



Technology Innovation In Asia

An InvestKL Whitepaper

GREATER KUALA LUMPUR



EXECUTIVE SUMMARY

Multinational corporations (MNCs) play a key role in innovation by contributing technology, ideas and fostering creative environments. Their support and investment is often crucial to the success of many small, medium sized enterprises (SMEs) and startups.

Greater Kuala Lumpur is a good example of a geographical area that is home to numerous MNCs that are innovation leaders in their fields, their presence helping to foster a community of entrepreneurs and new business leaders. But even large corporations with considerable resources for research and development (R&D) cannot innovate in a vacuum.

Whether at the MNC level or an SME/startup, businesses thrive on the entrepreneurial spirit present in a location. Local SMEs/startups address challenges by using creative technologies and solutions. MNCs can benefit from directly partnering with these SMEs/startups or indirectly from the talent pool that springs up around them, and the “can do” innovative culture and ecosystems that develop as a result.

MNCs need a steady and diverse supply of talent to ensure they have the brightest minds working on the most challenging problems.

Partnerships play a key role, as they tend to multiply the strengths and contributions of all stakeholders, from universities and government agencies to other private enterprises. A culture of innovation can only develop and deepen if there is a suitable ecosystem to support it. Greater Kuala Lumpur provides that infrastructure, supporting services and a dynamic culture that innovative companies require to build the digital future.

In this report, we discuss how talent, partnerships and infrastructure have contributed to the development of technology innovation in Greater Kuala Lumpur. We do this by examining how these factors have contributed toward the business growth of three MNCs that opted to set up in Greater Kuala Lumpur. We also look at two local high-tech SMEs/startups that are thriving and doing their part to foster innovation across the whole Asia-Pacific region.



1. TALENT



Help finding the right talent



Experienced tech skills



Home to large expat community



200,000 yearly graduates

The availability of talent is a key factor when it comes to attracting innovative MNCs, and Malaysia's universities, industry-support groups and the leading government agencies, such as InvestKL, offer comprehensive assistance to help them find the right talent pool.

Malaysia provides a large supply of talent with specific industry experience and technology skills. Greater Kuala Lumpur also has a reputation for being attractive to foreign talent, in addition to the large pool of international workers that already reside in the metropolis.

Greater Kuala Lumpur is home to a significant number of experts – in the mechanical, electrical and processing areas of the industrial-gas-production sector; IT developers and data scientists and software engineers; performance analysts and real-time engineers with data skills; and experienced cybersecurity, strategy and HR practitioners. Malaysia's talent has a strong sense of ownership when it comes to projects, is highly motivated and committed to learning and mastering new tools and methods.

Malaysia is home to a multi-cultural society, which means its workers are better placed to understand and accept diversity, and leverage the advantages of it when they are at work. When it comes to diversity youthful input is a crucial ingredient particularly for creating new products and services that are aimed at younger customers.

Malaysia has a young, multicultural population, and its fresh graduates bring creativity, enthusiasm and a vibrant sense of community to the workplace, inspiring learning within their work teams.

DIVERSITY IS OUR STRENGTH

"Innovation does not come from just one group of people. It needs the collective input from a diverse and inclusive workforce. Diverse in terms of age, gender, culture and nationality. Our teams are a wonderful mix of all the above and with an inclusive culture, everyone on the team is encouraged to contribute ideas and ask any questions, so that we can create the best-possible outcome for the problem." Accenture

One example of this strength in talent is Air Liquide's Smart Innovative Operations center, which opened in Greater Kuala Lumpur in January 2018. Air Liquide has hired more than 35 locals from various backgrounds, benefiting from their links to Malaysia's public and digital ecosystems. Greater Kuala Lumpur is also home to a large number of professionals who have worked abroad, enhancing their ability to operate in a diverse workplace.

Diversity promotes teamwork and ease of integration, producing a more productive and innovative work force. Enhancing the international appeal of this diversity is the fact that educated Malaysians are proficient in English, meaning they can translate local processes, systems and customs into the language of international business. In addition, according to Accenture as Malaysians grow up in a multi-cultural society, not only is working in a multi-national team not a problem, often they will send Malaysian workers to other countries as they are so adaptable to different work situations and can work well with different cultures.

