

Data Centers and Networking

Compliance to Tier III data center infrastructure will reduce outage downtime by 93.94%, subsequently saving the company \$13,229,056.00 over the course of three years. Currently, the company has basic site capacity that leaves it extremely susceptible to planned and unplanned disruptions; demonstrated in the 10 outages it faced this past year. Equipping the company's datacenter with Tier III redundant capacity components will provide stability; that is the system will perform as it was intended, with reliability and predictability.

A Tier III classification provides strong data center configuration of site infrastructure by enabling concurrent maintenance, a feature that allows for simultaneous IT maintenance and operation. It achieves this through establishing multiple distribution channels, one of which is required to serve the critical environment, or ERP platform, at all times. Effectively, this will prevent halts to order processing and production on the ERP system, reducing costs from ensuing business interruption to our manufacturing processes. Discontinuity of business and IT environment is a feature not currently provided by the Tier I data center, which, unlike a Tier III data center, requires a shutdown of system components to perform maintenance. To build a Tier III data center, the company will have an initial outlay of \$35,000,000. However, the company will have no additional costs in following years. Conversely, there is no initial cost to maintaining the current Tier I data center, but a \$25,670,304 annual downtime cost, in perpetuity.

The implementation of a Tier III data center will yield tremendous monetary and strategic value to our company. The reduction of \$24,114,528 in annual downtime cost will help to maximize both the top and bottom line of the income statement and secure long-term profitability of the company. The resulting increase in availability will provide the structural stability required for management to shift from a short-term, reactive mindset to a proactive mindset focused on longevity and growth.