



Delivering e- Infrastructure Services

August 22, 2001



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2001

2002

2003

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2012

2013

2014

2015

Discussion Topics

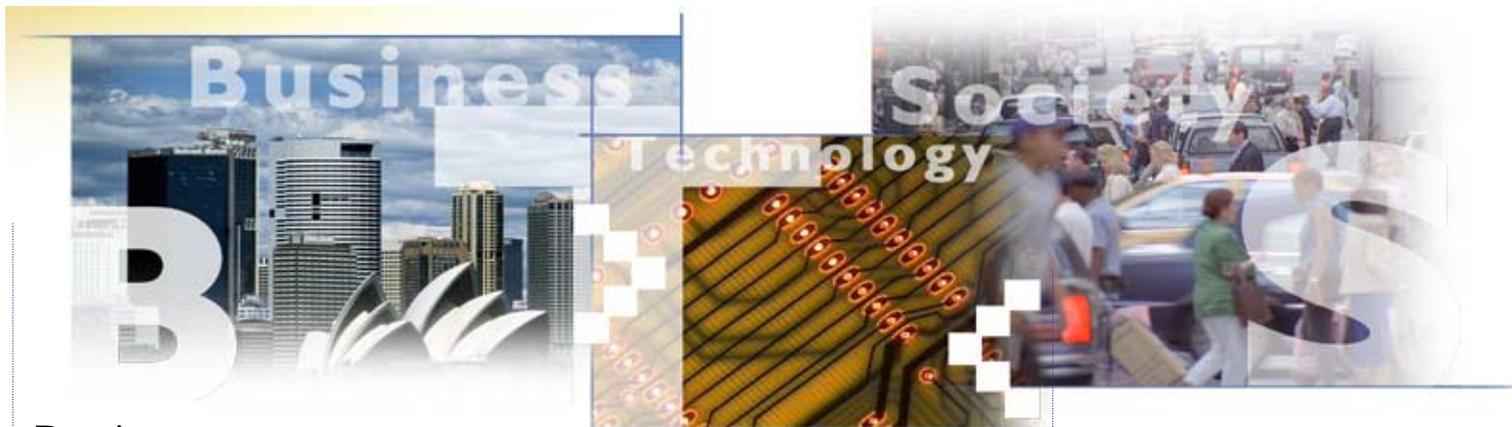
The e-Business Environment

**AT&T/HP e-Business Strategic
Direction**

**AT&T e-Business Competencies &
Capabilities**

Client Benefits

Major Forces Affecting Business Success Today



Business

- e-Commerce
- Pressure on profit margins
- Cross-industry consolidation
- Service business dominance
- Deregulation
- Globalization
- Acquisitions and mergers

Technology

- Security
- Legacy networks, infrastructure & Integration
- Scalability and reliability
- Distributed networking
- XML and Portals
- Storage

