

Meeting the Capacity Demand

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THIC Inc.

The Premier Advanced Recording Technology Forum

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Meeting the Capacity Demand

Mark Eastman – QSD Product Marketing

THIC Conference

Boulder, Colorado



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Agenda

- Market Trends
- DLTtape™ Futures
- Summary

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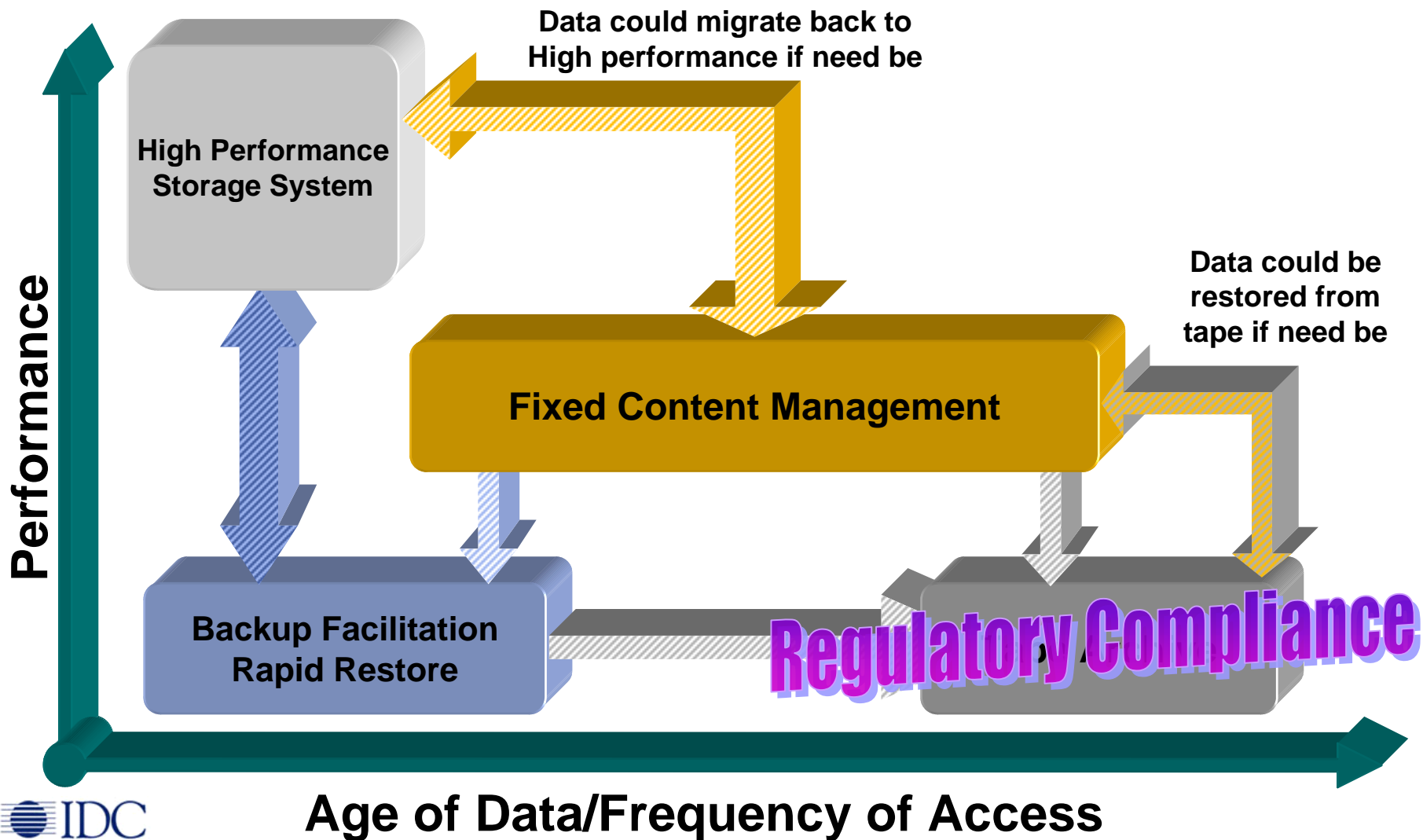
Market Trends

Market Overview



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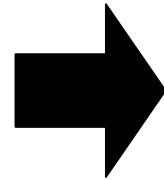
Data Lifecycle Management and Tiered Hardware



