DIGITAL PULSE

A SPOTLIGHT ON THE DIGITAL HUB OF ASEAN

MALAYSIA'S RISE AS A GENERATIVE AI POWERHOUSE: VOX'S VISION AND THE NATION'S BOLD LEAP FORWARD

Metaverse Campus: Perspectives on Social Benefits for Malaysians

Cyber Security: The Spine of Digital Transformation

Seizing US$2 Trillion Digital ASEAN Opportunities: How China Can Leverage Malaysia's Advantage
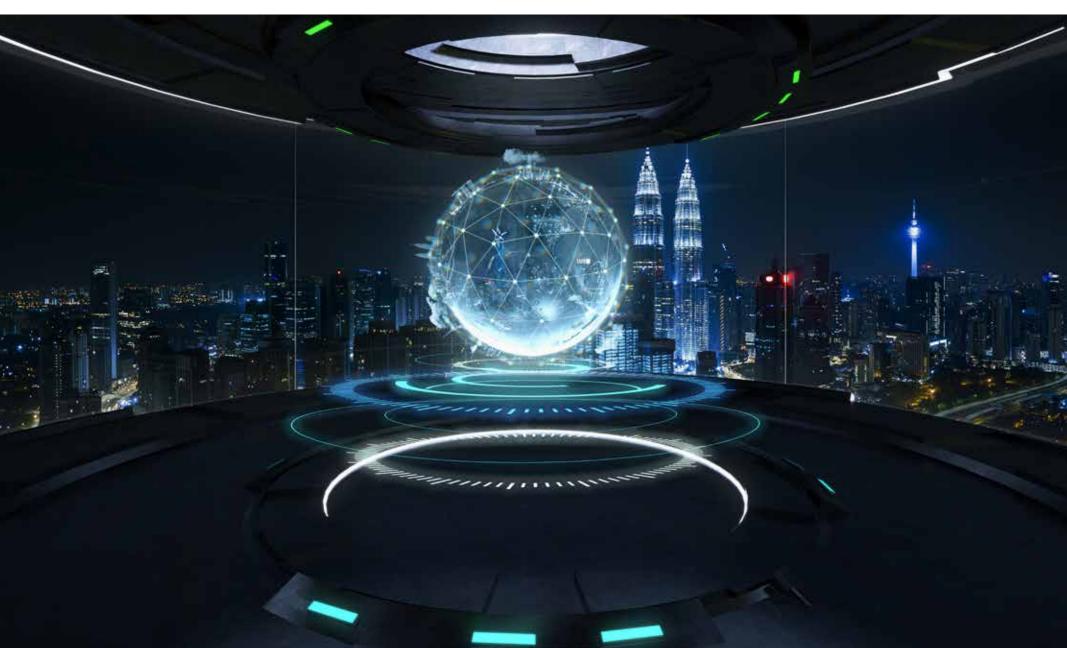
ABOUT MDEC

ABOUT MALAYSIA DIGITAL ECONOMY CORPORATION (MDEC)

Malaysia Digital Economy Corporation (MDEC), a government agency under the purview of the Ministry of Communications and Digital, was established in 1996 to lead Malaysia's digital economy. Beginning with the implementation of the MSC Malaysia initiative, we have since then catalysed digital transformation and growth all over the nation. By offering greater incentives and governance for growth and re-investment, we aspire to bolster Malaysia's status as the digital hub of ASEAN, opening new doors and driving shared prosperity for all Malaysians.

Malaysia's central geographical location in ASEAN, its young and digitally-savvy population, multicultural and multilingual tapestry, easy access to capital and regional markets, ease of doing business, certainty of business operating environment and legal system, comparative value and high standard of living, makes it the natural choice to land and grow your digital business here.

CONTENTS

09

12

05

16

FOREWORD

TS. MAHADHIR AZIZ,
CEO of MDEC

"INNOVATION IS THE CALLING CARD OF THE FUTURE, AND DIGITAL TRANSFORMATION IS THE PATH TO PROGRESS."

QUOTED by Reed Hastings, Co-Founder and CEO of Netflix, we look forward to a collaborative world where humans work hand-in-hand with technology to ease the day, as new technology is the beating heart of the digital sphere. However, in the ever-shifting landscape of today's world, one constant remains: change.

The world as we know it has undergone a seismic shift, accelerated by the increasing digital transformation that has tested the fabric of our societies and economies. The technological innovation we have now serves as a powerful catalyst, thrusting us into a future that we had only glimpsed in the realm of science fiction. Businesses and institutions that had invested in digital transformation found themselves better equipped to adapt and thrive in the face of adversity.

In the latest edition of Digital Pulse, we set out on an exploration through the continuously expanding domain of the digital sector. MDEC spoke with VOX Asia, where the company embraces new tech in Generative AI and continues to explore the ranges. They recognise the quality of local tech talent and will work closely with the government to make Malaysia a Generative AI Hub.

Industries as varied as healthcare, finance, manufacturing, and education are undergoing profound changes. Companies are embracing cloud computing, artificial intelligence, and data analytics to optimise operations. Additionally, academic institutions are adopting changes by introducing ideas like Metaverse Campus, which allows students and lecturers to interact virtually in a campus setting. In this edition, we further share how Malaysia has maintained its position as the location of choice for digital tech and services companies from China to land and expand in ASEAN through collaborations with our agency.

Digital transformation is not a luxury; it is a necessity. It is not just about keeping pace with the times; it is about forging ahead as architects of the future. As we navigate this new world, we must harness technology's immense potential to reshape our industries, empower our communities, and address the pressing challenges that confront us.

