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Flash Research Assignment 1

If our company decides to upgrade from a "Tier I" data center to a "Tier III" data center, in three years we could reduce downtime by 54 hours and save over 13 million dollars. The "Tier III" data center could bring our growing manufacturing company to where it needs to be from an IT standpoint. As a manufacturing firm, our ERP is the backbone of our business, and it is about time we protect it as such. The upgrade in the data center would cut downtime by about one day per year and save over 20 million dollars per year.

Our company currently runs a "Tier I" data center. This means that the data center has non-redundant capacity components and a non-redundant distribution path. Planned work on a "Tier I" data center requires most or all systems to go down, and an unplanned outage will impact computer equipment. These are large weaknesses in our current data center. If we upgrade to a "Tier III" data center, we will see several upgrades in the key components. A "Tier III" data center is a concurrently maintainable data center. This means that it has redundancy with regards to capacity components and multiple distribution paths. A "Tier III" data center also has dual powered IT equipment and every capacity component can be removed without disrupting the computer equipment. Our current data center has 99.67% availability, which means that there is about 28.8 hours of downtime per year. The proposed "Tier III" data center would have 99.98% availability, which would only have 1.6 hours of downtime per year.

The financial benefits of switching to a "Tier III" data center are monumental. The cost to build the "Tier III" data center is $35,000,000 and it will take approximately 1 year to build. However, this is still a great investment looking down the road 3 years. Downtime costs our company $14,800 per minute. That is equal to $888,000 per hour. Our current data center, with 28.8 hours of downtime per year, costs us $25,574,400 per year in downtime. A "Tier III" data center, with only 1.6 hours of downtime a year, would cost us $1,420,800 in downtime per year. That means that once the "Tier III" date center is built, it could save us $24,153,600 per year. So one year from now, a "Tier III" data center could be built and the company would be down $35,000,000. However, in years two and three the company would save a combined $48,307,200. That means that after three years the company would be ahead $13,307,000, and would continue to save $24,153,600 for every year to come.