WHY SMART COMPANIES ARE RETOOLING TO OPTIMIZE THEIR DATA CENTER LAB FACILITIES AND RE-INVESTING IN R&D

5 Reasons to rethink your data center lab strategy

VANTAGE™
DATA CENTERS

WHY SMART COMPANIES ARE RETOOLING TO OPTIMIZE THEIR DATA CENTER LAB FACILITIES AND RE-INVESTING IN R&D

5 Reasons to rethink your data center lab strategy

In today's fast paced environment, innovation is paramount to success. In fact, a recent study indicates that Research and Development by private companies is nearly historical highs. Clearly, R&D is back in vogue and more important than ever. But R&D work, especially for technology companies, requires more sophisticated, dedicated, state-of-the-art IT infrastructure than ever before.

Time and time again, when examining the IT environment of our customers and prospects, we find that in the rush to innovate faster, companies have let their underlying IT infrastructure atrophy if it hasn't kept up with other investments over time.

Most underlying IT infrastructures fall into one of three internal scenarios:

1. You are running IT infrastructure dedicated to R&D testing in pockets throughout your office space, paying exorbitant commercial real estate and power usage fees.
2. You are running IT infrastructure dedicated to R&D inside your company's core data center, using critical infrastructure for testing – which means paying for five nines (99.999 percent) of availability and redundancies you don't necessarily need.
3. Some combination of both, which makes it nearly impossible to manage the infrastructure without turning your expensive R&D engineers into data center managers.

Clearly, your data center lab is an important asset, and requires the ability to quickly deploy new infrastructure to support testing needs – but the existing solutions just don't work.

Today, there is an option that allows you to take advantage of advances in data center design while also affording the flexibility and customization needed to innovate quickly and turn on a dime. Put plainly: if you run a data center lab of any reasonable size, you need need purpose-built data center lab space.

This is not merely about consolidation, though that is an important component. Transitioning to purpose-built means creating an flexible, energy and cost-efficient model that allows your data center lab facilities to expand as you grow, use cheap power as you need it, and avoids wasting money on power and infrastructure that you don't need.

COST

You'll save time and money with purpose and efficiency

Have you built data center racks and equipment into your office space? If so, you're overpaying for the space you are using.

Using commercial real estate for data center lab IT infrastructure is unnecessarily expensive. Moving to a data center that is purpose-built for your data center lab is more efficient and effective. By moving to an outsourced model, you'll have access to facilities built with all the requirements to run an effective data center in mind. Not only is this more effective in general, it offers a better environment to work in while saving money and time.

If you are running data center lab equipment in a commercial office, it's also very likely that you are being charged retail power rates – which can be prohibitively expensive. Wholesale power rates available through co-located data centers, which run at $.096 per kilowatt hour (kW/h), can save you up to 40 percent over retail rates, which run an average of $0.15 per kW/h.

> *With electricity making up approximately 50 percent of the cost of running IT infrastructure, tuning your data center on low-cost power is paramount to ensuring maximum efficiency.*

If running infrastructure in your office, you are also sacrificing the ability to manage the efficiency of power usage and control power distribution. Often, power usage effectiveness (PUE) is an afterthought, or non-existent, in commercial environments – when in reality, it's an integral component of efficiently running your data center lab's infrastructure. A wholesale data center environment comes equipped with service level agreements (SLAs) that govern and control PUE at a high level of specificity, with costs savings passed along directly to you.

FLEXIBILITY

You'll optimize your infrastructure for its best intended purpose

Facilities that were not purpose-built often have unnecessary redundancies that drive up cost. In testing environments, for example, critical infrastructure isn't being run – so why over invest to ensure it is available 99.999% of the time?

Purpose built data center lab infrastructure in co-located data centers offers more control over the environment and redundancy equipment.

If you are building using mixed environments – spaces that run both business-critical equipment and testing equipment – or using critical infrastructure for testing, you may be overpaying for your lab facilities. Most current environments are not equipped to serve both needs. Equipment that can never go offline requires backups (2N) that testing environments (N or N+1) do not. In spaces dedicated to R&D, you shouldn't pay for redundancies you don't need.

For data center lab and testing environments, a fully redundant backup is unnecessary – because if the system goes down, there is no immediate or traumatic effect on your day-to-day business operations. By moving to a purpose-built space, you'll have choice over how equipment is run, while taking advantage of an expert staff that knows exactly what you need for which workloads.

ACCESS

Keep your data center lab close and in the right hands

Most in-office environments are built because that is where the engineers work. Access is, of course, important – the engineering team needs to be close to its equipment. But that doesn't mean it has to be next to their desks. Housing your own equipment on-site is cost-prohibitive for most, while wholesale spaces help bridge the gap between high cost and accessibility. With wholesale, you get a dedicated space, easy access and offices – essentially as convenient as your own office, but without the costly side effects of running equipment in a commercial space.

There is also the advantage of proximity to mission-critical staff. It is crucial to keep the data center lab accessible and visible to those who were hired to run it. Many data center labs built in commercial spaces are simply plopped wherever they fit. But that could situate a data center next to the marketing department rather than closest to those who know everything about how to run and operate the environment.

Get the convenience and peace of mind that comes with knowing your data is being managed by a team of highly trained professionals who are experts in every aspect of the environment.

SCALABILITY

You'll be able to plan for today and tomorrow

Businesses can't afford to rent massive amounts of space they may need in the future to accommodate growth. So when your needs change, and your footprint expands, the inefficiencies of your data centers become more exposed and more costly. Put another way, while your data center lab IT infrastructure may have originally fit in the space of two desks, if you need to quadruple your footprint, can you afford to lose another eight desks?

Wholesale is equipped to expand with you – a space that can grow, or even scale back – to fit the needs you have today and the possibilities of the future. It's important to house your equipment in an environment built with purpose and long-term strategy in mind. Co-located data centers are built for one purpose only – to provide state-of-the-art environments, regardless of shifting requirements and needs.

> *Allow yourself to grow comfortably by having a plan for expansion in place without paying for it up front.*

SERVICE

You'll have access to resources and services that will help you focus on the right things

Your company's data center lab may have grown organically over the course of many years – designed haphazardly over time, rather than purposefully with an eye on future growth. Is it time to build something with a long-term vision in place? Work with a team that will help assess what you need today and build a data center infrastructure that meets your specific needs. We have experts capable of designing with purpose and foresight.

Have you become the default go-to for all things related to your data center lab's IT infrastructure within your company, even though that is not the primary function of your job? That's expensive! Paying your R&D staff to tackle the day-to-day burden of data center management is neither cost efficient nor fair to the employees. Our team can allow you to focus on what is most important, relieving the burden of work that is slightly outside your realm of expertise. Let dedicated experts manage the environment for you, freeing you to focus on building, designing and testing your products.

About Vantage

Vantage provides highly scalable, flexible and efficient data center solutions offering unique value through its commitment to exceptional customer service. Operating campuses in Silicon Valley, California, and Quincy, Washington, Vantage delivers data center design solutions engineered to meet our customers' unique requirements in support of the most demanding large enterprises, technology companies and service providers. Vantage is backed by Silver Lake, the global leader in technology investing, with $23 billion in combined assets under management and committed capital. Additional information on Vantage is available at ***www.vantagedatacenters.com****.*

VANTAGE™
DATA CENTERS

PRESS CONTACT

Vantage Data Centers
Steve Lim, (408) 215-7215

slim@vantagedatacenters.com