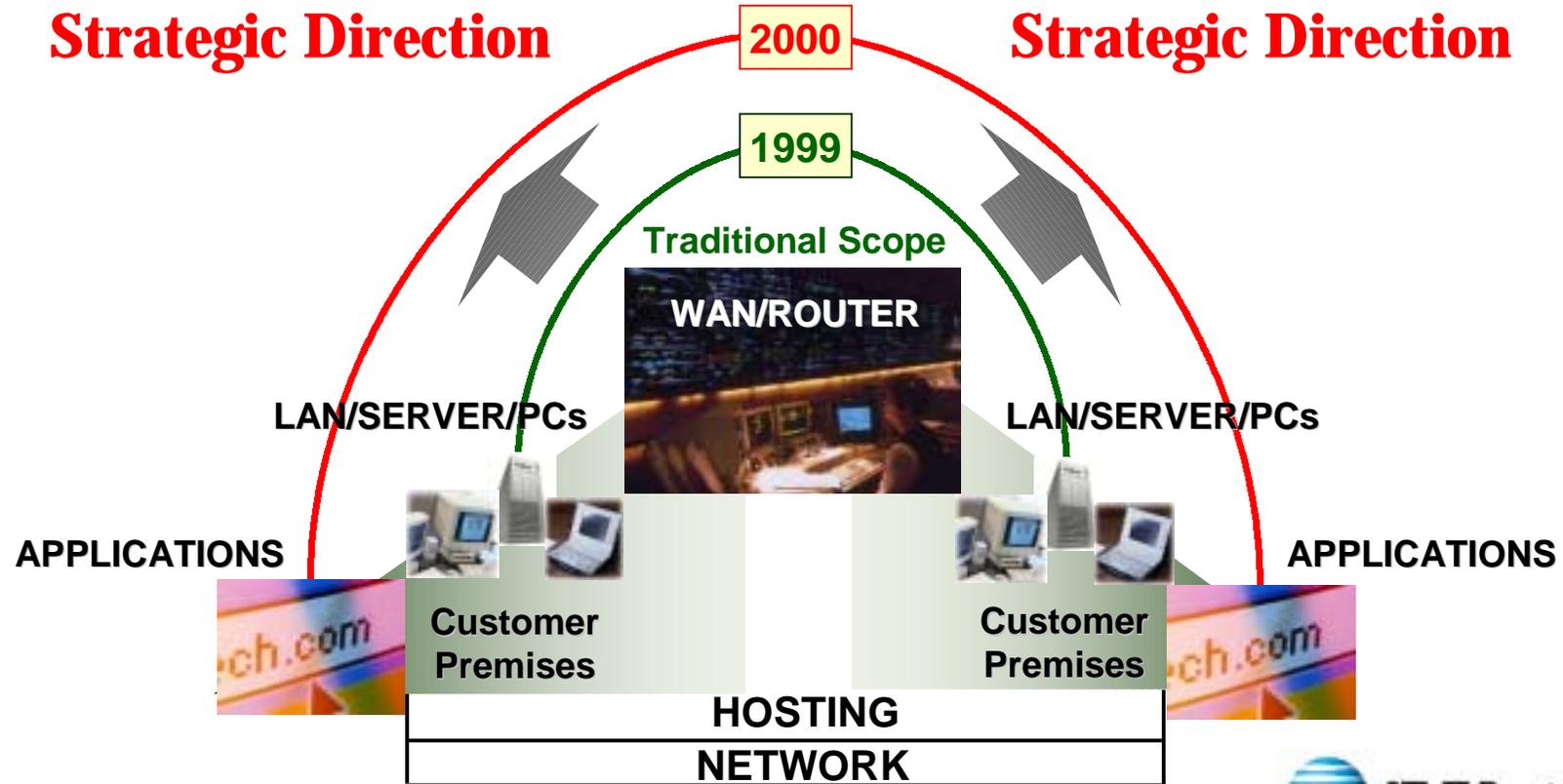
Society

- 24-hour customers
- Self-service access
- Speed and instant gratification
- Personalization and customization
- Convergence of work and home
- Capacity on demand

E-Business and AT&T's Strategic Direction in the New Economy

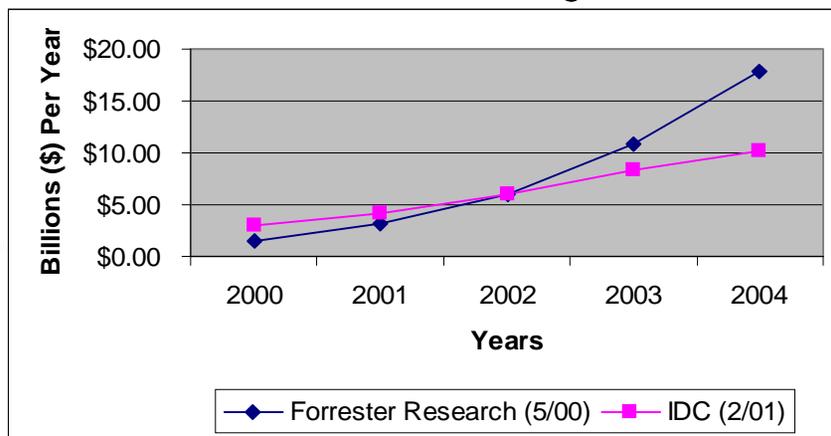
- **E-Business Definition:** *An Internet technology-enabled transformation that dramatically increases the efficiencies of current business processes, revolutionizes external relationships and redefines business on a global basis*

-- Gartner Group



E-Infrastructure Innovation & Growth

Market Size Projections



IDC: Custom Hosting, e-Bus Mgmt. & Security

Forrester: Custom & Managed Hosting

Target Market

- **Enterprise Clients**
- **Complex Environments**
 - ✓ Multiple Applications
 - ✓ Security Requirements
- **Application Centric**
 - ✓ Extranets (B2C, B2B, B2E)
 - ✓ WWW Presence
 - ✓ Transactive/Bandwidth Intensive

AT&T Advantages

- **Platform Investment of \$200M+**
- **6+ years Managed Services Experience**
- **Integrated Tools, Instrumentation & Process**
- **Client-Intimate Servicing Model**
- **Direct Connection to OC192 IP Backbone**
- **500+ M Managed Elements**
- **Global Reach of Over 100 Countries Worldwide**
- **1.2M+ Internet Users Daily**
- **Growing to 23 IDCs worldwide with 5M sq. ft.**

