



Online Backup Market Research

Gartner, IDC, Meta Group - 40-80% of a company's business critical data resides on PCs

- Laptop sales in 2002 - 100 million
- 35% of all PCs sold to business are laptops
- 41% of employees have remote access to corporate networks, 90% by 2004

<http://www.telewest.co.uk/yourbusiness/securebackup.html>

- 80% of all data is held on PCs (Source, IDC)
- 70% of companies go out of business after a major data loss (Source, DTI)
- 32% of data loss is due to user error (Source, Gartner Group)
- 10% of laptops are stolen annually (Source, Gartner Group)
- 15% of laptops suffer hardware failure annually (Source, Gartner Group)

<http://www.lht.com/Products/TapeBackup/Software/LostDataCosts/CostOfLostData.html>

Pepperdine Study - The Cost of Lost Data, 9/99

- 6% of all PCs will suffer an episode of data loss in any given year
- There are three main quantifiable costs associated with each incident of data loss: (1) the cost of technical support in the recovery effort, (2) lost productivity due to user downtime, and (3) the possible cost associated with data that is permanently lost.

Average Cost of Each Data Loss Incident

Technical Services	380
Lost Productivity	177
Value of the lost data	2,000
Total	\$ 2,557

- Range of per incident losses:
 - 80% of data loss incidents will cost \$577
 - 20% of data loss incidents will cost \$10,557
- virus cost needs to take into account the network effect of computers - e.g., suppose a computer virus invades a network and damages data on 5 PCs. From the analysis, 5 multiplied by \$2,557 results in an expected loss of \$12,785.

<http://www.hp.com.sg/news/2000-05-24a.html>

- It is estimated that nearly 80 percent of laptop and desktop PCs carry company data, and yet most companies have no backup strategies in place for their employees' hard drives. Typically, the data that resides on servers is backed up, leaving the rest vulnerable to user error, accidental damage or in the case of laptops, theft.
- Portable computers are especially vulnerable. According to Computer Weekly (18 Nov, 1999), it is estimated that more than 20 percent of notebooks used in the field lose data as a result of theft or damage.
- The U.S. remote and mobile population in 1999 was expected to reach 35.7 million, and an additional 22.2 million laptop computers are expected to be sold worldwide during the year 2000. With laptop hard-drive capacities commonly exceeding 8GB, these numbers suggest that there is a massive growing volume of vital data at risk. And the cost of replacing data is high.

- In addition, as computing moved to laptop PCs for on the road business and management activities, 45% of computers being sold are now Laptop PCs and studies show that companies are spending \$10.2 billion for disaster recovery of important business critical data, from loss, theft, hard drive crashes and accidental deletion. This does not include the cost of lost worker productivity.
- Even companies who have been doing daily backups, to tape or disk, have found when disaster strikes, that the backup tape or disk was corrupted or the data was unrecoverable. The only safe format for total data protection is computer to computer, to an offsite location where data is professionally managed and available for disaster recovery 24/7.

http://portal1.legato.com/corporate_info/pressroom/1999/PR258.html

- Legato Systems, Inc. (NASDAQ: LGTO), the leader in enterprise storage management software, and Stac Software, Inc. (Nasdaq: STAC) today released "The Cost of Lost Data" Report. This report is the first quantifiable study of the costs associated with recovering or replacing missing data after incidents such as hardware failure, human error, virus corruption and theft. The study, researched and written by Pepperdine University economics professor and labor economist David Smith, estimates that six percent of PCs will suffer an episode of data loss in any given year. Each incident requires an average \$2,557 to fix, including costs such as retrieving and recovering the missing information, lost productivity, technical services and the data's average value. Smith estimates that businesses spent \$11.8 billion recovering data from those affected PCs in 1998.
- **Backups are useless if they cannot be restored immediately, from anywhere, when disaster strikes. It comes down to the fact that if you do not have an automated solution, you don't have a solution.**
- Many companies, especially small ones, don't realize they are at such a high risk for data loss which can wipe out their business. Backing up computer data off-site is now as essential as locking your doors at night

<http://www.oregonhealthinsurance.com/long%20term%20care.htm>

- The odds of a car accident are 70 in 1,000 at an average loss of \$3,000
- Therefore the odds of having a PC data loss incident is equal to the odds of you having an auto accident (6% for data, 7% for auto)

