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Our company has the opportunity to save $9.2M by using virtualization to consolidate server workloads. By using VMware software, it will enable us to consolidate10 physical servers to run on one virtual machine. We should invest in VMware promptly because of the substantial cost reduction in hardware, energy, and operating costs.

The key capability of VMware is its first phase of virtualization, which is consolidating server workloads. Consolidating 10 physical servers onto a single virtual machine will lower energy costs by reducing the number of servers in the data center. Server consolidation will reduce hardware and operating costs by 50% and energy costs by 80%, which can save our company $3,000 a year. Virtualization works and operates the same way as a physical network, but offers more operational benefits and protects critical information. Implementing VMware will allow us to decrease costs and improve reliability by consolidating 10 physical servers onto a single virtual machine.

With 1,000 servers in our datacenter, we are currently spending $14M within a 3-year time period. In comparison, investing in VMware will allow us to have 200 physical servers and 80 virtual machines. In total this will cost us $4.8M with a 3-year time period. Over the 3-year time period, our company will have a net benefit of $9.2M. VMware will consolidate servers into virtual machines producing reduced costs in maintenance and improving our reliability.

Figure 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Costs** | **Year 1** | **Year 2** | **Year 3** | **Total**  |
| **New servers (1,000)** | $8,000,000 | $0 | $0 | $8,000,000 |
| **Maintenance 1,000 servers** | $2,000,000 | $2,000,000 | $2,000,000 | $6,000,000 |
| **Total costs** | $10,000,000 | $2,000,000 | $2,000,000 | **$14,000,000** |
|  |  |  |  |  |
| **Benefits** | **Year 1** | **Year 2** | **Year 3** | **Total**  |
| **200 traditional physical servers** | $1,600,000 | $0 | $0 | $1,600,000 |
| **80 VMWare servers (10:1 consolidation)** | $1,280,000 | $0 | $0 | $1,280,000 |
| **Maintenance 200 traditional servers** | $400,000 | $400,000 | $400,000 | $1,200,000 |
| **Maintenance 80 VMWare servers** | $240,000 | $240,000 | $240,000 | $720,000 |
| **Total benefits** | $3,520,000 | $640,000 | $640,000 | **$4,800,000** |
|  |  |  |  |  |
|  | **Year 1** | **Year 2** | **Year 3** | **Total**  |
| **Total net benefits** | $6,480,000 | $1,360,000 | $1,360,000 | **$9,200,000** |

Works Cited

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