The shape of things to come

Neil Cresswell of Virtus Data Centres examines the rise of the intelligent data centre and explains how to stay ahead of the curve in an evolving landscape


▶ The role of the data centre has changed. Over the last few years it has transitioned from a cost centre to a revenue centre, with businesses of all sizes seeing the strategic value they deliver. Until now, traditional data centres offered expensive pricing models, which alienated the majority of small to mid-size businesses, unable to commit to long-term and expensive contracts. However, with the emergence of intelligent data centre providers, with astutely designed facilities, disruptive pricing models and flexible contracts capable of offering better price points, shorter contract terms and more efficient solutions, this is no longer the case.

DEFINING MOMENT

There are many differing industry views around what the new generation of intelligent data centres look like, from ensuring high-availability, dense network availability – offering a diverse range of connectivity options – to high server and network speeds and power density. However, in today's data centre market, these are table stakes – the bare minimum required for any data centre company.

To be considered intelligent and next generation, data centre providers need to take far more into account if they are to provide the innovative capabilities and price points that customers demand if they are to

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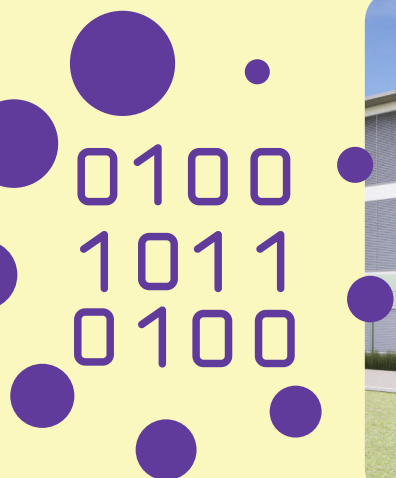
stay competitive.

To achieve next generation status, data centres need to be intelligently designed and purpose built from the ground up to ensure they're highly optimised, deliver innovative services, and are sustainable and efficient. Every aspect of the data centre needs to have been rigorously planned, questioned and simulated well before the first spade digs the dirt – from the location of the site, construction firms and technology vendors used, to connectivity capabilities, ease of access for operators, power consumption and cooling capabilities.

MODEL BEHAVIOUR
By taking this intelligent approach to data centre design, creating models and analysing results, it becomes possible to predict the total cost of ownership of each simulated

option and ensure the most efficient and cost effective configuration is chosen, ultimately benefiting both the data centre provider and customers who these costs usually get passed on to.

More importantly, it also means the data centre can achieve its design power usage effectiveness (PUE) much sooner once operational – unlike the majority of data centres, which can take years before they achieve the same.

FINANCIAL TIMES
The ability to forecast and understand total cost of ownership (TCO) goes far beyond simple capital expenditure calculations. It also has implications from a commercial standpoint.

In a fast paced world where business needs can change regularly, the expensive

and inflexible long-term contracts, which have to-date been the norm, are no longer palatable to many businesses. Typically, data centres have charged high rates, because their overheads made these prices necessary. However, by taking a smarter approach to building, cooling and running data centres, colocation providers can reduce these overheads significantly – passing on the cost savings to customers.

What really sets intelligent data centres apart is the ability to provide customers with access to the vast amounts of information they generate daily. By giving customers visibility into data centre operations and enabling them to access, visualise and analyse the information, customers can benefit from far greater insight than has been previously available, and use it to base more accurate resourcing decisions on.

FLEXIBLE FRIENDS

Today, many colocation providers claim to deliver 'flexible' and 'agile' contracts. But due to a lack of data centre infrastructure management (DCIM) solutions available to colocation customers, they have not had access to the information indicating how much space, power and cooling they use to do anything about it.

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In order to make its intelligent data centre offer more complete and ensure customers have total transparency and control of their usage, colocation providers need to ensure they're providing customers with access with this information so they can benefit from the flexible contracts and only pay for what they use.

A MATTER OF CHOICE

There's more to intelligent data centres than just space, power and cooling. In today's constantly evolving and competitive data centre landscape, where companies have far more choice, data centres need to ensure they're highly efficient if they are to compete.

Only by minimising operational costs and laying a solid foundation for success through intelligent design will they be able to compete with the next generation of data centres which are offering highly flexible, short term and competitively priced data centre offerings. ❏

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