



## Total Cost of Ownership: What is it Really?

August 11, 2003

Dell Inc. Proprietary



## 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

Dell Inc. Proprietary

## 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.

Dell Inc. Proprietary

## 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.

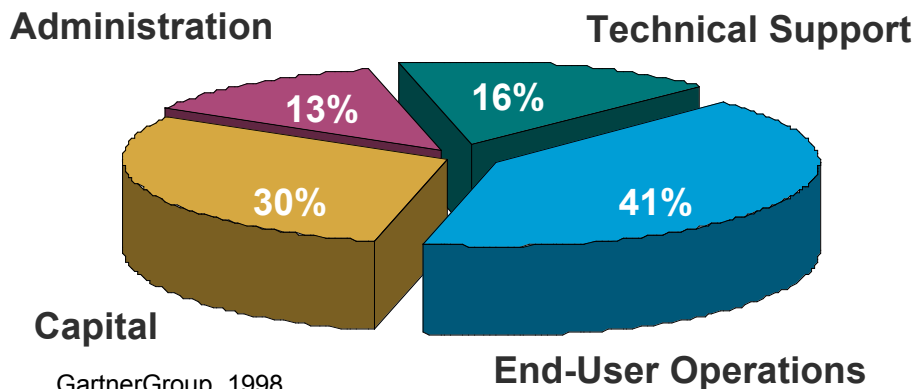
### **Implement Accepted Best Practices Driving Down TCO**

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

Dell Inc. Proprietary

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

**\$9700/desktop/yr**



Dell Inc. Proprietary

**TCO: Cost Area Definition**

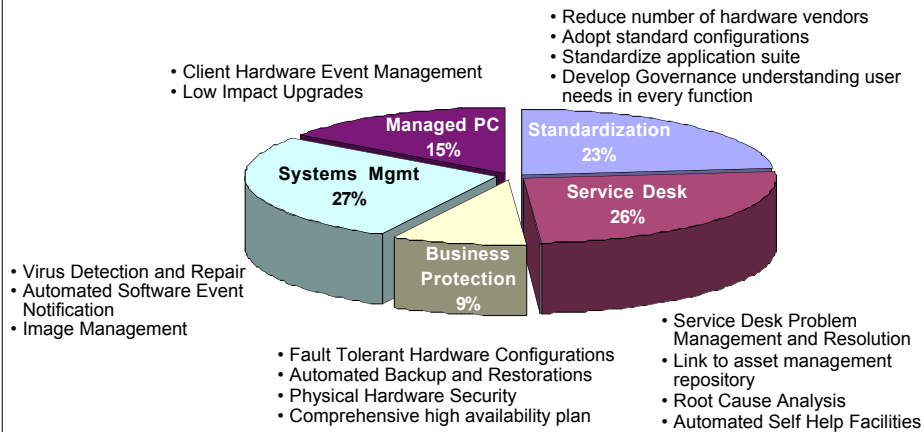
<b>End-User Ops</b>	<b>Administration</b>	<b>Tech Support</b>	<b>Capital</b>
<ul style="list-style-type: none"> <li>▪ <b>Data Management</b> Application Dev. Formal Learning</li> <li>▪ <b>Casual Learning</b></li> <li>▪ <b>"Futz" Factor</b> Client Peer Support</li> </ul>	<ul style="list-style-type: none">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

