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Flash Research Paper #1 – Data Centers and Networking

Money is being wasted because we do not have a stable datacenter. Upgrading our datacenter from Tier I to Tier III will increase our annual revenue with a net benefit of \$37,372,000 over a three-year period. A Tier III datacenter drastically improves redundancy while increasing uptime from 99.67% to 99.98%.

Our Tier I datacenter does not have the redundant components to keep a respectable stable uptime but upgrading to a Tier III datacenter will give us redundant capacity components to keep the data center stable in a critical environment. As of now our datacenter uptime throughout the year is at 99.67% but upgrading to a Tier III datacenter increases redundancy which will increase uptime to 99.98%. Going from Tier I to Tier III reduces the amount of yearly downtime by 1,650% from 1,735 minutes to only 105 minutes.

Our costs over a three-year period was \$77,034,000 but after implementing and installing Tier III specs we can reduce those costs and gain a net benefit of \$37,372,000 over a three-year period. With Tier III we will save and benefit \$24,124,000 a year due to less downtime.

## **References**

The rating guidelines from the Uptime Institute "Data Center Site Infrastructure Tier Standard: Topology" (PDF) Uptime Institute.

Jew, Jonathan. "BICSI Data Center Standard: A Resource for Today's Data Center Operators and Designers," BICSI News Magazine, May/June 2010, page 30.

<sup>&</sup>quot;Measuring Data Center Efficiency: Easier Said Than Done". Dell.com.