

Building the talent pipeline

BY VANESSA GOMES AND KIRAN JACOB

The data centre boom will create a wealth of job opportunities in various sectors, with an expected surge in demand for professionals in construction, engineering and infrastructure development, as these facilities are being built.

In the long term, there will also be a need for skilled workers in data centre management, IT operations and cybersecurity — areas that will be critical for maintaining these centres — according to Seri Pajam Development Sdn Bhd CEO Thomas Ten.

It is important to address potential challenges such as the skills gap and displacement of traditional jobs to ensure that the growth of data centres supports inclusive economic development as well, says Alvin Gan, head of technology consulting at KPMG in Malaysia.

According to an Uptime Institute survey, more than 50% of data centres are grappling with attracting top talents, whereas 45% are facing difficulties in retaining them. Gan also references KPMG's own study, which has found that current talent management practices are not enough to combat the shortage of vital IT talents.

The talent shortage is on a global scale and is not unique to Malaysia, particularly in terms of specialised professionals such as data scientists and cybersecurity engineers, which has been exacerbated by the rapid growth of data centres.

The primary challenge in developing a skilled workforce for the industry is the rapid growth of the sector, which often outpaces the availability of trained professionals, says Saad Aslam, head of the department of computing and information systems at Sunway University's School of Engineering and Technology. To address this, it is crucial to design flexible curricula that align with evolving industry demands.

Students of Sunway University are able to obtain degrees as well as professional certifications that can enhance their readiness for future employment. This is done through practical learning that integrates real-life industrial experience and case studies in the coursework.

"We developed a programme that aligns with industry needs. We also collaborated with industry partners to understand the key skill requirements. We have developed specialised programmes and certifications and offer handson learning opportunities," says Professor Denny Ng, dean of Sunway University's School of Engineering and Technology.

Malaysia's New Industrial Master Plan (NIMP) 2030 includes talent development through initiatives such as myNext and MYFutureJobs, which streamline access to highly skilled foreign talents. A December 2022 forecast by Malaysia Digital Economy Corporation (MDEC) projected a compound annual growth rate of 7.59% for digital professionals over the next three years.

MDEC reported that by 2024, 24% of the workforce would be engaged in digital roles, with more than half of these talents concentrated in the central region. The study also found that the overall demand for skilled digital professionals still exceeded the available supply, emphasising the need for more focused talent development initiatives.

There is the potential of talent transfer from Singapore to Johor. However, challenges such as stringent immigration policies and the growing pool of local talent could dampen the need for external expertise. "Factors such as compensation differences and companies'

strategies for talent distribution across regions for risk management reasons will influence Singaporean professionals' decision to work in Johor," says Gan.

Acknowledging strengths

Despite some level of skills shortage, Malaysia is in a strong position when it comes to having a skilled workforce in the information and communications technology (ICT) sector, says Seri Pajam's Ten, adding that this is possibly a key reason why data centre operators are looking to set up their operations here.

"We've built a robust pipeline of highly skilled professionals in areas like IT operations, cybersecurity and data centre management, whereas educational institutions and training programmes have been effective in preparing a workforce that meets the demands of these high-tech industries," he points out.

"This availability of talent is a major draw for companies, considering Malaysia as a hub for their data centre operations because they can tap into a pool of well-trained professionals, which not only reduces their operational risks but also allows them to scale efficiently. So in this case, talent is actually one of our strengths and it is helping to drive investment into the country."

While we may not be facing a skills shortage just yet, it is important to maintain and further develop our talent pool to keep up with technological advancements and industry needs. "We also need to keep pace with regulatory developments to protect both the interests of data centre operators and the broader needs of the country. It is a complex landscape, but with the right strategies in place, these challenges can be effectively managed," says Ten.

Raymond Tong, president of Asia-Pacific at Vantage Data Centers, says the establishment of digital talent ecosystems, through the collective efforts of various stakeholders — the government, employers and universities — will foster digital innovation, support digital skills development and provide ongoing training to keep the workforce's digital skills up to date.

Vantage is developing two data centres in the country and much talent is needed to build and operate these facilities, from design to engineering, construction, operations and safety. Tong says the industry is in need of skills, such as that of electricians, and not all jobs require a degree.

"It is important for the industry to partner with associations, secondary schools, trade schools, colleges, veterans and others to educate individuals on the numerous opportunities in the data centre sector. For example, at Vantage, we have more than 150 open jobs right now around the world. There has never been a better time to work in the data centre industry as the world continues to be more digital,"he adds.

Johor Corporation's property arm, JLand Group Sdn Bhd (JLG), is also proactively addressing the skills challenge through strategic partnerships with Johor Skills Development Centre and Yavasan ICom

"We are currently collaborating with Johor Skills to develop tailored programmes specifically designed for Ibrahim Technopolis, ensuring that our workforce is prepared to meet the demands of the future," says JLG deputy chairman Datuk Akmal Ahmad.

"Johor Skills is an integral part of the newly established Johor Talent Development Council, a joint initiative between the state and federal governments, aimed at addressing talent development issues in Johor."