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DATA CENTERS AND NETWORKING

By switching our Tier I data center to a Tier III data center, our company can save over $13 million. Our company currently runs on a Tier I data center. I propose that we invest in a Tier III data center that in the long run, will results in a more durable data center.

The Tier III data center provides a more efficient, more available center for data storage and management compared to the Tier I data center. The Tier III data center is a combination of the Tier I and Tier II data centers along with additional equipment and features. Both data centers are durable, however, during times of maintenance, the Tier I data center must be shut down compared to the Tier III data center, which can be maintained while still in active mode. Throughout the year, the Tier I data center experiences 1,734.48 minutes of downtime while the Tier III data center experiences only 105.12 minutes of downtime. Furthermore, the Tier III data center comes with a backup component in case one needs to be repaired compared to the Tier I that has no backup. Overall, the Tier III data center is by far an upgrade over the Tier I data center.

The initial investment, or cost, to install the Tier III data center is $35 million. While that seems to be a big sum of the company's finances, in the long run, the investment benefits the company $48,229,056—which comprises of the difference in downtime costs for the Tier I and Tier III data centers. Upon further calculations, the net three-year benefit for the Tier III data center is $13,229,056—a steal when compared to the initial $35 million investment.

	Minutes in a Year	Availability	Downtime (min/year)	Downtime Cost
Tier I	525,600	99.67%	1,734.48	$25,670,304
Tier III	525,600	99.98%	105.12	$1,555,776
			Savings	$24,114,528

	Year 1	Year 2	Year 3	Total
Costs	$35,000,000	$0	$0	$35,000,000
Benefits	$0	$24,114,528	$24,114,528	$48,229,056
			3-Year Net Benefits	$13,229,056

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