Blue = Hard Cost     
 ■ Black = "Soft" Cost

Dell Inc. Proprietary

## Components of TCO Reduction

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



\*Gartner Group Measurement, 2001

Dell Inc. Proprietary

## 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)

Dell Inc. Proprietary

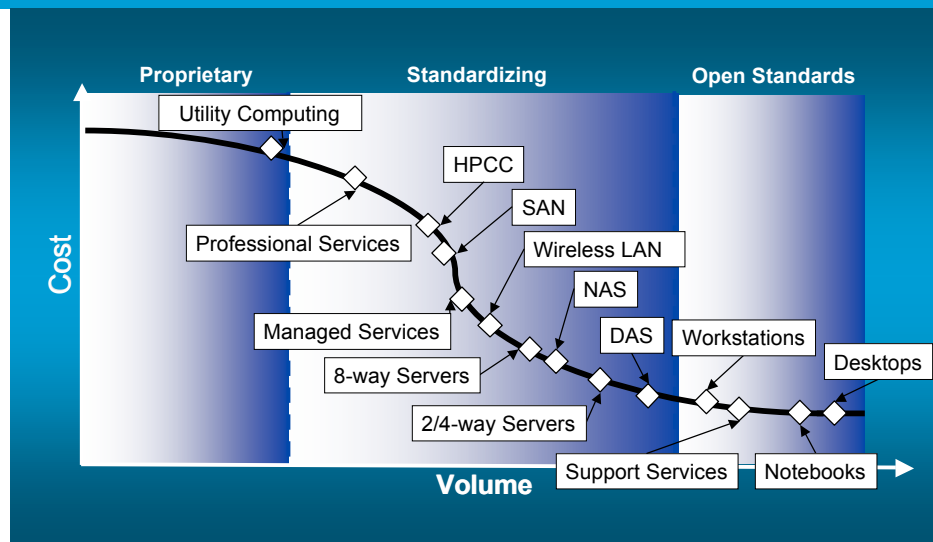
## 2. Use Industry Standard Technology

- 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

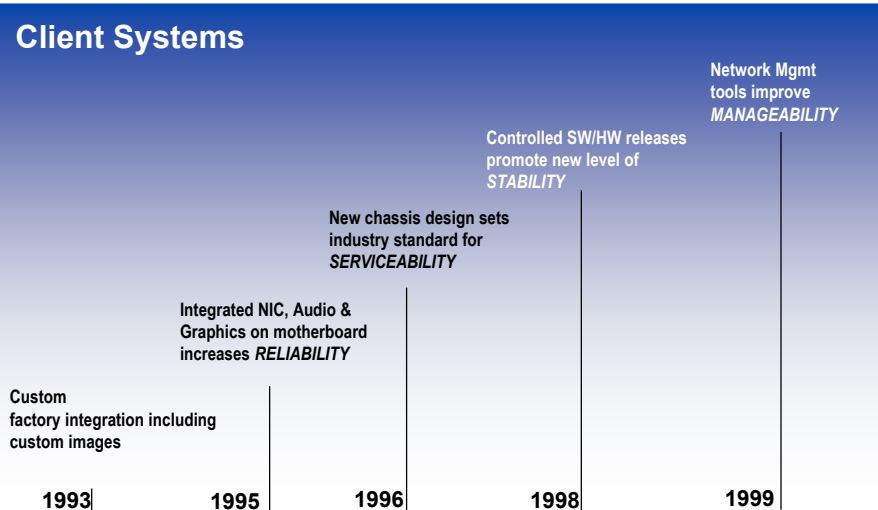
Dell Inc. Proprietary

## Driving Standardization



Dell Inc. Proprietary

## Product Innovations that Drive Down TCO



Dell Inc. Proprietary

## 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

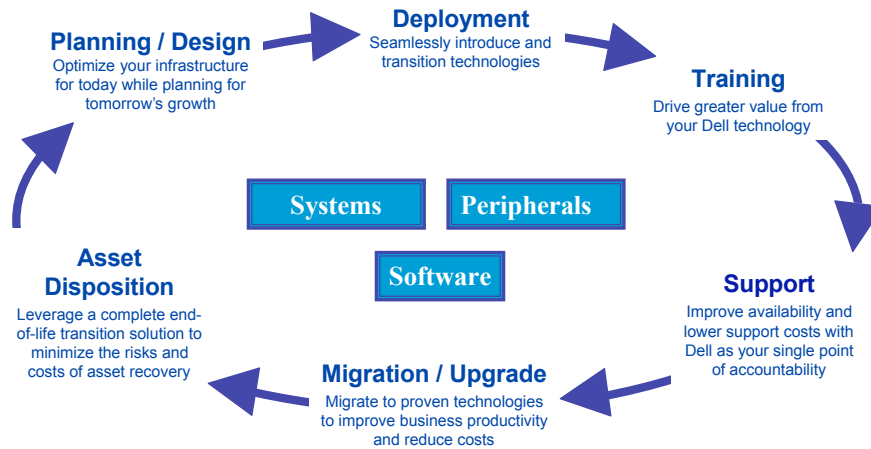
- Centralized, descriptive inventory data

### Remote Access

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

Dell Inc. Proprietary

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



Dell Inc. Proprietary

## 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

Dell Inc. Proprietary



Thank You

Dell Inc. Proprietary



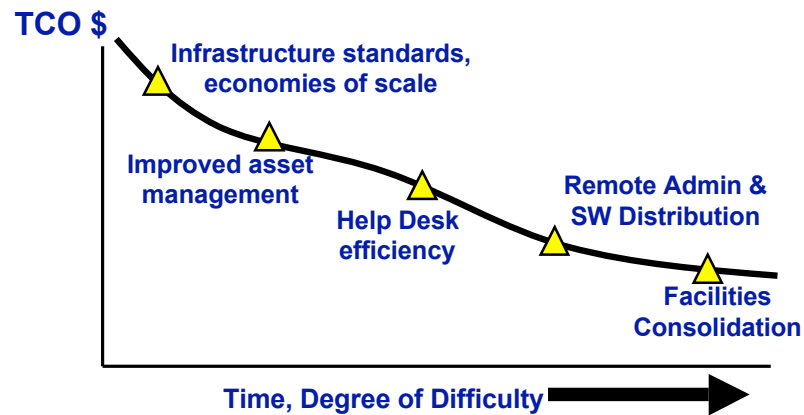
Backup

Dell Inc. Proprietary



## TCO Case Study

### Fortune 500 Company



Dell Inc. Proprietary

## 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*

Dell Inc. Proprietary

## 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

Dell Inc. Proprietary

## 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

Dell Inc. Proprietary