Why You Need to Keep an Eye on Your Data Center's ROI

Balancing the needs of users and company ROI means deploying data center assets that deliver maximum performance and reliability while reducing capital and operating expenses.

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Data center managers constantly straddle the line between user demand and company budgets. On one side is the pressure to deliver maximum uptime and performance. On the other is the bottom line, which requires operating in the most cost-efficient manner possible.

There was a time when you could accommodate increased traffic by adding more servers. Those days, however, are gone as budget and physical space constraints force you to do more with less.

Whether you measure your data center's return on investment (ROI) by time to savings, time to revenue, time to break even or another financial metric -- choosing technologies that can bolster the balance sheet, while also keeping your users happy, is vital.

Granted, embracing new technologies comes with an initial cost. But, when making IT asset purchase decisions, ROI-driven data center managers look beyond the initial price tags and consider the assets' impact on operational efficiency, capital expenses (CapEx) and ongoing operating expenses (OpEx).

With that in mind, here are a few savings opportunities to consider when building your data center or upgrading your existing infrastructure.

Power Consumption

Power is the most expensive component of a data center's OpEx, feeding the servers, network equipment and the cooling system. Energy-efficient components reduce your power costs on two fronts – not only do they use less electricity to operate, they also generate less heat, which requires less electricity to cool.

Performance and Port Count

Investing in performance and ports can reduce your server count, which can drastically decrease IT expenses, real estate requirements and power, cooling, and maintenance costs.

High-performance storage components, for example, accelerate Input/Output Operations per Second (IOPS) and reduce latency while high port count adapters offer maximum storage connectivity. Both allow you to host more users on fewer servers.

Component Compatibility

The typical data center is built upon components from multiple vendors. It takes considerable time and expense to test, integrate and validate those components to ensure their compatibility with each other. Implementing solutions that deliver proven compatibility with other devices will accelerate deployment and reduce OpEx.

Management Tools

Even minor issues can cause widescale disruption if they take you by surprise. Good management tools allow you to monitor power usage, cooling needs and traffic demands in real time.

Getting the Best Returns from Your Storage

Improving any of the above areas can go a long way towards optimizing your data center for performance and financial efficiency. Finding the right storage components from the right partner can address them all.

Microchip: A Storage Leader

For over 30 years, we have built storage products with our customers' needs in mind, evolving from our origins on the desktop into one of the most trusted data center partners in the world. Our SmartROC/IOC silicon-based HBA and RAID adapters can be found in more than 30 million servers around the globe.

Our storage solutions help maximize your data center's ROI by minimizing your CapEx and OpEx in the key

opportunities we reviewed above:

- Power Consumption: Our **SmartRAID 3100 adapters** and **SmartHBA 2100 and HBA 1100** draw fewer watts per port compared to competitive offerings, and our low-profile adapters allow better airflow in the server chassis to lower your cooling expenses.

- Performance and Ports: Our 12 Gbps **SmartRAID**, **SmartHBAs and HBAs** deliver maximum read/write bandwidth and IOPS, allowing you to host more users and more transactions on fewer servers. Our SmartRAID 3100 and HBA 1100 offer industry-leading 24-port options to further reduce your server requirements.

- Proven Compatibility: All of our solutions have been tested with hundreds of third-party devices to ensure compatibility with existing ecosystems. Additionally, we offer best-in-class sales and technical support and are ready to help you design, deploy and manage any type of data center.

- Management Tools: Adaptec® maxView Storage Manager lets you view, monitor and configure all the storage in your system built on our RAID adapters and HBAs so you can stay on top of day-to-day operations.

Building Your Data Center

Balancing the needs of users and company ROI means deploying data center assets that deliver maximum performance and reliability while reducing capital and operating expenses.

Adaptec HBA and **RAID adapters** reduce the amount of electricity your data center needs to power and cool servers. They deliver the highest performance and port counts to reduce the number of servers required to meet user demands and are compatible with your infrastructure. Our dedicated support team can help you design and build your data center, and our maxView Storage Manager lets you manage all the storage in your system built on our RAID adapters and HBAs.

Marc Anthony, Mar 29, 2021