"In Malaysia, where we have our Oracle Cloud Solution Hub housing the brightest and most-talented people to imagine and inspire solutions for our customers' real-world business problems, we seek out solution engineers with technical capabilities in the areas of emerging technologies like Blockchain, Internet of Things (IoT), Machine Learning, Artificial Intelligence (AI), Data Analytics, and Autonomous Databases." - Oracle

Accenture is a global professional-services company, providing a broad range of services and solutions in the areas of strategy, consulting, digital, technology and operations. We work at the point where business and technology intersect to help clients improve their performance and create sustainable value for their stakeholders. Accenture ASEAN comprises Indonesia, Malaysia, Singapore and Thailand.

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The Oracle Cloud offers a complete suite of integrated applications for Sales, Service, Marketing, Human Resources, Finance, Supply Chain and Manufacturing, plus Highly-Automated and Secure Generation 2 Infrastructure featuring the Oracle Autonomous Database.

For more information about Oracle, [please visit us at oracle.com](http://oracle.com).

Malaysia produces an average of 200,000 fresh graduates annually and 33% of this young talent move to Greater Kuala Lumpur upon graduation in the hope of securing better career opportunities. Malaysia ranked 3rd in the 2018 English Proficiency Index covering ASEAN countries. Many Malaysians come from multicultural backgrounds and ethnicities, and are fluent in English and Malay (the national language), and other languages such as Mandarin, Tamil, and various dialects. According to a 2018 report by the International Institute for Management Development (IMD), Malaysia was ranked 22, ahead of Japan, among the 63 countries included in its World Talent Ranking for 2018.



The world leader in providing gases, technologies and services for Industry and the Health sector, Air Liquide is present in 80 countries and has approximately 65,000 employees, serving more than 3.5 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide's scientific territory and have been at the core of the company's activities since its creation in 1902.

For more information about Air Liquide, [please visit us at Airliquide.com](http://Airliquide.com)

"We have been very impressed by the level of commitment and enthusiasm of these young Malaysians, and would like to acknowledge Malaysian universities for giving fresh graduates an excellent springboard for their professional careers." Air Liquide

Diversity promotes teamwork and ease of integration, producing a more productive and innovative work force.



MASTERING THE ART OF INTELLIGENT CONVERSATION – HYPERLAB’S UNIQUE AND INTELLIGENT CONVERSATIONAL AI SOLUTIONS STAND OUT BECAUSE THEY HAVE TRANSFORMED AUTOMATED RELATIONS – ADDING VALUE AND ENSURING HAPPY CUSTOMER EXPERIENCES ARE WHAT IT PRIDES ITSELF ON

The workplace as we know it is going through a significant evolution. More than ever, performance is key, and getting a deeper understanding of customer business needs is a must for any organization seeking to gain and maintain market share. Enter the fascinating arena of artificial intelligence (AI), which is proving to be the key component for businesses looking to create a differentiating and winning marketing strategy.

When it comes to the AI adoption rate, and for Malaysia in particular, a February 2019 study conducted by Microsoft and IDC shows that 70% of the business leaders interviewed in the country thought AI was vital to the competitiveness of their organizations. For those that had incorporated AI into their business model, competitiveness is expected to increase by 2.2 times in 2021, while the rate of innovation for companies that use it should almost double (1.8 times) by then too.

One of the companies shaping the use of AI in both Malaysia and Asia Pacific is Malaysia-based conversational AI start-up Hyperlab. Hyperlab’s expertise is in helping businesses automate and improve both their customer and employee experiences via its extensive conversational AI platform.

Chris Greenough, one of the three co-founder of Hyperlab and now responsible for the marketing function of parent group, Everise, says: “We’re all about trying to achieve efficiency for companies. AI is not about replacing people. What we do is add technology and use machine learning to augment what people in organizations are already doing.”