We hope to provide valuable information for potential investors to understand this vibrant nation's investment landscape. Reach out to us today! Happy reading.

MALAYSIA'S RISE AS A GENERATIVE AI POWERHOUSE: VOX'S VISION AND THE NATION'S BOLD LEAP FORWARD

As the pioneering Generative AI startup powering Sharly.ai, VOX thrives within the rich ecosystem of Malaysia, aiming to set new standards in the industry

By VOX Asia

WHEN you think of the global tech hotspots, Silicon Valley, New York or London come to mind. However, it is imperative not to overlook Malaysia's untapped potential. Strategically positioned as a regional hub in ASEAN, which boasts the highest consumer digital adoption in the world, Malaysia is an attractive destination for innovators like VOX, the Generative AI startup behind Sharly.ai.

ACCORDING TO THE NEW INDUSTRIAL MASTER PLAN (NIMP) 2030, RECENTLY PUBLISHED BY THE MALAYSIAN GOVERNMENT, THANKS TO GENERATIVE AI, THE COUNTRY CAN ACHIEVE A BOOST OF 30% IN PRODUCTIVITY ACROSS ALL SECTORS BY 2030, UNLOCKING OVER US$113 BILLION IN ADDITIONAL PRODUCTION CAPACITY. ON A GLOBAL SCALE, GENERATIVE AI IS ESTIMATED TO ADD BETWEEN US$2.6 AND US$4.4 TRILLION ANNUALLY TO THE ECONOMY, ACCORDING TO A REPORT BY MCKINSEY.

Malaysia's rich cultural heritage represents a blend of tradition and innovation. This fusion, combined with a young and digital-savvy population and government vision executed by MDEC, aligns with VOX's mission to create a world where technology empowers and connects every human being. "Generative AI is not just a technological transition; it is a societal evolution. By understanding and engaging with it, we are opening a new chapter in human creativity and potential", said Simone Macario, CEO of VOX. In fact, the numbers paint a staggering picture.

The question is simple: What share of this astonishing figure can Malaysia capture? To answer this question, it is essential to understand the actual capabilities of Generative AI. The NIMP 2030 outlines the bold plan of establishing Malaysia as a Generative AI Hub by focusing on two main applications: manufacturing and public services. While these two sectors are essential drivers for the Malaysian economy, there are numerous additional use cases of Generative AI to consider.

What VOX has been doing thus far is proof that new tech can be developed in Malaysia and that Generative AI offers endless possibilities. Simone Macario's Startup is the first mover in Generative AI in ASEAN and the first Gen AI startup in Malaysia. They have been involved in developing proprietary Natural Language Processing (NLP) models and driving their adoption through business solutions, which are used by some of Malaysia's favourite retail leaders, such as Old Town White Coffee, A&W and Baskin Robbins.

IMPLEMENTATION OF GENERATIVE AI IN VARIOUS SECTORS:

- **Education:** Tailors learning experience, enables teachers to provide targeted support and institutions to enhance teaching.
- **Healthcare:** Accelerates drug discovery, personalises treatments and advances medical imaging.
- **Media:** Aids writers and creatives; blending human creativity with computational power.
- **Software development:** Boosts productivity, optimises code generation and system designs.
- **Retail:** Creates product recommendation tools or customer support.

FOSTERING TECH COLLABORATION

Recognising the untapped potential of young and digital-savvy Malaysians, VOX has taken active measures to nurture and grow local tech talent. By developing Sharly. ai, a no-code platform that empowers people to create their own Generative AI apps, they provide an avenue for young talents to work on the same cutting-edge technologies that are being developed in global tech hotspots like Silicon Valley. This initiative not only bridges the technological divide but also creates a robust ecosystem of local Generative AI experts.

VOX's pioneering work in Generative AI has drawn significant foreign investments, especially from Europe and the United States. These investments serve a dual purpose: they will bring in financial resources and also facilitate a transfer of knowledge, elevating Malaysia's standing in the technological world.

"

BY FOCUSING ON FOSTERING LOCAL TALENT AND LURING FOREIGN INVESTMENTS, VOX IS PLAYING A CRITICAL ROLE IN ESTABLISHING MALAYSIA AS A GENERATIVE AI HUB. WE BELIEVE THAT THE CARDS ARE BEING RESHUFFLED RIGHT NOW, AND GENERATIVE AI IS THE OPPORTUNITY TO DEVELOP NEW, DIGITAL-DRIVEN ECONOMIES.

SIMONE MACARIO,
CEO OF VOX

Unified goals and proactive stakeholders, including VOX – drive success.

In terms of user base, Sharly.ai is not confined to just the Malaysian demographic. Sharly.ai is currently being used in over 60 countries – it is "Made in Malaysia for the World". By creating groundbreaking technology on Malaysian soil and exporting it to the global market, VOX manages to bring international attention to the country as an emerging hub for technological innovation.

In essence, VOX aims to set new standards in the industry and show that Malaysia can be a significant contributor to the development of new technologies rather than merely an adopter. By focusing on fostering local talent and luring foreign investments, VOX is playing a critical role in establishing Malaysia as a Generative AI Hub. "We believe that the cards are being reshuffled right now, and Generative AI is the opportunity to develop new, digital-driven economies" Simone Macario said.

TRANSFORMATIVE JOURNEY

As promising as this looks, making Malaysia a Generative AI Hub is a challenging endeavour. Achieving this vision requires planning, but execution is even more crucial. Speed is of the essence in the fast-paced world of technology, where delays can result in missed opportunities and diminished competitive advantage.

