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THE REAL ESTATE ALTERNATIVE

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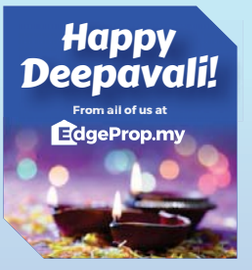

A defensive play

Amidst crisis, the data centre industry has proven itself as a resilient, if not a booming asset investment class. Turn to Pages 9 and 10 to find out more.

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COVER STORY

THE REAL ESTATE ALTERNATIVE

BY **CHIN WAI LUN**

As landowners and real estate players vex over the dismal property outlook amidst the Covid-19 pandemic, another alternative asset class has emerged from the robust e-commerce to open up many business opportunities – data centre.

According to JLL Property Services (M) Sdn Bhd's latest report released on Nov 5, 2020, logistics and data centre markets have accelerated in the Asia-Pacific region and primarily driven up industrial market transactions by 76% year-on-year (y-o-y) in the third quarter of 2020 (3Q20).

In comparison, office transactions went down 35%, while retail and hotel transactions fell 51% and 87% y-o-y respectively during the quarter.

JLL Property Services country head YY Lau, in the report, said that Malaysia is also seeing healthy interest in the logistics and data centre market.

International Data Corp (IDC), in its report dated Oct 2019, estimated that there will be 41.6 billion connected Internet of Things (IoT) devices, generating 79.4 zettabytes (ZB) of data in 2025. One ZB is equivalent to one trillion gigabytes. These data have to be stored somewhere.

Many companies are also moving their professional applications to cloud services to cut back on the cost of running their own centralised computing networks and servers.

The cloud doesn't mean that the applications and data are not housed on computing hardware. It just means that someone else maintains the hardware and software at remote locations where the clients and their customers can access them via the Internet. And those locations are data centres, based on HowStuffWorks' definition.

Looking at the increasing demand for data storage space, Savills Malaysia managing director Datuk Paul Khong says cloud storages are made possible by these data centres, which store, process and disseminate data.

"This sector is coming in as a relatively new asset class on its own, as data centres continue to play an important role in ensuring the continuity of daily business operations, housing critical and proprietary assets for organisations," he tells EdgeProp.my.

LOW YEN YEING | **EdgeProp.my**

One of the data centres in Cyberjaya.

What is a data centre?

According to infotainment website HowStuffWorks, data centres are "simply centralised locations where computing and networking equipment is concentrated for the purpose of collecting, storing, processing, distributing, or allowing access to large amounts of data. They have existed in one form or another since the advent of computers".

Entities that utilise or produce a large amount of data have the need for data centres. For instance, telecommunication firms, government agencies, financial institutions, social networking services (Facebook and Google) and even retailers.

"Lack of fast and reliable access to data can mean an inability to provide vital services or loss of customer satisfaction and revenue," says HowStuffWorks.

Location of data centres

Currently there are more than 30 data centres in Malaysia, mainly focused in Cyberjaya, Kuala Lumpur with a few additions in Selangor and Iskandar Malaysia, Johor.

Khong says Malaysia has attracted neighbouring countries such Singapore to set up data centres here, leveraging the former's advantages in proximity, spacious land and well-equipped facilities.

For instance, Singapore's Keppel Data Centres Holding and Alpha Data Centre Fund have jointly developed a Tier III-equivalent data centre for a third-party customer in Johor.

"In Aug 2020, the Johor state government announced that global technology giant Microsoft is building a data centre in the Kulai district. The data centre is known as Keppel DC Malaysia 1 Data Centre and is expected to begin operations in 2021," adds Khong.

On data centre buildings, he notes the design of the data centre could be a standalone building, like the data centres in Cyberjaya's enterprise or commercial zones, while data centres located outside Cyberjaya are mostly located in industrial zones.

"Power supply (dual sources or more) and fibre provision are both important factors in choosing a location," he adds.

Purpose-built data centres are typically industrial-type buildings as they require large amounts of open space, high ceilings and high specification on floor loading to support the weight of equipment, says Sam Lee, managing director of Lendlease Data Centres.

"Additionally, zoning requirements more often require data centres to be located in industrial-classified zoning areas. Critical to the operation of a data centre is the availability of services and utilities such as power, water (for cooling) and telecommunications networks," he adds.