In other words, Hyperlab does more than just offer automation solutions; it also brings together a lot of different silos of information, allowing all of the elements within a business function to be connected.

In addition, the company helps its clients stand out, by showing them how to position themselves as thought-leaders. For example, Hyperlab was instrumental in helping one of Malaysia’s major banks, Hong Leong Bank, win two gold awards at the Human Resources Excellence Awards 2018 (Asia) – one for “excellence in HR innovation” and the other for “best use of HR technology”. The company worked with the bank to create and implement HALI, its AI assistant. HALI was launched in March 2018 to assist the thousands that work for the bank.

Hyperlab’s main strength, and what sets the company apart from its competitors, is that its chatbots converse in way more than just English. And it is this that has allowed the company’s business to grow so quickly. It provides conversational AI in the most widely spoken dialects in Southeast Asia, having powered more than 10 million conversations in English, Singaporean English (“Singlish”), Malaysian English (“Manglish”), Bahasa Malaysia, Mandarin and more.

Finding the right people to do this programming, however, was the biggest challenge for Hyperlab, until it discovered that some of its youngest talent (often fresh graduates) have the best ideas and brightest minds. Hyperlab now fosters a culture of having young, smart, hungry-for-success, well-rounded people who understand that the bigger picture is ultimately about adding value. And these people tend to be foreigners or locals who have received an international education. In many countries in Asia, hiring foreign staff is a time-consuming process, but according to Mr Greenough, hiring foreign talent already based in Malaysia has been relatively straightforward.

In addition to talent, Mr Greenough categorizes Malaysia as being one of the region’s sweet spots for start-ups and innovation. “It has high-speed Internet. Good infrastructure, government support and grants ... it definitely hits the sweet spot in a lot of areas for cost, infrastructure and capability.”

INTERNATIONAL TALENT

In addition to high quality local talent with overseas education and experience, Greater Kuala Lumpur is also home to a high number of foreigners that have residency status. Some of these foreigners came due to the employment opportunities offered in a variety of businesses, or they came to study in Malaysia's top universities, adding strength to the local talent pool. The central location and connectivity of Greater Kuala Lumpur allows companies to take advantage of talent from the whole region, making it an attractive relocation destination.

Malaysia is also part of the Asean Economic Community, one of the key objectives of which is the easier movement of talent within the community. Malaysia's current policies, such as Malaysia "My Second Home" and Resident Pass, also make a significant difference in attracting and retaining international talent, particularly as other countries in the region have tightened immigration requirements.

TALENTED GRADUATES

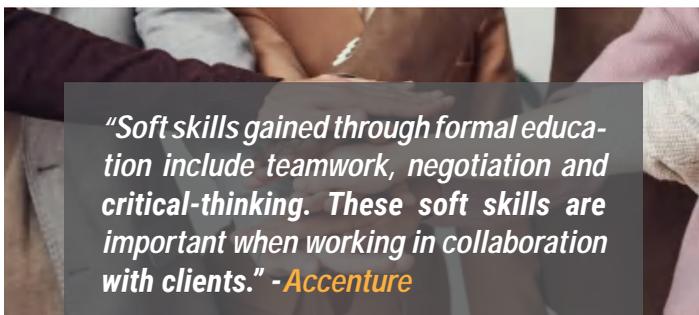
MNCs source the top-performing graduates from local and international colleges and universities. Malaysia's universities are particularly strong in teaching mathematics, science and engineering, but they also support the development of soft skills, such as teamwork, negotiation, and critical thinking. This enables them to produce graduates with skills that are invaluable in areas such as cybersecurity and software engineering.

Greater Kuala Lumpur boasts numerous top-ranked universities that produce highly motivated graduates. Universiti Malaya (UM), Malaysia's oldest university, ranked among the top-10 universities in middle-income economies around the world by The Global Innovation Index 2019.

