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Flash Research Assignment: Data Centers and Networking

Our company is losing \$24.1M by operating with our Tier I data center. By implementing a Tier III Data Center, we are able to save over \$48M. Tier III will offer a crisis management system to reduce losses, improve redundancy issues and increase system availability. Last year our center experienced ten outages to its ERP system, and we were unable to process orders, manufacture products and distribution stopped creating problems for our company.

Tier III provides maintainable data centers, back up distribution channels and reserve fuel storage. Coupled together this implementation of a Tier III data center will reduce down time from .33% to .02% and offer a 99.8% availability. Maintainable centers offer the ability to switch systems to work on while another is being utilized for operation functionality in-turn reducing downtimes.¹ Redundancy components allow for maintenance and repairs by utilizing fail-safes to reduce potential distribution within distribution channels.² Tier III offers on site 12 hours of reserve fuel storage to provide adequate supply.

By implementing Tier III data center, we will be saving \$48.2M with a return on investment of \$13.2M in the third year. Initial cost of implementing the Tier III data center will be \$35M which transfers into future profits. Tier III is the solution to improve our competitive advantage in our growing manufacturing company.

¹Uptime Institute 2009.Data Center Site Infrastructure Tier Standard: Topology. Retrieved September 19, 2016 fromfile:///C:/Users/tue86596/Downloads/Data%20Center%20Site%20Infrastructure%20Tier%20Standar%20-%20Topology.pdf

²Chandrasekaran, A., Lerner, A., & Smith, D. (2016, March 28). Containers Will Change Your Data Center Infrastructure and Operations Strategy. Retrieved October 10, 2016, from <http://www.gartner.com/document/3267118?ref=solrAll>

³ Sauer, J. (n.d.). Colocation Benefits. Retrieved October 10, 2016, from <http://www.tierpoint.com/colocation/colocation-benefits/>

Figure 1

***Excel Table**

Data Centers and Networking				
	Minutes Year	Downtime%	Minutes per 1yr.Down	yrly./Cost
Tier I	525,600	0.33%	1734.48	\$25,670,304.00
Tier III	526,600	0.02%	105.12	\$1,555,776.00
			Save per year	\$24,114,528.00
	yr1	yr2	yr3	Total
Cost	\$35,000,000	0	0	\$35,000,000
Benefits/Savings		\$24,114,528.00	\$24,114,528.00	\$48,229,056.00
			Year 3 Net Benefit	\$13,229,056.00

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