Lenovo ThinkStations: Supporting Enterprises' Key Business Objectives as a Leader in Reliability

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Lenovo ThinkStations: Reliability Matters

A business' daily success and future growth depends on the consistency at which employees transform their time and data into revenue, and consequently many enterprises rely on workstation platforms for mission-critical processes.

Workstations are used by highly skilled employees to perform companies' most critical tasks. In industries such as manufacturing, finance, computer-aided design, finance, media and entertainment, science, medical, software development and energy, the workstation is positioned squarely in the middle of a critical path to generate revenue and support the business' strategic objectives. Failures prevent employees from completing these critical tasks, which can lead to loss of data and cripple a company's ability to compete. The cost related to a single workstation failure can rapidly balloon into thousands of dollars.

Workstations need to be reliable, reducing the total cost of ownership while meeting demands of applications and computing environments

Reliability may not be as glamorous as a workstation's performance or features, but when failures occur, reliability instantly becomes the most important characteristic. Enterprises including workstations as part of their IT infrastructure need a workstation platform with proven reliability to support an enterprise's key initiatives.

Workstation computing performance, capacity and features are similar across the industry and among vendors, and as a result reliability is emerging as a compelling differentiator among desktop and mobile workstation vendors. Multi-core processing, high-end graphics performance and storing large amounts of data are meaningless if the platform performing these tasks is not reliable.

As enterprises deploy workstations as tools to make critical business- and customer-focused operations more efficient, given the critical nature of the work being performed on these workstations, it is increasingly important for enterprises to team with a partner whose products deliver the necessary levels of performance and reliability.

Reliability and repair rates: Workstation reliability is a key factor in an enterprises' ability to compete and innovate. The need for repairs prevents an organization from running software such as medical applications, financial trading models, product lifecycle management and design, business intelligence, and analysis applications. These applications are the lifeblood of a company and the foundation on which a business' operation relies: not being able to utilize these applications or software is simply not an option.

Impact of repair rates on IT operations: Workstation reliability impacts a business' production and influences product(s) time to market, employee responsiveness and efficiencies in key vertical markets such as software development, web and animation media, medicine, energy and finance. A workstation that is highly reliable provides access to business-critical applications for a greater period of time over its lifecycle to employees, supporting the means

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utilized by an enterprise to meet its strategic revenue objectives, boost employee productivity and reduce the cost of downtime.

As companies more frequently depend on software and other applications for mission-critical functions, workstation downtime leads to a cascade of related labor, revenue-generation and service costs that contribute to the total cost of an outage. Workstations that are more reliable inherently reduce the total cost of downtime by minimizing the negative financial impacts to business and employee productivity.

Workstation design and engineering: The hardware on which business-critical applications run must meet and, in most cases, exceed the demands from the software even as applications critical to successful business operations become increasingly resource-hungry. A workstation must provide sets of hardware and interface features and specifications that not only meet the demands of today's applications, but can scale and adapt to meet the demands from future versions of business-critical applications.

ThinkStation workstations leverage Lenovo design and manufacturing expertise into a leadership position in reliability, according to customers

Lenovo and the Think brand have long been trusted partners of businesses. The importance of software, and the increasing weight of its demands on computing devices, is requiring changes in how businesses view and implement hardware, and workstations are relied on to process mission-critical transactions at any time and provide business-critical data on demand. As industry data and TBR's own workstation reliability studies have shown, enterprises can rely on Lenovo ThinkStation desktop and ThinkPad mobile workstations as an important pillar that supports a business' revenue and profit objectives.

TBR, in a customer study for Lenovo, surveyed IT decision makers in the United States about workstation reliability[1] and those decision makers stated Lenovo workstations are the most reliable among major vendors. The survey revealed that:

- Competing workstations from other major brands had an average failure rate of 7.6% in the first three years of ownership;
- Lenovo ThinkStations had an average failure rate of 6.0% per year across the same time period

This means that competitors' workstations failed an average of 26% more often than ThinkStations, which correlates to the productivity of key employees being disrupted 26% less of the time when they use Lenovo.

Reliability and repair rates: Lenovo's cycle of continuously monitoring its workstations for improvements and engineering them with reliable components leads to each new generation being more reliable than its predecessor. Workstations built using manufacturing and assembly processes that are ISO

[1] The Workstation Repair Rate Study was commissioned with Technology Business Research, Inc. by Lenovo. The study included an online survey, fielded between 15 March 2012 and 9 April 2012, of 240 IT decision makers in the U.S. that were involved in HP, Dell and/or Lenovo workstation purchases over the previous three years.

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certified, constantly reviewed to improve efficiencies, tested for quality and performance using a strict set of guidelines and parameters, and reduce factors that can affect business operations directly correlate to low product failure rates.

Additionally, by combining software-controlled cooling engines with product design that draws from the ThinkPad legacy of reliability, cool air delivery to critical workstation components is optimized, further boosting reliability and driving down repair rates in both the short and long-term lifecycles of Lenovo workstations compared to its peer companies.

Impact of repair rates on IT operations: Workstation reliability impacts a business' production and sales activities, internal and external customer services and employee efficiencies. A workstation that is highly reliable provides access to business-critical applications for a greater period of time over its lifecycle to employees, supporting the means utilized by an enterprise to meet its strategic and revenue objectives and boosting employee productivity.

Workstation design and engineering: Lenovo's commitment to using industry-leading processors, memory, disk drives and graphics processing in its workstations creates products that not only provide a high degree of reliability over the product's typical lifecycle but are easily repaired, decreasing total cost of ownership by reducing maintenance and upgrade expenses.

ThinkStations are designed to run cooler, which means that the system components are less likely to fail. Innovations such as Lenovo-patented designs that maximize airflow and customizable thermal controls promote maximum air flow to core processors, graphics cards and memory. As a result, the performance of these critical components is safeguarded, allowing the workstations to be used for longer periods of time at the maximum level of their capabilities, moving the business forward and closer to its strategic revenue and profit goals.

ThinkStation conclusions

Through its ongoing focus to instill the core reliability proposition of the Think brand that results in each ThinkStation being more reliable than its predecessors, incorporating industry-standard components into its product designs, and engineering high levels of performance and manageability to boost employee and application efficiencies, Lenovo's ThinkStations are able to meet wide-ranging and diverse demands of today's enterprises.

Desktop and mobile workstations are increasingly relied on as important pillars supporting an enterprise's ability to execute its strategic initiatives. The high levels of reliability present in Lenovo's ThinkStation product line should be a key consideration in choosing the vendor for these specialized computing devices that play a significant role in a business' revenue generation and customer support activities.

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