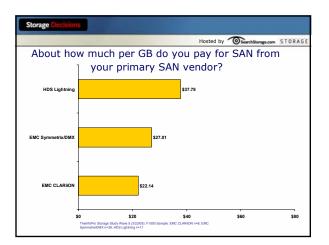
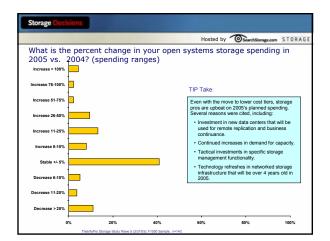


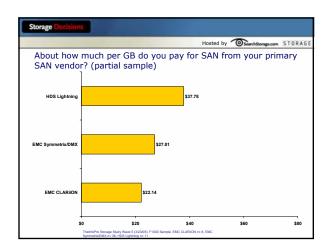
What storage pros are talking about

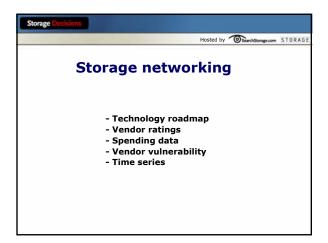
- "We are doing Hierarchical Storage Management (HSM) today with our structured data by moving from Tier 1 to Tier 2 Storage. It is a very manual process today with scripts we create and run. This does not scale down or scale out, so it is a problem."
- "We're working to implement tiered storage first. We need to be able to chargeback based on utilization. We can't yet chargeback. Until we can cost out the different tiers, we can't get anyone to go on anything less than the top tier storage performance – because we can't tell any user that they'll save money – because it's allocated today."
- "ILM has moved out to the long-term plan. We are hoping for it to be the mechanism for automating movement of data between tiers. I know that is not the full grandlose version of ILM, but it is a tactical need. At this stage ILM is a concept."
- "Tiered storage is not ILM. To us ILM is "cradle to grave" for the data, which includes: Backup, Policy Manager, HSM for the right tier, Compliance, Data Mobility tools, Data Classification tools. It is a significant strategy we are developing, and we need robust solutions to respond to our needs."

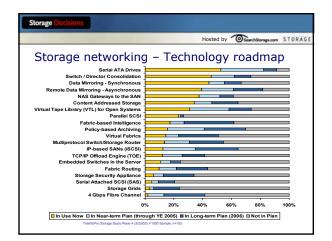


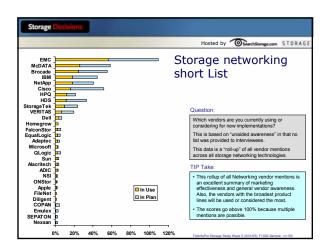




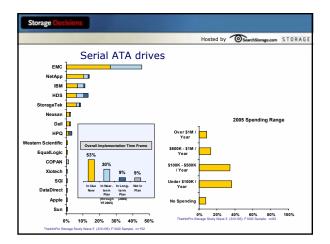


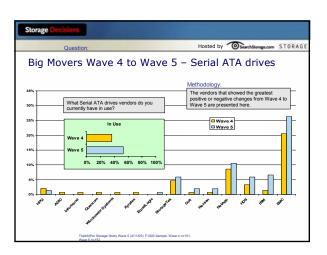


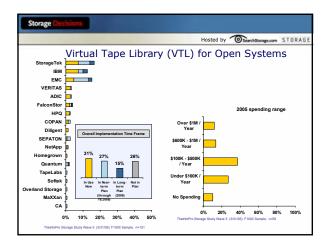


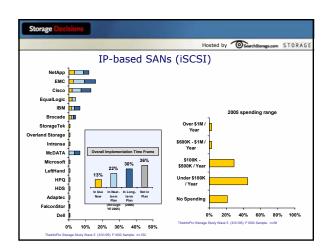


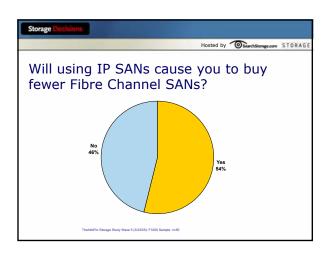
Storage Decisions				
		Hosted by	SearchStorage	com STO
Storage Networking Technology Plan Vendors	/ Hea	t Index	™ – Lead	In
Technology	Score	Lead In Plan Vendor	2nd In Plan Vendor	
Serial ATA Drives	100	EMC!	HDS	
Virtual Tape Library (VTL) for Open Systems	96	EMC	StorageTek	
Policy-based Archiving	93	EMC!	VERITAS	
Remote Data Mirroring - Asynchronous	93	EMC!	IBM	
IP-based SANs (iSCSI)	82	EMC	Cisco	
Multiprotocol Switch/Storage Router	69	Cisco	Brocade	
NAS Gateways to the SAN	69	EMC	NetApp	
Switch / Director Consolidation	61	Cisco	Brocade	
Fabric Routing	61	Cisco	McDATA	
Fabric-based Intelligence	60	Cisco	Brocade	
Content Addressed Storage	56	EMC!	NetApp	
Data Mirroring - Synchronous	48	EMC	IBM	
4 Gbps Fibre Channel	47	Brocade	McDATA	
TCP/IP Offload Engine (TOE)	44	Emulex	QLogic	
Virtual Fabrics	43	Cisco	McDATA	
Storage Security Appliance	35	Decru!	EMC	
Embedded Switches in the Server	18	IBM	Brocade	
Serial Attached SCSI (SAS)	14	EMC!	HDS	
Storage Grids	13	EMC!	NetApp	
Parallel SCSI	0	EMC	HDS	