Quantum Impact...the next five years



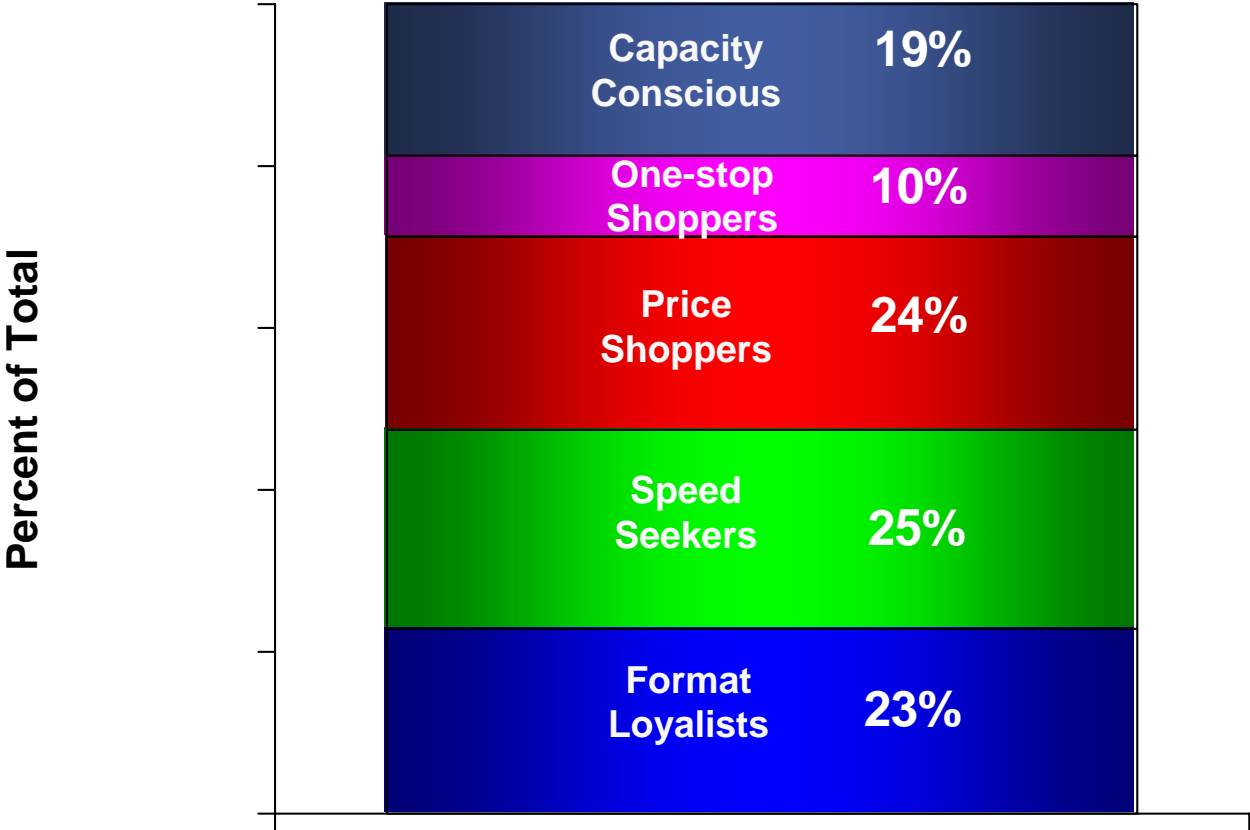
- High Data Availability
- Data Lifecycle Management
- Data Value Management
- Storage Management



Disk for availability
Tape for archive
Self-managing devices

DLTSAGE
Quantum

Midrange Tape Segment Purchase Criteria



Source: Quantum Conjoint Study 2003

Quantum Implications

- Speed seekers are the early adopters of D2D
 - Once they implement D2D they become Capacity Hounds
- Capacity conscious will be drawn to inexpensive (\$/GB) high-capacity tape
- DLTtape is leading the industry in both categories
- DLTtape futures will provide even more focus on capacity

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DLTtape Futures



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SDLT 600 Key Enablers

- Track Density Increased 43%
 - Digital Signal Processing on Optical Servo
 - Number of tracks increased from 448 to 640
- Head Channels Doubled
 - Higher output read head which allowed for smaller footprint
 - Number of Heads increased from 8 to 16
- New Super DLTtape II Media
 - Uses the media for the next generation drive today
- High Performance Interfaces
 - 2 Gb Fibre Channel
 - Ultra 160 SCSI

