

# CORPORATE REAL ESTATE & WORKPLACE

# **Corporate real estate and IT collaboration**

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# A look at data centers and the corporate real estate portfolio

by David Horowitz

Ithough rarely seen or even acknowledged, during the last 10 years, data centers have become a prevalent part of today's society and a critical component to most companies' business and real estate portfolios. Data centers are the linchpin to powering modern business and the disruptive models that provide immediate access to almost anything, including sharing and viewing photos of family and friends, ordering on-demand automobile transportation or streaming entertainment content, and, best of all, connecting to people all over the world.

The evolution in technology has allowed corporations to rethink how they work and undertake extensive innovation projects that will allow people to experience goods and services that just simply were not available a few years ago.

These amazing features and benefits we experience daily need to be processed, stored and managed somewhere, somehow. That's where data center real estate comes into play.

It's fair to say that most of the population has never been in a data center and truly has no concept of what the "cloud" really is; however, data centers have come to influence everything from corporate capital expenditures, to employee productivity, to end-user fulfillment. In fact, data centers have been one of the fastest growing sectors of real estate, dating back to the 2008-2009 recession, when they were one of only two real estate sectors to experience an increase in property valuations.

Although the data center industry is still in its infancy, the rapid changes in the IT landscape are challenging corporations to develop the most effective strategy for storing and managing their IT infrastructure. Is it best to own your own data center? Utilize a third-party colocation provider? Put it in "the cloud"? Or some combination?

From an investment perspective, all this change has been great for the sector. As of early November 2016, data center REITs outperformed the broader REIT sector and were up roughly 15 percent, on average, through the first 11 months of the year. In addition, data center REITs outperformed the S&P 500, NASDAQ 100 and DOW 30 by more than 10 percent. These results show the emergence of the data center as a viable real estate product class within the industrial segment.

## Growth in data centers is remarkable

The data center environment for corporations has evolved from traditionally owning and building their own data center on premises to outsourcing these requirements to third-party providers. Determining which of the various outsourcing solutions (i.e., colocation, wholesale, cloud, etc.) is best for your company can be a challenging task, but outsourcing has proven to improve IT operations and be a more cost-effective approach.

In certain situations, even some of the largest technology firms in the world like Microsoft, Google and Facebook are choosing to outsource their data center infrastructure requirements instead of building their own site. Leasing activity is at an all-time high and data center providers are challenged keeping up with the demand from cloud and enterprise companies. Considering the colocation/wholesale data center market isn't much more than 12 years old, there is already more than an astonishing 200 million square feet (18.6 million sq. m.) of third-party data center space in the U.S. Additionally, a study of data center energy use by the U.S. government found data centers now account for approximately 2 percent of the country's energy consumption. The continued rise in their demand creates the need for ever-increasing efficiency and sustainable designs.



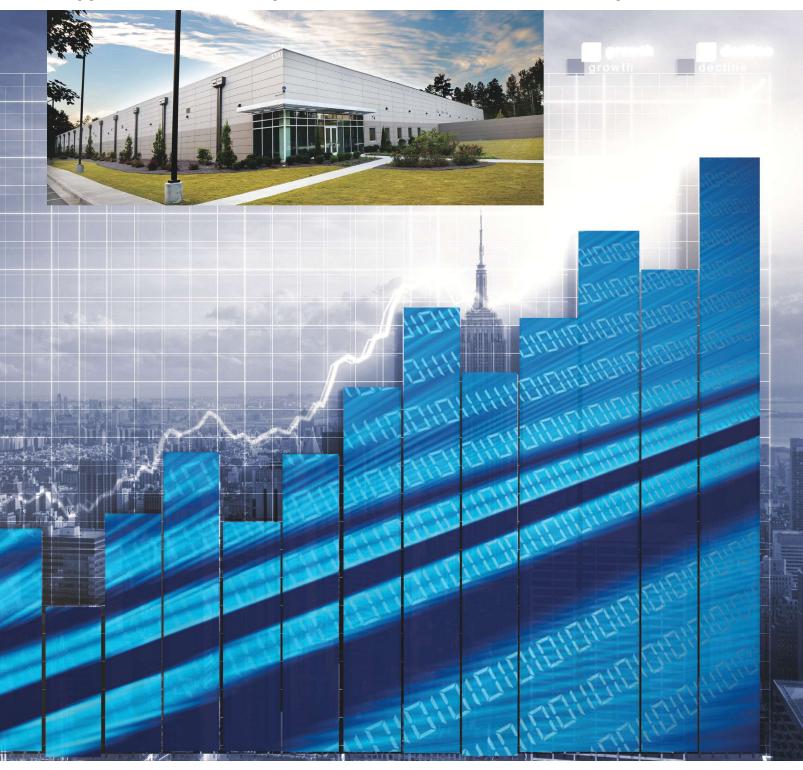
The impact of this on corporate real estate (CRE) strategies is significant. Data centers are an expensive but necessary component of the modern CRE portfolio – at the very least powering critical processes and workflows and, for some companies, enabling their primary business models.

CRE professionals now have a choice as to how best to deploy their infrastructure, as data center developers have created a high-quality real estate product that both private and public sectors find attractive for outsourcing. After all, the fallacy of complete control and greater reliability for companies to build and host their own data center on premises is just that; equipment becomes dated and maintenance protocols do not maintain congruency with the latest best practices.

