Sarah Labbad

MIS 2501 Sec 002

Data Center

Installing a Tier III data center will save our company $13,229,056 over a three year period. Our current Tier I center causes outages and wastes money due to expensive amounts of downtime. An investment in a more reliable data center will end up saving the company several millions of dollars in downtime per year and decrease our variable costs for many years to come.

With the current Tier I data center, the availability is 99.67% and our downtime per year is 28.8 hours. A Tier III data center is available 99.98% of the time, meaning there will be no more than 1.6 hours of downtime per year. This is extremely reliable and necessary considering all operations must halt when the data center is down. Additionally, Tier III’s provide power outage protection for at least 72 hours, so if something goes wrong the data center is not immediately down. The Tier III also allows maintenance to be done without interrupting the functionality of the data center and contains cooling systems to keep everything running without an issue.

The benefit of switching to a Tier III is not having to spend $76,723,200 over the next three years due to downtime in our current system. The Tier III data center is estimated to cost $35m to build, but this is a fixed cost that will only be paid once and reduce our variable costs the longer we use the data center. With a Tier III data center, we are guaranteed to spend no more than $28,494,144 over the next three years due to downtime. Total, his brings the cost of the Tier III data center to only $63,494,144 to build and use for 3 years. The net benefit of switching to a Tier III is $13,229,056. The investment is worth it considering the enormous amount of money we will save even in the first few years.

Works Cited

Gage, Clinton. “Tier Classification System.” Uptime Institute LLC, uptimeinstitute.com/tiers.

Hatton, Ben. “Data Center Tiers Explained.” RSS, 21 Feb. 2014, www.thedatacave.com/data-center-tiers-explained.

Staff, Colocation American. “Data Center Tier Rating Breakdown - Tier 1, 2, 3, 4 - CLA.” Colocation America, Colocation American Staff, 28 Nov. 2017, www.colocationamerica.com/data-center/tier-standards-overview.htm.