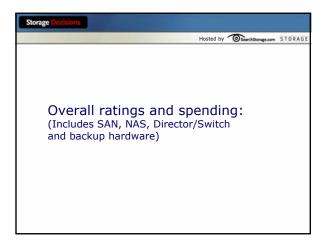


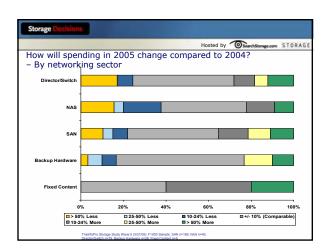


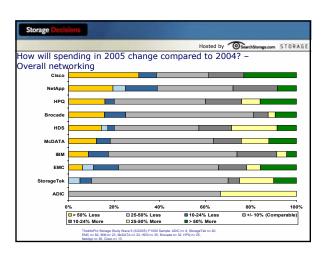


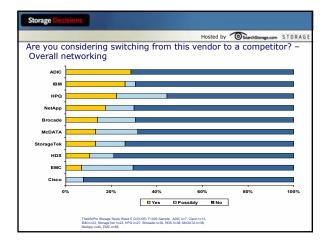


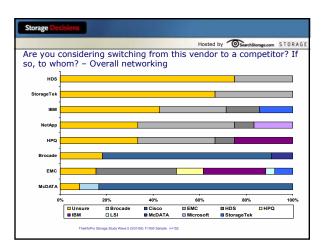




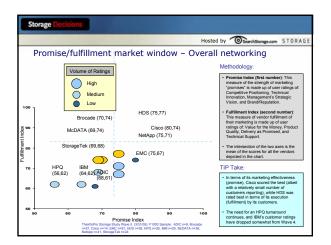


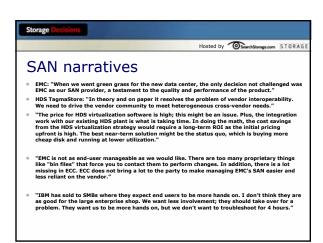


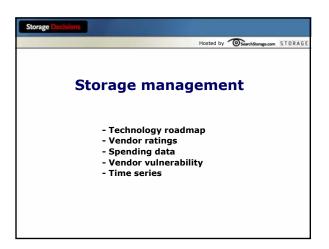


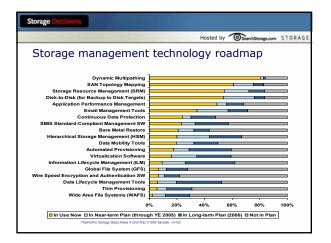


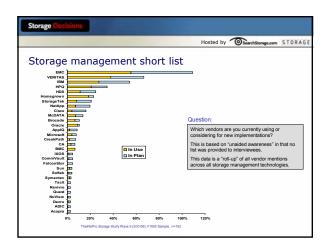
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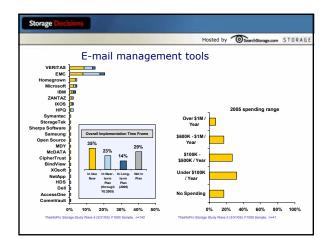