All stakeholders, from government agencies to investors and companies like VOX, must be aligned in their goals and proactive in their roles. It is essential to have a clear roadmap, with each actor understanding their parts in the larger picture. VOX is committed to being a catalyst in this transformative journey. The company is not just keen to contribute technological know-how but also to assist the Malaysian Government in developing and executing a comprehensive plan to realise the country's aspirations of becoming a Generative AI Hub. The future waits for no one, and every moment counts in this race towards technological empowerment.

Generative AI is one of the hot topics discussed at the upcoming Malaysia Digital Expo 2023 (MDX 2023) - a six-week-long empowerment platform that brings together the very best of Malaysia's digital economy. Find out more about MDX 2023 at mdec.my/mdx.

MDX

A SERIES OF MALAYSIA'S PREMIER TECH EVENTS

25th September - 8th November 2023
NATIONWIDE

Discover and Immerse Yourself in MDX 2023

Explore MDX 2023, a transformative six-week experience into the heart of technology. Immerse yourself in the finest nationwide tech events, including auxiliary events, conferences, exhibitions, launches, business networking, and an exclusive industry awards dinner. Unite with distinguished speakers and esteemed panellists from local and international organisations to chart the course for a tech-driven future.

MDX GRAND FINALE
6TH - 8TH NOVEMBER 2023
MITEC, KUALA LUMPUR

Conference Ticket Pricelist

Purchase your conference ticket today through Evenesis, the official event platform.

Ticket Tiering	Single Day Pass	Three Day Pass
NORMAL	RM500	RM1,200
SPECIAL*	RM350	RM900
BULK 5	NA	RM5,500
BULK 10	NA	RM10,000

*For MD Companies & Acadamia Only
Read the Term & Conditions **HERE.**

BUY YOUR TICKET NOW >

What You Will Get at MDX Grand Finale

EXPLORE the digital ecosystem

GAIN understanding from opinion leaders

NETWORK and engage for business expansion

DISCOVER MDX 2023 HERE >

METAVERSE CAMPUS: PERSPECTIVES ON SOCIAL BENEFITS FOR MALAYSIANS

Written by Dr Glaret Shirley Sinnappan, Senior Lecturer, Faculty of Computing and Information Technology at TAR UMT

THE Metaverse represents an innovative educational frontier for Malaysians, providing a concurrent virtual realm designed for academicians and students. Conceived as the Metaverse Campus (MC), this concept aims to transition traditional physical classrooms into a virtual platform which enables students from across the globe to partake in classes and events seamlessly.

The findings reveal that the Malaysian academicians' view on MC's accessibility perspective is to endorse globalisation, increase cooperation between academicians and students, provide the best user experience, protect security, and endow interfaces for target audiences from cross-world ecosystems. The academicians believe this will augment daily campus lives using senses such as touch, sight, sound, and smell in the future. They agree that the MC infrastructure is imperative to sustain excellent communication, processing, computation, rendering, simulation, storage, resource management, and operating systems.

A study was conducted among 25 academicians from Malaysia hailing from local and private tertiary institutions using the Fuzzy Delphi Method (FDM). This study is aimed to get consensus regarding MC from the accessibility, diversity, equality, and humanity perspectives.

Virtual Reality (VR), and Augmented Reality (AR) and it will be a learning environment which offers the right tools to provide an immersive experience for meaningful learning.

They agreed that MC will benefit various parties, such as providing students with teaching and learning experiences beyond the classroom, enabling parents to monitor their kids' progress, and encouraging educational institutions to build reliable and accurate virtual and augmented environments. It is expected to support digital twin representatives between the physical and digital worlds.

The academicians also support that MC can provide various avatars that will permit lecturers and students to control the orientation of their bodies and eyes using node points for each human body part, such as elbows, legs, shoulders, hands, feet, etc. It should also be able to demonstrate the holistic scenes to lecturers and students using stereo-matching and depth estimation techniques. This will support lecturers and students in understanding their roles, contents, objects, and attributes, such as distance, characteristics, and actions, across different metaverse worlds.

MC will also be able to provide various interactions between lecturers and students, such as sharing access to assignments, announcements, events, lessons, timetables, and feedback. Lecturers and students will benefit from mobility needs, increased attendance, self-paced practices, content reviews, and science experiments in a virtual lab. Using the new Metaverse educational technology, MC is perceived to provide diverse career paths and orientations in a way that maximises benefits for current and future higher education students.

> **WE BELIEVE THAT MC SHOULD BE A PLATFORM THAT IS ACCESSIBLE, DIVERSE AND INCLUSIVE. IT WILL ALSO PROVIDE A SAFE SPACE WHERE LECTURERS AND STUDENTS CAN REPORT MALICIOUS USERS' BEHAVIOURS AND MALPRACTICES USING THE DECENTRALISED AUTONOMOUS ORGANISATION (DAO).**
>
> **DR GLARET SHIRLEY SINNAPPAN,** SENIOR LECTURER, FACULTY OF COMPUTING AND INFORMATION TECHNOLOGY AT TAR UMT

From the academicians' point of view, they anticipate MC to consist of characteristics such as the ability to provide twin learning environments, virtual learning worlds, world simulators, learning service providers, blockchain, learning augmentation, Haptic or 3D touch, supportive apps, personal life recording, financing, sensation devices, Non-Fungible Token (NFT), and User-Generated Content (UGC). However, the academicians do not consider that MC will decrease operational costs compared to the operating cost of a physical campus.

