Rebecca Robinson

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Enterprise IT Architecture

<u>Flash Research 1: Data Centers and Networking</u>

Right now, our downtime is costing us over $25 million a year and our Tier I data center has caused 10 outages in the ERP system. During these outages, we cannot process orders and cannot make or ship the products. We must reduce the number of these outages to help our organization be more productive and save money. An option for doing so is upgrading our current datacenter to a Tier III, which can save us over $13 million.

The Tier I datacenter has non-redundant capacity components, a single, non-redundant distribution path and 99.67% availability. If any of these components fail, it will result in downtime for the data center. The company is experiencing 1,734 minutes of downtime a year, each minute costing $14,800. By upgrading to a Tier III datacenter, it will alleviate this problem because Tier III datacenters have redundant capacity components and multiple independent distribution paths. It will increase availability to 99.98% and planned maintenance can be performed without any downtime.

Investing in a Tier III datacenter will cost $35 million and one year to build, but you will be receiving your money back by the third year. Downtime for one year with our Tier I datacenter now is costing us approximately $25 million a year, while a Tier III datacenter cost approximately $1.5 million resulting in a savings of $24 million a year. By the end of year three, we will have saved over $13 million by upgrading to a Tier III datacenter. Although upgrading is an investment, it is the key to helping our company continue to grow at the rapid pace it has been.

Figure 1

	Minutes/year	Availability	Downtime (min/year)	Downtime cost
Tier I	525,600	99.67%	1734.48	$25,670,304
Tier III	525,600	99.98%	105.12	$1,555,776
			Savings	**$24,114,529**

Figure 2

	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**

<u>Works Cited</u>

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