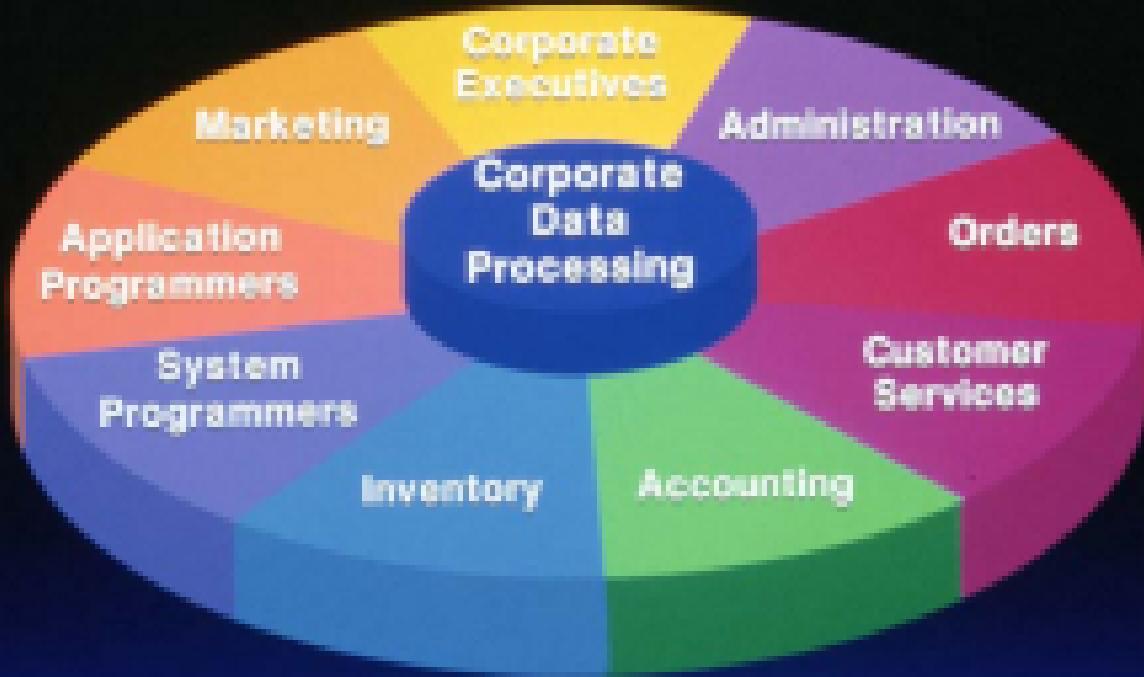


MEMOREX

MEMOREX 6880  
SOLID STATE DISC  
STORAGE SUBSYSTEM

## INFORMATION DISTRIBUTION



MEMOREX

## MANAGEMENT ISSUES

Productivity?

Hardware Cost?

Response Time?

Performance?

Managing Growth?

