Defense Information Systems Agency

A Combat Support Agency

Storage Directions

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Agenda

- Storage Capacity Services
- Rates
- Storage “Game Changers”

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Storage Capacity Services

Delivered as a service to meet customer requirements

600+ Orders Completed:

- 67 – Disk Arrays Installed
- 5.3 PBs of disk capacity
  - 10% IBM mainframe
  - <1% Unisys mainframe
  - 90% server

Pay only for what is used!

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Everything in the Rates

Direct Costs

- **Storage Related Services**
  - **Hardware**
    - Depreciation
    - Maintenance
    - Infrastructure costs – FC & IP switches, backup media, etc.
    - Racks, cables, etc.
    - Capacity service based contracts
  - **Software**
    - SOE Products & other storage resource products
    - Hardware-specific related products
  - **Labor**
    - Storage Administration
    - OST support
  - **Back-up Services**
    - Standard weekly backups (1 copy onsite, 1 copy offsite, retain 5 weeks)
    - Incremental daily backups (retain 2 weeks on site)

Indirect Costs

- **Data Center Services**
  - **Security**
    - Info Assurance/STIG
    - "Behind the Gate" Facilities
    - Military Police
    - Regulatory Compliance
      - SAS 70
      - DoD IG
      - NSA
  - **Facility Measures**
    - Conditioned/Redundant Power Feeds
    - A/C
    - Floor Space
  - **Networks**
    - Circuits
    - Secure, Reliable & Monitored Network
    - 24x7x365 Support
  - **Service Level Agreements**
  - **Help Desk**
    - Customer Service Agents
    - Engineers On-call

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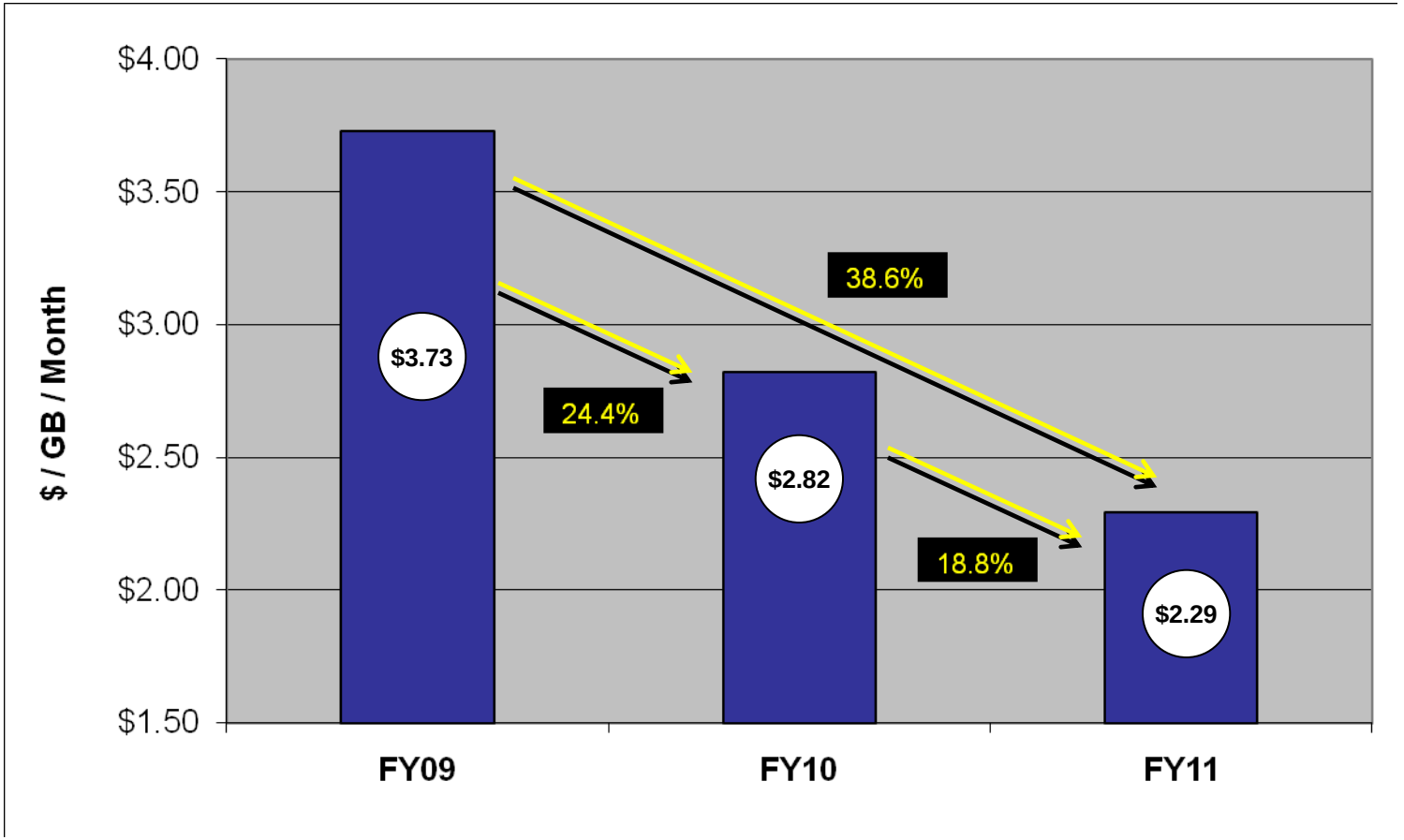
Trend of Basic Storage Rate



