Flash assignment 1: Data Centers and Networking

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With the current tier I system, over the next three years, this company could lose over 76 million dollars. If this company is to invest 35 million dollars into installing a tier III system, this loss will be reduced by 94.44 percent. Although the difference in availability between a tier I system and a tier III is only .31 percent, 99.67 vs. 99.98 percent, the rest of this paper will breakdown how much this actually costs the business.

The current tier I system has no redundancies. What this means to you is that the system has to be shut down for repair/ maintenance. This also means, since there are no backups, that any unplanned shutdowns will also stop the flow of work. Each minute this company has downtime, it cost us $14,800. According to an article by Uptown Institute, tier I systems have 28.8 hours of downtime per year. This includes planned and unplanned outages. This means that, over the course of one year, this company is losing $25,574,400 and $76,723,200 over the course of the three year that you would expect to see returns from an investment. As I said before, this loss can be reduced and cover the $35 million investment needed to transition to a tier III system.

A tier III system is beneficial to this company because of the redundant systems it has. This reduces the amount of planned and unplanned downtime to only 1.6 hours per year, 27.2 hours less downtime than a tier I system. Assuming the same cost per minute of downtime of $14,800, this company will lose only approximately $1.42 million a year, which translates to $4,262,400 million over the course of three years. This, as stated previously, is a reduction in loss by 94.44%. However, this loss does not include the $35 million cost it would take to install this system. This would bring the total expense to $39,262,400. If you also included the loss you would incur for the year you would be running on a tier I system while the tier III system is being installed, it would total a loss/expense of $64,836,800. However, this is still $11,886,400 less than the loss this company would incur, if this company were to stay with the tier I system over the next three years instead of implementing a tier III system.

As you can see, there is a costly difference between 99.67% availability in a tier I system and 99.98 % availability in a tier III system. To me, the question here isn’t whether or not to invest $35 million into implementing a tier III system. The question here is, would you rather lose about $12 million by keeping a tier I system in place, or would you rather reduce this company’s losses by that same amount by implementing a tier III system?

Works Cited/Data

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