

# Data Centers and Networking

## Tier I to Tier III

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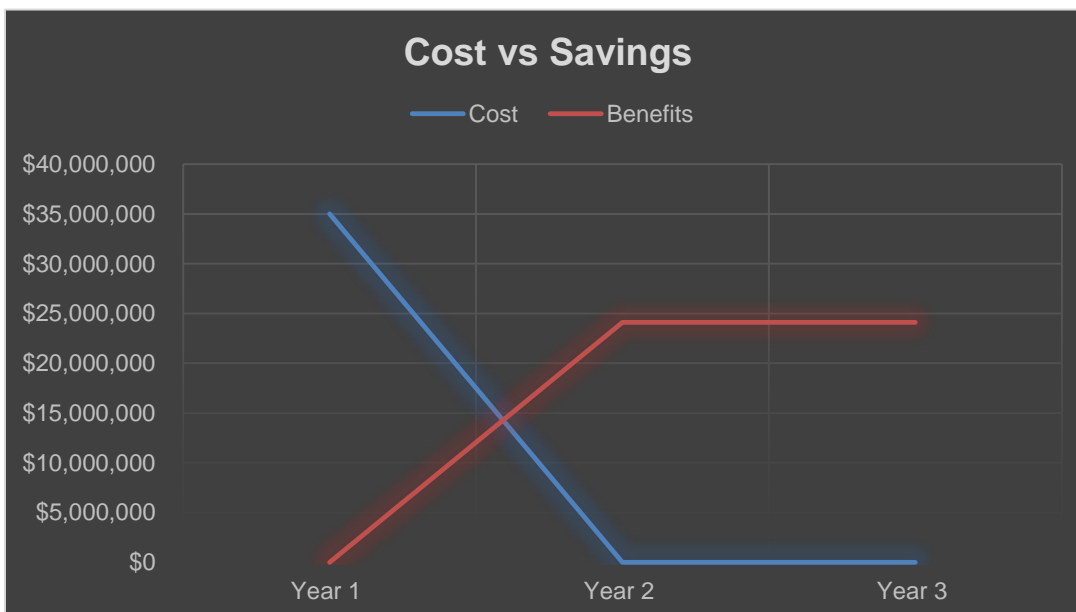
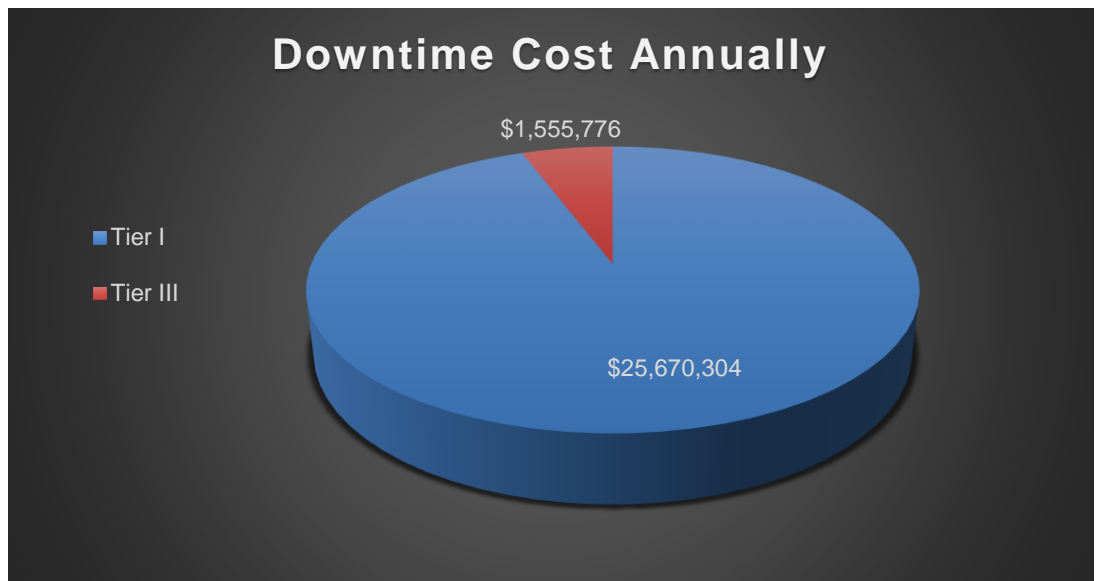
Our company is currently bleeding, with the yearly 28 hours of downtime, with a Tier III we get minimal down time of 1.7 hours utilizing backup power, cooling, and uplink components. Over the course of three years, our investment in the Tier III will pay for itself and gain us a net benefit of \$13 million.

The current data center experienced ten substantial downtime and outages in 2015, primarily due to relying on a single power and cooling path. In contrast, the newer data center will be bolstered by multiple uplinks, active power sources, and cooling distribution paths (Gite 1). In ordinary site infrastructure with current ERP, planned work necessitates data centers be taken offline. The Tier III data center being concurrently maintainable stops down time related any maintenance, providing back-up components, as if one of the path goes down just switch to the backup, keep moving forward.

In brief, with the new data center we will save \$48 million over a three-year period. Implementing the advanced data center will take 1.5 year and cost \$35 million the first year nothing else over three-year standard. It will have a full ROI and a net benefit of \$13 million the three-year period.

	Minutes in Years	Down Cost/Minute	Uptime	Downtime Cost/Year
Tier I	525600	\$ 14,800	99.67%	\$ 25,670,304
Tier III			99.98%	\$ 1,555,776
			<b>Savings</b>	<b>\$ 24,114,528</b>

	Year 1	Year 2	Year 3	Total
Cost	\$35,000,000	\$0	\$0	\$35,000,000
Benefits	\$0	\$24,114,528	\$24,114,528	\$48,229,056
			<b>Net Benefits</b>	<b>\$13,229,056</b>



## Works Cited

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