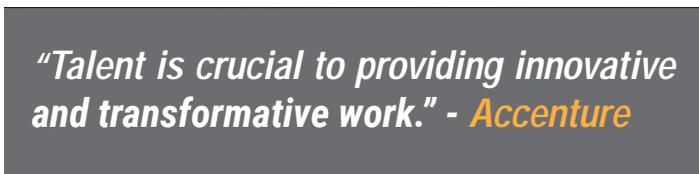
CITY LIVABILITY

Greater Kuala Lumpur's lush and tropical setting also makes it an inspiring place to live, work, and play. The scenic surrounds are complemented by an abundance of choice for housing, while world-class facilities, such as expatriate residential areas, healthcare/medical centers, international schools, shopping destinations and the integrated public transport network, have placed Kuala Lumpur among the 100-most livable cities for Asian expatriates, based on ECA International's 2018 location ratings survey.





Malaysia's youth is the backbone of the country's economy and future, so it is important for the government and private sector to provide avenues to help develop the skills needed to close the digital-skills gap and prepare these young people for the disruptions that are inevitable in the modern world.



Malaysia's Ministry of Education and MDEC, together with key technology industry players, have launched the MY Digital Tech Talent initiative aimed at developing the nation's digital economy. The initiative recognizes 11 universities and five polytechnic institutions that have been awarded Premier Digital Tech University status for 2019-21.

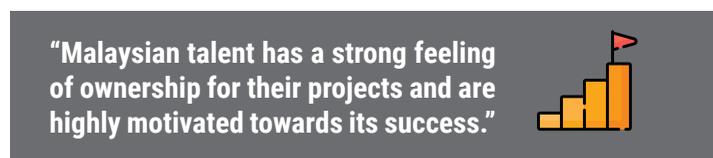
Under the initiative, participating industry partners provide selected institutions with a range of services, including curriculum assets and training for teachers in a range of technology subjects that they then can incorporate into their respective courses and programs. This will help their students acquire the knowledge and relevant skills needed to secure innovative and digitally driven jobs upon graduation.

Oracle is an active contributor to this ecosystem through the Oracle Academy, which delivers Train the Trainer events for educators in Java Programming and Database Design and Programming with SQL, as well as self-learning study on Big Data and Machine Learning with Artificial Intelligence in Java. Educators who complete the training are then able to teach Oracle Academy course curriculum at their institutions.

The Oracle Malaysia office is a good example of what they want to achieve across ASEAN. A diverse talent pool that is lending support and capabilities on the technical and business side that are a combination of local staff and those that have transferred from other offices. What makes Malaysian hires particularly good employees is what Oracle has identified as a passion for their work – bringing their best work but always looking to improve. This they say has made significant contributions in driving customer success in cloud adoption for their Digital and Cloud Solution Hub.

Accenture suggests Malaysian talent is naturally creative, and in an innovation-led environment their employees are leveraging digital technologies to creatively solve client problems – “proving themselves to be true innovators.”

For Air Liquide, Malaysia provides a workforce eager for innovation. They are committed to learn and master new tools and methods and, “Malaysian talent has a strong feeling of ownership for their projects and are highly motivated towards its success.”



2. PARTNERSHIPS AND NETWORKS



InvestKL focused on helping enterprises



R&D partnerships with universities



Innovative tech companies to partner

MNCs may have superior resources and expertise, but they cannot ensure innovation all on their own. They need partners, from other multinationals to SMEs/startups, government departments, universities and agencies. Partnerships help companies challenge themselves and the status quo by generating fresh ideas and technology. Greater Kuala Lumpur provides key, supportive partnerships and networks that enable companies to focus on their core strengths, allowing them to transform their industries.

AGENCY SUPPORT

Malaysia's governmental agencies play a leading role in creating dynamic and productive peer-to-peer networks that offer support and collaboration. Companies can build their talent pipelines and develop new tools in-house with the help of these agencies. InvestKL is at the center of these networks – it partners with various government agencies to attract multinationals from North America, Europe and Asia Pacific that are looking to set up their regional businesses, explore how to improve their innovation, create talent hubs and offer high-value business-service activities in the Greater Kuala Lumpur area, creating a gateway to expansion across Asia. For example, InvestKL works with Malaysia's expatriate service division to provide assistance with visas, residence and employment passes (both temporary and for professional visits) to meet the business needs of investors. The country has also re-launched its 10-year Residence Pass-Talent work permit for foreign talent and their families, allowing them to seek employment and study with minimal red tape.

