



Go further, faster

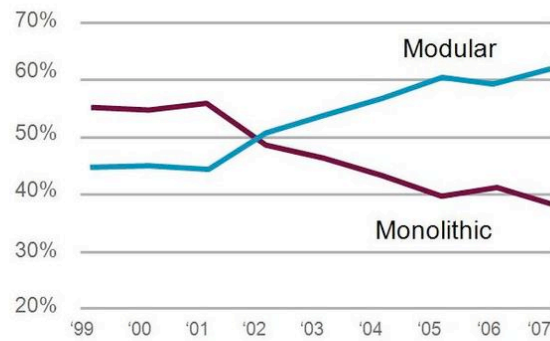
Using Your Data Center as a Competitive Weapon

Mike Riley
CIO, Central Area



Economics Drives Technology Adoption

Example: Monolithic Storage Share Shift



Monolithic and Modular storage as percent of combined revenue

Source: Gartner, Inc – Market share: External controller-based disk storage, June '06, June '07, August '08

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Where to Invest?

New Technology

Total Accumulated Revenues	\$236.7	Total Accumulated Revenues	\$16,379.3
Average per Company	\$15.8	Average per Company	\$2,047.4

Proven Technology

Total Accumulated Revenues	\$3,056.2	Total Accumulated Revenues	\$45,743.7
Average per Company	\$82.6	Average per Company	\$1,906.0

Established Market

\$3,292.9

Emerging Market

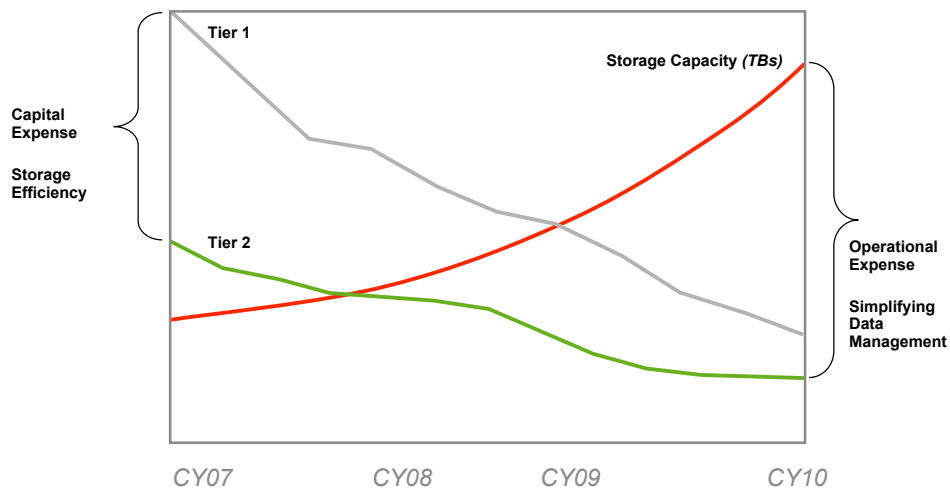
\$62,123.0

Strategy: do not be the cloud. Provide proven technology to the cloud.