<http://www.bitstor.com/dataloss.html>

- Users today store data on their desktops and networks that is mission-critical to their organizations and their personal lives. Loss of mission-critical data, by definition, causes major business processes to stop. This, in the worst instance, can cause a company to go bankrupt. System administrators can lose their jobs. Companies can lose faithful customers who lose trust as a result of the company's failure to deliver as promised. The financial, legal and productivity ramifications associated with the loss of critical data puts companies and individuals at great risk
- What Are The Leading Causes Of Data Loss? (OnTrack Data 1998
<http://www.ontrack.com/datarecovery/dataloss.asp>)
 - [Hardware or System Malfunction](#) 44%
 - [Human Error](#) 32%
 - [Software Program Malfunction](#) 14%
 - [Viruses](#) 7%
 - [Natural Disasters](#) 3%

<http://www.icl.com/news/feature/ITdayfromhell.htm>

- 79% of people find PC failure more stressful than queuing in a bank or bar
- 12% of people find PC failure more stressful than being left by a partner
- 38% would rather face delays on public transport than not be able to get onto their PC for a day

- 30% would rather give a speech to a large audience than be separated from their PC

<http://www.imine.net/prodsvc/?thin>

- a typical PC has a failure rate of 20,000 hours or about 1 every 7 years (50 hour week, 52 week year)

http://www.livevault.com/solutions/smb_cost_worth.htm

- Costs of system downtime include:
 - Lost revenue
 - Lost customer goodwill
 - Duplicate processing
 - Time required to activate the backup facility
 - Unproductive employee time during the outage
 - Restarting and testing the primary system after failure
 - Reconfiguration of user and security profiles
- According to Contingency Planning Research & Strategic Research Corporation:
 - 43% of U.S. companies experiencing disasters never re-open, and 29% close within 2 years.
 - 43% of lost or stolen data is valued at \$5 million.
 - Most companies value 100MB of data at more than \$1million.
 - The loss of revenue for each hour of downtime varies from industry to industry. Network Computing recently reported the following numbers for various industries. The actual cost of downtime would be even greater because employee productivity downtime is not included in these figures.
 - Industry Average Revenue Loss/Hour of Downtime
 - Energy and Telecom \$3 million/hour
 - Manufacturing and Financial Institutions \$1.6 million/hour
 - Insurance and Retail \$1.2 million/hour
 - Professional Services \$500,000/hour
 - Construction and Engineering \$400,000/hour
 - Hospitality and Travel \$330,000/hour

<http://www.lht.com/Products/TapeBackup/Software/LostDataCosts/CostOfLostData.html>

- Average time to recover lost data = 6 hours (if a person is employed/available to do it)
 - it cost an average of \$190 to recover data via an internal IT employee and \$380 for an outside employee
- Virus cost needs to take into account the network effect of computers - e.g., suppose a computer virus invades a network and damages data on 5 PCs. From the analysis, 5 multiplied by \$2,557 results in an expected loss of \$12,785.
- Average of \$2,577 per loss -- 80% of data loss incidents will cost \$577 -- 20% of data loss incidents will cost \$10,557

<http://www.safeware.com/99pressreleases.htm>

Other highlights of the 2000 Safeware loss study:

- Approximately 831,000 PCs incurred accidental damage in 2000 that could have resulted in insurance claims. Over 95 percent of accidentally damaged units were notebook PCs.
- Accidental damage accounted for 58 percent of reported notebook losses, up from 52 percent in 1999.
- Notebook theft losses, as a percentage of total claims, remained steady at about 28 percent.
- A desktop PC is about about five times more likely to be damaged by a power surge or lightning than a notebook PC.
- Approximately 1.5 million PC owners in 2000 incurred equipment damage or loss that could have resulted in an insurance claim. Increase of about 19 percent from 1999.

- Approximately 387,000 notebook PCs were stolen in 2000, up about 20 percent from an estimated 319,000 in 1999

<http://www.datarecoverygroup.com/articles/article4.htm>

- The average company's computer system was down 9 times per year for an average of 4 hours each time.
- The average company's hourly downtime costs an average of \$330,000 per outage.

<http://www-1.ibm.com/services/continuity/recover1.nsf/services/Continuum>

IBM business continuity and recovery services site - some good language on general issues

<http://www.backupcentral.com/software-remotebackup.html>

comparison of remote storage back-up products (mostly appliances but include



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