Luke Moratelli

Our current datacenter has cost us a large sum of money in recent years because of downtime. A tier III datacenter would include an investment in redundant capacity components and increase the availability of our datacenter by 0.31%. An upgrade would result in a net benefit of $13.2 million over a three-year period.

A Tier III datacenter has redundant capacity components which allows service and maintenance on components without shutting anything down. “It is possible to manage maintenance periods without affecting the continuity of service on the servers.” (OVH) This allows for less potential downtime than the Tier I datacenter. There is a major difference in availability between a Tier III and a Tier I datacenter. The availability of a Tier I datacenter is 98.67%. The availability of a Tier III datacenter is 99.98%. This is a significant difference in relation to minutes per year considering there are 525,600 minutes in a year, so there is an approximate difference of 6,885 minute difference between the two datacenters in a year. There are also certain upgraded power and cooling capabilities for a Tier III datacenter. The technical advantage of a Tier III datacenter versus a Tier I is immense.

The total cost to build this Tier III datacenter is $35 million for a three-year period. As the cost of downtime is $14,800 per minute, it would generate a benefit of $48.2 million in savings for a three-year period. We would avoid the cost of downtime for a Tier I datacenter. The net benefit of building the Tier III datacenter is $13.2 million after the three years.

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