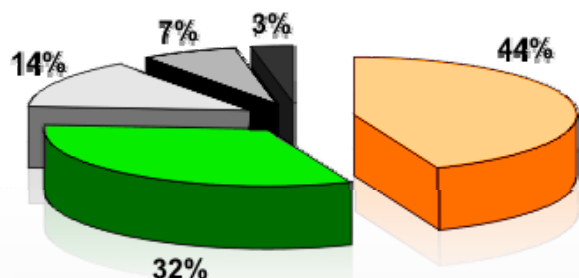


STATISTICS ABOUT LEADING CAUSES OF DATA LOSS

Despite technological advances in the reliability of magnetic storage media, data loss continues to rise, making data recovery more important than ever. On track engineers have identified three trends that are leading to this increase in lost data.



- Hardware or System Malfunction account for 44% of data loss
- Human error accounts for 32% of all data loss.
- Software corruption account for 14% of all data loss.
- Computer Viruses account for 7% of all data loss.
- Natural disasters account for only 3% of all data loss.

1. More data is being stored in smaller spaces. Today's hard drives store 500 times the data stored on the drives of a decade ago. Increasing storage capacities amplify the impact of data loss, making mechanical precision more critical.
2. Data has become more mission-critical. Users today are storing more information electronically than ever. The loss of mission critical data can have staggering financial, legal and productivity ramifications on businesses and home users alike.
3. Backup tools and techniques are not 100% reliable. Most computer users rely on backups as their safety net in the event of data loss (a recommended practice). Ontrack research indicates that 80 percent of its data loss customers regularly back up their data, only to find them less than adequate at the critical moment they need to restore them. Backups assume that hardware and storage media are in working order; that the data is not corrupted, and that your backup is recent enough to provide full recovery. In reality, hardware and software do fail and backups don't always contain current enough data.

Leading Causes of Data Loss Details

Hardware or System Malfunctions (44 percent of all data loss)	
Possible Symptoms	<ul style="list-style-type: none"> ▪ Error message stating the device is not recognized ▪ Previously accessible data suddenly gone ▪ Scraping or rattling sound ▪ Hard drive not spinning ▪ Computer hard drive doesn't function
Examples	<ul style="list-style-type: none"> ▪ Electrical failure ▪ Head/media crash ▪ Controller failure
Preventive Measures	<ul style="list-style-type: none"> ▪ Protect electrical components by using computers in a dry, shaded, dust-free area ▪ Protect against power surges with an uninterruptible power supply (UPS) ▪ Do not shake or remove the covers on hard drives or tapes.
Human Error (32 percent of all data loss)	
Possible Symptoms	<ul style="list-style-type: none"> ▪ Previously accessible data suddenly gone ▪ Message similar to "File Not Found"
Examples	<ul style="list-style-type: none"> ▪ Accidental deletion or drive format ▪ Trauma caused by drop or fall
Preventive Measures	<ul style="list-style-type: none"> ▪ Never attempt any operation, like installations or repairs, with which you don't have experience ▪ Avoid moving your computer, especially when it's in operation

Software Corruption (14 percent of all data loss)	
Possible Symptoms	<ul style="list-style-type: none"> ▪ System messages relating to memory errors ▪ Software application won't load ▪ Error message stating data is corrupted or inaccessible
Examples	<ul style="list-style-type: none"> ▪ Corruption caused by diagnostic or repair tools ▪ Failed backups ▪ Configuration complexity
Preventive Measures	<ul style="list-style-type: none"> ▪ Back up data regularly ▪ Use diagnostic utilities with caution
Computer Viruses (7 percent of all data loss)	
Possible Symptoms	<ul style="list-style-type: none"> ▪ Blank screen ▪ Strange and unpredictable behavior ▪ Error message stating ▪ "File Not Found" Message announcing virus appears on screen
Examples	<ul style="list-style-type: none"> ▪ Boot sector viruses ▪ File infecting viruses ▪ Polymorphic viruses
Preventive Measures	<ul style="list-style-type: none"> ▪ Use a good anti-virus package ▪ Obtain software from reputable sources ▪ Scan all incoming data, including packaged software, for viruses
Natural Disasters (3 percent of all data loss)	
Possible Symptoms	<ul style="list-style-type: none"> ▪ While floods and earthquakes have obvious symptoms, brownouts and lightning strikes often leave no clues
Examples	<ul style="list-style-type: none"> ▪ Fires ▪ Floods ▪ Brownouts
Preventive Measures	<ul style="list-style-type: none"> ▪ Store tested backups in an off-site location ▪ Install a UPS ▪ Don't store critical data in a flood plain

<p>Did you Know...</p> <ul style="list-style-type: none"> ▪ More vital data is being stored in smaller spaces ▪ Disaster prevention and recovery plans are often overlooked or outdated. ▪ Most small businesses don't have a backup plan that fully protects them. ▪ Backup tools and techniques are not 100% reliable. ▪ In addition to being more prevalent, computer viruses were more costly, more destructive, and caused more real damage to data and systems than in the past. <p><i>(Source: 7th Annual ICSA Lab's Virus Prevalence Survey, March 2002)</i></p>	<p>How much is your downtime costing you?</p> <ul style="list-style-type: none"> ▪ U.S. businesses lose over \$12 billion per year because of data loss. ▪ At what point is the survival of your company at risk? 40% said 72 hours, 21% said 48 hours, 15% said 24 hours, 8% said 8 hours, 9% said 4 hours, 3% said 1 hour, 4% said within the hour. ▪ 46% said each hour of downtime would cost their companies up to \$50k ▪ 28% said each hour would cost between \$51K and \$250K ▪ 18% said each hour would cost between \$251K and \$1 million ▪ 8% said it would cost their companies more than \$1 million per hour <p><i>Source: 2001 Cost of Downtime Survey Results</i></p>
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Some Numbers that will shock you...

- 6% of all PCs will suffer an episode of data loss in any given year. Given the number of PCs used in US businesses in 1998, that translates to approximately 4.6 million data loss episodes. At a conservative estimate, data loss cost US businesses \$11.8 billion in 1998. (The Cost Of Lost Data, David M. Smith)
- 30% of all businesses that have a major fire go out of business within a year. 70% fail within five years. (Home Office Computing Magazine)
- 31% of PC users have lost all of their files due to events beyond their control. (Boston Computer Network)
- 34% of companies fail to test their tape backups, and of those that do, 77% have found tape back-up failures. (Boston Computer Network)
- 60% of companies that lose their data will shut down within 6 months of the disaster. (Boston Computer Network)
- American business lost more than \$7.6 billion as a result of viruses during first six months of 1999. (Research by Computer Economics)

Some More Numbers that will shock you...

- 93% of companies that lost their data center for 10 days or more due to a disaster filed for bankruptcy within one year of the disaster. 50% of businesses that found themselves without data management for this same time period filed for bankruptcy immediately. (National Archives & Records Administration in Washington)
- Companies that aren't able to resume operations within ten days (of a disaster hit) are not likely to survive. (Strategic Research Institute)
- More than 300 million business PCs have a combined 109,000 terabytes of data that is not backed up regularly and, "as much as 60% of corporate data resides unprotected on PC desktops and laptops." Source: IDC analyst Cynthia Doyle
- The average company spends between \$100,000 and \$1,000,000 in total ramifications per year for desktop-oriented disasters (both hard and soft costs.) (Source: 7th Annual ICSA Lab's Virus Prevalence Survey, March 2002)
- Simple drive recovery can cost upwards of \$7,500 and success is not guaranteed.(Boston Computing Network)