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Flash Research Paper #2

Our company is currently overpaying for amount of servers we use. We have the opportunity to consolidate 72% of our physical servers and save a total of \$9.3 million over the next three years. This is all done through the process of consolidating our servers by implementing virtualization software, VMware. Through the use of VMware, our company can work on fewer servers, increase production and save millions of dollars.

We currently face an issue with our servers, as each machine is only allowed to run one operating system and one application at a time. With VMware we can load multiple operating systems and have them run virtually and simultaneously. The key component to server consolidation is that our company can now run ten virtual machines for every one server. Since virtualization allows for multiple operating systems on a single machine, we no longer need one physical server per system. Virtualization is more reliable, if one physical server goes down, all virtual servers will still be able to run. There is no need to buy redundant servers for backups, as copying and pasting content on one virtual server onto another is simple. We will go from 1,000 servers down to only 280 servers which will help our bottom line.

Virtualization allows our company to save millions of dollars by making an easy switch. Our current three-year cost by staying with a 1,000 physical hardware set up will be \$14 million. However, after the initial investment of \$1.28 million for the virtual machines and \$1.6 million for the physical servers, our three-year cost will be only \$4.8 million. Over the next three years, our company will save a combined net benefit of \$9.3 million. Through the use of virtualization, our business will cut costs associated with unreliable traditional systems and be able to more a more productive and efficient business.

	Year 1	Year 2	Year 3	Total
Current				
New Servers(1,000)	\$8,000,000	0	0	\$8,000,000
Cost to Run:	\$2,000,000	\$2,000,000	\$2,000,000	\$6,000,000
Total Current Costs:	\$10,000,000	\$2,000,000	\$2,000,000	\$14,000,000
	Year 1	Year 2	Year 3	Total
Cost of Virtual Servers:	\$1,280,000	0	0	\$1,280,000
Additional Costs to run (Virtual Servers):	\$240,000	\$240,000	\$240,000	\$720,000
Cost of Traditional Servers:	\$1,600,000	0	0	\$1,600,000
Additional Costs to run (Traditional Servers):	\$400,000	\$400,000	\$400,000	\$1,200,000
Total cost for Servers:	\$3,520,000	\$640,000	\$640,000	\$4,800,000
	Year 1	Year 2	Year 3	Net Benefit
Benefits:	\$6,480,000	\$1,360,000	\$1,360,000	\$9,200,000

Bibliography

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