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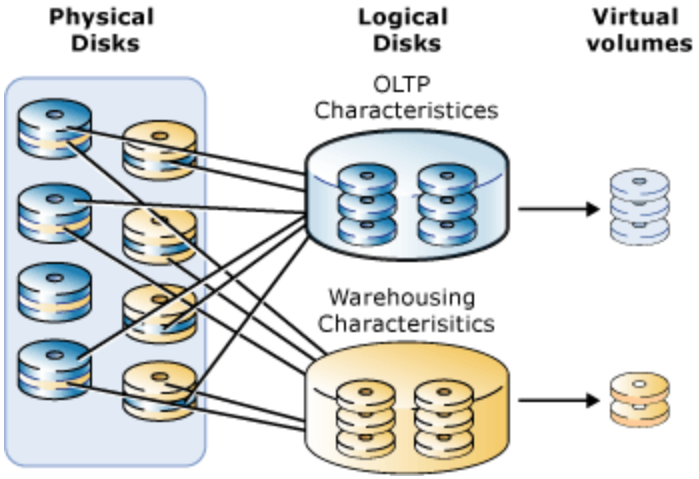
Storage “Game Changers”

- **Virtualization**
  - **Separates physical disk capacity from logical disk capacity**
  - **Faster provisioning**
  - **Keeps costs down by minimizing the amount of physical disk required**



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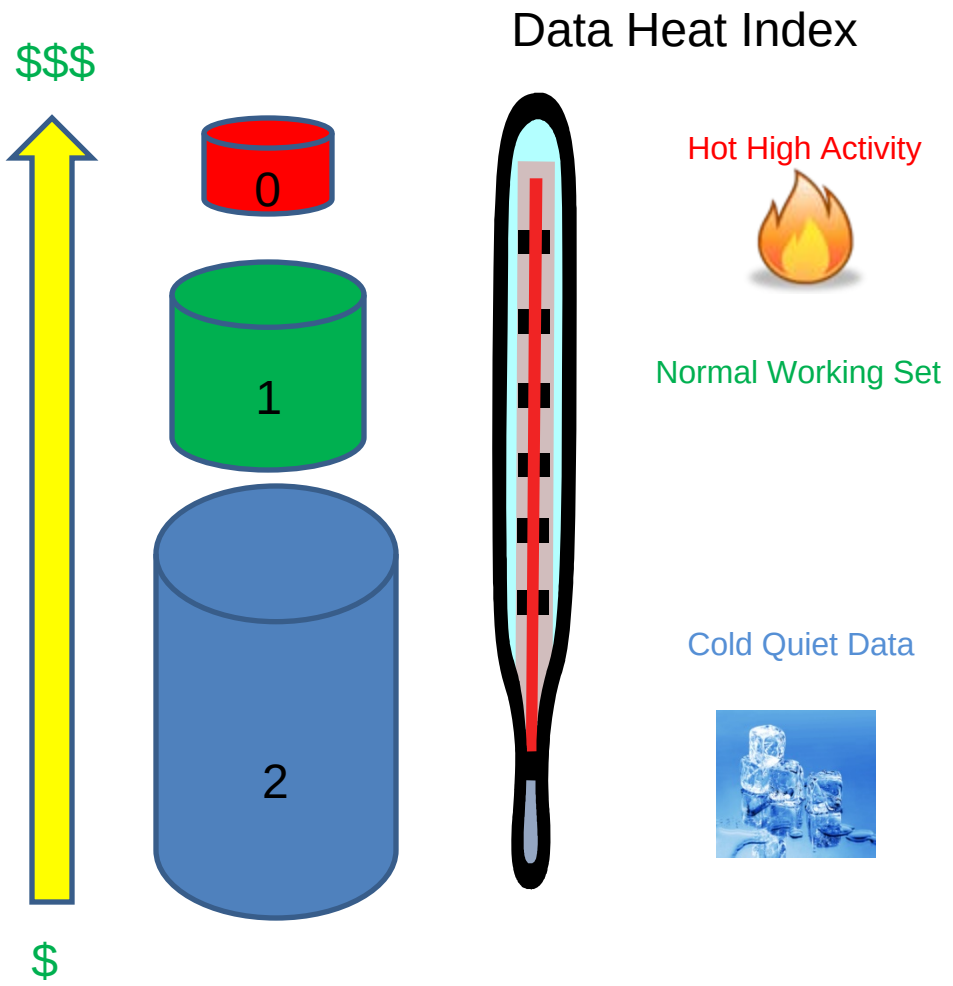
- **Tiered Storage**

Today –Arrays with FC, SAS, and SATA disks. Manual positioning of data.