From the diversity perspective, the academicians consider that MC will provide features and functionalities that support technologies of Extended Reality (XR),

MC IN PROMOTING EQUALITY

- To provide a platform that allows lecturers and students to use their avatars without focusing on elements such as language, race, gender, disability, social status and ethnicity.
- To support eliminating discrimination and promoting equality for lecturers and students.
- To provide acceptance of lecturers and students from various backgrounds from international campuses.

The academicians trust that MC will be an autonomous ecosystem that promotes equality, opportunities and respect for lecturers and students. With such positive effects, students are expected to contribute full participation in all campus activities.

Lastly, from the humanity perspective, MC is expected to harness positive humanistic values and opportunities among Malaysian lecturers and students. It can gather a community from diverse backgrounds and beliefs, which will enhance the transfer of knowledge and experience within a community.

We believe that MC should be a platform that is accessible, diverse and inclusive. It will also provide a safe space where lecturers and students can report malicious users' behaviours and malpractices using the Decentralised Autonomous Organisation (DAO).

However, the academicians disagree that MC will be a platform that will preserve different cultural and artistic forms focused on society, humanity, spirituality, and culture. In addition, they do not think that MC will ensure significant ethical issues such as violating individual privacy, issues on data protection, bullying and scamming will be preserved. The academicians find it challenging to maintain users' fundamental rights to use avatars created to suit everyone's choice to show the importance of culture and cultural activities, norms, and communication values in the Metaverse worlds.

Tunku Abdul Rahman University of Management and Technology (TAR UMT), as a Premier Digital Tech Institution (PDTI), will continue to provide quality education for Malaysian students in the future. This is why it is essential to study the needs and expectations of Malaysian academicians regarding MC in terms of its accessibility, diversity, equality, and humanity perspectives aimed at Malaysian students. This is a way to support PDTIs' vision.

To learn more about the PDTIs and MDEC's talent initiatives, please visit mdec.my/pdti.

SEIZING US$2 TRILLION DIGITAL ASEAN OPPORTUNITIES: HOW CHINA CAN LEVERAGE MALAYSIA'S ADVANTAGE

By Raymond Siva, Senior Vice President, Digital Investment, MDEC

IT has been 10 years since the Belt and Road Initiative (BRI) was first launched, and in that time, the global business landscape has changed tremendously. Malaysia has long been supportive of the infrastructure development strategy since its inception, with the BRI serving as a catalyst for fostering economic connectivity and forging more robust partnerships across Asia and beyond.

Much has been written about the BRI, including arguments for and against it. What remains however, is the strong trade relationship between Malaysia and China. Malaysia's Ministry of Investment, Trade and Industry's Trade & Investment Mission to China from 31 March to 2 April 2023 generated MYR 170 billion (CNY 262.8 billion) of potential FDI from China and MYR 2.44 billion (CNY 3.8 billion) of potential exports to China. Malaysia has also been a major trading gateway in the Digital Silk Road, as the country continues to experience a surge of Chinese capital in the digital economy.

Let's look at just how far Malaysia and China's relationship has come regarding digital investments.

MALAYSIA, THE PREMIER INVESTMENT DESTINATION

Malaysia has maintained its position as the location of choice for digital tech and services companies from China to land and expand in ASEAN. According to Malaysia Digital Economy Corporation's (MDEC) records as at the end of 2021, Chinese companies with MSC status have recorded a total investment value of more than MYR 1.3 billion (over CNY 2 billion) into Malaysia. Since July 2022, the MSC status has been revamped to Malaysia Digital (MD).

MD is the new national strategic initiative by the government, building on the strong foundation established via MSC Malaysia - a national initiative established in 1996 towards transforming Malaysia into a leader in the knowledge-based economy. MD aims to encourage and attract companies, talents and investments while enabling Malaysian businesses and its people to play a leading part in the global digital revolution and digital economy.

RAYMOND SIVA,
SENIOR VICE PRESIDENT,
DIGITAL INVESTMENT,
MDEC

Chinese digital tech and services companies that have contributed to the investment figure include Huawei Technologies, Alibaba Cloud, Beyondsoft and China Mobile International, among others. In 2022, there was a 24% Y-o-Y increase in the number of Chinese companies awarded the MD status.

DRIVING INVESTMENTS WITH MALAYSIA DIGITAL

What makes Malaysia so attractive that more and more such companies are deciding to invest in the country?

Malaysia ranked first in emerging Southeast Asia as the country with the most potential to attract FDI in the Milken Institute's Global Opportunity Index 2022, and this can in part be attributed to the various initiatives implemented under MD. The MD status offers fiscal and non-fiscal initiatives to local and international tech companies to encourage them to operate, grow, expand, or invest anywhere in the country.

Malaysia is also home to a mature and innovative digital ecosystem and infrastructure, on top of being an excellent location for business continuity while companies enjoy the value-driven cost of doing business.

Additionally, MDEC's Global Testbed Initiative (GTI) enhances Malaysia's position as a digital technology hub by attracting foreign and local companies to testbed and validate their digital solutions in Malaysia. The objectives of GTI include catalysing high-value activities that align with MD aspirations and establishing a friendly ecosystem for new digital technologies and business models.

