

Amanda Rossetti

Implementing a Tier III data center makes the most technological and financial sense for our manufacturing company. Implementing this system will save, on average, over \$24.1 million dollars every year. The Tier III data center will also drastically reduce down time of our ERP system by about 30 hours per year.

The Tier I data center that we currently have caused ten unscheduled outages of our ERP system last year. Upgrading to the Tier III data center will add redundant capacity components, which means that when one component goes down the entire system will not go down. This allows people to continue working as normal. It also has a concurrent maintained aspect, which means that a technician can safely remove some of the components to do maintenance without disrupting service. If anything at all happens to the Tier I data center, the entire system goes down. However, with the Tier III data center, some things can go down and the users will never know and can continue doing their jobs as usual.

The Tier I data center is currently costing the company over \$25 million every year because of unplanned outages. Upgrading to the Tier III data center is only a one time investment of 35 million dollars. The upgrade will save the company over 24.1 million dollars every year after the first year with a total savings of 48.2 million in three years. In just three years, the company will not only save the initial cost, it will also exceed the initial cost by over \$13.2 million. Our company should upgrade to a Tier III data center.

	Minutes in a year	Availability	Downtime Minutes/year	Cost
Tier I	525,600	99.67%	1734.48	25,670,304
Tier III	525,600	99.98%	105.12	1,555,776
Net Benefit				24,114,528
	Year 1	Year 2	Year 3	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
Three year Return on Investment				38%

Work's Cited

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