced various challenges in providing services at the incident site. This included absence of electricity, the hilly terrain and distance from the main transmitters of the respective service providers. These challenges and difficulties caused technologies such as microwaves to be unusable due to the absence of Line-of-Sight (LOS). LOS is the imaginary line between an observer and the target. A clear LOS without obstruction in the path is important for high-speed communication³.

TM proposed an alternative solution to MCMC and EDRT that involved pulling a 2-kilometer (km) fiber optic cable from the Awana Genting Node to TM's MoVIC (mobile IP cell) at the incident site. This successfully provided high speed fixed and mobile coverage and allowed Multi

Operator Core Network (MOCN) technology to be used by the other service providers to provide coverage for their respective networks. MOCN is a technology that allows a network operator to provide access to a single radio access network by other operators. Each operator operates its own core network, including one or more independent nodes.

On the first day of the incident, at 9.00 pm, the YB Minister, Ministry of Communication and Digital (KKD) visited the site to see the situation of the incident and to ensure that the communication services on the ground were at the best level. Later, at 9.30 pm, a press conference by YB Minister was held at a Malaysian Information Department (JaPen) truck as the media coordinator. During the press conference, YB Minister instructed MCMC and telecommunications providers to expedite and immediately establish a standard operating procedure (SOP) for telecommunications access, especially with the specific need for SAR operations in disaster areas.

By December 17, 2022, Saturday, at 9.00 am, all moveable mobile communication assets, Cell on Wheels (COW) by TM, Celcom, Digi, Maxis and U Mobile were fully operational at the incident site. The services were successfully on-air and provided maximum quality communication services to the SAR team and media practitioners. MCMC's monitoring results found that all service providers successfully achieved excellent cellular coverage quality that is above 50 Mbps. In addition, TM also provided an additional 800 Mbps Unifi wireless access, Wireless Fidelity (Wi-Fi) at the ATM, APM, JBPM and PDRM tents for the search and rescue operations. The same access point was also placed at the Malaysian Information Department (JaPen) incident site operation truck as a coordination centre for media practitioners.

To ensure that the coverage of the telecommunications network at the incident site was at best levels throughout the search and rescue operation, MCMC also went down to the incident site daily to monitor and carry out coverage tests. The periodic speed tests results conducted by MCMC at the incident site found that all telecommunication



Image 4: Malaysian Information Department (JaPen) Incident Site Operation Truck - Coordinator Centre For Media Practitioners (Source: MCMC Selangor Database)

³ <https://www.techtarget.com/>



Image 5: Maxis Cell on Wheels (CoW) and TM CoW (Source: MCMC Selangor Database)



Image 6: Digi CoW and U Mobile CoW (Source: MCMC Selangor Database)

networks were good and at the best level. The telecommunication providers were on standby 24 hours a day to ensure that their respective telecommunication networks were operating at optimal levels throughout this search and rescue operation.

THE IMPACT

The search and rescue operation officially ended on the ninth (9) day after the last body was successfully found by the SAR team at 4.50 pm, December 24, 2022, Saturday. In this incident, a total of 31 victims were confirmed dead, consisting of 20 adults and 11 children. The total number of victims involved was 92 people. We convey our condolences to all the families of the victims who perished in the Batang Kali landslide, and we hope that the families will be patient and resolute in facing such a challenging and sad time. To the Muslim victims, we pray that the souls of the victims are blessed and placed among the righteous and the pious.