Another crucial pull factor is Malaysia's highly skilled, digitally savvy and multilingual talent pool. This is evident by the country achieving a ranking of third globally in the Graduates in Science & Engineering sub-index in the WIPO Global Innovation Index 2022 and obtaining the fourth spot globally in high-value exports of global knowledge skills according to the INSEAD Global Talent Competitiveness Index 2022. To ensure Malaysia has a robust and sustainable digital talent pipeline to support industry growth, MDEC is championing end-to-end talent and capability initiatives that span across programmes catered to school and tertiary students and the existing workforce. These include the Let's Learn Digital upskilling program, industry-academia collaboration through the Premier Digital Tech Institutions (PDTIs) and the #mydigitalmaker movement to transform Malaysian youth from digital users to producers in the digital economy.

MDEC's talent initiatives extend over its relationship with China as well - proof of a two-way understanding of the importance of talent. Last year, the Alibaba Netpreneur Training Programme, powered by Alibaba Global Initiatives in partnership with MDEC and Malaysia External Trade Development Corporation (MATRADE), offered entrepreneurs and business owners an opportunity to learn and explore how to harness digital technology to thrive through a four-week online training.

In 2022, to promote digital professional mobility and tourism across Malaysia, MDEC introduced the DE Rantau programme, aimed at establishing Malaysia as the preferred digital nomad hub in ASEAN. Through DE Rantau, foreign and local digital nomads can travel and work remotely across various locations in Malaysia, while having access to stable broadband connectivity and various other facilities and services supporting the nomadic lifestyle.

With the increasing focus on environmental, social and governance (ESG) globally, as part of the commitment to create a sustainable, carbon-neutral digital economy in Malaysia, MDEC developed the Malaysia Digital Climate Action Pledge (MDCAP) to support sustainability adoption by businesses across the digital economy.

A REGIONAL DATA CENTRE HUB
Over the recent years, Malaysia has also proven itself to become a regional data centre hub - and for good reasons. Strong domestic and international connectivity, ease of doing business, progressive data governance and the availability of highly reliable energy are key ingredients to the country's success in attracting data centre players. Availability of land, incentives, strong and growing market demand, and a low incidence of natural disasters add to Malaysia's appeal. In the Knight Frank SEA-5 Data Centre Opportunity Index 2023, Malaysia has become the most attractive destination for data centre investments.

THERE HAS BEEN AN INFLUX OF CHINESE DATA CENTRE COMPANIES' INVESTMENTS IN MALAYSIA RECENTLY, INCLUDING FROM THE LIKES OF BYTEDANCE, BRIDGE DATA CENTRES AND GDS HOLDINGS.

DEVELOPING GREATER COLLABORATION
The China Plus One strategy also needs to be included in the Malaysia-China investment relationship discussion. Tech companies can now clearly see the potential of Malaysia as an ideal '+1' destination, thus contributing to the FDI inflows into Malaysia, while also fully leveraging existing good relationships with China.

As China and Malaysia forge stronger partnerships, implementing the Regional Comprehensive Economic Partnership (RCEP) opens more opportunities for both nations. The world's biggest free-trade agreement by population and GDP is expected to eliminate about 90% of the import tariffs between its signatories within 20 years of implementation. Malaysia is also a signatory of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), and we look forward to China's active participation in the trade agreement.

With the economic reopening of China post-pandemic and the growing geopolitical tensions between China and the West, a rising number of Chinese businesses are now eyeing the competitive Southeast Asian region for international expansion more keenly.

DIGITAL HUB OF ASEAN

With a combined population of over 666 million and an estimated total GDP of all states amounting to approximately USD 3.66 trillion - a significant increase from the previous years, ASEAN ranks as the fifth largest economy globally. The region also has the world's third-largest workforce.

ASEAN's digital economy meanwhile is projected to reach USD 2 trillion by 2030, and the sector is forecasted to contribute around 28% to ASEAN's GDP. I'm proud that Malaysia is strategically positioned at the core of digital ASEAN, making it the launchpad of choice for companies to springboard into ASEAN.

MDEC, as Malaysia's lead Investment Promotion Agency for digital investment, is committed to supporting the growth and expansion of tech companies at all stages, assisting them to land and expand in Malaysia and beyond. Please reach out to MDEC (mydigitalinvestment.gov.my) and learn how to get started on this process.

We welcome you to make Malaysia your digital home in ASEAN.

CYBER SECURITY: THE SPINE OF DIGITAL TRANSFORMATION

By Murugason R. Thangaratnam, Executive Chairman of Advanced Security Network and Chief Executive Officer of Novem CS

POST-PANDEMIC, it goes without saying that cyber security teams have a lot on their plate, and you would be forgiven for feeling we live in an age of permanent crisis and paranoia, driven by rising geopolitical tensions, mass digitalisation, hybrid work, and a skilled labour shortage. While a new era of almost limitless connectivity is changing the way we live, work and produce, we are struggling to adapt to the rising threats posed by malicious actors and the borderless cyber threat attack surface.

As cyber breaches continue to grow exponentially and malicious actors continue to evolve, new verticals are becoming their targets. Today, the automobile industry should be just as concerned about a supplier or its equipment being infected with malware as a malfunctioning part. The pandemic changed working patterns, and a hybrid approach has become the norm for many businesses; employees are just as likely to work from another country as they are from the office. At the same time, data flows outside traditionally closed networks and into the cloud, while the 5G-powered Internet of Things (IoT) means that equipment is cloud-centric, too.

The battle is not how to effectively implement a secure digital transformation programme but the mindset transformation required to accept and execute it. The typical size of an IT team in an enterprise is almost always disproportionate to the size and revenue generated, making it virtually impossible to monitor and analyse all aspects of the environment. However, the upside is that more organisations and governments are waking up to the value of cyber security investment over the last couple of years. This is reflected in global spending, which Gartner estimates could be as high as $1.75 trillion by 2025.

