

What if I told you that you could save millions each year by making one important decision? Due to a handful of outages to our ERP system, the company has had to stop such routine operations as processing, making, and shipping orders. As a result, these downtimes cost us on average \$14,800 per minute. If we continue to use the current system for our data center, we will be throwing away money. By investing in the improved Tier III data center now, the company can decrease its losses and increase their profits.

By building a Tier III data center we can increase the availability to 99.98% from 99.67% availability that the current Tier I system offers. As shown in Figure 1, the uptime performance from Tier I to Tier III is drastically improved. Also known as a concurrently maintainable site infrastructure, Tier III data centers have one key capability that a Tier I data center does not have: the ability to essentially run 24x7. Due to the fundamental requirements, a Tier III data center has multiple independent distribution paths serving the computer equipment, but only requires one distribution path to serve the equipment at any time. Each and every capacity component and element in the distribution path can also be removed from service without impacting the rest of the computer equipment. This keeps the downtime to a minimum by allowing maintenance activities to be done without the need to completely shut down the whole site infrastructure.

So how will this save the company millions? By converting to a Tier III data center which has 99.98% availability, we can decrease the downtime of the ERP system from approximately 1734.48 minutes a year to 105.12 minutes a year (Figure 2). This equates to a \$24,114,528 decrease of costs resulting from downtime a year. The initial investment will cost approximately \$35,000,000 and 1 year to build, but with the new data center implemented, the company can break even and even profit an estimated \$13,229,056 in a 3 year period.

Figure 1:

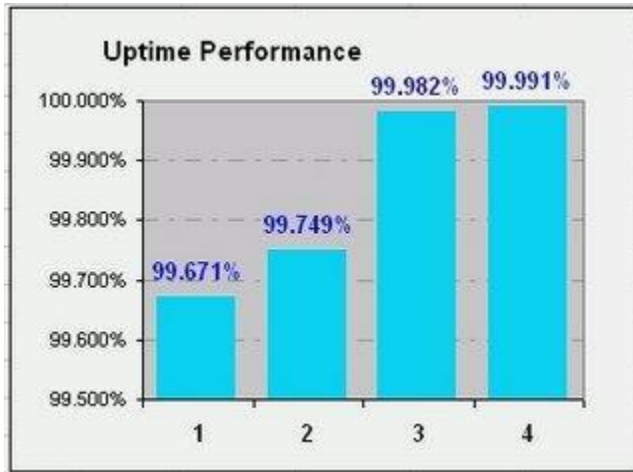
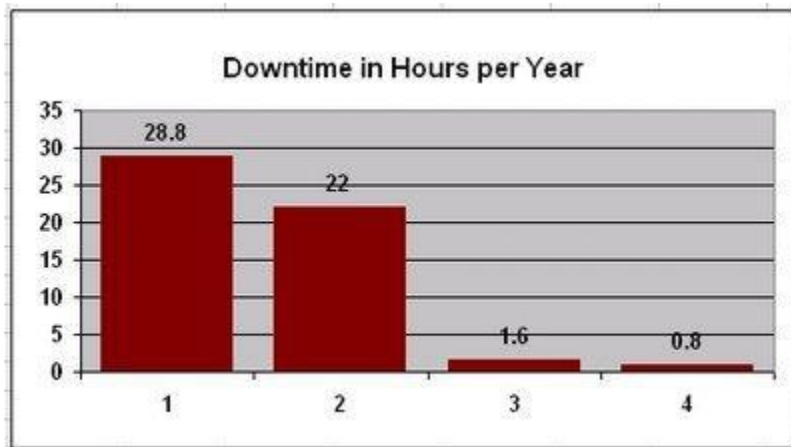


Figure 2:



Work Cited

"A Quick Primer on Data Center Tier Ratings." *Notes from the Consultant's Jungle — Data Center and IS Security Information, Trends, Advice*. 15 July 2008. Web. 30 Jan. 2012. <<http://notesfromtheconsultantsjungle.com/2008/07/15/a-quick-primer-on-data-center-tier-ratings/>>.

"Tier 1|Tier 2|Tier 3|Tier 4 Data Center." *Data Center Tier Standards*. Web. 30 Jan. 2012. <http://www.colocationamerica.com/data_center/tier-standards-overview.htm>.

Uptime Institute, LLC. *Data Center Site Infrastructure Tier Standard: Topology*. Tech. New York: Uptime Institute, LLC, 2010. Print.