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Server Consolidation: Cloud Computing and Virtualization

I would recommend that our company upgrades from physical, traditional servers to virtualized, Vmware servers during the next server refresh period. Our company will face 3-year net benefit of $9.2 million with this new technology. The main technological feature of virtualization is the ability to consolidate these servers.

The key benefit of virtualization is the ability to consolidate servers. This will “deliver IT services on demand, independent of hardware, operating systems, applications or infrastructure providers” (Server Consolidation, NP). Virtualization will take 80% of our current servers and convert them into VMware servers which take up one-tenth of our current physical space. Consolidating our servers creates a decrease of 800 to 280 physical servers.

Currently, over a three-year time span, it costs the company $14 million for our current servers, and this is the perfect time to invest in the new technology because we are doing our server refresh which will benefit the company $4.8 million. This cost avoidance strategy will create a net benefit of $9.2 million over a 3-year time period, through the usage of server consolidation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Current 3 Year Analysis:** |  |  |  |  |
| Before Virtualization/Cloud Computing: | Year 1 | Year 2 | Year 3 | 3-Year totals |
| Total number of Servers: | 1,000 | 1,000 | 1,000 | 1,000 |
| Cost of Server: | $8,000 | 0 | 0 | $8,000 |
| Cost to Run: | $2,000,000 | $2,000,000 | $2,000,000 | $6,000,000 |
| Total cost for Servers: | $10,000,000 | $2,000,000 | $2,000,000 | **$14,000,000** |
|  |  |  |  |  |
| **Proposed 3-Year Analysis:** |  |  |  |  |
| After Virtualization/Cloud Computing: |  |  |  |  |
| 80% of Servers (Vmware): | 800 | 800 | 800 |  |
| 20% of Servers (Traditional): | 200 | 200 | 200 |  |
| Number of Potential Virtual Machines: | 80 | 80 | 80 |  |
| Cost of Server: | $ 16,000 | 0 | 0 |  |
| Cost to Run: | $ 3,000 | $ 3,000 | $ 3,000 |  |
|  |  |  |  |  |
| Cost of 80% of Servers: | $ 1,280,000 | 0 | 0 | $1,280,000 |
| Additional Costs to run (80% of Servers): | $ 240,000 | $ 240,000 | $ 240,000 | $720,000 |
| Cost of 20% of Servers: | $ 1,600,000 | 0 | 0 | $1,600,000 |
| Additional Costs to run (20% of Servers): | $ 400,000 | $ 400,000 | $ 400,000 | $1,200,000 |
| Total cost for Servers: | $ 3,520,000 | $ 640,000 | $ 640,000 | **$ 4,800,000** |
|  |  |  |  |  |
|  |  |  |  | **Total Net Benefit:** |
| **Benefits:** | **$6,480,000** | **$1,360,000** | **$1,360,000** | **$9,200,000** |

Works cited

"Reduce IT Costs and Increase Control with Server Virtualization." Server Virtualization & Consolidation. N.p., n.d. Web. 10 Oct. 2016.

"What Is Server Consolidation? - Definition from WhatIs.com." *SearchDataCenter*. N.p., n.d. Web. 10 Oct. 2016.

"What Is Server Virtualization? - Definition from WhatIs.com." *SearchServerVirtualization*. N.p., n.d. Web. 10 Oct. 2016.