Cyberjaya, hot spot for data centre

In Malaysia, Cyberjaya has maintained its status as the number one hot spot for data centres in Malaysia due to its complete infrastructure and dark fibre provision.

IVPS Real Estate Sdn Bhd (Alliance Member of Cushman & Wakefield) country manager Tiffany Goh says more than 90% of existing data centres in Malaysia are located in Cyberjaya.

"Other possible locations promoted by the government are in Negeri Sembilan and Melaka, as well as Johor Bahru or Iskandar region, which is promoted with the intention to capture the spill-over demand from Singapore," she adds.

Besides basic infrastructure, Goh notes another key element that attracts investors or data centre operators are locations with easy accessibility to other transportation hubs like airports and train lines.

"Other requirements include the stability of the site condition, such as water bodies and soil condition. If the data centres are in industrial areas, the operators will try to avoid heavy industrial parks," she adds.

Lendlease's Lee shares similar sentiments. "A significant amount of development has happened in Cyberjaya over the past five years, driven by multiple factors such as support from the government to target high-tech development, accessibility to power, availability of land and ability to own freehold land and property," he says.

SAVILLS MALAYSIA

Khong: Power supply (dual sources or more) and fibre provision are both important factors in choosing a location

Data centres as defensive assets

Based on Savills Research data, data centres are increasingly being seen as a defensive asset class with appeal to global institutions.

The regional transaction volume of US$0.74 billion (RM3.05 billion) recorded in the first half of 2020 already bypassed the 2019 total of US$0.70 billion, and a couple of large portfolio deals are now in the pipeline, accounting for more than US$1.56 billion.

In the longer term, China is likely to emerge as Asia's largest market, closely followed by Japan, says Savills' Khong, adding that the outlook of data centres remains bright moving forward, as the

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Most of the data centres are designed as a standalone building.

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demand for data centres continues to rise with technology advancement.

"We expect the Malaysian data centre industry to continue its growth in the next five years. As at the current juncture, there are limited large hyperscale players in this region.

As the global economy faces pressure from the Covid-19 pandemic, Lendlease's Lee observes that demand and investment for data centres are on the rise all throughout the world, especially in Southeast Asia. Malaysia will continue to experience an increase in all these activities, which will continue to push the demand for data centre space.

Lee concurs that data centres have proven to be a resilient investment asset class over the past several years, especially so during the Covid-19 pandemic.

Internet usage and cloud adoption was on an upward trend prior to the outbreak, and that growth has only accelerated since then. As such, data centres as an investment continue to maintain a healthy outlook on returns (relative to traditional real estate) and will likely continue into the foreseeable future.

"Data centres are becoming an increasingly important part of business operations as well as mainstream real estate asset class. With mature and expanding economies, Asia is expected to show exponential growth in data usage," adds Lee.

Meanwhile, Cushman & Wakefield director of logistics and industrial Lynus Pook says data centre businesses are registering positive growth over the years. For instance, RM1.592 billion of revenue was recorded for year 2019, an increase of 19% from year 2018 (RM1.288 billion).

He notes that double-digit growth is expected in the medium term for this business since government agencies and even small companies have been looking at this cloud adoption business more aggressively in 2020.

"Although there is tough competition from markets like Singapore, Hong Kong and Japan, the market in Malaysia is growing due to low overhead costs such as cheaper and abundant land," Pook adds.

Hence, he opines that the government plays an important role in attracting investors by promoting the country's ICT development through continued provision of attractive incentives or rebates for data centres players, 100% foreign participation coupled with the readiness of infrastructure and abundance of land.

CUSHMAN

Goh: If the data centres are in industrial areas, the operators will try to avoid heavy industrial parks.

LENDLEASE

Lee: With expanding economies, Asia is expected to show exponential growth in data usage.

CUSHMAN

Pook: The market in Malaysia is growing due to low overhead costs.

Do you know that data centres are classified into several tiers?

Based on Uptime Institute's Tier Certifications system, which has become the default standard for the data centre industry, data centre classifications are divided into four tiers that match a particular business function and define criteria for maintenance, power, cooling and fault capabilities.

Tier I

A Tier I data centre is the basic capacity level with infrastructure to support information technology for an office setting and beyond. Tier I protects against disruptions from human error, but not unexpected failure or outage. Redundant equipment includes chillers, pumps, UPS modules and engine generators. The facility will have to shut down completely for preventive maintenance and repairs, and failure to do so increases the risk of unplanned disruptions and severe consequences from system failure.

