

Miraziz Zakhidov
Flash Research Assignment #1
Data Centers and Networking
09/10/2012

By investing in Tier III data center, our company would save a total of \$24.1 million per year in significantly reduced downtime costs. Tier III data center is more advanced data center that has more capabilities than the current Tier III data center that our company uses. Upgrading to Tier III data center would increase data center uptime availability and its efficiency while generating significant savings for our company. It would also improve our customer satisfaction from our services.

One of the key capabilities of Tier III data center is that it is a concurrently maintainable data center that has redundant capacity components and multiple independent distribution paths. Only one distribution path is required to serve the computer equipment at any time. Removing any capacity component or element in distribution paths from service for performing planned site infrastructure maintenance will not have any impact on any of our computer equipment performance. Tier III data center would allow us to continue our operations while performing planned maintenance. Our current Tier I data center must be completely shut down annually to safely perform necessary maintenance. Because of this, Tier I data center averages downtime of 28.8 hours annually with 99.67% uptime availability which costs our company a total of \$25.57 million per year. Compared to Tier I data center, Tier III data center will average downtime of only 1.6 hours with 99.98% uptime availability which would only cost us a total of \$1.42 million per year. This major advantage of Tier III data center would significantly reduce our annual downtime from 28.8 hours to 1.6 hours while saving our company millions of dollars every year.

Although building Tier III data center would take 1 year and cost us approximately \$35 million, we would be making a great investment over a period of three years. With Tier III data center, our company would save a total of \$72.46 million in reduced downtime costs over a period of three years. Initial investment of \$35 million will save us millions of dollars as I stated earlier and it will help our company to gain a competitive advantage over its rivals who still use Tier I data centers. Providing our services with fewer interruptions (except for unplanned ones) would also help our company to improve its customer loyalty and satisfaction.

Miraziz Zakhidov
Flash Research Assignment #1
Data Centers and Networking
09/10/2012

References

Turner IV, W. Pitt, John H. Seader, Vincent E. Renaud. *Data Center Site Infrastructure Tier Standard: Topology*. Uptime Institute LLC. 2012. Web.

"Data Center Tier Standards | Tier 1-4 Overview | Colocation America." *Dedicated Hosting Servers, Colocation Data Center | Colocation America*. N.p., n.d. Web. 9 Sept. 2012.
<http://www.colocationamerica.com/data-center/tier-standards-overview.html>

Hamilton, Mary Beth. "Data Center Tiers Defined." *Eze Castle Integration: Hedge Fund Technology, IT Services, Consulting*. N.p., n.d. Web. 9 Sept. 2012.
<http://www.eci.com/blog/40---a---refresher---on---data---center---tiers.html>