

Upgrading the company's datacenter from Tier 1 to Tier 3 provides a net benefit of \$35 million over three years of implementation. The goal of switching tiers is to reduce downtime caused by power outages and maintenance, because downtime costs the company money.

Currently, the company runs on a Tier 1 datacenter, which is the lowest grade data center. One of the main problems with Tier 1 is that it has a single power source that the entire hardware runs on. This is problematic because if maintenance is necessary, it has to be done during odd hours when the system is able to be shut down. If an outage occurs, there are no redundant components that can act as a fail safe for the data. A Tier 3 datacenter, can solve these outages because it is dual powered and has redundant components in the system. Therefore if one of the components goes down, one of the power paths can still keep the system afloat. Maintenance of the Tier 3 datacenter is easier than Tier 1, in that maintenance and repairs can be done during business hours because the entire system does not need to be shut down to work on it. The redundant components can also be removed without causing an outage, making maintenance is easier.

The cost to implement the Tier 3 center is \$35 million, which includes the installation costs. Within three years it will the cost avoidance of the Tier 3 datacenter is \$72 million, which makes the investment pay for itself. Over three years, the net benefit of the upgrade is \$37.4 million.

Works Cited

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