

Currently our company uses a Tier I data center, which in the last year has had 10 unscheduled outages costing \$14,800 per minute (Table B). A Tier III data center will reduce the chances of these unscheduled outages by providing multiple active pathways for energy, saving the company time and money. By investing in a Tier III data center, our company will be saving \$13,229,056 over the next three years (Table C).

By letting the company continue with a Tier 1 data center, we only stunt the growth of our continually expanding business. Tier 1 data centers have a slower uptime guarantee, higher risk of unplanned outages, and only 99.67% uptime as opposed to a 99.98% with a Tier 3 data center (Coreix 1). With a Tier 3 data center, if there is any major disturbance in the data center either due to planned maintenance or component failure, service will not be interrupted due to multiple active pathways (Visi 1). Additionally, all the critical components within the system have dual power sources and are fault tolerant (Colocation America 1). In the situation where both power sources fail, there is also 12 hours of redundancy power supplied by on sight fuel systems. In case there is any sort out outage, Tier 3 data centers are covered from every angle.

By investing the one time cost of \$35,000,000 into building a Tier 3 data center, we reduce the downtime this company incurs every year. We are currently losing \$77,010,912 over three years due to downtime on a Tier 1 data center. After switching to a Tier 3 data center, we can drastically reduce the cost to \$63,781,856 every three years (Table B). This is a total savings of \$13,229,056 (Table C). Additionally, by upgrading our data center we are providing insurance for our customers that will assure them that when they need us, we will be readily available with no business stoppage. If we want to compete with bigger companies, we need act and think like them. By switching to a Tier 3 system, we can do this.

## Sources:

"Data Centre Tiering | Tier 1, 2, 3 & 4 Data Centres | Tiering Info." *Data Centre Tiering | Tier 1, 2, 3 & 4 Data Centres | Tiering Info*. N.p., n.d. Web. 29 Jan. 2014. <[http://www.coreix.net/resources/faqs\\_tiering](http://www.coreix.net/resources/faqs_tiering)>.

"Colocation Services." *Data Center: Tier III Certified Design: Eden Prairie, MN*. N.p., n.d. Web. 29 Jan. 2014. <<http://www.visi.com/business/colocation/compliance/tier-iii-design-certified.aspx>>.

"Tier Standards Overview." *Data Center Tier Standards*. N.p., n.d. Web. 28 Jan. 2014. <<http://www.colocationamerica.com/data-center/tier-standards-overview>>.

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Tables (Copied from Excel)

	<b>Table A</b>	
	<b>Tier 1</b>	<b>Tier 3</b>
<b>Availability (%)</b>	99.67%	99.98%
<b>Unavailability (%)</b>	0.33%	0.02%
<b>Unavailability (Minutes)</b>	1734.48	105.12
<b>Average \$ Loss Per Minute</b>	\$14,800.00	\$14,800.00
<b>Total Loss in Dollars/Year</b>	\$25,670,304.00	\$1,555,776.00

	<b>Table B</b>			
	<b>Total Cost (In Dollars)</b>			
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total Cost Over 3 Years</b>
<b>Tier 1</b>	\$25,670,304.00	\$25,670,304.00	\$25,670,304.00	\$77,010,912.00
<b>Tier 3</b>	\$60,670,304.00	\$1,555,776.00	\$1,555,776.00	\$63,781,856.00

	<b>Table C</b>		
	<b>Tier 1</b>	<b>Tier 3</b>	<b>Total Savings</b>
<b>Total Loss Per Year</b>	\$77,010,912.00	\$63,781,856.00	\$13,229,056.00