Often, companies relying on owned, on-premises data centers often take a "don't ask, don't tell" approach to their ongoing resiliency: Don't ask for money to upgrade something that works just fine, and don't tell me about the ever-increasing risk and eventuality of a failure.

# **Oversight shifting to real estate**

As data centers now make up a significant portion of the CRE portfolio valuation, responsibility for them has begun to transition from the IT business units toward the real estate department. And, contractual



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agreements that companies enter into with third-party data center providers have generally transitioned from service contracts to real estate leases.

Historically, IT departments have managed these mission-critical real estate/IT decisions. IT executives have typically driven corporate infrastructure strategy and execution. However, their experience in understanding complex leases and real estate peccadilloes can often be limited.

Interestingly, over 70 percent of corporate America's IT is still housed internally, and these IT departments' top priority is ensuring that their company's IT infrastructure is available to support its business without downtime, operating efficiently 24x7x365 without a fear of ever, ever going down. But supporting the annual increases in data growth, network consumption and power requirements has become extremely time-consuming and expensive for corporations to manage internally; it is not the core of their business.

Thankfully, advancements in design efficiencies and operational best practices by third-party providers have improved dramatically over the last few years. Data center providers are getting smarter and more cost-effective in their builds, which, in turn, benefits tenants from both an efficiency and economic perspective.

Ten years ago, the standard construction cost to build a data center was between \$13 and \$18 million per megawatt of critical power capacity (data centers typically measure in terms of kilowatts or megawatts of power rather than square feet). However, with economies of scale and improvement in efficiencies, providers are now building data centers for a construction cost of between \$7 and \$8 million per megawatt.

As a result of these lower cost structures, the average total cost of ownership (TCO) for an 8,000-square-foot (743 sq. m.)/1 megawatt, 10-year lease for a customer leasing from a data center provider has declined approximately 10 percent from five years ago. According to most industry experts, the only time it makes financial sense for a corporation to consider building its own data center is if the requirement is for over 100,000 square feet (9,290 sq. m.) and/or 6 megawatts of power. Most corporate (enterprise) facilities fall far short of this metric or, regardless, find that the flexibility in terms of growth and term length often tip the scale toward leasing vs. owning.

## **Drawbacks of owned data centers**

Many enterprises who built their own data centers are sitting on unutilized capacity and are trying to develop creative solutions to sell assets. However, these assets were overbuilt (on IT executive projections of "what could be" as they looked into their crystal balls to guess what might happen to technology over a 10-year period), and the book values are so high that a sale is deemed to be out of the question.

In one instance, a major airline chose to build a 1-megawatt data center on its campus rather than outsourcing to a third-party provider. IT drove this decision and built the data center for \$35 million – over twice the industry standard. In a discussion with one CRE director with a major financial services firm, he stated "It would be nearly impossible for us to build a data center and match the demand of IT where the facility would be properly utilized."

Whether it's through the cloud, colocation, or a wholesale data center solution, CRE executives should start actively participating in these decisionmaking processes. Without their involvement, corporations are paying higher lease rates, ignoring available business and tax incentives, facing unexpected capital expenses, and limiting flexibility options for the short and long term.

Real estate obligations are already the second or third highest expense for most corporations. Given the rapid increase in corporate data center demand, overall real estate costs attributed to them will continue to climb. In many cases, CRE executives have not embraced this change and limit their involvement in these transactions, leaving it to the IT team.

Why is that the case? John Bullen, director of real estate for Comcast and an active member of the company's data center procurement team, says:

"There is certainly a language barrier that keeps the IT/CRE relationship strained. We have found that by taking the time to listen and learn from IT, we have slowly built trust with our IT partners. It's only by being able to speak the same language that CRE can truly understand the requirement. This understanding is necessary to negotiate the right transaction. There is more to a 'good deal' than rental rate and this is never more evident than with data center transactions. The burden of bridging the language barrier is on CRE."

Many IT departments still hold on to misconceptions about internal data centers. Among them: internal facilities are superior in terms of corporate control, and they're less expensive, more resilient and more efficient. CRE executives can help prove out the facts over these common misconceptions; like many of the internal corporate-owned data centers that still exist, those misconceptions are simply obsolete because of the wide variety of outsourced data center options and services now offered in the marketplace.

By CRE executives becoming more comfortable with the metrics associated with data center transactions (i.e., cost per kilowatt vs. cost per square foot/meter), they can add more value and more influence in the decision-making process for their companies. As Comcast's Mr. Bullen notes, the language barrier is a major factor and it's difficult for CRE to recognize the necessities vs. the desires articulated by IT professionals.

## The bottom line

When IT is solely responsible for procuring data center space, they are tasked with being an IT expert, futurist, and a real estate negotiator. A good IT executive might have real insight into the evolution of a company's applications, its requirements, etc. But as we all know, real estate executives know how to negotiate and understand the dynamics of real estate leases that will better align with the company's goals. Not only can real estate add value in the negotiation process, they also can prevent the IT department from overlooking other aspects of the transaction that will benefit the company. CRE executives will complement IT's efforts by reducing TCO, balancing costs with operational goals, operating more efficiently, and maintaining corporate sustainability.



David Horowitz of T5 Data Centers is a 12-year veteran of the data center industry and has managed practice groups for commercial real estate firms as well as data center providers.