The Integration of Your Application & Network



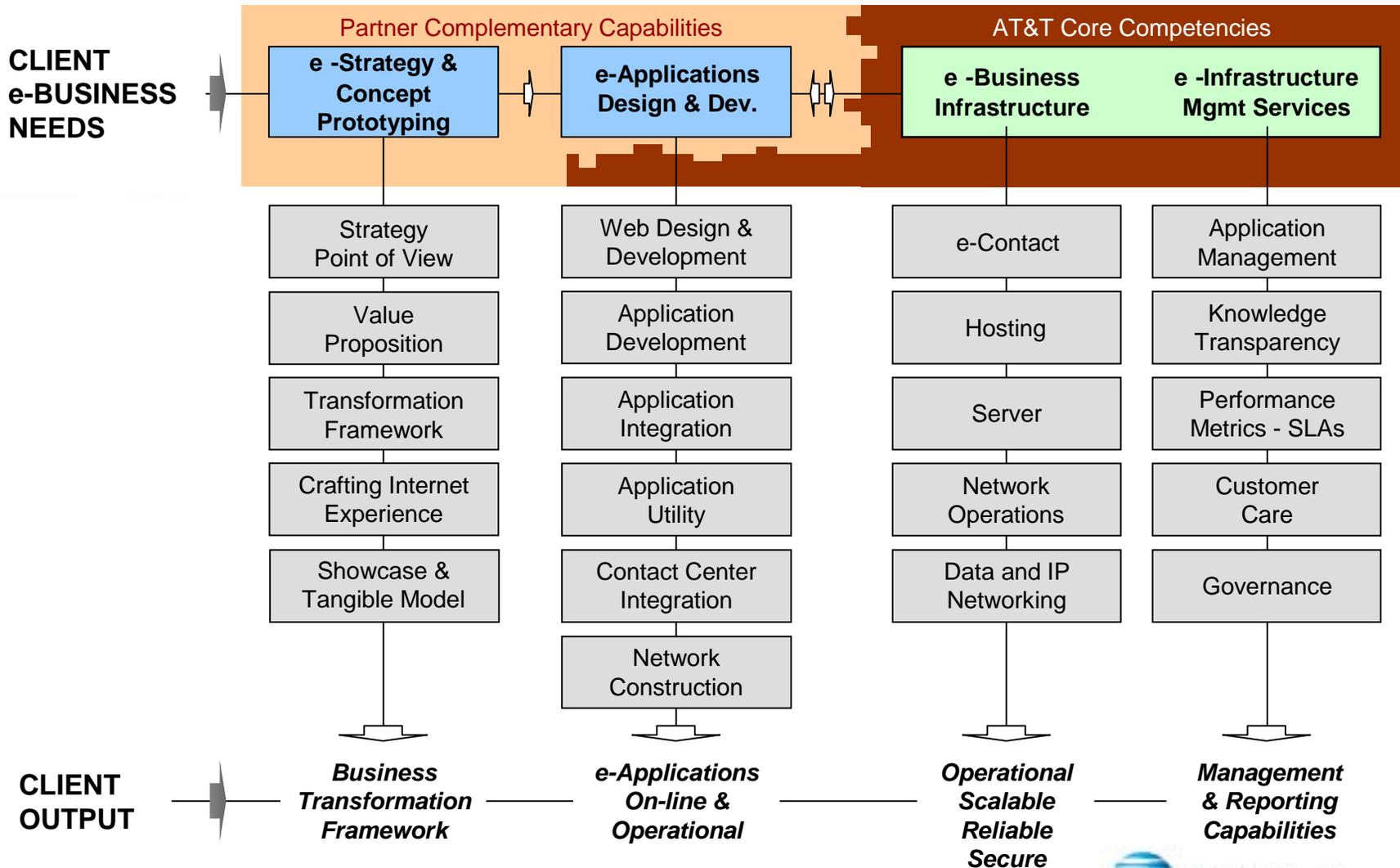
REPORTS

Application Ops
Center & Tools



- AT&T WILL:**
- ✓ Build upon Core Strengths & Assets
 - ✓ Extend AT&T Networking Expertise
 - ✓ Invest in New Capabilities & Services
 - ✓ Expand Complementary Partnerships

Customer Needs and AT&T 's Strategic Approach in the "New Economy"



Goals of the AT&T/HP Solutions Alliance

Leverage key strengths of AT&T and HP to create e-Solutions that help businesses transform the way they do business

For the client:

- Provide networked application infrastructure reducing clients' capital investment
- Rapidly and reliably deploy, enabling client faster time to money
- Supply teams of skilled professionals, freeing client to focus on core business and from hiring challenges
- Deliver predictable performance using Service Level Guarantees supporting end users for "always on" service

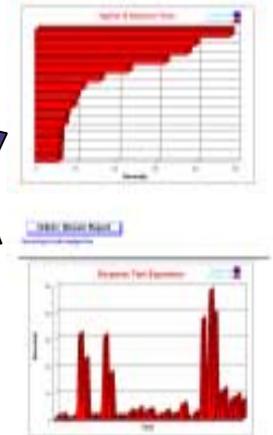
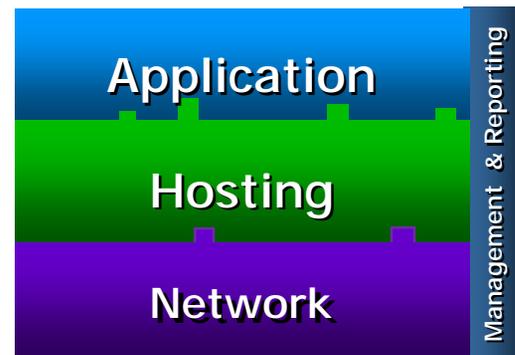
For AT&T and HP:

- Drive incremental revenue for AT&T, HP & common channel partners
- Advance positions of both companies as innovators of e-Business

Build an e-Infrastructure & Success Criteria

Infrastructure characteristics:

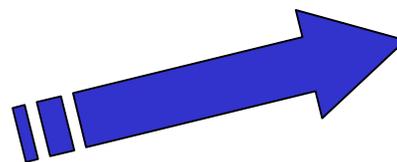
- High-performance, high availability
- Capacity on demand to support applications
- Connectivity wherever and however your users need it
- Capability to leverage your existing network assets



The expectations placed on the Internet are moving toward the requirement of a new set of criteria for e-Infrastructure providers.



- Best-effort
- No service levels
- Socialistic



Key success criteria:

- Performance & Reliability
- Management Services
- Professionals
- Scalability
- Partners & Alliances
- Security
- Speed

