

## Flash Research Assignment 1

Our company suffers from a preventable loss of \$25.6 million a year. If we implement a Tier III site infrastructure a reduction in downtime cost will decrease these losses by \$13.2 million in the next three year. By switching to a Tier III site infrastructure we will save over 24.1 million dollars annually with more availability and less downtime per year.

A Tier III site infrastructure eliminates the higher chance of unscheduled outages, which causes downtime within the company, and to the point, cost the company money. A Tier III data center offers Concurrent Maintenance, which means that every component that is vital to support the IT processing environment can be maintained without affecting the IT environment (Data Center Site Infrastructure Tier Standard: Topology). With this redundancy capability on the Tier III data center less downtime occurs and the data centers can run more efficiently. The redundancy function extends to the physical aspect of the data center by creating a redundant delivery system for any crucial components with multiple distribution paths. Therefore, allowing the Tier III system to have an effective life beyond the present IT requirements (Data Center Site Infrastructure Tier Standard: Topology). A majority of the cost from the current Tier I infrastructure are from downtime and by switching to a Tier III system you will drastically decrease these outages.

It will cost \$35 million to switch over to a Tier III site infrastructure, but our company will be saving over \$24.1 million a year on just downtime cost. Over the next three years we will save over \$48.2 million. This system is expensive to implement, but will yield a 38% return on investment (ROI) in three years time. The Tier III data center will help reduce downtime cost in the long run and save the company millions per year.

	Minutes in a year	Availability	Downtime (min/yr)	Downtime Cost
<b>Tier I</b>	525,600	99.67%	1734.48	\$ 25,670,304.00
<b>Tier III</b>	525,600	99.98%	105.12	\$ 1,555,776.00
			<b>Savings:</b>	\$ 24,114,528.00

	Year 1	Year 2	Year 3	Total
<b>Costs</b>	\$ 35,000,000	\$ -	\$ -	\$ 35,000,000
<b>Benefits</b>	\$ -	\$ 24,114,528.00	\$ 24,114,528.00	\$ 48,229,056
			<b>3 Yr. Net Benefit:</b>	\$ 13,229,056
			<b>3 Yr. ROI:</b>	38%

#### Work Cited

Data Center Site Infrastructure Tier Standard: Topology. Rep. Uptime Institute, 2009. Web. 5 Sept. 2013.

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Schwartz, Lynn. "The Tier Classification System." *Uptimeinstitute*. Uptime Institute Peressional Service. Web. 30 Sept. 2014.