Tomorrow – *Solid state*, FC, SAS and SATA. Automatic positioning of data based on activity.



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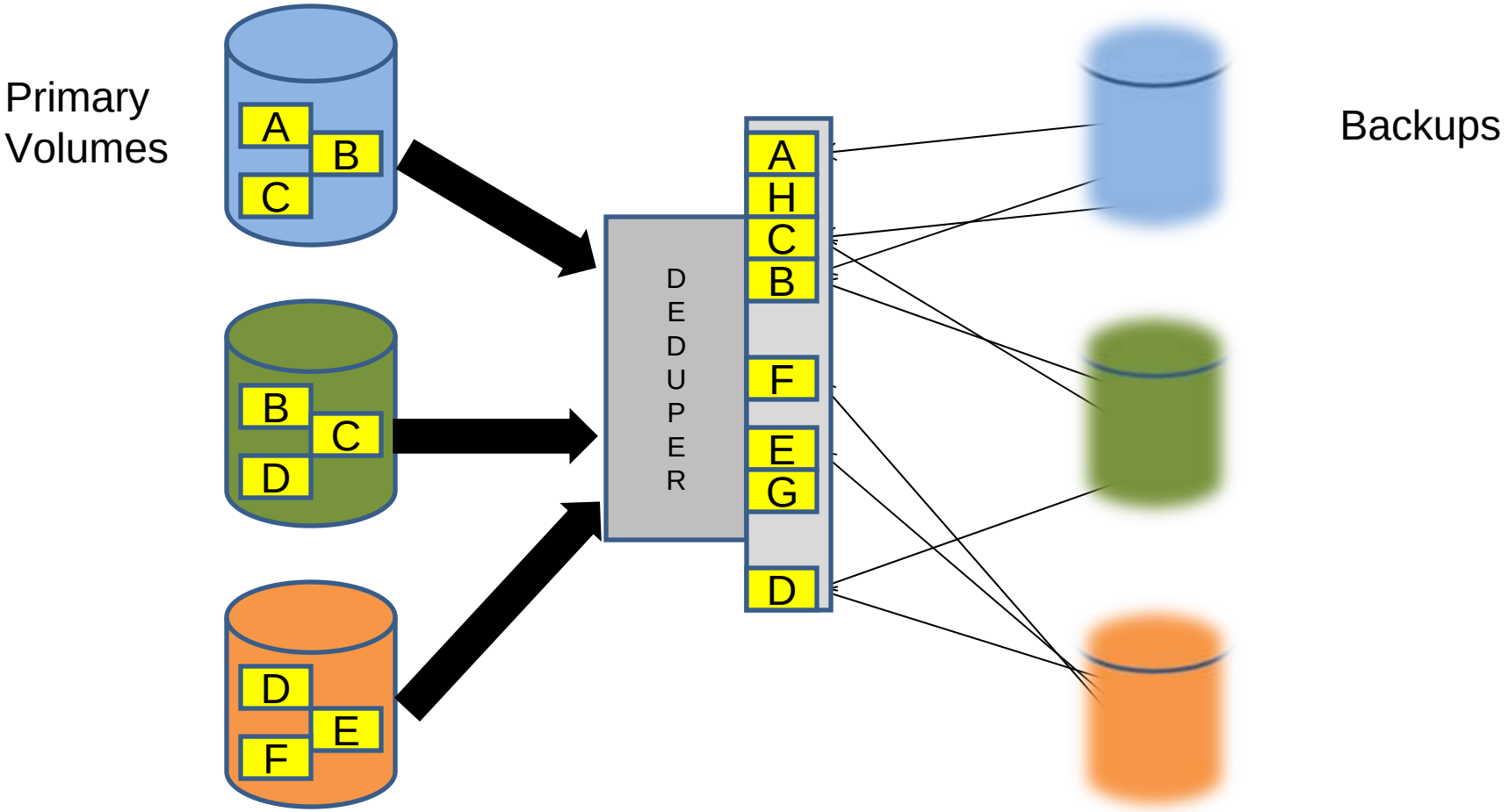
Storage “Game Changers”

- **Data Deduplication**



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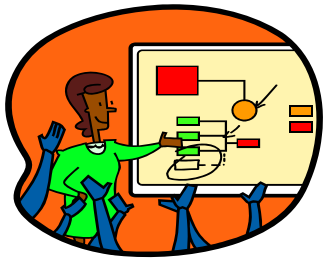
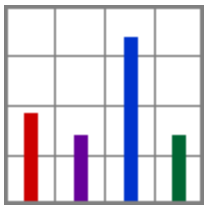
- **Storage Resource Management**
  - Improved automate storage billing process
  - Improved management of storage resources
  - Improved metrics





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Questions

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