Jessica Martincic

Enterprise IT Architecture

Mart Doyle

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Virtualization and Computing

By implementing virtualization technology to consolidate server workloads, our company will realize a net benefit of $9,200,000 over the course of three years. Since we are at the start of a hardware refresh cycle, we will need to replace our current servers within the next year and should consider the most cost-effective options. With VMware infrastructure, we can reduce our current number of servers by 80%. This consolidation will result in dramatically lower costs, improved manageability, and space conservation.

The key capability of VMware is its server consolidation and containment solution, which mitigates the number of physical servers needed. VMware infrastructure will allow us to consolidate ten physical servers onto a single virtual machine server. In other words, we can reduce our server count from 1,000 to 280 by implementing VMware. This reduced server complexity will enable us to simplify and centralize our infrastructure management process and decrease the need for physical space.

With VMware implementation and maintenance, our company will experience $14,000,000 in benefits and $4,800,000 in costs over the course of three years. The three-year net benefit of VMware installation will amount to $9,200,000, making it a worthy investment for our organization.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Year 1 | Year 2 | Year 3 | Total |
| Benefits: |   |   |   |   |
| Eliminating Physical Servers | 8,000,000 | 0 | 0 | 8,000,000 |
| Eliminating Maintenance  | 2,000,000 | 2,000,000 | 2,000,000 | 6,000,000 |
| Total | 10,000,000 | 2,000,000 | 2,000,000 | **14,000,000** |
|   |   |   |   |   |
|   | Year 1 | Year 2 | Year 3 | Total |
| Costs: |   |   |   |   |
| VM Servers | 1,280,000 | 0 | 0 | 1,280,000 |
| Maintenance | 240,000 | 240,000 | 240,000 | 720,000 |
| Physical Machines | 1,600,000 | 0 | 0 | 1,600,000 |
| Maintenance | 400,000 | 400,000 | 400,000 | 1,200,000 |
| Total | 3,520,000 | 640,000 | 640,000 | **4,800,000** |
|   |   |   |   |   |
|   | Year 1 | Year 2 | Year 3 | Total |
| Net Benefits | 6,480,000 | 1,360,000 | 1,360,000 | **9,200,000** |

Works Cited

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