What AT&T & HP Bring to the Alliance

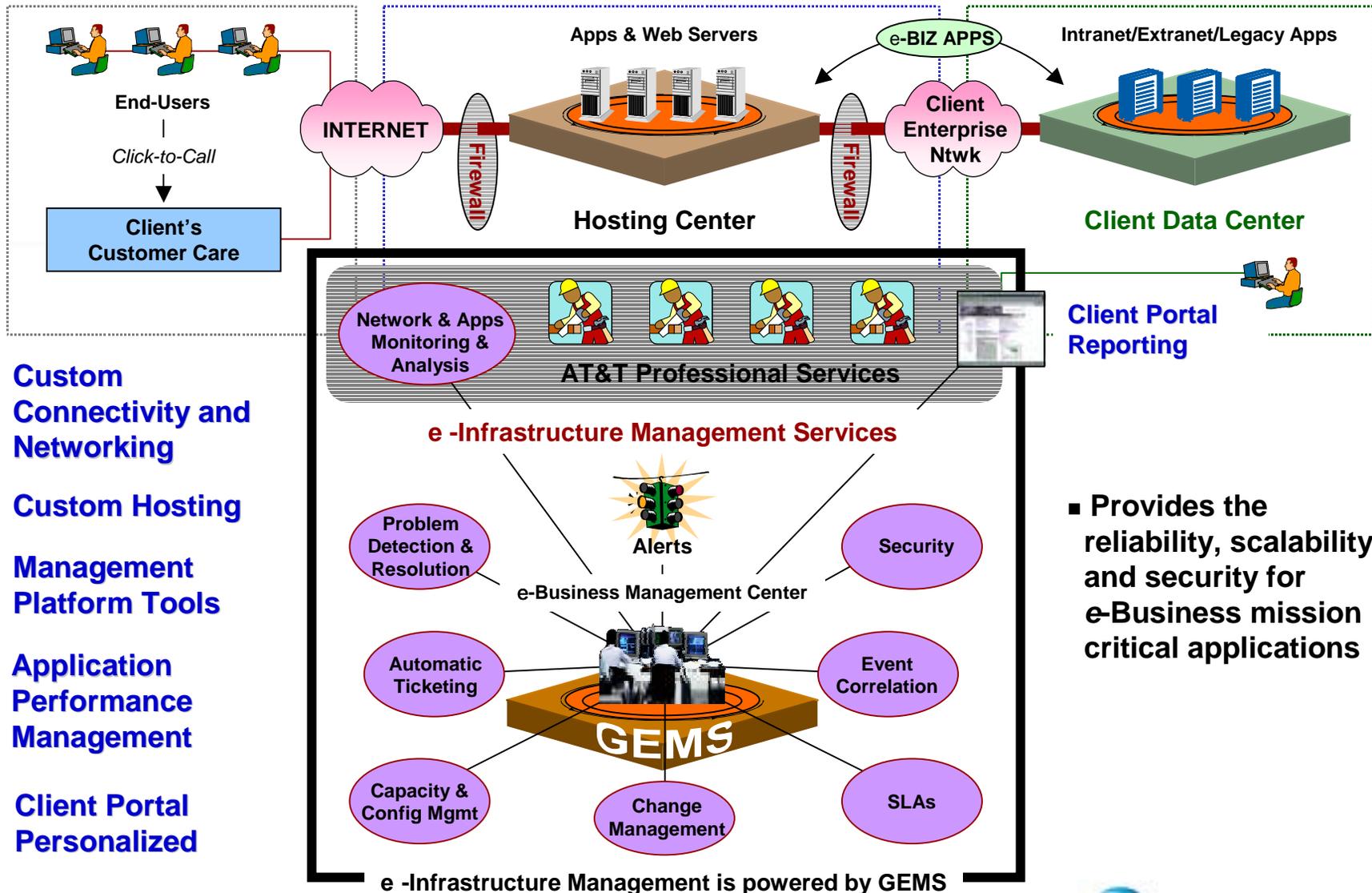
Hewlett Packard

- High performance, Highly available, Internet critical hardware
- Best of breed software
- Applications management tools
- Professional services for application design, development, integration, deployment and ongoing support
- HP brand name and reputation for quality

AT&T

- World class Data Centers
- Global Internet backbone
- Networking management capabilities, tools and platforms
- Professional services for design architecture, implementation and lifecycle management of the Internet environment
- AT&T brand name and reputation for quality

AT&T e-Infrastructure Solution



**Custom
Connectivity and
Networking**

Custom Hosting

**Management
Platform Tools**

**Application
Performance
Management**

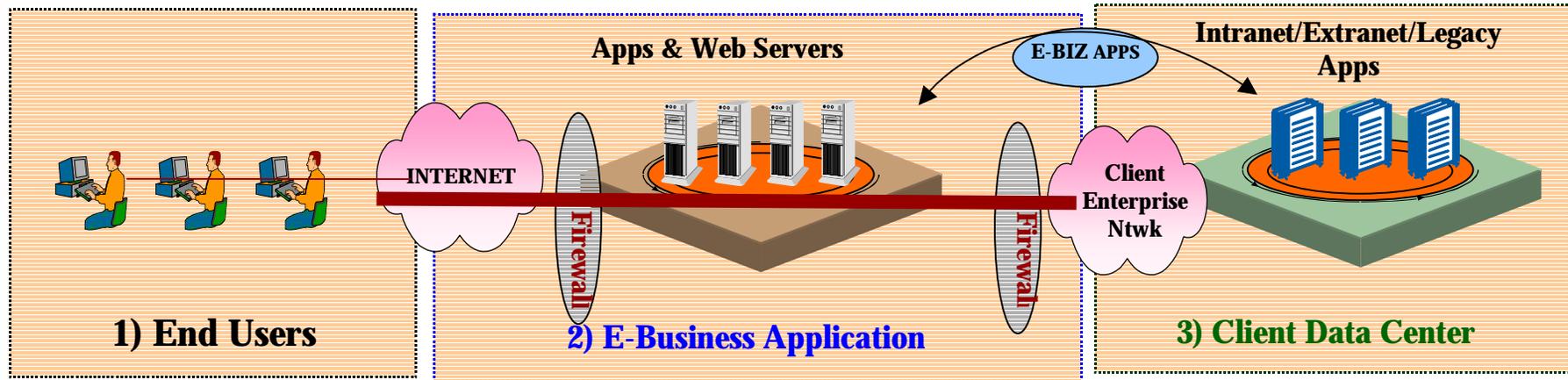
**Client Portal
Personalized**

- Provides the reliability, scalability and security for e-Business mission critical applications



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AT&T and HP Simplify the Complex & Reduce Total Cost of Ownership