The Batang Kali massive landslide tragedy enormously impacted all parties involved directly or indirectly during the nine (9) days of the SAR operation. As an appreciation towards the dedication shown by all parties during the SAR operation, a total of 157 officers, who were called “Wira



Image 7: Malaysian Information Department (JaPen) Incident Site Operation Truck - Coordinator Centre For Media Practitioners (Source: MCMC Selangor Database)

KKD”, from various departments and agencies under the Ministry of Communications and Digital (KKD) received certificates of appreciation for their commitment and contribution. Among those involved are the Malaysian Information Department (JaPen), Malaysian Broadcasting Department, Malaysian National News Agency (Bernama), Malaysian National Film Development Corporation (Finas), Malaysian Communications and Multimedia Commission (MCMC), and telecommunications provider companies. The certificates were presented by the Minister of Communications and Digital (KKD), YB Fahmi Fadzil at the KKD monthly assembly on January 31, 2023. [my](#)



Image 8: MCMC Officer Doing The Network Assessment at JBPM Tent (Source: MCMC Selangor Database)



Image 9: MCMC Officer Doing The Network Assessment with Telecommunication Provider (Source: MCMC Selangor Database)



Image 10: Ministry Of Communication and Digital (KKD) Recognises 157 Personnel For Their Commitment During Batang Kali Landslide (Source: Bernama)

SCOREBOARD



POSTAL TRAFFIC DOMESTIC PARCELS

MILLION



2022 : 0.2
 2021 : 0.8
 2020 : 0.8
 2019 : 0.9
 2018 : 0.9
 2017 : 1.0
 2016 : 0.9
 2015 : 0.8

Postal and Courier

POSTAL TRAFFIC DOMESTIC LETTERS

MILLION



2022 : 362.1
 2021 : 365.0
 2020 : 456.9
 2019 : 596.5
 2018 : 672.3
 2017 : 738.1
 2016 : 808.2
 2015 : 851.3

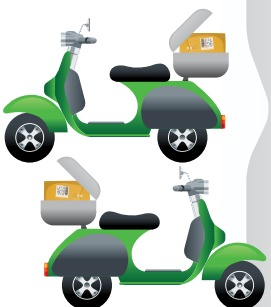
NUMBER OF POST OFFICES



2022 : 865
 2021 : 788
 2020 : 810
 2019 : 896
 2018 : 914
 2017 : 921
 2016 : 927
 2015 : 930

COURIER TRAFFIC DOMESTIC DOCUMENTS

MILLION



2022 : 61.0
 2021 : 94.6
 2020 : 107.3
 2019 : 91.6
 2018 : 87.3
 2017 : 52.8
 2016 : 47.2
 2015 : 33.2

NUMBER OF COURIER LICENCES



2022 : 120
 2021 : 122
 2020 : 106
 2019 : 104
 2018 : 119
 2017 : 128
 2016 : 112
 2015 : 88

COURIER TRAFFIC DOMESTIC PARCELS

MILLION



2022 : 617.8
 2021 : 623.2
 2020 : 303.2
 2019 : 120.3
 2018 : 85.7
 2017 : 34.3
 2016 : 23.7
 2015 : 18.6



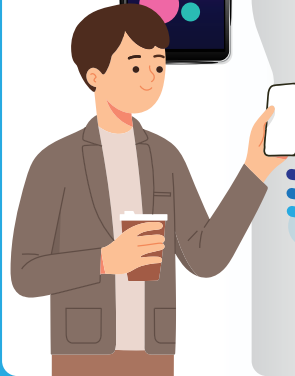
Communications and Multimedia

PENETRATION RATES: MOBILE - CELLULAR PER 100 INHABITANTS



2022 : 145.4%
 2021 : 142.1%
 2020 : 133.6%
 2019 : 135.4%
 2018 : 130.2%
 2017 : 131.2%
 2016 : 139.9%
 2015 : 143.8%

PENETRATION RATES: MOBILE-BROADBAND PER 100 INHABITANTS



2022 : 131.0%
 2021 : 124.1%
 2020 : 118.7%
 2019 : 123.7%

PENETRATION RATES: PAY TV PER 100 HOUSEHOLDS



2022 : 80.6%
 2021 : 80.0%
 2020 : 83.4%
 2019 : 86.3%
 2018 : 87.6%
 2017 : 83.6%
 2016 : 78.6%
 2015 : 73.7%

PENETRATION RATES: FIXED BROADBAND PER 100 PREMISES



2022 : 47.6%
 2021 : 41.9%
 2020 : 37.2%
 2019 : 32.8%



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