

John Matthews – Virtualization & Cloud Computing

Our company will spend \$14M over three years in purchasing and maintaining servers if we continue to invest in physical servers at the start of our hardware refresh cycle. Rather, we can invest in VMWare to cut costs and improve server efficiency. This technology allows 10 virtual servers to run at once on one physical machine. Using VMWare results in \$9.2M in savings for our company in three years.

VMWare is an operating system that will allow our company to run 10 virtual servers on one physical server. By using VMWare, our company will only need to invest in 280 physical servers instead of 1000. Each virtual server will manage its operating systems and applications, independent of the physical server and the nine other virtual servers. Virtual servers require less maintenance than physical servers, and can be moved to a different physical server during periods of maintenance on the physical machine. Consolidating machines onto VMWare reduces hardware and servicing costs, increasing server use efficiency.

By deciding to invest in virtual servers, our company will only need to purchase 280 total servers. Total maintenance and purchasing costs of these servers will equal \$4.8M. By investing in VMWare at the start of our next refresh cycle, our company will no longer have to spend \$14M on 1000 physical servers. Utilizing VMWare will net our company a \$9.2M benefit in three years.

Appendix

| Cutting Costs | Year 1 | Year 2 | Year 3 | |
|-----------------------------|------------------------|-----------------------|-----------------------|------------------------|
| Eliminate Purchasing Costs | \$8,000,000.00 | \$ - | \$ - | \$8,000,000.00 |
| Eliminate Maintenance Costs | \$2,000,000.00 | \$2,000,000.00 | \$2,000,000.00 | \$6,000,000.00 |
| Total Benefit | \$10,000,000.00 | \$2,000,000.00 | \$2,000,000.00 | \$14,000,000.00 |
| | | | | |
| New Investments | | | | |
| Physical Servers Purchasing | \$1,600,000.00 | \$ - | \$ - | \$1,600,000.00 |
| Physical Server Maintenance | \$400,000.00 | \$400,000.00 | \$400,000.00 | \$1,200,000.00 |
| Virtual Server Purchasing | \$1,280,000.00 | \$ - | \$ - | \$1,280,000.00 |
| Virtual Server Maintenance | \$240,000.00 | \$240,000.00 | \$240,000.00 | \$720,000.00 |
| New Costs | \$3,520,000.00 | \$640,000.00 | \$640,000.00 | \$4,800,000.00 |
| | | | | |
| NET BENEFIT | \$6,480,000.00 | \$1,360,000.00 | \$1,360,000.00 | \$9,200,000.00 |

Bibliography

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