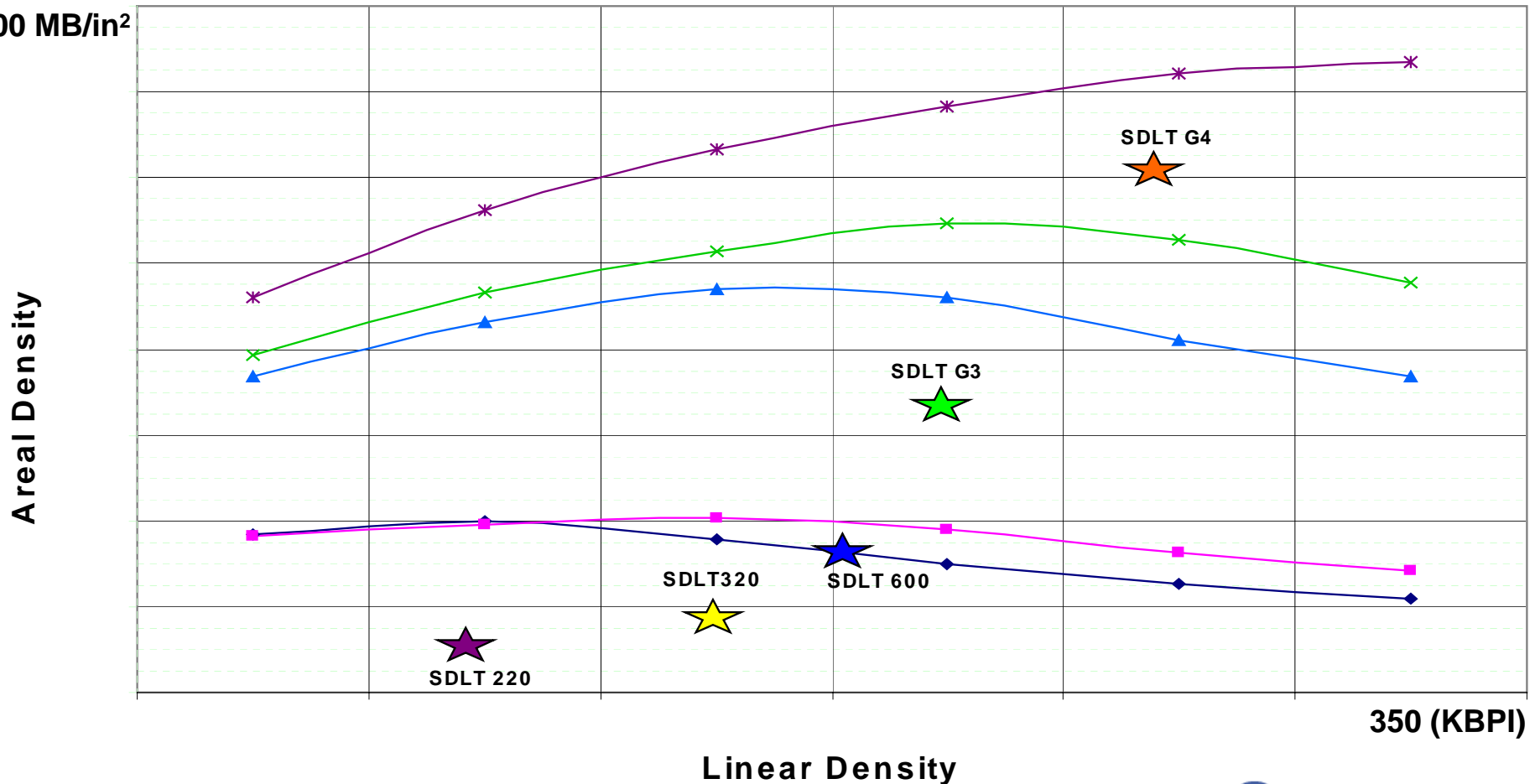


DLTtape Enabling Capacity

- Improved servo sensing techniques
- Enhanced tape path for thinner media
 - Reduced edge force
- Higher bandwidth actuators
- More robust format
 - ECC improvements
 - Bandwidth to handle larger errors
- Lower SNR for smaller heads and tracks
 - Heavily integrated read channels
 - Deeper Viterbi Trellis

Super DLTtape Media

Areal Density Comparisons for Various Particle Constructs
24 dB SNR



Summary

- D2D is here...but so is Tape
 - System DLM/ILM Strategies
- Data Management and Regulatory Compliance are driving capacity
 - Capacity driving solutions
- Manageability is key
 - DLTSage™
 - ISV Support