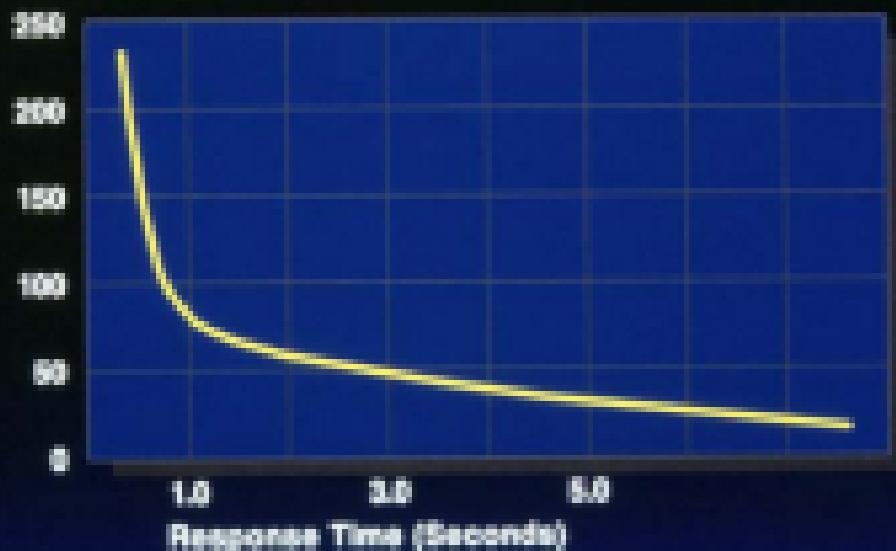
## PEOPLE COST vs HARDWARE COST

- 60 Programmers at  
\$40,000 = \$2,400,000
- 200 Outside Users at  
\$25,000 = \$5,000,000
- Total Annual People  
Cost = \$7,400,000
- 5% Productivity  
Improvement = \$370,000

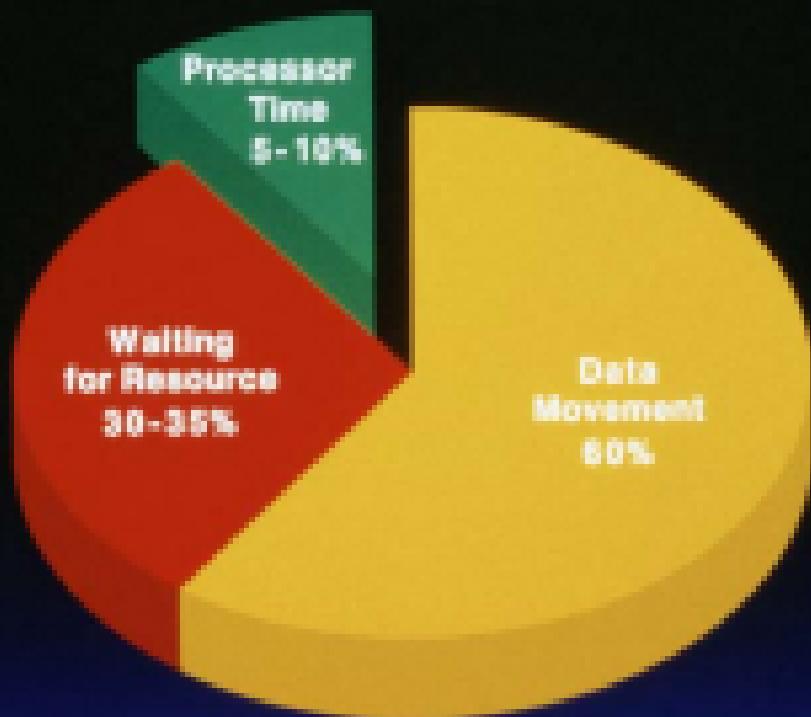


## PRODUCTIVITY AS A FUNCTION OF RESPONSE TIME

Productivity (Transactions per Hour)



