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Flash3 - Virtualization

In a matter of only three years our company could reduce costs by a total of \$9,200,00. Right now we are losing a large amount of money on physical servers. If we switch to virtual servers in order to consolidate server workloads we could utilize more of our servers and also save a great deal of money in the future. The technical advantage of virtualizing our servers is that we could consolidate 10 physical servers onto a single virtual machine server. As a rapidly growing manufacturing company it is essential to virtualize our servers in order to save on hardware, and maintenance costs while at the same time making the information in our data center more accessible to our employees, thus improving the service they can provide to clients.

The technological capabilities of virtualization are innumerable. The main benefit to this technology is the ability to detach software from hardware and minimize the amount of physical servers needed to efficiently run business operations. In other words, "Virtualization detaches workloads and data from the functional side of physical infrastructure, enabling unprecedented flexibility and agility for storage, servers and desktops" (Gartner). This means that we will be less reliant on physical servers for our information because most of our data can be neatly organized in a smaller amount of virtual servers. This makes day to day operations a lot less risky because virtual servers are less likely to crash and even if they do crash pertinent information will not be lost because the central server will not be harmed, only the virtual one. It is possible that 80% of your servers could run as virtual machines under VMWare. VMWare is a company that provides virtualization services to many companies similar to our own. We can also store more information on these virtual servers but in a more compact form.

If we continue in our current state we would face a total 3 year capital and operating expense of \$14,000,000. However, if we act fast and implement virtual servers we would only experience a capital and operational expense of \$4,800,00. This is a cost difference of 66%. We cannot afford to lose this much amount of mind due to inefficiency. There is a solution to our problem, and it is called virtualization. Virtualizing our servers "reduces cost, improves high availability, and simplifies operations" (VMWare). Every minute that we waste running an inefficient business we are losing valuable customers. It is only through server virtualization that our company can support the high level of growth that we are currently experiencing. Although the average cost per server of a physical machine is \$8,000 and the average cost of a digital server is \$16,000 we would save money in the long run because we can run several servers on the one virtual server where as we would need to keep buying servers under the physical server business model. Virtualizing our servers is necessary if we want to stay ahead of the competition and efficiently meet the needs of our customers.

[http://my.gartner.com/portal/server.pt?
open=512&objID=260&mode=2&PageID=3460702&resId=1745020&ref=QuickSearch&stkw
=virtualization](http://my.gartner.com/portal/server.pt?open=512&objID=260&mode=2&PageID=3460702&resId=1745020&ref=QuickSearch&stkw=virtualization)