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MIS 3406

18 September 2018

Flash Research Paper #1: Datacenter

Our company can gain a net benefit of over \$13M by upgrading from a Tier I datacenter to a Tier III datacenter. Every minute of downtime will cost \$14,800. We cannot ignore the fact that our company has suffered over 10 outages the past year.

The key capabilities of the Tier III datacenter include redundant capacity components, consistent performance tests, and N + 1 fuel capacity. With these capabilities, our datacenter will be prepared for any outage or disruption. Currently, the Tier 1 has the availability of 99.67%. Tier III has the availability of 99.98%. That .31% difference amounts to \$24,114,528 in downtime costs.

Making the investment of \$35,000,000 for a datacenter upgrade will give a benefit of \$48,229,056 in a span of three years. It is not just money that is on the line, but also the company's reputation as well. The upgrade will result in a swift way to mitigate risks and the ability to avoid outages.

	Y1	Y2	Y3	Total
Cost	35,000,000	0	0	35,000,000
Benefit	0	24,114,528	24,114,528	48,229,056
			Net Benefit	13,229,056
	Minutes in a year	Availability	Downtime cost per min	Total
Tier I	525,600	99.67	14800	25,670,304
Tier III	525,600	99.98	14800	1,555,776
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			Total Amount of Downtime Cost	24,114,528

Works Cited

Data Center Site Infrastructure Tier Standard: Topology. Rep. Uptime Institute, 2009. Web. 18 Sept. 2018.

Woodward, Matt. "How Much Does 1 Hour of Downtime Cost the Average Business?" *Rand Group*, 9 Jan. 2017, www.randgroup.com/insights/cost-of-business-downtime/.

Colocation American Staff. "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.