## ON-LINE TRANSACTION



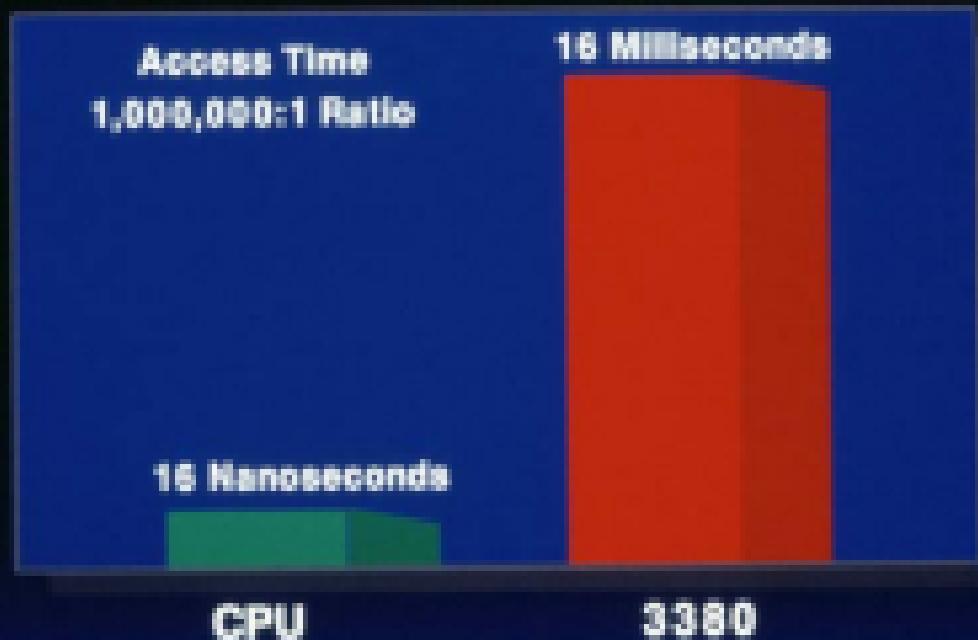
## TRADITIONAL SOLUTIONS

- Maximize Existing Hardware
  - Systems Tuning
  - Restrict Usage
  - Reschedule Workload
- Add Additional Hardware
  - Additional CPU
  - Faster CPU
  - More Memory, Channels, Disk

## RULES OF THUMB

- CPU Utilization Below 80%
- Channel Utilization Below 35%
- Add Memory to Reduce Paging
- Do Not Utilize All Disk Space

## THE REAL PROBLEM



## THE REAL PROBLEM

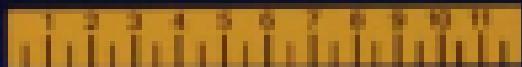
A Millisecond -  
Dallas to Houston



A Microsecond -  
3 Football Fields

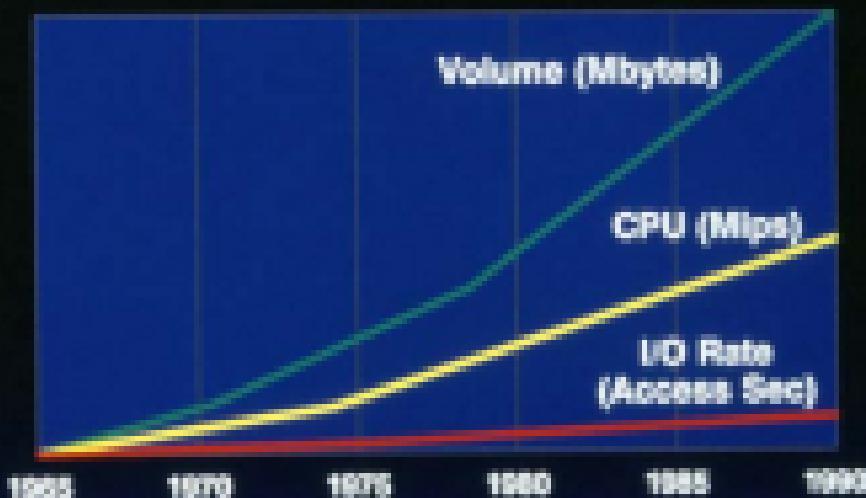


A Nanosecond -  
Only 11.8 Inches



## TECHNOLOGY TRENDS

- DASD Capacity,  
60x Larger
- CPU Speed,  
30x Faster
- DASD Performance,  
4x Faster