❝

MORE ORGANISATIONS AND GOVERNMENTS ARE WAKING UP TO THE VALUE OF CYBER SECURITY INVESTMENT OVER THE LAST COUPLE OF YEARS, WHICH GARTNER ESTIMATES COULD BE AS HIGH AS $1.75 TRILLION BY 2025 IN GLOBAL SPENDING.❞

MURUGASON R. THANGARATNAM,
EXECUTIVE CHAIRMAN OF ADVANCED SECURITY NETWORK AND CEO OF NOVEM CS

This year, it was approximately $172 billion, and investment is paying off in some areas like data analytics. Security teams are becoming increasingly effective at proactively detecting and mitigating cyber threats, with the added power of data and automation also playing more of a role.

Traditionally, cyber security has been framed as an ongoing battle between hackers and criminals on the outside and security experts on the inside. It is easy to frame organisations as closed shops, and this narrative is reflected in popular culture. However, the reality is much more complex. To secure against evolving cyber threats, businesses moving forward must

adopt advanced security technologies, continually test and update controls and educate employees on cyber risks. Cyber security must be integrated into software, system design, coding and implementation. Employee awareness and reporting of anomalies to IT administrators can greatly reduce the risk of a successful attack. Proactive cyber security minimises the impact of cyberattacks and can strengthen customer trust, reputation and business growth.
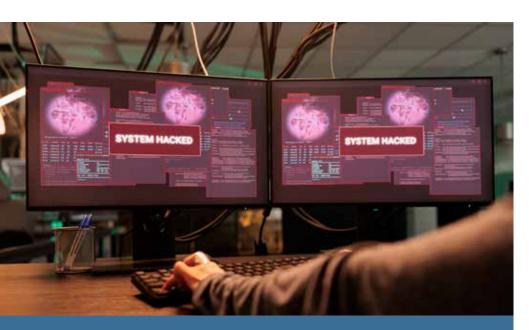
Malaysia is also undergoing a major transformation and finding its place in the digital world. Despite robust cyber security measures, the country faces challenges securing its vast digital landscape.

CYBERATTACK CASES

Fortinet's Southeast Asia and Hong Kong vice-president, Peerapong Jongvibool, noted that the attacks included viruses, botnets, and exploits detected by FortiGuard Labs' cyber security solutions, ranking Malaysia among the most vulnerable locations in the region. According to FortiGuard Labs, Malaysian cyber threats in the fourth quarter of 2022 included 61.1 million virus detections, 50.2 million botnet attacks, and 7.5 billion exploit detections.

Furthermore, Malaysia fell victim to multiple cyberattacks last year, including data theft from a national registry and a payment gateway data breach. A group known as the "grey hat cyber security organisation" broke into a payslip system, extracting nearly two million payslips and tax forms, stealing up to 188.75 gigabytes of data, and highlighting system vulnerabilities.

Such cyberattacks reveal that many Malaysian organisations lack proper cyber security measures, leaving them vulnerable to malware, ransomware, and phishing threats.

MEASURES TO TACKLE ORGANISATIONAL CYBERATTACKS

- Cyber security has to be approached from a risk and governance standpoint and is a key indicator of management quality.
- The first line of defence against cyber threats begins with proactive defence measures, not reactive ones, as is often the case.
- Be vigilant, monitor networks for unusual activity and regularly update and patch their software.
- Developing a comprehensive incident response plan or playbook is crucial to achieving cyber resilience.
- Define roles and responsibilities during a cyber incident, provide step-by-step procedures for identifying and addressing breaches, and incorporate regular training and simulation exercises to prepare employees.

As cyber threats become increasingly sophisticated, so must the knowledge and awareness of employees. Regular training, for example, using an e-learning platform on recognising potential threats such as phishing emails, implementing strong password policies, and understanding the importance of regularly updating software can significantly reduce an organisation's vulnerability to cyber-attacks. Creating

a culture of cyber security awareness requires ongoing communication, training, and leadership support, including board level. By adopting these approaches and committing to continuous improvement and adaptation in the face of evolving threats, Malaysia can build a more resilient cyber ecosystem and significantly reduce cyberattacks' impact on its digital landscape.

Proactive agencies like MDEC, who drive the agenda with the National Cyber security Agency (NACSA) and Cyber security Malaysia (CSM), have been deploying aggressive push towards making cyber security an integral part of the transformation process and a critical pillar of national security. Today's government has also been sending the right messages to protect its citizens' privacy and digital security.

CYBER SECURITY AWARENESS AND FDI
Based on a recent study by the Department of Skills, The Centre for Instructor and Advanced Skill Training (CIAST) and Cyber Security Malaysia, the country needs 27,000 cyber security knowledge workers by the end of 2025. This must be addressed to support the national ecosystem and make Malaysia an attractive investment destination for international cyber security companies. Foreign direct investment (FDI) catalyses digital economy development, which cyber security is a crucial part of. With competition increasing as countries announce various FDI-attractive policies, policymakers must think strategically, not tactically. Malaysia should actively direct investments into targeted cyber security services with a focused approach.

Sharing session on cyber resilience and cyber hygiene organised by the Malaysian Dutch Business Council (MDBC) and hosted by Malaysia Digital Economy Corporation (MDEC).