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Challenge #1: Cost

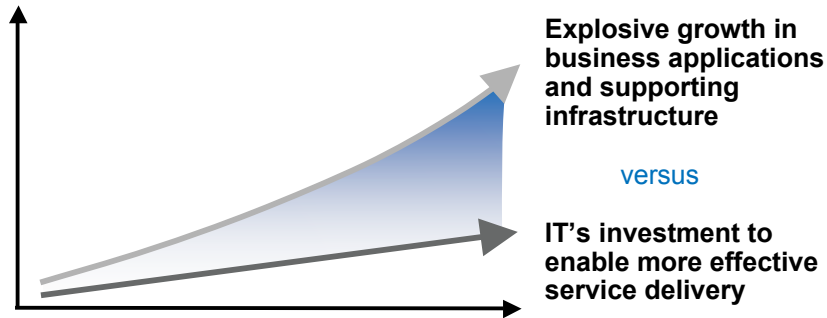


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Challenge #1a: Data Growth

The growing gap between business demands and IT's ability to deliver



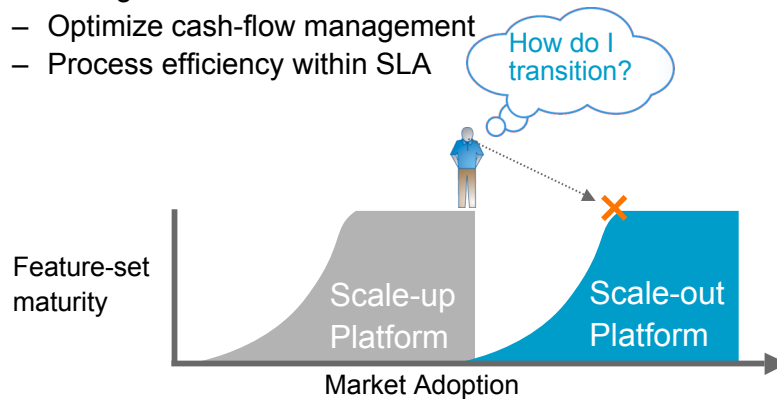
Applications	Infrastructure	IT management
<ul style="list-style-type: none"> Enterprise upgrades New architectures (SOA) Rich media applications 	<ul style="list-style-type: none"> 2x servers every 5 years 2x storage every year Virtualization 	<ul style="list-style-type: none"> Limited budget growth Tribal organizations Manual processes

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Challenge #2: Actually Adopting New Tech

- The next wave of Efficiency
 - Optimizing the price : performance curve
 - Service changes without business disruption
 - Next generation architecture without data risk
 - Optimize cash-flow management
 - Process efficiency within SLA



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Traditional Change Dilemma

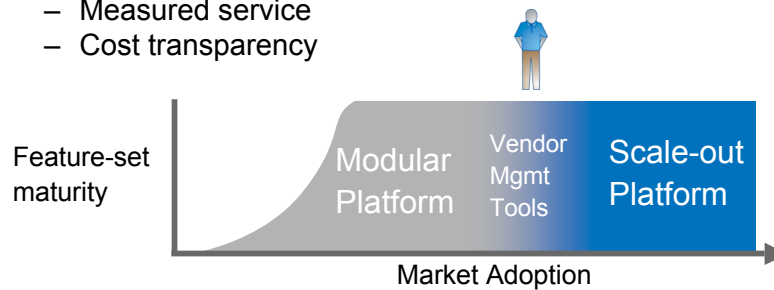
	Risk	Cost
Replace Equipment	<ul style="list-style-type: none"> 1.0 product? Incomplete feature-set Niche approach 	<ul style="list-style-type: none"> May not integrate in time and with other platforms Next problem requires yet another new platform
Retool	<ul style="list-style-type: none"> Time to integrate Toolsets change top to bottom 	<ul style="list-style-type: none"> Requires new IT processes
Retrain	<ul style="list-style-type: none"> Team adaptation Right skill set? Burnout? 	<ul style="list-style-type: none"> New people New training
Rebuild Data	<ul style="list-style-type: none"> Critical business data at risk Unproven solution Disruptive data migration? 	<ul style="list-style-type: none"> Costly and time intensive Significant cost consequence for mistakes

Who bears the burden of these risks and costs?



