



Total Cost of Ownership: What is it Really?

August 11, 2003

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The Challenge

How do I optimize my IT investments?

- **Organizations remain under intense pressure to reduce costs**
- **To reduce costs we must increase efficiency in resource allocation**

“Lowering overhead costs is the top priority for CIOs in this extended period of economic malaise. Enterprises can use IT to reduce, contain and leverage overhead costs in a way that delivers sustainable business value.” – Gartner

“We encourage CIOs and their management teams to think of the enterprise as an interdependent system, with IT as the connective tissue of the system. A dollar of IT investment can have a leveraging effect on overall enterprise cost reduction.” – Gartner

“Total cost of ownership and “IT accounting issues” are likely to remain important priorities for infrastructure management - at least through 2003 and into 2004. These IT accounting issues would include consolidation, reducing maintenance expenses, lease versus buy, and extending server upgrade cycles.” – META

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Analyst Tools for Measuring IT Value

Many Tools Have Been developed for Measuring the Cost and Value of IT Investments using a variety of methodologies. These include:

TCO: Measures IT costs, complexity and best practices over time. Includes direct costs (acquisition costs of hardware/software, fees, management, operations) and indirect costs (end-user operations and downtime.) Compares against benchmarks

TVO: Measures the business value of IT investment decisions based on a set of defined measures that model the controllable business activities of an organization

ROI: A project-based financial measure of the economic return from an investment

While they vary in the scope of what they identify and in the complexity of administration, each of these frameworks can help you to make better IT investment decisions.

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Recommendations

Measure Project Specific ROI to prioritize investment.

Yields actionable savings in much shorter period of time, with less disruption than a more comprehensive, enterprise-wide assessments of cost and value.

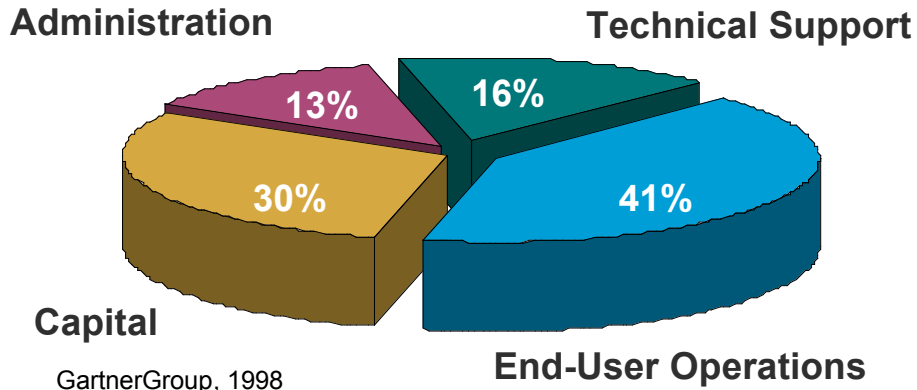
Implement Accepted Best Practices Driving Down TCO

1. Understand the cost of IT in your environment
2. Use industry standard technology
3. Adopt an automated management culture
4. Manage system lifecycles
5. Leverage service capabilities to reduce costs

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TCO: What are the costs? When do they occur?

\$9700/desktop/yr



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TCO: Cost Area Definition

End-User Ops	Administration	Tech Support	Capital
<ul style="list-style-type: none"> ▪ Data Management Application Dev. Formal Learning ▪ Casual Learning ▪ "Futz" Factor Client Peer Support 	<ul style="list-style-type: none"> Asset Management Security Legal P & P Enforcement Formal Audit ▪ Informal Audit Client Purchasing Installation Capacity planning Adds, moves and changes Upgrades Server Purchasing Security Administration NOS Administration 	<ul style="list-style-type: none"> Tier 1 Help Desk Documentation Data Extract Configuration Review Application Consulting Vendor Liaison Standards Dvlpmnt End User Training Product Introduction Product Review ▪ IS Desktop Learning Utilization Review Install/Move/Upgrade Install Network Tier II Support Tier III Support Tech Training and more..... 	<ul style="list-style-type: none"> Desktop Hardware Totals Cabling Network interface cards File and Print servers Applications Servers Disk Subsystem Hub port/Switch Bridge/router NOS Connectivity software Management and utilities Installation Network Software Maint Network Hardware Maint S/W (original lic.) - desktop S/W (original lic.) - network Software (upg. lic.) IS allocated capital