FDI into cyber security requires alignment in several functions and measures addressing regulatory bottlenecks, including pro-competition policies and avoiding agencies working in a silo; and broader higher education/training; bottlenecks in labour supply with regards to skills mismatch; better data privacy policies; and adequate incentives to facilitate retention of skilled workforce are essential.

Better cyber security could further bolster the country's economy and capability. The government must have a comprehensive strategy and a concerted approach to ensure security within cyberspace and engender trust in the use of digital services, bearing in mind the increased proliferation in the use of ICT on a national level, the increasing economic importance of technology as well as the envisaged use of emerging technologies such as cloud computing, generative AI, Big Data and IoT.

Investment policies, incentives, and the investor pitch must resonate with the country's unique strengths – business ecosystem, political stability, excellent infrastructure, and technological capabilities.

One of the ultimate goals is to establish coordinated structures to protect national information infrastructures and to establish a national cyber risk assessment plan to identify gaps and strengthen the capability to investigate and combat cybercrime.

OCTOBER IS

CYBER SECURITY
AWARENESS MONTH

Protect your devices and data. Stay informed and vigilant against diverse security threats.

IN CASE YOU MISSED IT

| Business and tech news round-ups

Malaysia Secures RM37.4 Billion Investment Commitments in Digital Sector

As of August 2023, Malaysia has secured over RM37.4 billion in investment commitments in the digital technology sector, promising the creation of at least 15,895 high-value jobs, according to YB Fahmi Fadzil, Minister of Communications and Digital. He said this remarkable achievement reflects foreign investors' confidence in Malaysia Digital (MD), the national strategic initiative driving the digital economy. YB Fahmi Fadzil mentioned this when officiating the Malaysia Digital Expo (MDX) 2023, an event led by MDEC. MDX 2023 is a key initiative under MD which aims to position Malaysia as a leading digital nation in the ASEAN region.

Demand Shift from China Helps Malaysia's FDI, Says Moody's

Moody's Analytics stated that Malaysia, Indonesia and Thailand will likely attract more foreign investments as companies look to "deconcentrate risk away from China". This move is driven by global demand shifting from China towards North America, prompting other Asian nations to seek fresh investment opportunities. The Asia-Pacific economy, it said, is experiencing a slowdown due to various factors. They include sluggish global trade, uncertainties surrounding China's post-pandemic economic recovery, elevated interest rates, and certain fiscal policy adjustments.

Malaysia Well Positioned to Lead Economic Opportunities in ASEAN, Says Deputy Minister

Malaysia is well positioned to lead economic and industrial opportunities within the ASEAN region via the initiatives outlined under the Madani Economy Framework, New Industrial Master Plan (NIMP 2030) and National Energy Transition Roadmap (NETR) that serve as catalysts to attract high-value investments, said YB Liew Chin Tong, Deputy Investment, Trade and Industry Minister. As a gateway to ASEAN, the deputy minister said Malaysia is well equipped with an English-speaking workforce, a stable political climate, an established Common Law framework and a mature business environment.
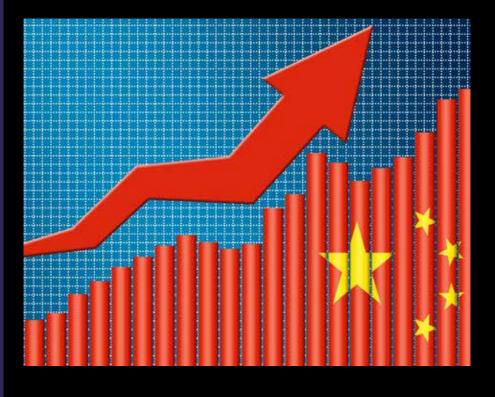

ASEAN to Usher in Golden Era of Economic Prosperity in Closer Partnership with China

The China-ASEAN relationship has been showing a sound momentum of all-round development. China's engagement with ASEAN is deep and varied, most prominent economically. China's organic economic linkages with ASEAN economies have resulted in China's economic performance having a strong impact on ASEAN's economic prospects. Both sides have become each other's largest trading partners, with trade volume in 2022 almost topping $1 trillion, an increase of 11.2% year-on-year and more than double the volume a decade ago. China is also one of the largest sources of foreign direct investment in ASEAN.

ASEAN to Stay Priority for China's BRI Investment despite Slowdown

Economists say that despite slowing growth at home, Southeast Asia will remain an investment priority for China and a core target for its Belt and Road Initiative (BRI). Beijing views the region as geopolitically important to counter US influence. Southeast Asia is also an essential source of critical minerals, including nickel, for China's green technology and electric vehicle ambitions. Investment and construction contracts under the BRI to ASEAN countries averaged around $27.9 billion from 2015 to 2019 before falling to $10.8 billion in 2021. Last year, they rebounded 72% to $18.6 billion, according to a July report by Maybank Singapore.

EVENTS HIGHLIGHT

Glimpses of what matters: Coverage of MDEC's engagements and initiatives

2023

04 AUGUST

INAUGURATION OF ERICSSON'S 5G EQUIPMENT MANUFACTURING
YB Tuan Syed Ibrahim Syed Noh, Chairman of MDEC, and Ts. Mahadhir Aziz, CEO of MDEC, had the honour to witness the inauguration of Ericsson Global 5G Equipment Manufacturing in Malaysia held in Penang. The production was inaugurated by YB Teo Nie Ching, Deputy Minister of Communications and Digital, YAB Tuan Chow Kon Yeow, Penang Caretaker Chief Minister, and His Excellency Dr Joachim Bergstrom, Swedish Ambassador to Malaysia.