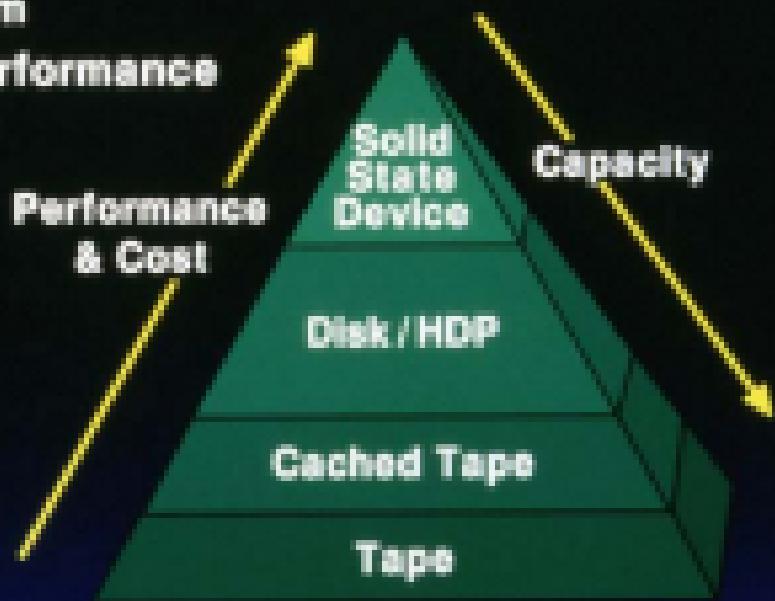


## PERFORMANCE CHARACTERISTICS BY TYPE OF DATA

- What is the Time-Value of the Data?
  - Who Uses It?
  - How Frequently?
  - How Quickly?
- How Much Data Is It?
- How Does It Impact Corporate Profitability?
  - Does It Impact People Productivity?

## STORAGE SUBSYSTEM FAMILY

- Address Real Problem
- Provide Improved Performance
- Reduce Costs



MEMOREX

## THE MEMOREX 6880

A New Generation of  
Solid State Technology



## 6880 SOLID STATE DISC

- The Highest Performance I/O Device
- Solid State Technology
  - No Seek
  - No Latency
  - No RPS Miss
  - .3 ms Access Time
  - 3 MB/Sec Data Transfer
- 32 MB to 512 MB Capacity
- Non-Volatile

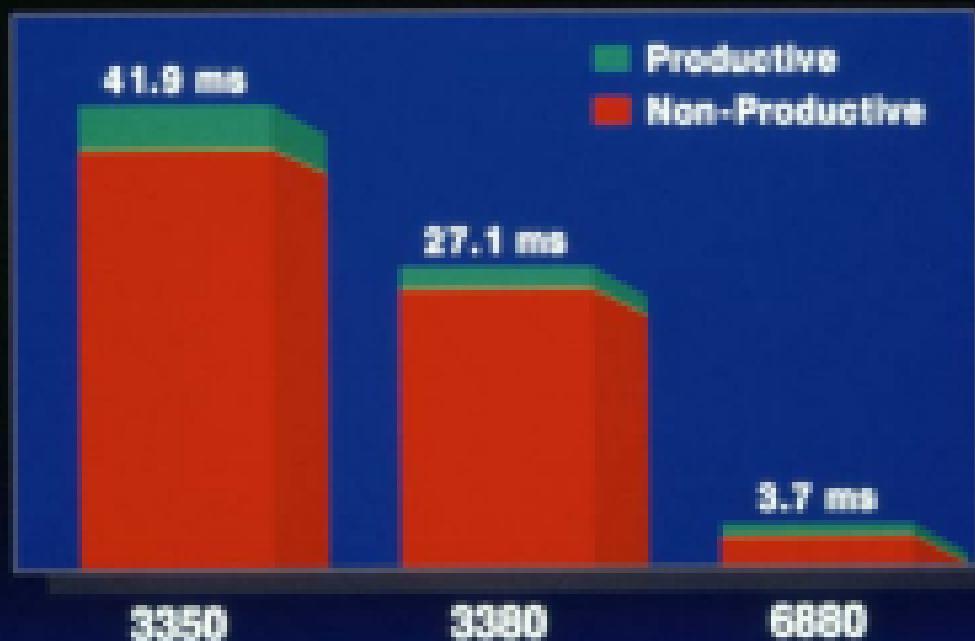
## APPLICATIONS

- Demand and Swap Paging
- On-Line System Load Libraries
- On-Line Terminal Work Space/Queues
- Data Base Indices
- Security
- Catalogs
- CAD/CAM Roll Files
- Critical Batch Files
- \* \* \* \* \*

## BENEFITS

- Improve On-Line Response Consistency
- Improve System Performance
- Reduce On-Line Response Time
- Increase Transactions
- Increase Number of Users
- Improve Hardware Utilization  
CPU, Channels, Disk, Memory
- Enhance Batch Throughput
- Simplify Tuning Efforts