Tier II

Tier II facilities cover redundant capacity components for power and cooling that provide better maintenance opportunities and safety against disruptions. The distribution path of Tier II serves a critical environment, and the components can be removed without shutting the system down. Like a Tier I facility, unexpected shutdown of a Tier II data centre will affect the system.

Tier III

A Tier III data centre is concurrently maintainable with redundant components as a key differentiator, with redundant distribution paths to serve the critical environment. Unlike Tier I and Tier II, these facilities require no shutdowns when its equipment needs maintenance or replacement. The components of Tier III are added to Tier II components so that any part can be shut down without impacting IT operation.

Tier IV

A Tier IV data centre has several independent and physically isolated systems that act as redundant capacity components and distribution paths. The separation is necessary to prevent an event from compromising any of its systems. The environment will not be affected by a disruption from planned or unplanned events.

However, if the redundant components or distribution paths are shut down for maintenance, the environment may experience a higher risk of disruption if a failure occurs.

Tier IV facilities add fault-tolerance to the Tier III topology. When a piece of equipment fails, or there is an interruption in the distribution path, IT operations will not be affected. All of the IT equipment must have a fault-tolerant power design to be compatible. Tier IV data centres also require continuous cooling to make the environment stable.

Recent transactions or contracts related to data centres in Malaysia

Apr 29, 2020

- Telekom Malaysia Bhd's enterprise and public sector business solutions arm TM One, has unveiled its new 90,000 sq ft **Klang Valley Core Data Centre (KVDC)**. The KVDC is certified by the Uptime Institute as Tier III in design and in constructed facility, apart from being certified as compliant to Threat, Vulnerability and Risk Assessment (TVRA), ISO 27001 and Payment Card Industry Data Security Standard (PCI-DSS).

July 3, 2020

- AIMS Data Centre announced they had begun construction on a new Tier III purpose-built data centre facility in Cyberjaya. Named **AIMS @ Cyberjaya**, the facility will serve as AIMS' flagship data centre facility, in addition to Menara AIMS that is located in Kuala Lumpur. Upon completion, AIMS @ Cyberjaya will offer a white space of 240,000 sq ft, on top of a power capacity that is scalable up to 50MW. The facility will be able to cater to hyper-scalers and enterprises with high processing and stringent security requirements.

Aug 18, 2020

- **Green Packet Bhd** invested an initial RM100 million under its collaboration with Tencent Cloud to set up a joint Internet data centre in Malaysia. Green Packet group managing director CC Puan said the initial investment would comprise the setting up of infrastructure, including a total of 600 servers, as well as the provision of software solutions.

Aug 23, 2020

- Global technology giant **Microsoft**, was building a data centre in Kulai district. Johor Menteri Besar Datuk Hasni Mohammad said the construction of the centre had been 40% complete, and the development would be able to stimulate the economic sector and provide job opportunities in the state.

Sept 28, 2020

- **PCCW Solutions** expanded into Malaysia with the opening of a new delivery centre in Kuala Lumpur and a then recently acquired data centre in Cyberjaya, Selangor. The company said it was part of its commitment in delivering a full range of IT services to clients in Southeast Asia. The new delivery centre was set to enable PCCW Solutions to leverage local technical and business capabilities while providing multi-country access to help clients accelerate digital transformation.

Oct 26, 2020

- Property developer **Glomac Bhd** was considering venturing into data centre business in the near future to diversify its investment portfolio. Glomac Bhd group managing director and CEO Datuk Seri Fateh Iskandar Mohamed Mansor said the company had been in talks with two parties (one local and one international) on data centres, to leverage on Glomac's landbank in Cyberjaya.

Oct 27, 2020

- Minetech Resources Bhd's unit, **Techmile Resources Sdn Bhd**, bagged a RM37.46 million contract from ARNN Technologies Sdn Bhd for works on an integrated data centre on a call-out basis. It said the works would begin on acceptance of the service order and was expected to be completed within 24 months from the starting date, with any extension period obtained from the project owner to be added to the completion date.

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SUMMARIES

CEO with TalksDatuk Joseph Lau Chief Executive Officer of ParkCity GroupExclusive live interview withAmidst crisis, the data centre industry has proven itself as a resilient, if not a booming asset investment class. Turn to Pages 9 and 10 to find out more.