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Flash Research Assignment #1

By switching to Tier III datacenters, we could see a net benefit of $37,460,800. Building the Tier III datacenter can make sure our costs do not become too high. Tier III datacenters allow for system maintenance without any disruption and significantly less downtime. This would save us the tremendous downtime expense we currently face.

Tier III datacenters are concurrently maintainable systems. This means regular maintenance on power and cooling can take place without any effect on the performance of the datacenter. Their overall downtime is only 1.6 hours a year. This implementation will increase our availability from 99.67% to 99.98%. Besides that, they also provide N+1 redundancy. This is a backup power supply provided in the case of if the main power supply is unresponsive. It is guaranteed for up to 72 hours of backup power. We should invest in building the Tier III datacenter because it will significantly lower downtime from 28.8 hours to 1.6 hours.

Construction and installation will cost $35,000,000 for the first year with no other costs for the rest of the three year period. The benefit would be saving $24,153,600 per year from less downtime and for a total of $72,460,800 in the three year period. This leaves the company a three year net benefit of $37,460,800.

Sources

Albert. “Data Center Tier Rating Breakdown - Tier 1, 2, 3, 4 - CLA.” *Colocation America*, Colocation American Staff, 19 Apr. 2017, www.colocationamerica.com/data-center/tier-standards-overview.htm.

“Log in to Your Gartner.com Account.” *Login Page*, www.gartner.com/document/3430417?ref=solrAll&refval=209207612&qid=373609d205794fbd790b84f07e78aec9.

Lortz, Mitch. “The True Cost of IT System Downtime.” *Everbridge*, 28 Sept. 2016, www.everbridge.com/true-cost-system-downtime/.