The Future of Magnetic Tape
IBM begins development on its last tape drive (3480) ever because........ of the declining cost of disk drives
1953
IBM 709 – 7 Track
Reel-to-Reel

1984
IBM 3480 Cartridge
200 MB
Current Market:

~ $6B/yr.
6% Dollar Growth
15% Unit Growth
Session 3.2 The Staying Power of Tape
Robert Amatruda, Research Manager, Tape and Removable Storage, IDC

“The tape data storage industry posted yet another stellar year of growth - contrary to the widely held belief that tape is no longer a viable and cost-effective storage medium”
Storage Subsystem Price Trends

(OEM price/equiv. unless otherwise noted; no capacity compression or utilization)

Tape Drives
Tape Drives + 100 Tapes
Tape Media Only
Performance Disk Drives
Dataquest Multi-platform class disk
Gartner Mid-range Disk Subsystems - low
Memory chip-low
Gartner Mid-range Disk Subsystems - high
Dataquest Enterprise Class disk

Price (OEM/Integrator - $/GB)

GA year

Tape Drives
Optical Disk Subsystems
Disk Drives - low
Desktop Disk Drives

6/25/01 NASA01
Courtesy StorageTek M. Leonhardt 4/01
Today:
DLT/LTO – 100 GB/Cartridge
5 yrs:
800 GB-1TB/Cartridge

5-7 yrs:
10 TB/cartridge (6 Gb/in²)
~2b/um³

Cartridges ~ $100 (Single end-user)
STORAGE

• ON-LINE: MAGNETIC DISK

• NEAR-LINE:
  – VERY LARGE: TAPE
  – LARGE/MODERATE: MAGNETIC DISK/DVD

• ARCHIVAL:
  – LARGE: TAPE
  – MODERATE/SMALL: DVD