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Virtualization and Cloud Computing

Virtualization can save the company $9.2 million in a three-year span if we convert 80% of our current servers. It can decrease the number of physical servers needed and lead to higher efficiency and productivity. It also reduces maintenance, software maintenance, technical support, and power and cooling expenses. This implementation consolidates allows you to split a single system into multiple separate systems, increasing efficiency.

Traditional servers can only use one operating system at a time, using all of their capacities. By consolidation, we can have the capability of running multiple applications while still using a single machine. Running multiple systems can reduce downtime, cooling and power, costs. By virtualizing the servers, there is no need to update the hardware of the physical servers to operate on modern operating systems. This increases uptime, decreases software maintenance and technical support costs.

The initial set up cost for Virtualization is $4.8 million oppose to the physical servers cost of $14 million. With 80% of our 1,000 servers, maintenance costs will also be reduced. Virtualization advancement will result in a $9.2 million benefit within the 3 years.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Current | Year 1 | Year 2 | Year 3 | Total |
| Server | $8,000,000 | 0 | 0 | $8,000,000 |
| Maintenance | $2,000,000 | $2,000,000 | $2,000,000 | $6,000,000 |
| Total |  |  |  | $14,000,000 |
|  |  |  |  |  |
| Current |  |  |  |  |
| 200 Physical | $1,600,000 | 0 | 0 | $1,600,000 |
| VM | $1,280,000 | 0 | 0 | $1,280,000 |
| Maintenance 200 | $400,000 | $400,000 | $400,000 | $1,200,000 |
| Maintenance VM | $240,000 | $240,000 | $240,000 | $720,000 |
| Total |  |  |  | $4,800,000 |
| Net Benefits |  |  |  | $9,200,000 |

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