← Integrate and Manage Three Environments →

Client Challenges

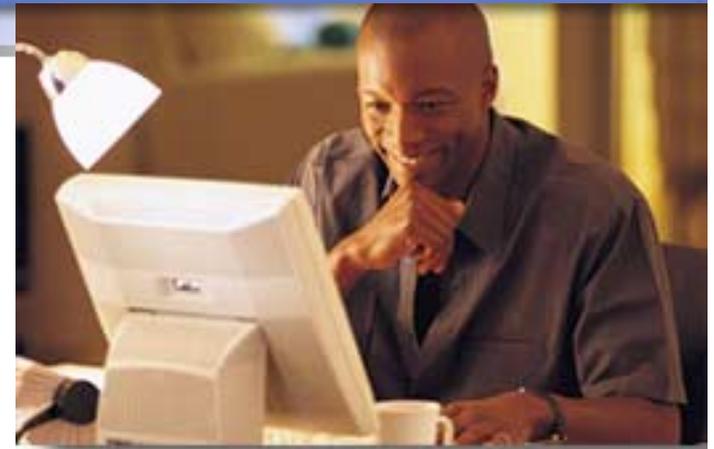
- Capital Investment
- Design, build and run models and staff
- Time
- Technology expertise, refresh and evolution
- Integration into current business practices and infrastructure

Client Benefits:

- Reduced capital investment
- Simplified applications implementation & management
- Quicker time to money
- Always on infrastructure and processes
- Single point of accountability
- Life cycle management and support



AT&T UltravailableSM Solutions

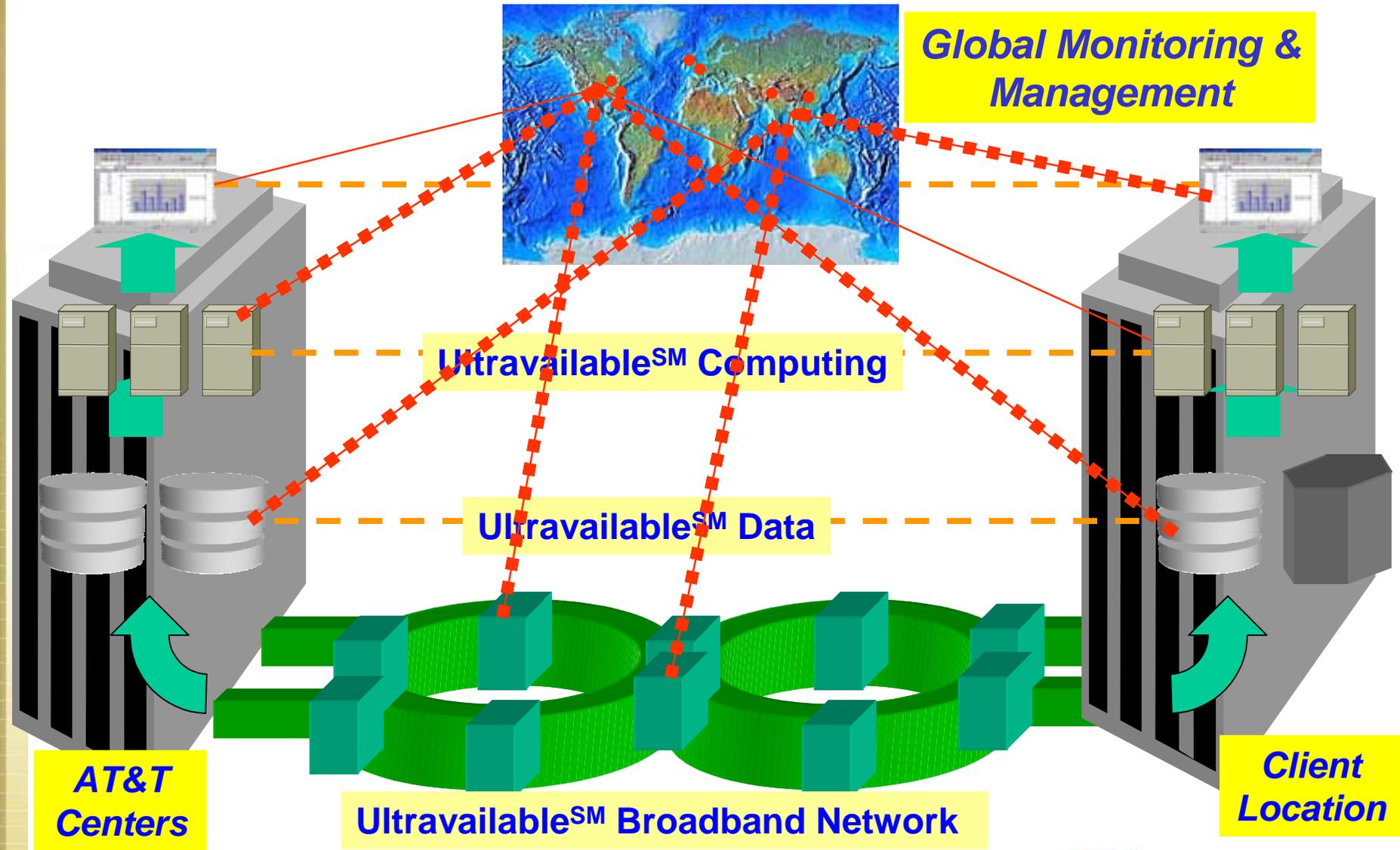


Focused on your complex requirements for highly reliable, secure solutions with near 100% availability.

- **Client-Defined SLAs**
- **Optical Networking**
- **Managed Storage**
- **Fail-Over Computing**
- **Global Management and Monitoring**
- **Professional Services**

We deliver mission-critical, always-on availability.

