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Flash Paper 2

By updating 80% of our current hardware system to a virtual machine system our net benefit savings will increase by $9,200,000 over the next three years. While virtual machines function like physical computers, they limit the amount of expensive hardware needed, eliminating redundancy while optimizing space.

The benefits of virtual machines are their lower maintenance costs and their efficient use of space. Converting ten of our physical servers to one virtual server will help consolidate our hardware significantly. Reducing the number of physical servers from 1000 server to 200 physical servers and 80 virtual machines will allow us to consolidate space. This will result in less money spent on software maintenance, technical support, and power and cooling.

After consolidating to 280 servers, the three-year savings of switching to virtual machines will be $14,000,000. There will be a savings of $4,800,000 over the next three years on total costs, which will ultimately lead to a net benefit of $9,200,000 as well as a more mobile and efficient network.

Citations

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| --- | --- | --- | --- | --- |
| Benefits | Year 1 | Year 2 | Year 3 | Total |
| Eliminating physical servers | 8,000,000 | 0 | 0 | 8,000,000 |
| Eliminating maintenance cost | 2,000,000 | 2,000,000 | 2,000,000 | 6,000,000 |
| Total Benefits | 10,000,000 | 2,000,000 | 2,000,000 | 14,000,000 |
|  | | | | |
| Cost |  |  |  |  |
| Physical Servers | 1,600,000 | 0 | 0 | 1,600,000 |
| Maintenance on Physical Servers | 400,000 | 400,000 | 400,000 | 1,200,000 |
| Virtual Machine Servers | 1,280,000 | 0 | 0 | 1,280,000 |
| Maintenance on VM Servers | 240,000 | 240,000 | 240,000 | 720,000 |
| Total Costs | 3,520,000 | 640,000 | 640,000 | 4,800,000 |
|  | | | | |
| 3-Year Net Benefit |  |  |  | 9,600,000 |
|  |  |  |  |  |