Data storage centers are a critical component in any company. However, maintaining a data center is costly and time consuming. There are several ways that we can cut both the time and costs of our data center. With this new technology our data center can run faster and more efficiently. Enterprise-grade Solid-State Drives are something that we should invest in and could cut data center costs by 90%.

Solid-State drives (SSD) in many ways are better than hard-disk drives (HDD). One of the key benefits of an SSD is low energy consumption. With no moving parts, SSDs use less power, lowering the energy required to run, but also lowering the heat that is released from the drives. With the decrease in power needed to run SSDs we can decrease energy usage by up to 90%. SSDs can also achieve 100 times or more increased input/output operations per second (IOPS) compared to an array of 10,000 rpm or 15,000 rpm e-grade, mission-critical HDDs. In addition to the increase in performance and energy efficiency, SSDs provide higher reliability due the lack of any moving parts that could potentially break down.

SSDs can save the company millions a year by simply cutting energy usage. It is estimated that cooling accounts for 40-50% of the total energy usage of data centers. With up to a 90% decrease in energy usage per-drive, this will drastically decrease the costs of running the data centers. With the decrease in energy usage, also comes a decrease in heat released from the drives. With such a decrease in heat, we can cut costs for cooling our data center. SSDs are also more reliable and do not have any moving parts that could break and require repairs. This would also cut costs for repairing and replacing broken drives in the data center. The reliability of SSDs would also increase productivity due to the decrease in downtime for repairs. SSDs are a technology that is growing fast and will continue to improve and save our company even more money down the line.

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