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Flash Research Assignment #1

Data Centers and Networking

By upgrading our current Tier I data center to a Tier III data center, our company will save over $48 million. Investing in this new system will reduce downtime; prevent outages, and increase availability and overall savings.

The technological improvements that can yield such high savings would require an investment of $35 million. This upgrade would be transitioning our current Tier I data center to an advanced Tier III data center. There are many aspects of this new infrastructure that allows reliability to improve greatly. Currently, there is no redundancy in place for capacity components as well as distribution paths, which we rely on both internally and externally. This upgrade would call for implementing redundancies in these areas, which would allow us to continue business even when vital components of the back end system fail unexpectedly. For example, all IT equipment will be dual-powered making power failures a significantly smaller issue than before. Rather than having an unexpected outage for hours, a rare and unexpected outage would last only minutes in order to switch to our redundant components totaling a decrease of 1,5000 minutes of downtime per year.

Ultimately, this one time investment of $35,000,000 will increase reliability to our system and allow business to continue even when there are unexpected outages. Just in the past year, there were ten outages costing up to two million dollars per outage. A small investment of $35 million would reduce the loss of operations significantly. This would allow for an increase of uptime of .31% or over 1,500 minutes per year or about $24 million in business. By the third complete year of this new system, there will be an increase of over $48 million in cumulative savings. In turn, the investment would pay for itself in less than 36 months.