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MIS 2501 Flash Research Paper #1: Data Centers and Networking

We have the chance to save $24 million a year in lost profits by upgrading our Tier I data center to a Tier III data center. Our business is currently held together by a Tier I data center that gives us almost 100% uptime every year with only .33% of downtime, but ends up costing us $25.7 a year in downtime costs. We can reduce downtime and increase savings and net gain by this upgrade.

The Tier III data center allows us to maintain our data center at 'like-new' condition on a frequent and regular basis. This is crucial as it will allow us to maintain the highest standard in keeping our systems up and running. In addition to that, the Tier III data center will allow any single component to be singled out, repaired, and restored back in its position without a single interference to our IT environment. With the Tier I data center, any component that was in need of repair meant that our entire IT environment would be shut down during repairs. This would wreak havoc and potentially produce unrecoverable losses from more serious situations. Having full redundancy, a Tier III data center will allow continuous operations and oversight without any interruption. With this constant oversight without interruption and downtime, we can envision a future with zero downtime.

The initial investment will cost $35 million up front to upgrade to the Tier III data center. As mentioned, our current data center is costing us $25.7 million a year in downtime. We can slash that cost by 94% with a Tier III data center implementation and at the end of three years, we will have a $48 million in savings and 38% ROI at $13 million.

	Availability	Downtime Per Year (In Minutes)	Cost Per Minute in Downtime	Cost Per Year in Estimated Downtime
Tier I (Current)	99.67%	1,734	$14,800	$25,663,200
Tier III	99.98%	105	$14,800	$1,554,000
			Net Savings	**$24,109,200**

		Year 1	Year 2	Year 3
	Cost	$35,000,000	$0	$0
	Savings	$0	$24,109,200	$24,109,200
			Total Savings	$48,218,400
			Total Cost	$35,000,000
			Net Profit	**$13,218,400**
			ROI	**38%**

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