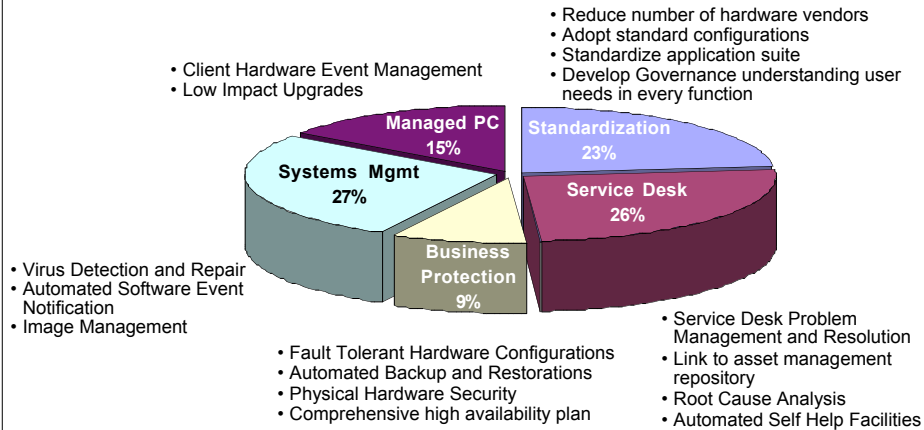
Blue = Hard Cost

■ Black = "Soft" Cost

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Components of TCO Reduction

TCO Best Practices Can Assist in Reducing Costs 17%-26%*



*Gartner Group Measurement, 2001

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1. Understand the Cost of IT in Your Environment

Measurement Tools Can Help:

Leveraging ROI Analyst tools for consolidation and migration when combined with infrastructure consolidation and migration services can lead to...

- Significant cost savings through standardization and reduced complexity in management
- Greater control and manageability
- Improved service levels, efficiency of operation, utilization, and accessibility
- Greater data security and business continuity
- Detailed ROI analysis of migration (NT4, Exchange, Unix), consolidation (Server and Storage)

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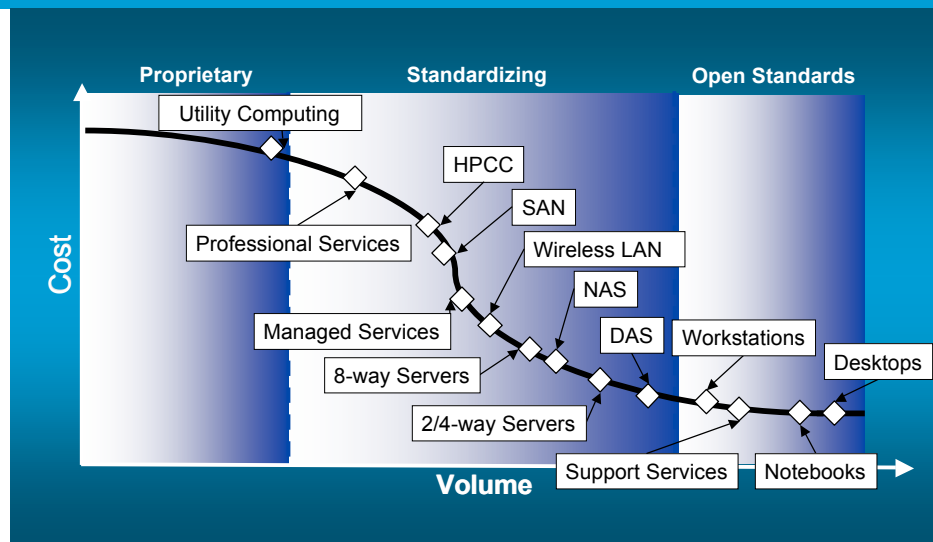
2. Use Industry Standard Technology

- Industry standard platforms now deliver performance comparable to proprietary architectures
- Standard platforms can deliver much lower prices and significantly better total value
- Standard platforms offer greater investment protection
- Industry standard platforms are modular and can scale in smaller increments than legacy systems
- Reliability and Availability proven in mission-critical applications

Standards can Lower your cost of ownership and improve the value of your IT investments

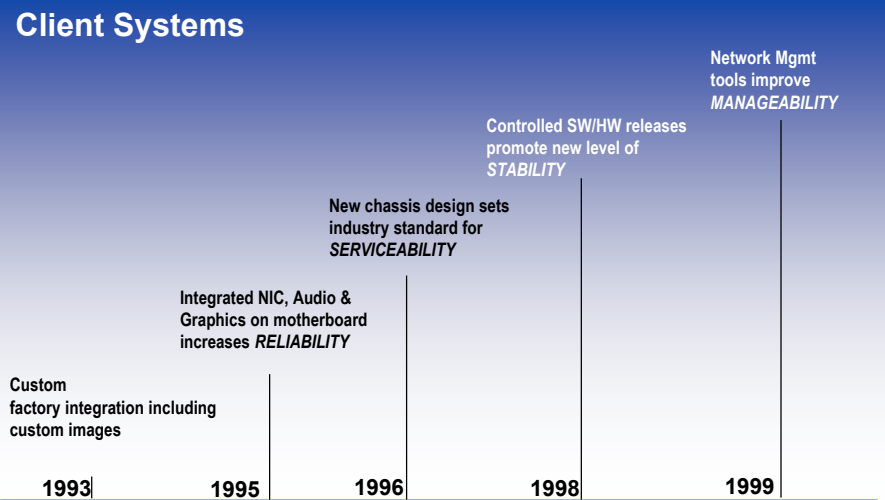
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Driving Standardization



