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Flash assignment 3

9/30/13

Over the next three years, this company will reduce its datacenter costs by 65.71% if we covert to mostly VMWare. Having virtual machines gives us the ability to consolidate to only 200 physical servers. This consolidation will end up saving the company $9.2 million over three years.

VMware, Virtual machine ware, is software that involves virtualization and cloud computing. They are compatible with x86-compatible computers. It is a widely used operating system for IBM-compatible computers. These virtual machines servers are like physical server, but they share computer resources with other virtual servers. This ability to share gives us the ability to consolidate 10 physical servers onto one virtual machine server. This makes it possible to convert 80% of our servers to virtual machines. This virtualization reduces the amount of physical servers to 200. This reduction in physical servers will reduce our cost significantly over the next three years.

Converting 80% of our servers to virtual machines will save us $9.2 million over the course of three years. This translates into a reduction in cost by more than 65%. The first year expense for physical servers is $10 million while the first year expense for virtual and physical servers is only $3.52 million. Over the next two years, the expense for physical servers would be $4 million while VMware with physical servers would be $1.2 million. This creates a difference in expense of over $9 million. With this savings in fixed maintenance cost, the money could be used to increase revenues by using the savings for technology investments or to upgrade the datacenter.

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|  | **Physical server** | **Virtual Machine Server** |
| **Cost to purchase** | $ 8,000.00 | $ 16,000.00 |
| **Cost to maintain** | $ 2,000.00 | $ 3,000.00 |
| **Total cost** | $ 10,000.00 | $ 19,000.00 |

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|  | **Replacing with Physical Servers** | **Replacing with Virtual machines/Physical Servers** |
| **Units** | 1000 | 80-Virtual 200-Physical |
| **Total purchase Cost** | $ 8,000,000.00 | $ 2,880,000.00 |
| **Total maintenance cost** | $ 2,000,000.00 | $ 640,000.00 |
| **Total year one expense** | $ 10,000,000.00 | $ 3,520,000.00 |
| **Year two maintenance cost** | $ 2,000,000.00 | $ 640,000.00 |
| **Year three maintenance cost** | $ 2,000,000.00 | $ 640,000.00 |
| **3 year investment total** | $ 14,000,000.00 | $ 4,800,000.00 |
| **Total savings over 3 years** | - | $ 9,200,000.00 |
| **Reduction in cost over 3 years** | - | 65.71% |

Works Cited

Rouse, Margaret. "Virtual Machine (VM)." *What Is ?* N.p., n.d. Web. 28 Sept. 2013. <http://searchservervirtualization.techtarget.com/definition/virtual-machine>.

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