"Scaling our services for clients is crucial and getting the right talent at speed can be a challenge. We have worked with InvestKL to facilitate the growth of our talent pool. This collaboration has proven successful and we have been able to obtain quality talent with the right skill sets to deliver the innovative work we do." **Accenture**

InvestKL is also able to make introductions and facilitate progress via other government channels and agencies too such as: the Malaysia Digital Economy Corporation (MDEC), the Malaysian Investment Development Authority (MIDA), and the Malaysian Global Innovation and Creativity Centre (MaGIC).

"Industry partners such as InvestKL are important in helping us understand and appreciate the market landscape, and accelerate our investments and presence as we strengthen our foothold in our international operations." - **Oracle**

BUILDING AN INNOVATIVE COMMUNITY

Malaysia's world-class universities are important partners for MNCs seeking to enhance their ability and capacity to innovate and play a role in Greater Kuala Lumpur's growing innovation community. Partnerships with leading universities such as Universiti Malaya (UM), Multimedia University (MMU), Monash University Malaysia, and the National University of Malaysia (NUM) foster crucial industry-academia relationships between SMEs/startups and students to bridge industry and talent gaps, generate new ideas and perspectives on today's rapidly evolving digital world.

One example of such a partnership was when Air Liquide held a student data challenge for Asia-Pacific universities in July 2019. Some 650 students from eight countries took part in the challenge to help optimize the company's plants and supply chain by using innovative algorithms.



“Here in Malaysia, each project we work on with clients involves a different set of stakeholders that might include government agencies, other corporations, SMEs or even SMEs/startups and social entities. It takes more than just innovation from one company to pivot the whole country and reimagine a new Malaysia for the next generation.” Accenture

Malaysia currently spends 1.3% of its gross domestic product per year on R&D with RM400m allocated to university R&D programs

As a regionally important capital, Greater Kuala Lumpur is home to many embassies, foreign-business associations and overseas chambers of commerce. These institutions play an important role in welcoming and assisting companies from their home countries, including the US, Europe and China.

Kuala Lumpur serves as a regional gateway for MNCs looking to build their digital future by enabling partnerships between private and public organizations, universities and assists with long-term planning enabling industry and country innovation to take place.



ROBOTS ARE CHANGING THE WAY WE DO BUSINESS – WITH THE SUCCESS OF MALAYSIA'S FIRST HUMANOID ROBOT ADAM AND WITH MORE THAN SIX SERVICE ROBOTS NOW ON ITS BOOKS, ROBOPRENEUR, MALAYSIA'S FIRST AND ONLY COMPANY TO FOCUS ON CREATING AND BUILDING SERVICE ROBOTS, IS GOING FROM STRENGTH TO STRENGTH

Once the mainstream of industrial-manufacturing production lines, robots are now being developed and used in a service capacity as well – from health and education (especially in therapy helping children with special needs) to planting and picking seeds. Service robots can be either fully or semi-autonomous. Those that are fully autonomous function in real time and can make their own decisions as needed, even in unpredictable environments. They can be further categorized as personal-service robots or professional-service robots. The professional variety are used to perform commercial tasks while the personal type are used to help humans in a non-commercial environment. For example, helping to teach children with autism.

In Malaysia, not many companies use service robots, either in a personal or professional capacity. Even fewer companies focus on developing them. Established in 2015, Robopreneur was the first and is still the only company doing this in the country, according to Dr. Hanafiah Yussof, the Group CEO of Robopreneur. He has been in the robotics field for 18 years and has a high profile within the industry in Malaysia and globally. Holding a permanent position as Associate Professor in Universiti Teknologi MARA (UiTM), Dr. Hanafiah ventured into business by establishing Robopreneur to commercialize his research products and explore the service robotics business. In 2018, Dr. Hanafiah and Robopreneur took a bold step by pioneering the development of the first Malaysian made humanoid robot ADAM (Advanced Development Autonomous Machine). Funded by the Ministry of Finance Malaysia, the first stage of the ADAM project is focusing on the development of the upper trunk humanoid with full body motion, vision and speech capabilities. ADAM was successfully activated in March 2019, making it the first AI-powered humanoid robot ever built in Malaysia.

