

Flash Research Assignment #1

Our company has the opportunity to save \$13.2 million by implementing a Tier 3 data center. Within the last year, we have lost approximately \$25.7 million due to downtime costs. With the Tier 3 data center implemented, our systems would be functional during maintenance, and the daily operations of the firm would not be affected.

The key capability of the Tier 3 data center is that it offers redundant capacity components and dual power sources to the firm's equipment. This allows the data center to be operational during maintenance without any interruptions. With 99.98% availability of the Tier 3 data center, downtime costs would be reduced from 1,734.48 minutes to 105.12 minutes per year. This would decrease our chances of encountering a power outage, allowing our firm to carry out its daily operations normally.

Investing in a Tier 3 data center would allow our firm to save approximately \$24.2 million in downtime costs per year. The initial cost for building the Tier 3 data center would be \$35 million, but over a three year period, our firm would see a potential savings benefit of approximately \$48.3 million. This results in \$13.2 million in net benefit for our company. This investment would reduce the unscheduled outages for our firm, as well as improve the functionality of our equipment.

			Downtime Cost		
Tier	Minutes in a year	Availability	Downtime cost/min	Downtime/year	Downtime cost
1	525600	99.67%	14800	1734.48	\$ 25,670,304.00
3	525600	99.98%	14800	105.12	\$ 1,555,776.00
				Saved amount in 1 year	\$ 24,114,528.00

	Year 1	Year 2	Year 3	Total
Cost	\$ 35,000,000.00	\$ -	\$ -	\$ 35,000,000.00
Benefit	\$ -	\$ 24,114,528.00	\$ 24,114,528.00	\$ 48,229,056.00
			Net benefit	\$ 13,229,056.00

References

“Data Center Site Infrastructure Tier Standard: Topology.” GPX Global. Uptime Institute LLC, n.d. Web 29 January 2015

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“What Is a Tier 3 Data Center?” Who Is Hosting This: The Blog. N.p. 23 July 2010. Web. 29 January 2015