08 AUGUST

SHARING SESSION AT BANGLADESH STARTUP SUMMIT
MDEC had the opportunity to attend the Bangladesh Startup Summit in Dhaka, Bangladesh and share insights into Malaysia's journey in the investment ecosystem and driving digital economy advancement. The team was honoured to meet with Her Excellency Haznah Md Hashim, High Commissioner of Malaysia to Bangladesh, and shared about Malaysia Digital and MDEC's role in supporting the expansion of Malaysian tech companies.

10 AUGUST

OHSEM MARKETING 360 LAUNCH
Ts. Mahadhir Aziz, CEO of MDEC, had the honour to be part of the launch of OHSEM Marketing 360 launched by YB Fahmi Fadzil, Minister of Communications and Digital. MDEC, Dattel Asia Group and Media Prima will launch the Ohsem Digital Advertising Fund worth RM21 million to encourage 1,000 SMEs to implement advertisements on local content platforms.

09-11 AUGUST

IMPACTFUL INDUSTRY ENGAGEMENT SESSIONS

The MDEC team conducted productive industry gathering sessions in the month of August:

A. Digital healthcare industry players shared their valuable input and feedback on what is needed to move the industry forward, especially in terms of accelerating digital adoption in the sector at MDEC's Bangsar South office.

16 AUGUST

ESGAM AWARENESS EVENT & MOU SIGNING WITH PIKOM

Raymond Siva, Senior Vice President, Digital Investment, MDEC, shared his insights on topics such as balancing profitability and sustainability at the ESG Association of Malaysia (ESGAM) Awareness Event and MoU Signing with PIKOM, the National Tech Association of Malaysia, which took place at the ESGAM office in Kuala Lumpur.

C. An industry session took place at Common Ground Jaya One, Petaling Jaya, between the Malaysia IoT Association members and the MDEC Digital Investment and MDEC PEMANGKIN teams - comprising teams from Digital Agriculture, Digital Cities, and Digital Health. Participants took part in an insightful sharing session on possible opportunities for the association members to accelerate digital investments.

B. The Web3 community took part in a session co-organised between Tencent Cloud and MDEC at Common Ground Bukit Bintang, where discussions about the Malaysia Digital initiative and how blockchain technology can impact businesses took place.

16 AUGUST

NATIONAL E-INVOICING ENGAGEMENT SESSION WITH SERVICE PROVIDERS

The National e-Invoicing Initiative, part of Malaysia Digital's PEMANGKIN Digital Trade programme, recently held a productive e-Invoicing engagement session with service providers at the MDEC HQ in Cyberjaya. Over 150 service providers participated in the discussion on implementing interoperable e-Invoicing in Malaysia. Companies can take part in this initiative, and the guidelines for becoming certified Malaysia Peppol Service Providers are targeted to be published by the end of the year.

21 AUGUST

PDTI COLLABORATION WITH UNIMAS

MDEC's Premier Digital Tech Institutions (PDTI) team collaborated with UNIMAS for the 3rd Quarter PDTI Deans Meeting and UNIMAS Research Open Day. Prof. Datuk Dr. Mohamad Kadim Suaidi, UNIMAS Vice Chancellor, inaugurated the event. This marked a milestone as it was the first offsite meeting for PDTI Deans beyond the Klang Valley.

22 AUGUST

CHAIRMAN ROADSHOW TO MDEC DIVISIONS

YB Tuan Syed Ibrahim Syed Noh, Chairman of MDEC, recently visited MDEC's Bangsar South office as part of his roadshow to MDEC's various divisions. Through this session, the Digital Investment and Digital Export teams gained a deeper understanding of MDEC's crucial role in the tech ecosystem while also taking the opportunity to ask light-hearted questions to YB Tuan Syed Ibrahim Syed Noh.

24 **AUGUST**

FORGING TIES WITH THE EMBASSY OF KAZAKHSTAN

The MDEC Digital Investment and Digital Export teams conducted a fruitful session with delegates from the Embassy of Kazakhstan and its e-commerce company, Tuku.kz, at MDEC's Bangsar South office, discussing possible collaborations to pave the way for stronger bilateral connections between Malaysia and Kazakhstan.

25 **AUGUST**

ISLAMIC DIGITAL ECONOMY CONFERENCE BY MDEC

MDEC successfully organised the MD PEMANGKIN Connects Islamic Digital Economy at Connexion Bangsar South. At the conference, there were significant MOU exchanges between MDEC and Halal Development Corporation and 15 IDE companies from digital finance and the Islamic digital economy were granted the Malaysia Digital (MD) status.

30 **AUGUST**

GBS TALK SERIES

The Global Business Services (GBS) Talk Series by MDEC's Digital Investment team kicked off at MDEC's Bangsar South office with a robust sharing session on the GBS landscape and strategies to move the industry forward. Esteemed industry association partners, including GBS Malaysia, Contact Centre Association of Malaysia (CCAM), and AIA Digital+, were present to contribute to the depth of the discussion.

TAKE IT EASY

Light takes on technology that makes the world go round

What's a computer's favourite snack?
- Microchips!

Why don't programmers like nature?
- It has too many bugs!

How did Microsoft Office get so famous?
- Due to good Word of mouth.

To find out more about MDEC's Digital Economy initiatives, please visit us at www.mdec.my or follow us on:

Facebook: www.facebook.com/MyMDEC/

Twitter: @mymdec

If you wish to contribute to Digital Pulse, please drop a mail to clic@mdec.com.my