Dr Hanafiah believes the service-robotics industry will continue to grow exponentially and has positioned Robopreneur as a local business that has the know-how to create and offer robotics solutions, while also being able to support the industry in Malaysia and globally. To do this, it offers AI, 3D-printing and digital-media services. The company, which is based in the Futurise

Centre in Cyberjaya, currently has six humanoid robots on its books and is always looking to develop new ways for its robots to solve both human and industry problems. He says Robopreneur is in the unique position of serving both the business-to-business sector and the business-to-consumer sector with its robots and add-on solutions.

Moving forward, Robopreneur is developing its capability in providing professional-service robots for the industrial inspection and cleaning services. Targeting duct and pipeline inspection and cleaning robots for oil and gas and commercial buildings, up to cleaning and maintenance service robots for solar farms, expected to start rolling out in 2020.

Thanks to Dr Hanafiah's links to the robotics industry, Robopreneur has close ties to Malaysia's local, private and public universities, and with government agencies. According to Dr Hanafiah, active co-operation between companies and researchers, a booming and vibrant startup scene and strong, national, innovation funding has created a fruitful environment for innovation to take off in Malaysia.

He believes the country offers more support to grow this sector than most other countries in the region due to its natural resources, well-developed infrastructure, logistics, and technological ecosystem. The authorities have gone out of their way to provide grants to support high-tech SMEs/startups, as well as offering market test centers, co-working spaces and much more. All of which have enabled Robopreneur to expand its business.

Malaysia's geographical position is also a bonus. Dr Hanafiah says the country is well situated between China and the Middle East, Europe and India, which puts Robopreneur in a good position to connect to these markets. This is particularly useful as a January 2019 IDC study showed that China, in particular, accounts for the largest market share in the Asia-Pacific robotics (including drones and associated services) market. The US market intelligence organization **expects China's spending on robotics to reach US\$80.5 billion**, representing 62.2% of the Asia-Pacific region's (excluding Japan) total spending in 2022.

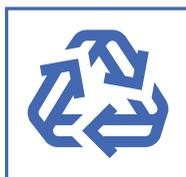
3. INFRASTRUCTURE AND LOCATION



Central location in Asia



Most connected Asian Airport



Ranked 35th in Global Innovation Index

In order to fully take advantage of the available talent and partnerships, MNCs must be in the right location with the right ecosystem – with policies in place to promote innovation and support technology industries.

Greater Kuala Lumpur has a strong geographical edge, as it is positioned in the center of Asia. This makes it easier to tap into mobile talent, access export markets and reach consumers in other countries.

CENTRAL LOCATION WITH GLOBAL CONNECTIVITY

Located at the heart of ASEAN, Greater Kuala Lumpur's strategic location delivers connectivity with emerging markets in Asia, making it the perfect regional location to grow business strategically within the region. Major business centers in Asia such as Tokyo, Hong Kong, Beijing, Shanghai and Seoul are quickly reachable from Greater Kuala Lumpur by plane.



Malaysia's government policies and initiatives are business-friendly and aim to entice MNCs to Greater Kuala Lumpur to set up their regional bases. And the fact the city is attractive on a cost basis compared to other regional centers is a bonus too.

According to the Readiness for the Future of Production Report 2018 by the World Economic Forum and A. T. Kearney, Malaysia was a leading country in terms of its readiness for the Fourth Industrial Revolution, ranking 30th out of 100 for its ability to innovate. It ranked 23rd in Technology and Innovation as a driver of production, and 7th when it came to the scale of its production structure.