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Product Innovations that Drive Down TCO



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3. Adopt An Automated Management Culture

To reduce the managed costs of your infrastructure, transition to a more automated management culture by implementing tools and services in these areas:

Deployment

- Local, remote or factory options

Health

- Proactive warning that a system is suffering a problem before it becomes critical
- Tightly interlocked vendor support resolving critical issues or outages quickly

Assets

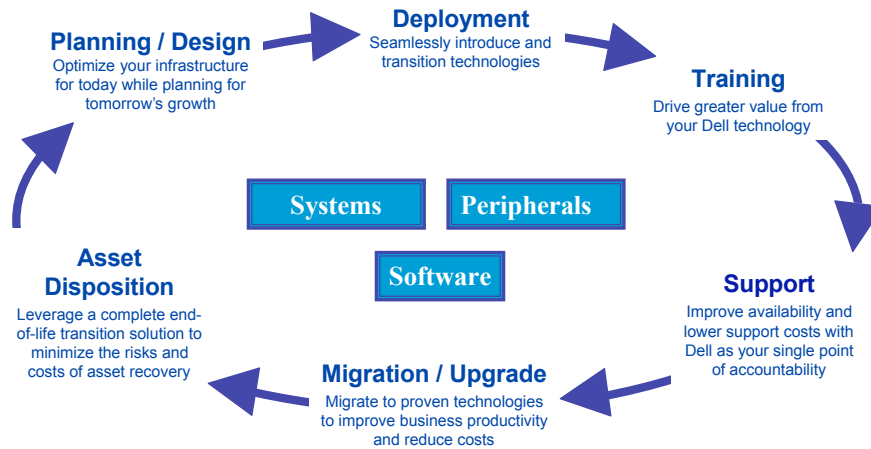
- Centralized, descriptive inventory data

Remote Access

- Control of systems around the corner and around the world.

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4 and 5. Manage Systems Throughout the Lifecycle With Flexible, Relevant Services



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Summary of Recommendations

1. Develop processes to improve value
2. Implement Industry Standards
3. Adopt an automated management culture
4. Manage system lifecycles
5. Leverage Service Capabilities to reduce costs


TCO Case Study

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Thank You

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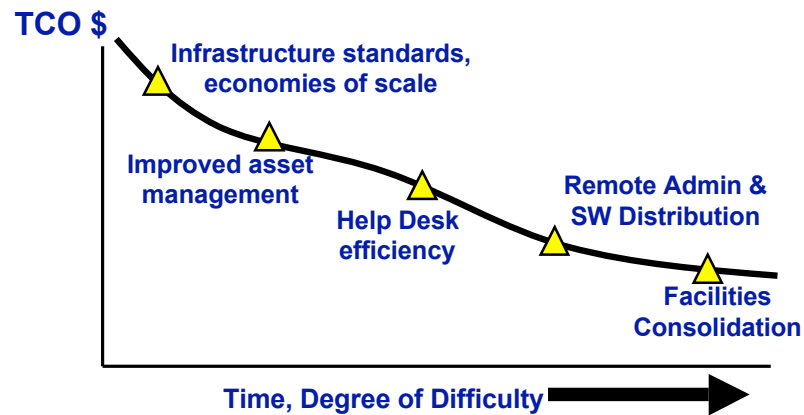
Backup

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TCO Case Study

Fortune 500 Company



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TCO Case Study

Fortune 500 Company

- *100% replacement of worldwide installed base*
 - 540 different kinds of desktops and notebooks
 - 100 different software images
 - 175 locations
 - 35 different countries
- *4.5 month deployment*
- *2 standard client configurations*
- *\$15M hard dollar savings over 3 years*

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TCO Case Study

Fortune 500 Company

	<u>Before</u>	<u>After</u>
• Acquisition vehicle	Purch.	Leased
• No. of systems supported per person	60	200
• No. of support people	167	42
• No. of problems solved at Level 1	56%	82%
• Average Helpdesk call time	16 m	7 m
• Average time for software fixes	3.6 h	20 m
• No. of hardware problems/month	475	160
• Average time for hardware repairs	6.1 h	2.5 h

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TCO Case Study

Fortune 500 Company

"We're 14 months into the process and it's probably the best initiative with the greatest value-add and potential we've ever implemented."

"Would we do it again? Absolutely."

- Director of Information Technology

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