The High Cost of Down Time: The Solid State Solution

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Andrew Vo, Client Storage Marketing, SanDisk

Summary

Today's highly mobile workforce requires fast laptop connectivity, instant access to business data, smooth multi-tasking and batteries that won't quit. Reliability and risk go hand in hand. Users in remote locations or just down the corridor need the ability to work longer, with less interruption. Service and product support businesses are looking to IT strategies and new technologies to satisfy customers and protect profit margins. Companies that upgrade to more reliable solid-state drives not only extend the life of existing systems, but can also focus resources on other mission-critical projects.

Creating more value introduces more variables

Faced with declining market share in traditional service areas, companies look to remote and specialized markets to create shareholder value. Vala Af-shar, Chief Marketing Officer at Extreme Networks observes "…industry and company structures and the very nature of work needs to transform to meet consumer expectations." [1] Closer to home, the more that laptops and other mobile devices used to create new efficiency and value, move around a corporate campus or across a diverse geographic area, the more likelihood that harsh or unpredictable environments exist to threaten the devices.

Downtime not acceptable

Standard business hours no longer

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[1] 5 Must-Have IT Skills For The Future of Work" The Huffington Post, September 14, 2014

exist in competitive, always-on markets. Customers expect responsiveness and will post complaints about service delays immediately on social media if brands don't deliver. Key performance indicators and profitability based on response time, as well as service level agreements, raise the stakes. Consider the impact of a five-minute lapse for a claims adjuster or field technician because of a failed hard drive.

We would expect that laptop efficiency would solve these new challenges and expectations for uptime, but supporting those laptops has become more complex and expensive. According to a 2014 Macquarie Equipment Finance study, "Day-extender notebooks are currently 10% to 12% more expensive to support…a traveling-worker notebook TCO is 18% to 19% more expensive to support than desktops."[2] Replacing laptops with tablets will eventually be a good solution, but right now it's simply not viable. They are companion devices at best.

Downtime can be costly, especially for companies with aging systems with multiple, mobile components. While some risks are beyond mitigation, such as weather and natural disasters, power grid and network failure, a well-targeted technology upgrade can help.

Ravi Annavajjahala, Director of Business Development at SanDisk® observes, "Many companies today are still stuck on legacy PCs that are slow, out-of-date and require constant maintenance. We realized the need to make it easy for companies to upgrade to more reliable flash-based drives, and through our STAR program we help them not only extend the life of existing systems, but also spend time on other mission-critical projects by deferring the costs of new PCs, with practically no downtime."

Unpredictable environments

The cumulative effects of removing a laptop from the controlled environment of a desk or docking station increases the risk of damage to a laptop's hard drive. It doesn't matter if that move is across a corporate campus, taking the laptop home or to an exotic location or leaving it in a trunk on a hot day.

Also, laptops deployed in remote locations are subject to temperature extremes and humidity, as well as higher levels of shock and vibration due to usage and travel conditions when the useris dependent on public transportation or off-the-road access. Over time, the risk of failure rapidly increases the chances of a wasted afternoon trying to fix an old machine, access a critical document or being paralyzed when traveling.

Hard drives have a built-in risk for failure — they simply weren't designed to be mobile. They are thick and heavy and typically have two motors, which add to the weight and size of the laptop. A hard drive generates a substantial amount of noise and heat, affecting battery life. Moving parts make the hard drive prone to breakdowns and crashes, causing lost productivity and possible data loss.

With no moving parts, solid state drives can withstand jarring movements, dramatically enhancing laptop reliability.

Reliability and productivity

When you have higher demands, you need the lowest possible failure rates. Based on survey data from PC Magazine, hardware failure rates haven't changed much, and in fact they may have actually gotten worse. [3]

As the mobile workforce grows and becomes isolated from local IT resources, reducing the frequency of hardware-related service tickets and dependency on help desks is critical to the success of a business. Not only does this make the mobile workforce more responsive and productive, but the company is able to reduce IT labor costs associated with evaluating and repairing non-functioning devices, or recovering lost data.

[2] Macquarie "Strategic Advisory: Desktop refresh cycles, 2009-2013" (2014)
[3] "Desktop Service & Reliability Survey 2009", PC Magazine, Sept 15, 2009

Conclusion

The mobile workforce is not only growing, it's tasked to operate in increasingly remote locations in search of new markets and higher margin opportunities. These corporate initiatives still depend to a great degree on the issuing of laptop devices, meaning an increased risk of mechanical failure paired with reduced access to technical support.

Therefore, a higher importance should be placed on IT infrastructure for reducing business risk and improving business continuity. Remote locations with harsher environments can be served more consistently and confidently when reliable solid state drives are deployed in laptops in place of hard drives.

Our Story

Here at SanDisk, we transitioned to SSDs in order to enable our global workforce of more than 4,000 technology professionals.

SanDisk, like many other high tech companies, has a workforce that travels the globe and need reliable machines that can withstand the bumps and grinds.

Workers, traveling from meeting to meeting not only on campus but also at client locations, need machines they can depend on. Many employees take their work home with them, carrying critical and sensitive data and files that they can't risk losing through hard drive failure.

Here are the results:

- Annual cost reduction and deferred savings of up to $610 per laptop
- Users gained an average of 15 minutes of productive time per day
- Reduced hardware-related help desk tickets by 5%
- Increased the average life of a laptop by 33%

Learn more about SSD solutions at http://www.sandisk.com/star

The world of digital content grows exponentially every day and SanDisk is designing flash storage solutions so that your valued data is readily available and reliable, even in the most challenging environments. SanDisk solid state drives offer energy-efficient, compact and durable alternatives to traditional hard disk drives for desktops, laptops and ultra-thin PCs.

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