AT&T UltravailableSM Suite



e-Business Professional Services



Delivering value through the creation, transformation and management of solutions that 'web enable' clients

- **e-Business Assessment, Architecture, Design & Deployment**
- **e-Contact Center Solutions**
- **Remote Access Consulting**
- **Knowledge Management Solutions**
- **Network Security Assessment, Site Build-out and Stress Testing**
- **E-Merging Services, Managed Wireless, Digital Marketplaces**

AT&T e-Business Solutions Differentiators: People, Process, Tools & Technology

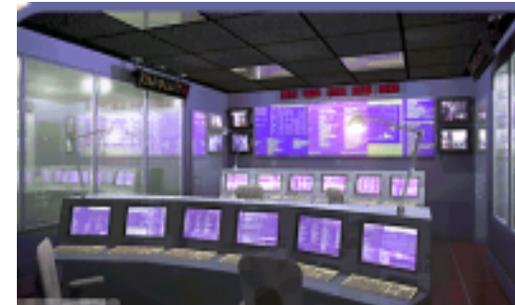
Our e-Business integrated solutions are powered by the **People, Process, Tools & Technology** provided by our:

Global Enterprise Management System (GEMS)

- Suite of best-in-class applications in one system
- End-to-end support for networking needs
- Centralized database of your entire network
- “Smart” trouble management

Global Client Support Centers

- State-of-the-art global management centers
- 24x7x365 monitoring & management
- Proactive & predictive technical support
- Extension of clients’ IT infrastructure
- Monitor a full suite of environments



PEOPLE

- Virtual Client Teams
- Solutions Professionals



PROVEN PROCESSES

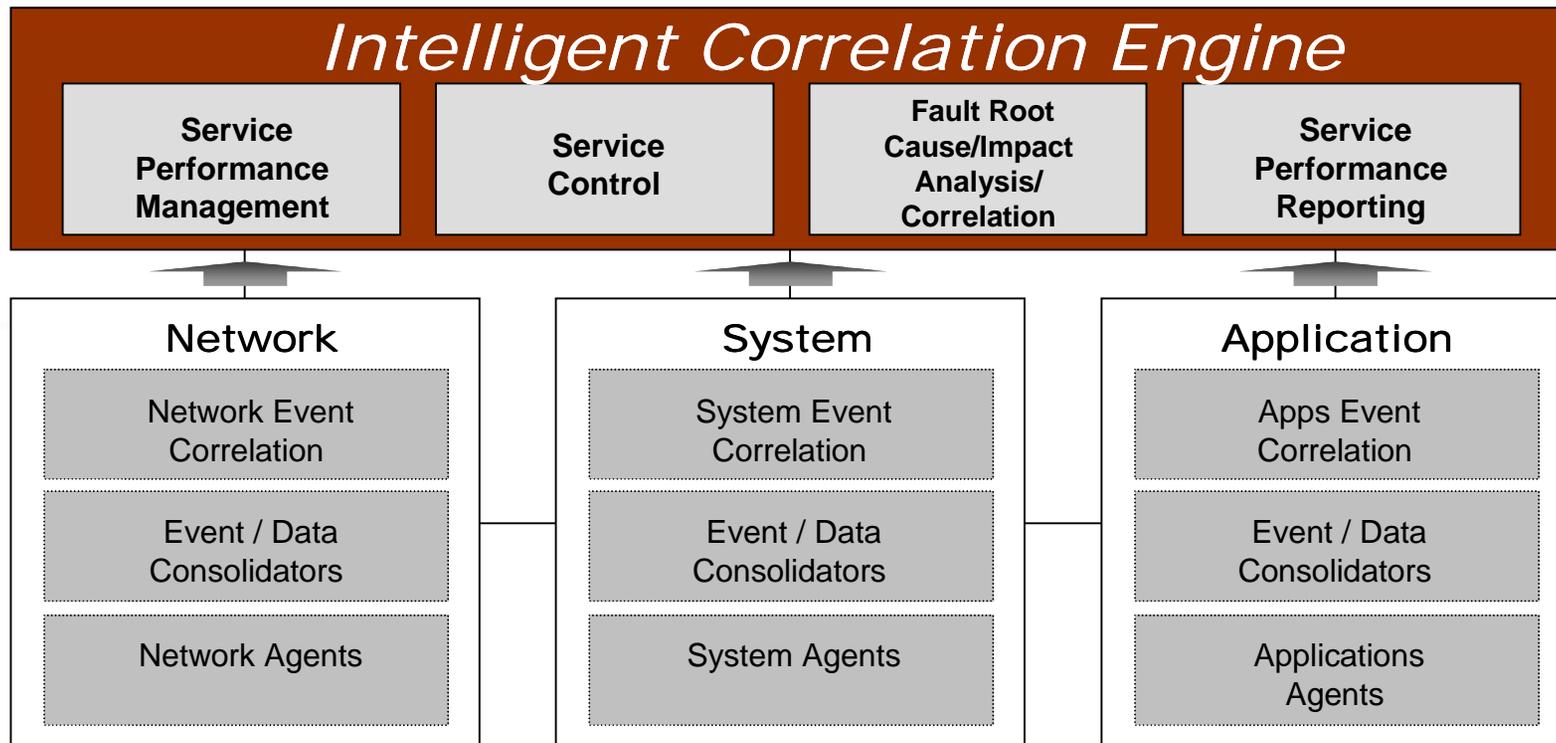
- Problem Detection,
- Root Cause
- Impact Analysis
- Change Management



