DATA CENTRE: BUILD OR BUY?

Organisations have a choice between building their own data centres, buying capacity in a hosted model, or a hybrid approach.

DEMAND FOR DATA CENTRE CAPACITY IS GROWING RAPIDLY IN THE REGION, BUT THERE ARE DIFFERENT APPROACHES TO MEETING THAT DEMAND THAT REQUIRE DECISIONS AT A HIGHLY STRATEGIC LEVEL, AND WHICH CAN HAVE A FUNDAMENTAL IMPACT ON THE ORGANISATION. OPTING TO BUILD INHOUSE FACILITIES VERSUS BUYING CAPACITY WITH A PROVIDER IS ONE OF THE MOST SIGNIFICANT DECISIONS IN IT TODAY

BY KERI ALLAN

T organisations in the region are increasing in complexity and maturity, and that growth is driving demand for data centre facilities. Catering to these data centre capacity requirements however is a challenge for enterprise and public sector organisations alike, as they have to choose between a large investment in building their own data centres, versus using a hosting provider or co-location deal.

"With data growing in the enterprise sector at between 40-60% per year, infrastructure has no choice but to grow with it. [It] is one of the most critical decisions the executive team will make when it comes to not just its IT strategy, but corporate strategy as a whole," notes Richard Jenkins, VP, Marketing and Strategic Partnerships at RF Code.

A recent report by Data Center Knowledge highlights that the build vs. buy discussion is sometimes driven by hard number-crunching business analytics and other times by human emotion, ego or habit. It also highlights how some issues can be clearly defined in the discussion — such as cost and time to market, but other factors such as perceived business strength and reputation are more blurred. So how do you decide what's the best path of action for your organisation?

Firstly it is important to consider all your options and to evaluate what will be best for both the company's short and long-term goals.

"There are certainly situations in which building one's own data centre is preferable. When there is a long-term commitment to managing and utilising the data centre infrastructure — typically upwards of seven to ten years — then the build option can in fact be more cost effective," highlights Sudheer Subramanian, senior solutions IT manager, Huawei Enteprise, Middle East.

"Having total and independent control of facilities is also one of the most compelling reasons to build a private data centre. How the data centre is powered, what are the innovative cooling technologies used to reduce the Power Usage Effectiveness (PUE) and its capacity to scale over the years are all decisions that the enterprise can determine for themselves; designing what they believe is the most reliable and effective facilities and infrastructure for their business.

"The decision to buy space through a service provider also presents unique value to the end user," he continues. "One of the most apparent benefits is that the upfront costs to acquire the space is significantly lower than if you were going to build your own data centre. For those with limited budgets or unsure of their long-term data requirements, it can also be ideal as contracts can be ended with very short notice periods, and funds then moved to another part of the business as seen fit.

"Furthermore, enterprises working with a service provider can easily scale as the space and facilities are readily available through the provider. Such a model can also present enterprises with greater flexibility in amplifying or reducing their data requirements at any given time, in turn keeping tight control of their operational expenditure."

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There are also 'middle ground' options available. For example HP offers the HP POD, a 'data centre in a box', which can be set up in just a few months. Then Jenkins recommends businesses go for a mix of build and buy.

"Industries such as financial services, healthcare and those managing large amounts of personal customer data will need a higher percentage of owner-operated infrastructure. The cost of this is higher and there is the management requirement, however owner-operated does provide the organisation with the ability to become more efficient than service providers are able to offer," he notes.

"Outsourcing to co-location facilities, hosting and cloud service providers is also an essential element of any successful, technology-dependent organisation," he adds. "This mixed model enables a company to focus on the processes and data most important to the success of its strategy, accurately plan investment in new infrastructure and technology, and implement the specific solutions required to acquire the data to achieve optimal regulatory, financial and operational performance."

For those that choose build over buy, there are certain factors to keep in mind.

"Things to keep an eye on [include] projected cost for real estate, running costs and energy consumption as well as long-term manageability," says Karam Jabi, Industry Standard Servers business unit manager, HP Middle East.

Indeed staff experience and commitment is key. It's important to hire and retain skilled staff to manage the data centre as it is not simply a build, switch on and forget infrastructure.