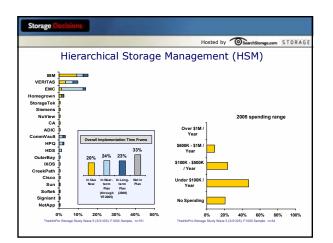


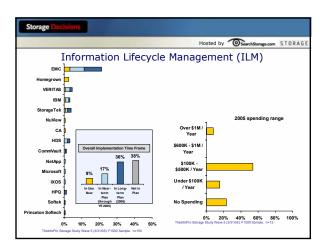


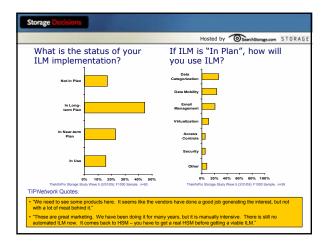


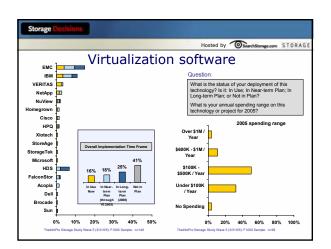
Hosted by SearchStorage								
Storage Management Techno Technology Adoption Index	logy Heat	Index™ \	/S.					
Technology	Heat Score	Adoption Score						
Email Management Tools	100	59						
Disk-to-Disk (for Backup to Disk Targets)	91	68						
Hierarchical Storage Management (HSM)	91	27						
Information Lifecycle Management (ILM)	81	21						
Storage Resource Management (SRM)	78	72						
Virtualization Software	75	25						
Automated Provisioning	66	27						
SAN Topology Mapping	60	86						
SMIS Standard-Compliant Management SW	58	34						
Data Lifecycle Management Tools	57	13						
Data Mobility Tools	55	27						
Application Performance Management	31	58						
Bare Metal Restore	29	19						
Wide Area File Systems (WAFS)	27	0						
Thin Provisioning	27	2						
Continuous Data Protection	24	23						
Dynamic Multipathing	14	100						
Global File System (GFS)	1	3						
Wire Speed Encryption and Authentication SW	0	3	1					



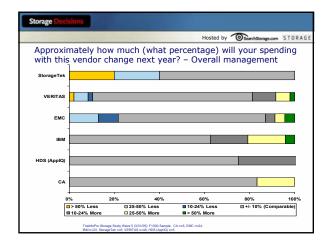


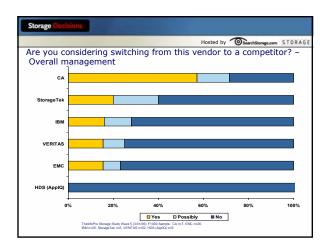


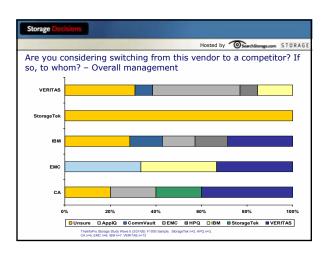




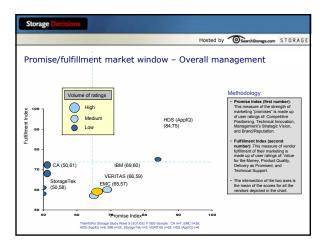








Storage E	Decisions
	Hosted by SearchStorage.com STORA
	Product ratings – Overall management
	Technical Competitive Inter- Innovation Positioning operability Functions Quality Per- Per- Reliability Permised Product Per- Reliability Promised Promance Permised Product Permised Permise
HDS (AppIQ)	
StorageTek	
CA	
IBM	
EMC	
VERITAS	
Customer	narratives:
• "From an • "IBM is no	ey are not as much of a leader, but have integrated tools and support for their product set. They have so much stuff and toolsy hat it is a question of how they will make the products. ECC perspective, it is the huge installed base of hardware that gives this product its strength." we supporting the product as Thot support was tacking. I think that is why it is getting branded with IBM in front of it, are changing—for a long time the service level and support was not enterprise class."
Method	ology:
The vend	ratings boxes or ratings are based on a "normal curve", with the number of boxes colored blue determined by the distance of each score from the mean of all vendors' scores.
. Endor 5	TheirfoPro Storage Study Wave 5 (3/31/05): F1000 Sample, CA n=7, EMC n=26, RMn n=25 Storage Study Wave 5 (3/31/05): F1000 Sample, CA n=7, EMC n=26,



Stora	age Decisions
	Hosted by SearchStorage.com STORAGE
	Storage management narratives
•	"We spent 9 months evaluating. They (AppIQ) gave us the widest variety of capabilities to meet our needs, and the most stable and best performance."
۰	"They (AppIQ) are slipping a little bit. They have lost some of their bandwidth because of the tie-in with HDS. HDS is leading them down THEIR path; AppIQ is a small company being towed by a behemoth. We're working on quality and performance."
•	On EMC's ECC: "Overly complex and not that easy to use. There is a wad of components in the product, and making sure they are all up takes too much time. It has weak reporting as well."
٠	On IBM Tivoli: "They missed delivery of functionality from Day 1. We bought the tool in 2000 and it is still not in production. The tool could not scale and had poor functionality. 3 years in, they bought Trellisoft and these pieces are solid and work well. The tools are complex and take training. We did not expect a turnkey solution; however, the amount of effort has been far more than the value we have experienced."