Oracle has taken advantage of all the benefits of being in Malaysia, opening two regional facilities. The Oracle Digital Hub in Malaysia, launched in September 2017, offers cloud services and targets small-and-medium-sized enterprises across 22 countries. Meanwhile, Oracle Malaysia expanded its premises for its Oracle Cloud Solution Hub, which it launched in May 2019, to include a regional technical cloud center that is focused on delivering Industry 4.0 solutions.

Air Liquide's Centre of Excellence is in Greater Kuala Lumpur and is the focal point for its innovation efforts. The center has created an exciting startup environment, enabling open innovation to happen among companies and individuals looking to collaborate.

INNOVATION TOOLS & SERVICES

While MNCs bring resources and expertise, hire local talent and develop extensive partnerships, they need access to external tools and services to allow them to focus on their core activities.

MSC Malaysia (formerly known as the Multimedia Super Corridor) is a Special Economic Zone and high-tech business district in central-southern Selangor, which is part of Greater Kuala Lumpur. MSC Malaysia gives eligible

information and communications technology (ICT) businesses, both local and foreign, incentives, rights and privileges to enable their continued business growth. There are nearly 3,000 active companies with MSC Malaysia status, generating RM472 billion in revenue and over 180,000 jobs.

The economic zone helps build momentum and support for international companies, while the government also helps eligible companies by ensuring they have the infrastructure they need as they build a presence in

Malaysia. Greater Kuala Lumpur boasts high-tech housing, and an expansive stock of Grade-A office space, with rental rates well below those of other regional business centers, and all with high quality internet connectivity. The city has a growing supply of MSC-status, ICT-facilitated properties that offer cutting-edge, digital infrastructure and environmentally sustainable practices.

TRANSPORTATION

Transportation is a crucial business factor in today's global economy. Greater Kuala Lumpur is well known for its excellent transportation system, from the nation's flagship carrier Malaysia Airlines to its superior road network and world-class ports. This makes it easy for MNCs to move people and goods, allowing for more timely and efficient business activities.

According to the OAG Megahubs Index 2019 Kuala Lumpur International Airport (KLIA) is the world's most internationally connected megahub, coming ahead of Manila, Singapore, Incheon and San Diego. Indeed, OAG noted that connectivity in Kuala Lumpur was "considerably higher than the rest of the Top-25" in the low-cost category. The OAG Megahubs Index 2019 outlines the world's most internationally connected megahubs by comparing the number of scheduled connections to and from international flights with the number of destinations served from the airport.

TRANSPORTATION INFRASTRUCTURE

Malaysia's Mass Rapid Transit/Light Transit, East Coast Rail Link (targeted for completion by 2026), its world-class airport (KLIA) and the world's 12th busiest sea port (Port Klang) provide great connectivity between Greater Kuala Lumpur and the rest of the region and the world. In addition to the already-extensive rail network, there are plans now for a Kuala Lumpur-Singapore High Speed Rail

COMPETITIVE POSITIONING

Malaysia is in a strong competitive position globally. According to the Global Innovation Index 2019 by Cornell University, INSEAD and WIPO, Malaysia ranked 35th out of 129 countries. Its upper-middle-class income group came in second overall in the ranking of innovation economies by income group,

and it was one of only three middle-income economies that perform as well on most GII innovation input and output measures as the high-income group.

E-Commerce to drive growth in logistics in Malaysia – according to PCW Research, the e-commerce market is expected to grow at a CAGR of 11%, increasing cargo volume in Malaysia from approximately 0.7 million tones in 2017 to 3 million tones by 2050.

More than 50% of Malaysians are e-commerce users, with an average shopper generating revenue of US\$185. In 2018, the number of successful e-commerce transactions in Malaysia reached over 52 million, worth RM7 billion.

Progressive and business-friendly government policies ensure that Greater Kuala Lumpur is improving its position in the global innovation index. Prime Minister Tun Dr Mahathir Mohamad in 2018 launched a four-pronged strategy (the National Policy on Industry 4.0 [Industry4WRD]) for Malaysia to get on a stronger footing in the manufacturing sector through higher productivity, contribution, innovation and increasing the number of high-skilled workers. The goal is to improve Malaysia's ranking to be among the top-30 nations in the Global Innovation Index by 2025, up from 35th in 2019.