TOOLS & TECHNOLOGY

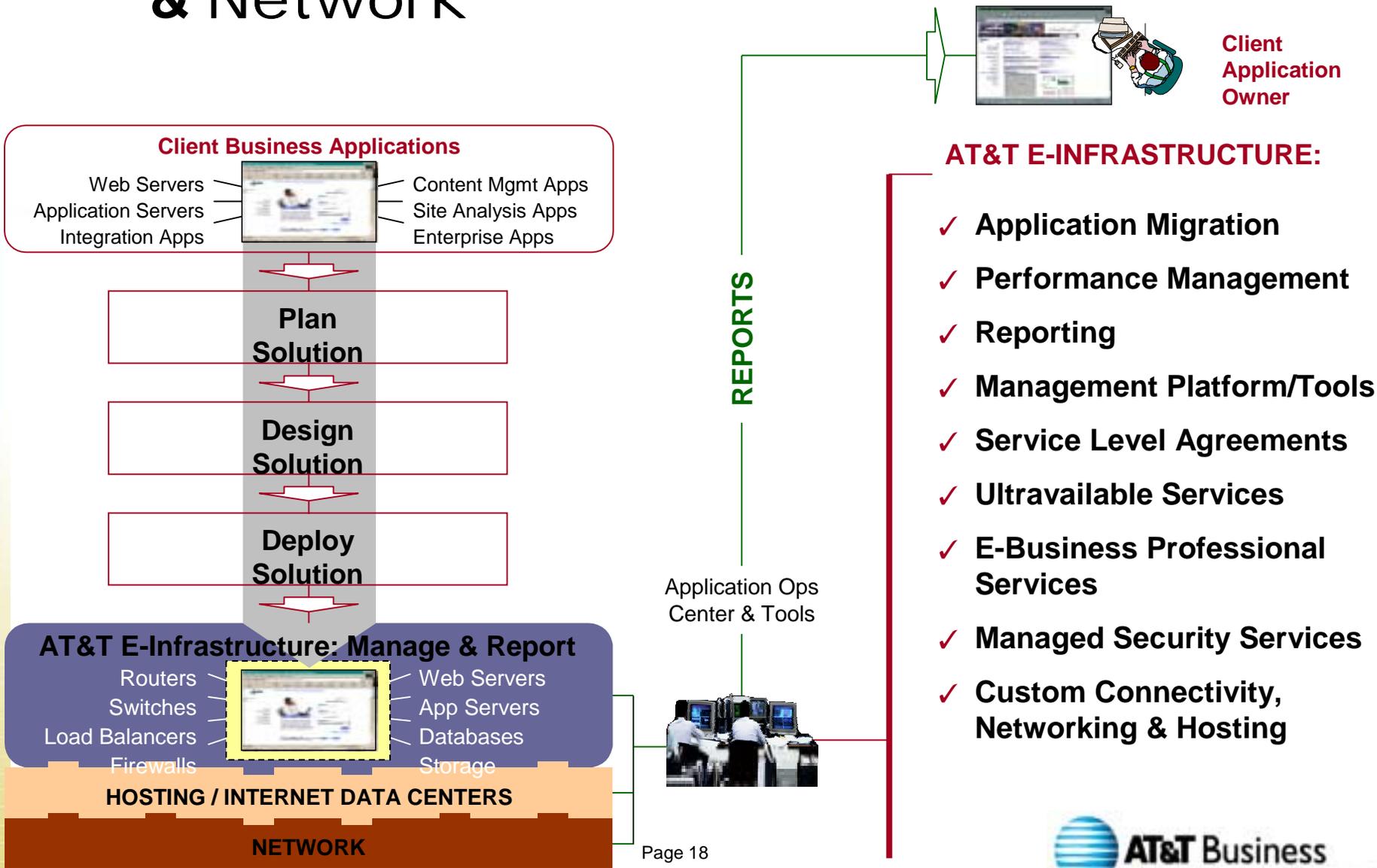
- GEMS Platform
- e-Bonding

End-to-End Management Services

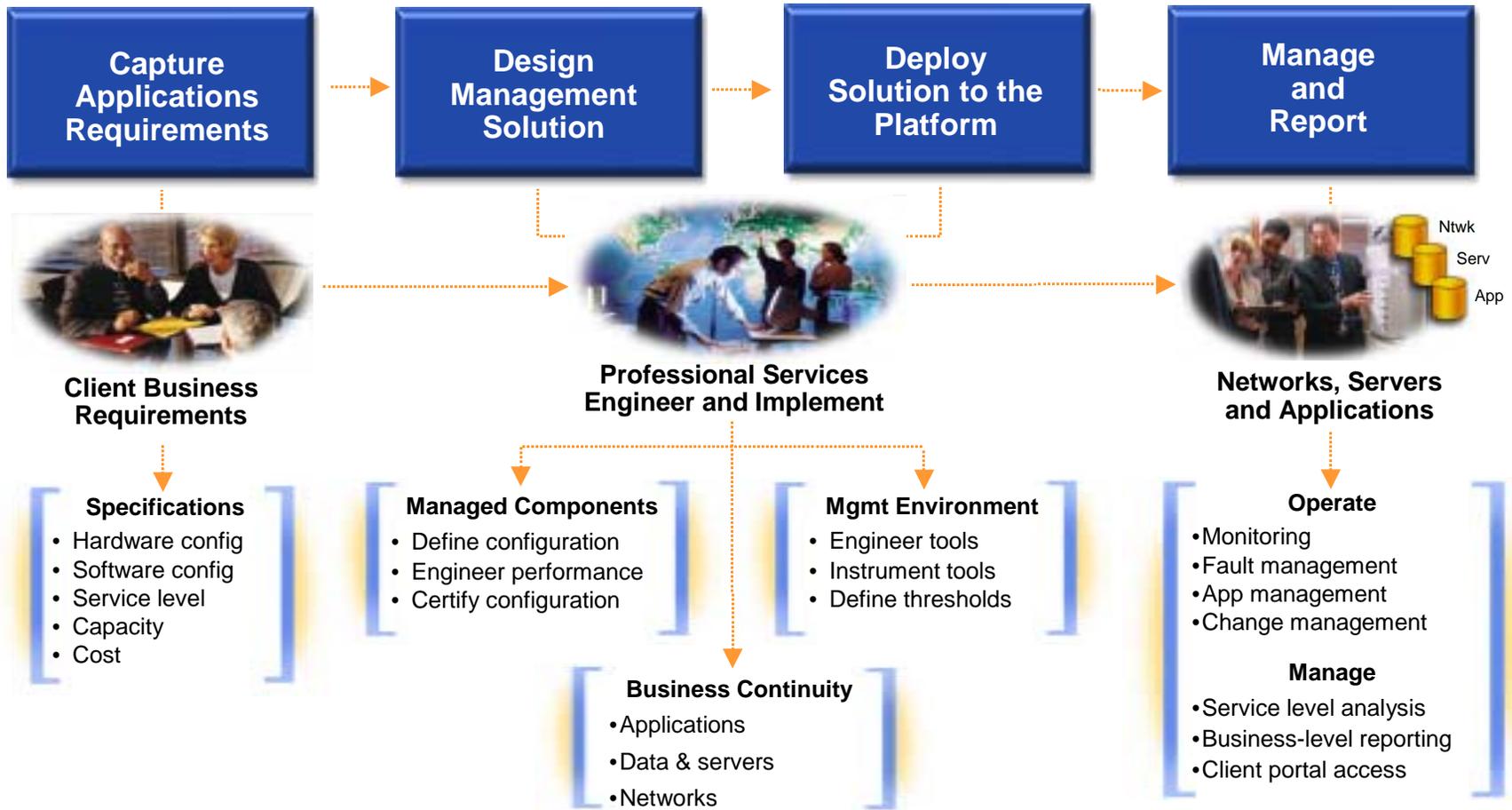


- AT&T will capture, consolidate, correlate and meaningfully process integrated E-business infrastructure (applications, systems and network) information that will provide an end-to-end, real-time view of the end-user experience
- AT&T will design management policies together with the customer to support customer's enterprise business requirements and manage them on a real-time basis

