

Notebook PCs Prone to Hardware Failure

Gartner study says some hardware component will fail on nearly one-fifth of all laptops.

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Nearly one-fifth of all notebook PCs will break down over their lifetime, needing a new hardware component to overcome the failure, a study reveals.

Though the broken part may be as simple as a laptop latch, the most frequent component failures involve motherboards and hard drives, according to a study released today by Gartner.

Desktops suffer from the same weakness, but they break less often. Gartner estimated that 5 percent of desktop PCs purchased in 2005-2006 will break within the first year, and that 12 percent will break within four years. In contrast, 15 percent of laptops will break within a year, and 22 percent will break within four years, the research company predicted.

Screens Holding Up Better

In recent years, broken screens were the most common laptop failures, but that has changed, said Leslie Firing, research vice president at Gartner.

Notebook manufacturers have improved their designs, reducing screen breakage by adding structural rigidity to the notebook casing and screen bezel, and providing more clearance between the screen and keyboard when the lid is closed, she said.

During the same period, motherboards have grown more complex. In the past, IT managers could replace single parts like a network interface card or a modem; but today those parts are integrated onto the motherboard, so managers must replace the entire motherboard to fix a single component.

After motherboards and hard drives, the next-most-common notebook hardware failures involve broken latches and hinges on the chassis, and lost keycaps and spilled drinks on the keyboard.

Better Reliability

PC vendors are making progress in building more-reliable machines, Firing said. Just two years ago, new desktops would break 7 to 15 percent of the time, and laptops would break 20 to 28 percent of the time.

Vendors have improved those numbers by testing more components, increasing the penalties levied on suppliers for broken parts, and scanning PCs during repairs to prevent future problems.

The Gartner study was difficult to research because most vendors refuse to discuss reliability with analysts, Gartner said. Consistent with that experience, neither Dell nor Hewlett-Packard responded to requests for an interview for this article.