Impact of the US/China Trade War – In a bid to circumvent additional US tariffs, manufacturers based in China may shift some of their operations to Malaysia. According to Muhammed Abdul Khalid, an economic advisor to Prime Minister Mahathir Mohamad, the US-China trade war is predicted to add around 0.1 of a percentage point to Malaysia's gross domestic product for 2019/20.

Impact of the US/China Trade War – The Malaysian electrical and electronics (E&E) sector and the natural gas sector are among the biggest beneficiaries of the ongoing trade war between the world's two largest economic juggernauts, according to Nomura Research. The research house said gains made by the two sectors due to trade diversions from the US and China were the key reasons for Malaysia becoming the fourth-largest beneficiary of the US-China trade war.

For Air Liquide, their innovations in Malaysia have benefited from Greater Kuala Lumpur's overall competitive positioning. It's a central location for their Asean operations, an attractive capital city, in terms of cost base and reliable infrastructure, it has a strong, young and motivated talent pool and a growing ecosystem with booming SMEs/startups with structures to support them.

CONCLUSION

Malaysia, and Greater Kuala Lumpur in particular, really does have it all, and this is the message we are hearing time and again from the MNCs and SMEs that are choosing to set up their Asia-Pacific innovation hubs here.

Near the top of the list of reasons for the country's growing business allure is its comprehensive and impressive business-friendly perks. For starters, the country's strong and well-organized infrastructure is frequently voted world-class, and its Grade-A real estate is very affordable.

According to the MNCs and SMEs/startups we interviewed for this paper, Malaysia's talent have a unique skill set that cannot be found elsewhere – ideal for the high-tech companies and sectors that the country is targeting.

Workers excel in computer science, electronics, mechanics, design thinking and critical thinking, to name just some of their skills. Many employers put this down to the country's universities, and the fact that the majority has a multicultural background. Such multiculturalism is a strong part of the country's identity and is obvious in many sectors of the economy.

So what can prospective employers expect? A diverse range of experienced and multilingual workers who fit easily and effectively into multicultural teams of creators. Greater Kuala Lumpur has long proven to be appealing for international workers looking to pursue a career overseas due to the relative ease of securing a work visa.

But it's not just foreigners who are drawn to the city; the numbers show that more and more Malaysians who have worked overseas are returning to their home market to benefit from exciting career opportunities.

All in all, the government and its agencies, especially InvestKL, are actively committed to supporting MNCs, SMEs/startups, universities and domestic industries to create ongoing success for the country's stakeholders – from the universities that train the talent pool to the multinationals that are able to innovate and create a more prosperous future for everyone.

Greater Kuala Lumpur is an attractive destination for high-value, high-skilled and innovation-led businesses. It offers significant benefits to MNCs and its local SME/startups in the areas that make up Industry 4.0, such as, Artificial Intelligence, Big Data Analytics, Internet of Things, Cloud Computing and Cybersecurity.

InvestKL has played a key role in facilitating programs to enhance local talent and to promote SME/startup collaborations with the MNCs that specialize in these areas, helping them better integrate into the region and realize the opportunities presented by Industry 4.0. So, if you are a decision-maker looking to set up a regional office in Greater Kuala Lumpur, what should you do next? Contact InvestKL.

Our organization focuses on the needs of MNCs, Fortune 500 and Forbes 2,000 companies, and provides the resources and pathway for these enterprises to establish and benefit from regional hubs in Greater Kuala Lumpur.

The following InvestKL resources focusing on some of the key drivers of innovation discussed in this report (talent, partnerships and infrastructure) can be found at the following links:

Talent: http://www.investkl.gov.my/Invest_In_KL-@-Talent.aspx

Partnerships / Innovation: http://www.investkl.gov.my/Invest_In_KL-@-Innovation.aspx

Infrastructure / Business Support: http://www.investkl.gov.my/Invest_In_KL-@-Business.aspx