WHAT TO LOOK FOR IN A DATA CENTRE PROVIDER

We asked the specialists what key factors IT professionals should look for in a data centre provider.

- "Before outsourcing customers need to be aware of the following with respect to the service provider: track record, flexibility to cater for customer needs, reliability and ability to offer business continuity and disaster recovery solutions and after sales customer support, backed up with a strong service level agreement."
  Abdulla Ebrahim Al Ahmed, senior vice president/Business, Etisalat
- "Interconnection — access to as many networks, cross connects and direct links to Internet routes as possible.
  "Global capacity — the ability to scale, and to move and hold capacity where regulation, power costs or business requirements demand, easily and quickly."
  Jeroen Schlosser, managing director, Equinix MENA
- "Choosing a provider should be based on aspects [including] stability and experience, compliance to international standards and processes, security and depth of service. In addition one should consider if the provider has the option to offer managed IT services, because these offer customers key strategic, financial and operational benefits."
  Yasser Zeineldin, CEO, eHosting Datafort

CONSIDERING BUILD?

Ahmed Tawfiq, Data Centre executive manager at Injazat Data Systems highlights the major issues that should be considered during due diligence in when leaning towards the build decision:

- Site selection and risk factors
- Availability and understanding tier levels
- Delivery model and operational procedures
- Energy efficiency and sustainability
- Expected life of a data centre facility
- Factoring capacity growth vs. 100 per cent initial build out
- Control and responsibility for the data centre facility
- Factors impacting the total cost of ownership of the data centre facility
- Leveraging contractor and vendor negotiation and relationship

"[Data centres] need to be monitored 24x7, equipment maintained as per manufacturer specifications, constantly checked for contamination and security to be tight all the time. Companies need to build in house capabilities to operate and maintain these infrastructure nerve centres," notes Mahesh Jaishankar, VP, datamena.

But that's an issue for after the build — first companies need to make sure they have or bring in the right people to get the project off the ground, as Ahmed Tawfiq, Data Centre executive manager at Injazat Data Systems highlights.

"Data centre design, construction and operation are different than for other buildings and require unique levels of expertise and experience," Tawfiq comments. "Even experienced data centre providers may not have the design and build resources necessary to undertake a major construction project, as constructing a sophisticated data centre facility can sometimes be compared to other types of specialised facilities such as an oil refinery or a chemical plant which require highly specialised skills and experience."

> "WHEN THERE IS A LONG-TERM COMMITMENT TO MANAGING AND UTILISING THE DATA CENTRE INFRASTRUCTURE — TYPICALLY UPWARDS OF SEVEN TO TEN YEARS — THEN THE BUILD OPTION CAN IN FACT BE MORE COST EFFECTIVE."

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For those that have chosen to outsource, next comes another decision — which of the many options to choose! Some of the most popular offerings include co-location, managed hosting and more recently, cloud.

"In co-location, customers can house IT equipment within a service provider data centre within racks or cages where they can place their servers, networks, equipment, storage and other business-critical IT infrastructure.

"Managed co-location services are an extension to traditional co-location where most of the capital expenses are offset by managed services charged on a monthly basis. Customers can opt for a mixed environment where specific services such as back-up, security, databases, and monitoring are managed by the service provider while customers choose to retain the management of their hosted infrastructure and business applications," says Yasser Zeineldin, CEO, eHosting DataFort. "With managed hosting customers lease one or more dedicated servers from the service provider who undertakes the responsibility of managing these servers up to the operating system layer."

"Cloud service providers are relatively new, but can take a company's IT services and host them in their own 'cloud' of distributed servers, which offers scaling, resilience and flexibility," Jeroen Schlosser, managing director of Equinix MENA continues.

"By combining a cloud service provider's offering with one's own data centre, a hybrid cloud can keep the control of a privately-owned data centre and augment it with the power of a cloud solution," he adds.

Build vs. buy is a big decision to make, but by taking the time to look over the options and business needs, IT professionals can find the right solution to take their organisation forward. With so much to choose from the options may look overwhelming, but don't forget that the providers are more than happy to offer guidance and consultation services to scope out the options and enable companies to find the right strategy to fit with the needs of their data.

"I think customers should seek professional help when making these decisions — often companies have the capabilities to advise customers and help them make up their mind," Jabi says. ■