

MOVING FORWARD

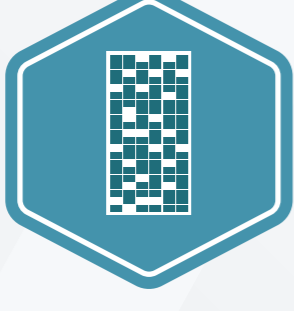
THE EVOLUTION OF IT DISASTER RECOVERY

From punch cards to virtualization, the growth of technology has made disaster recovery (DR) what it is today.

"Those who cannot remember the past are condemned to repeat it."
— George Santayana



1950s - '60s - BACKING UP TO MAGNETIC TAPE



United States Census Bureau receives **UNIVAC** (Universal Automatic Computer). Punch cards are used, as the first storage devices for data backup.



Punch cards are gradually replaced with **magnetic tape** backup.



First floppy disk introduced (8-inch disk stores 80KB).



First disk storage unit released (IBM 1301).

1970s - DISASTER RECOVERY IS BORN



Batch-oriented mainframes created and **computer systems linked**. That's a first.



Computers down? No reason to freak out. This doesn't affect the business.



The idea of **Disaster Recovery (DR)** is born.



"Creeper," the first virus-like program, is created.



Sungard Availability Services introduces the world's first commercial, "Hot Site," in Philadelphia.

1980s - THE INTERNET REVOLUTION BEGINS



The term **"cyberspace"** is coined and gains popularity.



Increasing **government regulations** mandate BC/DR.



"Internet Worm" virus shuts down 10 percent of the world's servers.



Internet **Domain Name System (DNS)** is established.



Backup and file exchange surge with development of 1GB disk drive, CD-ROM, FTP, and LAN technologies.

1990s - BACKUP GOES DIGITAL



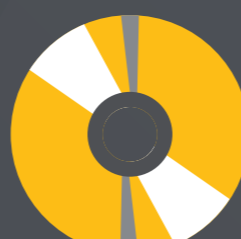
99.999% availability objectives established.



Hacker group L0pht testifies before congress that it could shut down nationwide access to the Internet in less than 30 minutes.



CERN releases the **World Wide Web**.



Backup takes another big step with development of CD-R, RAID, flash drives, and DVD technologies.



A year's work gone in 20 seconds: Pixar accidentally deletes Toy Story 2. Backups fail, but copies are found on animator's home PC.

2000s - "THE DECADE OF DISASTER"



Rapid Internet growth over the last decade turns 99.999% from aspiration to expectation.



The appearance of major viruses like **"Love Bug"** and **"Stages"** arises.



The **9/11 terrorist attacks** reveal a very real threat of disaster for many.



High-speed, immediate, and programmable backup solutions become reality with the introduction of Storage Area Networks.



The decade becomes the most tumultuous in the history of **Disaster Management:**

- 1,749 disasters during 1950s-'90s
- 1,266 disasters in 2000s, alone

2010 - THE VIRTUALIZATION DECADE



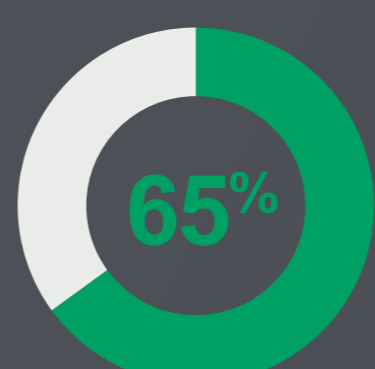
Over a 4-month period, Chinese hackers repeatedly penetrate The Wall Street Journal and Twitter. **#globalcyberattacks**



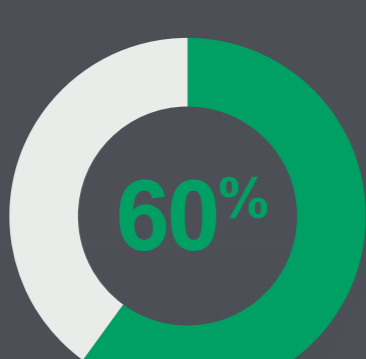
50% of companies have no plan to replace damaged equipment after a disaster.

2 BILLION

Internet users: The Department of Defense lists "Cyberspace" as a relevant domain for DoD activities, along with land, sea, air, and space.



In a 30-month period, **cost-per-hour of downtime increases** an average of 65%.



60% of workloads are virtualized. By 2014, it rises to 73%.



\$11 billion in natural disasters strike the U.S. in 2012. Worldwide natural and man-made disasters cost \$140 billion.

LOOKING AHEAD

History has shown that disasters are on the rise, hardware and software failures are constant threats, and human errors are inevitable. The fact is we're always going to need disaster recovery programs. When it comes to keeping your threat exposure to a minimum and your company connected, why not rely on the company that invented DR more than 3 decades ago? After all, more than 7,000 businesses and institutions across America and Europe do so today.



MAKE DR A PART OF YOUR FUTURE.

Watch Sungard Availability Services' Recovery-as-a-Service (Raas) video at www.sungardas.com



SOURCES: history1900s.about.com | backuphistory.com | computerhistory.org | pcworld.com | zakon.org | factmonster.com | sptimes.com | youtube.com | fema.gov | computerworld.com | washingtonpost.com | emergencygmt.com | en.wikipedia.org | csoonline.com | infoworld.com | drbcpt.com | protect-data.com | cbsnews.com | baselinemag.com | eweek.com | financialadviserblog.dowjones.com



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