## DATA MOVEMENT COMPARISON



## PERFORMANCE COMPARISON



# MEMOREX

## ON-LINE SYSTEM IMPROVEMENT

100



Response  
Time

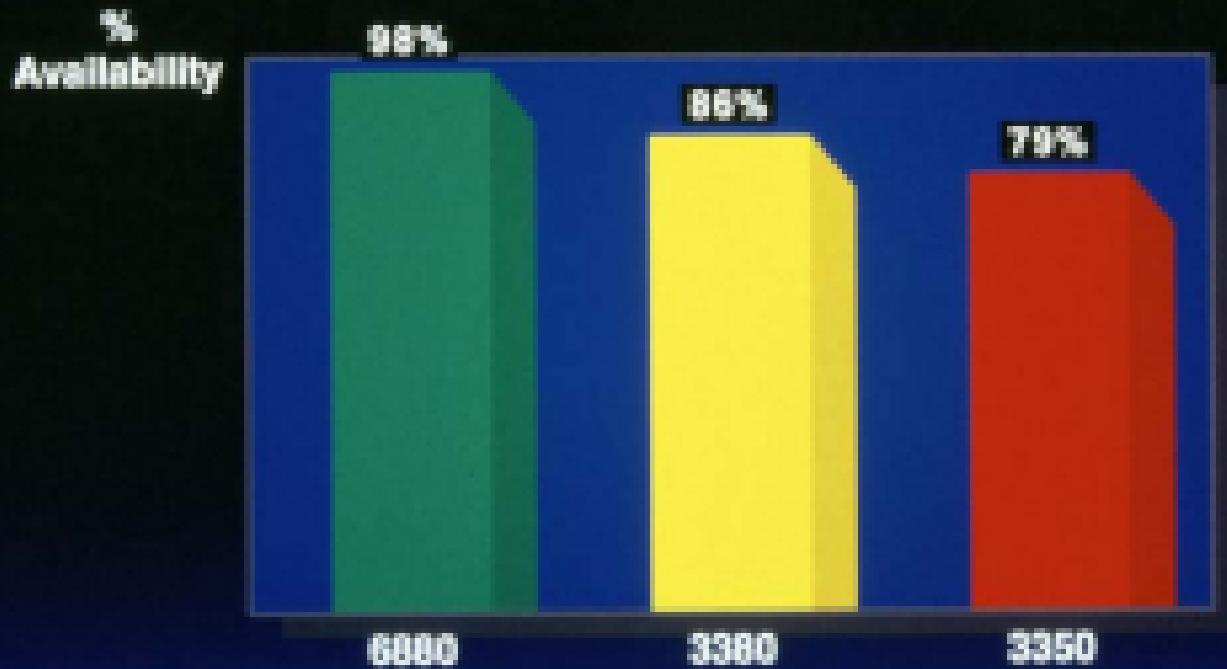
Users

## INCREASED RESOURCE UTILIZATION

- Improve CPU Utilization
- Improve Channel Utilization
- Improve Disk Utilization
- Improve Memory Utilization

# MEMOREX

## IMPROVED CPU ACCESS FOR CICS AND IMS



MEMOREX

## IMPROVED DISK UTILIZATION

- Increase Useable Space on Existing Devices
- Free Up Dedicated Volumes

50 MB per Actuator

\$750 per MB

## IMPROVED CHANNEL UTILIZATION

- 200% Improvement with 6880
  - Disk Channel Utilization: 25-35%
  - 6880 Channel Utilization: 50-70%
- 3081 Channel Group Cost: \$100,000

## SUMMARY OF 6880

### Benefits

- Improve System Performance
- Increased Productivity
- Improve Current Hardware Utilization
- Enhance Future Hardware Utilization

## SUMMARY OF 6880

### End Result

- Reduce Cost of Doing Business
- Increase Profits

## Can the Memorex 6880 Help Solve Your Problems?

- **Conduct Needs Analysis**
- **Report Results**