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Flash Paper Assignment I
Data Centers and Networking

Investing in a "Tier III" data center will result in a net benefit of $13,229,056. Our current data center is only available 99.67% of the time, meaning our system is down for roughly 29 hours yearly. This down time might not seem a lot, but it is costing us around $25 million every year. After a sufficient amount of research done, investing in a "Tier III" data center will solve this issue and save us around $24 million per year.

A tier III data center is equipped and structured to out perform a tier I data center for multiple reasons. Starting with a tier III's fundamental requirements: 1) It has redundant capacity components and multiple independent distribution paths. 2) In case of any faulty power it has dual power for all IT equipment. 3) It provides 12 hours of on site storage. Any component of the data center can be removed on a planned basis without impacting the system. In case any component has been removed this system will provide permanently installed capacity to run the system. Tier III a site infrastructure solution typically know the cost of a disruption, impact to market share, and continues mission imperatives all by utilizing organizations. Finally, a tier III data center is concurrently maintainable and is available 99.98% of the time, an addition 27.156 hours from our current tier I data center.

This investment will result in a net benefit of $13,229,056 over a three-year term. A tier III data center will cost $35 million to implement, but it over the course of three years it will save us $48,229,056.

Calculations:

Downtime cost of $14,800 per minute
525,600 minutes in a year
Tier I:
99.67% 1,734.48 min unavailable -> loss of $25,670,304 per year
Tier III:
99.98% 105.12 min unavailable -> loss of $1,555,776 per year

	Year 1	Year 2	Year 3	Total
Gains/savings		$24,114,528	$24,114,528	$48,229,056
Tier III costs	$35,000,000			$35,000,000
Net benefit				**$13,229,056**

Works cited:

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