Each year, our data center is experiencing 1734.48 minutes of downtime that result in a loss of $25,670,304 annually. This downtime is the result of multiple outages that occur due to the basic Tier I infrastructure of our current data center. I propose that we upgrade the data center to a Tier III infrastructure classification in order to save approximately $24,114,528.

The main idea of a Tier III infrastructure is *redundant components*. It calls for multiple extras to serve as “back-ups” in the case of outages, tests, etc. Each and every component can be removed without any impact and this infrastructure has sufficient, permanent capacity that will meet all requirements, even when these components are removed. Some of the key capabilities include engine generators with unlimited run-time, one active and one alternative distribution paths, a redundant delivery path for power and cooling and the ability to conduct infrastructure maintenance while taking every component offline without impacting the IT environment.

Upgrading to a Tier III infrastructure would significantly reduce downtime minutes and reduce the annual yearly cost to $1,555,776. Again, this saves our company $24,114,528 each year. The three-year net benefits will be $13,229,056. Not only does upgrading to the Tier III infrastructure save money, it is also puts less stress on the IT system, which reduces technical issues for both employees and customers.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Total |
| Costs | $35,000,000 | $0 | $0 | $35,000,000 |
| Benefits | $0 | $24,114,528 | $24,114,528 | $48,229,056 |

**3 Year Benefits ………………………………...…….. $13,229,056**

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