EXPERT **COMMERCIAL REAL ESTATE**

HERE COME DATA CENTERS

Michał Chodecki, BTS Development Director at Panattoni; **Michał Samborski**, Head of Development at Panattoni; **Waldemar Witczak**, Regional Director at Segro; and **Natalia Mika**, Advisor at Newmark Polska, explain why investors eye data centers and what it entails.

Several factors fuel the growth of the data center market today. One of them is the ongoing digitalization of business, triggered by the rapid development of ecommerce and IT solutions that utilize the paradigm of the Internet of Things. It is coupled with the rise of streaming platforms and the massive use of mobile applications. As a result, the demand for uninterrupted access to the ICT infrastructure is on the rise.

So far investors in data centers have focused on established business centers: Frankfurt, London, Amsterdam, Paris and Dublin (collectively referred to as FLAP-D markets) and in the US. However, with a steep rise in demand for data centers, the availability of suitable land in the FLAP-D markets is shrinking and investors look for opportunities in Poland as the country still has excellent and affordable sites and suitable fiber connectivity—the latter being one of key requirements for data center projects.

Most data center clients come from Western Europe and the US. They represent such sectors as ICT/Telecommunications, Tech Data Storage, Pharma/Lab and High-Tech Components Engineering. Data centers support their manufacturing and R&D not only in Poland but in entire Europe.

In recent months, both Polish and international companies have talked about growing demand for modern data centers.

GROWTH POTENTIAL
According to data from K2 Group, 58 percent of e-commerce companies in Poland rely on public cloud infrastructure. This trend is confirmed by a PMR report on data centers. According to the report the total capacity of commercial data centers in Poland is expected to double in the next six years, from nearly 110 MW in 2021. The authors of the report estimate that

the Polish data center market is worth over PLN 2.6 billion. Poland's capital Warsaw has attracted the largest number of investors in data centers, followed by Wrocław, Silesia, the Tricity, Kraków and Poznań. According to the PMR report, at the end of 2021 Poland had nearly 120 facilities offering server colocation and hosting. Most units comprised the area of up to 200 square meters. By comparison, leading operators of colocation infrastructure have over 4,000 square meters per facility. But the data center market in Poland is fragmented. Most centers

Many e-retailers have turned to cloud services to operate efficiently. Cloud services offer scalability and sufficient capacity to meet the demands of unexpected sales peaks.

are generally small buildings comprising up to 200 square meters. Such structures are cost-intensive to modernize. After some time in business it frequently turns out that more space is needed for new servers and staff rooms. As more international companies are expected to enter the Polish market, demand for data center space is likely to grow, reaching thousands of square meters.

POWER
Data centers are technologically demanding structures which differ significantly from typical warehouse units. They need continuous access to the IT network infrastructure and uninterruptible power supply. The servers require a strictly controlled operational environment with a safe range of temperatures,

which requires precise cooling. In addition, their electricity consumption per square meter is huge because they accumulate a lot of power-consuming hardware on a relatively small space. An average factory which comprises 10,000 to 20,000 square meters requires up to 1 megawatt of power supply. But a 1,000-square-meter data center may need up to 3.5 megawatts to operate efficiently. Due to huge energy requirements, developers have to build main power points connected to high-voltage lines. In addition,

many data centers are equipped with several power generators with the capacity of 1.5 megawatts each and fuel consumption of 500 liters per hour. Fuel tanks and barrels must be kept at hand for emergency supplies to ensure energy security.

BUILT-TO-SUIT
With this, choosing the right location is a challenge. Plots that are in demand are equipped with medium voltage power systems supplying high power, preferably from two independent sources, or regional power points, and ideally from more than one electricity provider with their own distribution networks. Such locations may include post-industrial sites.

Data centers have also specific

requirements regarding the safety of their physical infrastructure. They are located away from flight zones, floodplains, petrol stations, railway tracks or other technical installations that pose the risk of explosion. On the other hand, there are buildings designed to withstand earthquakes, flooding, nearby explosions and other natural disasters as well as resist electromagnetic interferences.

Fire-fighting systems in data centers are also designed differently than those for warehouses. Most fires are meant to be put out by a special mixture of gases without damaging critical server systems while fully protecting the safety of people during an accident.

All those requirements mean that only professional companies with the appropriate know-how and expertise are fit to design and build data centers.

Experts agree that built-to-suit approach for designing a data center is the best solution.

LEASE, NOT OWN
Until recently data center companies preferred to own the facility (freehold) rather than lease it. However, at present, investors prefer to keep their capital and use it on ensure business growth instead of financing the purchase of land to build a data center on and finance it. With this, more and more investors eye lease contracts (leasehold) as the most favorable option.

But developing a data center property requires highly-specialized approach on each stage of project development and construction. This is why, investors seek to use the BTS formula for a project development partnering with an experienced developer who is capable of offering support right from the start.