Innovating for a Seamless Journey

- Build on a feature complete platform
- Obtain the new scale-out capabilities you need
 - On demand self service
 - Ubiquitous network access
 - Location independent resource pooling
 - Rapid elasticity
 - Measured service
 - Cost transparency





Vision for Scale-out

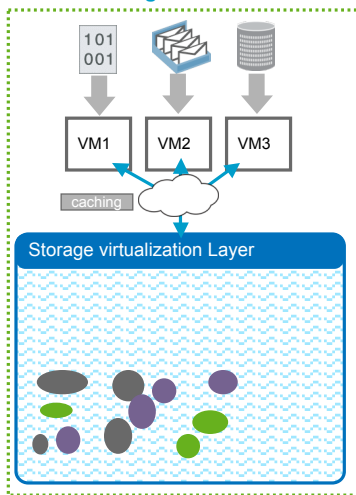
	Approach	Benefit
Evolve	<ul style="list-style-type: none"> Extend the life of current assets Build on a complete set of features Use proven solutions and technology 	<ul style="list-style-type: none"> Investment protection Seamless to business operations Cost reductions
Maintain and Enhance	<ul style="list-style-type: none"> Leverage existing skill sets Extend existing processes 	<ul style="list-style-type: none"> Better staff adoption Today's processes are foundation for tomorrow
Build Upon	<ul style="list-style-type: none"> Maintain protection of critical data Seamless data mobility Extend a mature feature set instead of starting over 	<ul style="list-style-type: none"> Flexibility to address future business needs addressed Agility and resiliency Critical data always on highest performing systems

Innovative approach lowers your risk and cost of change



Strategy #1: Data Mobility

Virtual Storage w/Virtual Servers



Cloud Challenges

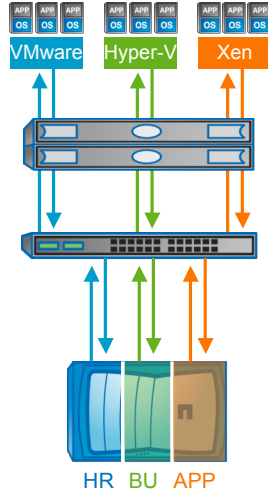
- Balance load between data centers
- Data Capacity is highly 'Stateful'
- Data I/O is stateless but pricey
- Move compute easily

Benefits

- IP Storage the key enabler
- Cache data near client
- Reduced latency
- Flash for peak workloads
- Master copy in data bunker
- Scale performance globally
- Seamless migration
- Migrate to lower cost data center



Strategy #2: Security



Cloud Challenges

- Separation of Tenants in Infrastructure
- Physical Hardware tied to customers
- Guarantee service levels for all
- Proven, scalable architecture

SMT Benefits

- Availability
- Secure Separation
- Service Assurance
- End to End Management

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Strategy #3: Efficiency

The iceberg effect of data



Cloud Challenges

- Where do you measure cost? Per VM or per GB?
- Multiple copies of the same data exist which increase cost exponentially
- Cost comparison with internal IT hard

Benefits

- Significantly reduce the quantity of data stored
- Lowers Cloud costs by only storing each piece of information once
- Drives high quality services at commodity prices

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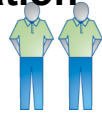
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Strategy #4: Automation

Zero touch IT for Cloud



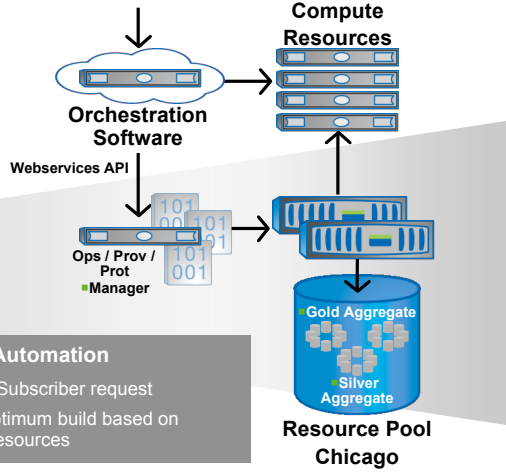
Subscriber

Subscriber
Purchases service levels instead of storage details

Storage Architect
Defines Storage Service offerings
Standard catalogue
Gold, Silver, Bronze
Storage offerings comprise
Logical Resource pools
Policies for provisioning & protection



Storage Architect



NetApp Automation
Activates Subscriber request
Selects optimum build based on available resources



Thank You & Continued Success !!