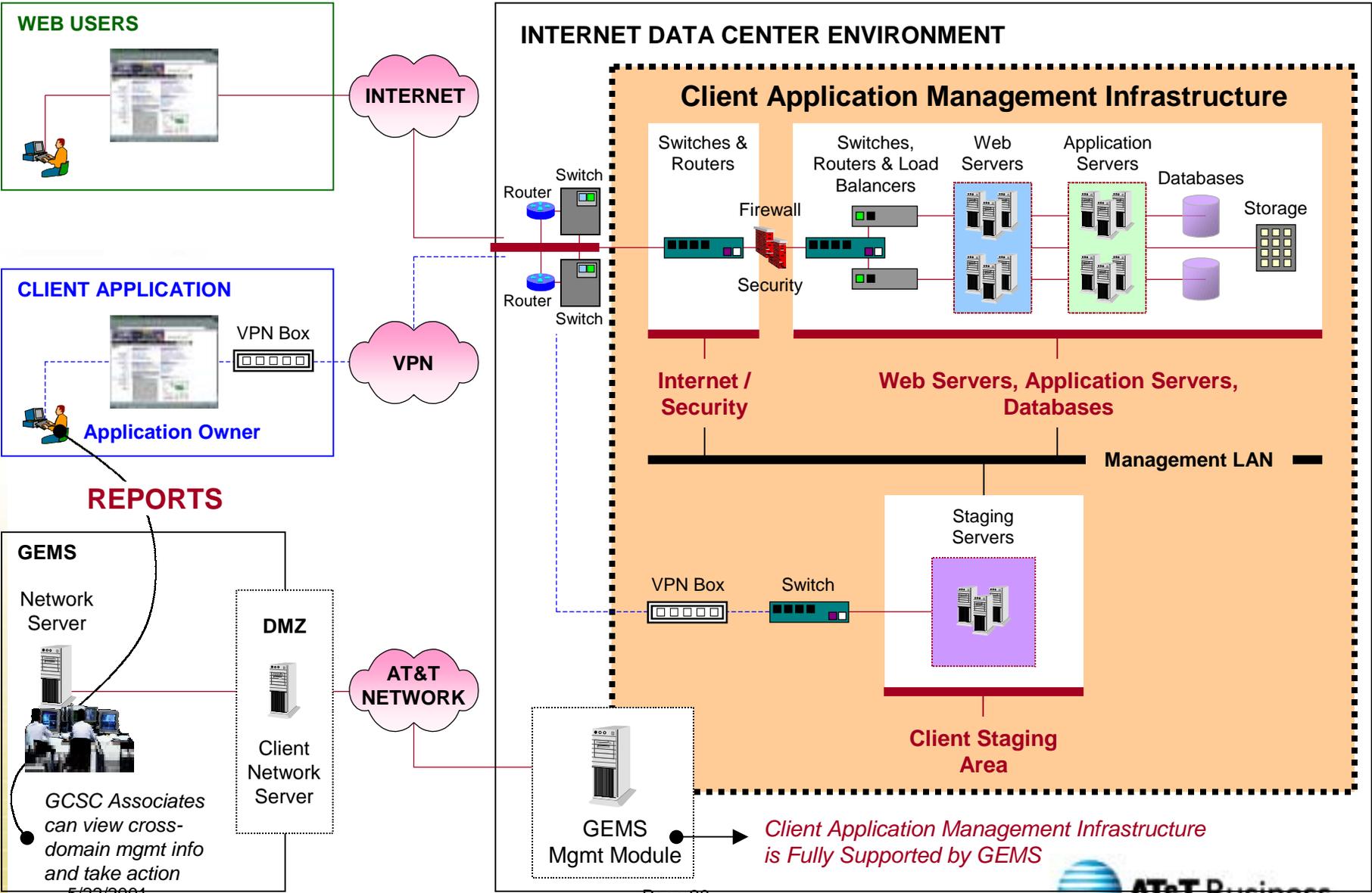
Integration of Client's Application & Network



What We Do for Our Clients



Client E-Infrastructure



REPORTS

5/22/2001

SLAs ensures Performance Accountability

CLIENT EXPECTATIONS: PREDICTABLE PERFORMANCE

PERFORMANCE REPORTING

- End User Response Time
- Page Load Times
- Browse Times
- Server Request Times
- Resolve Times
- Page Status
- Referring URL
- Request Verification Time
- Total Response Time



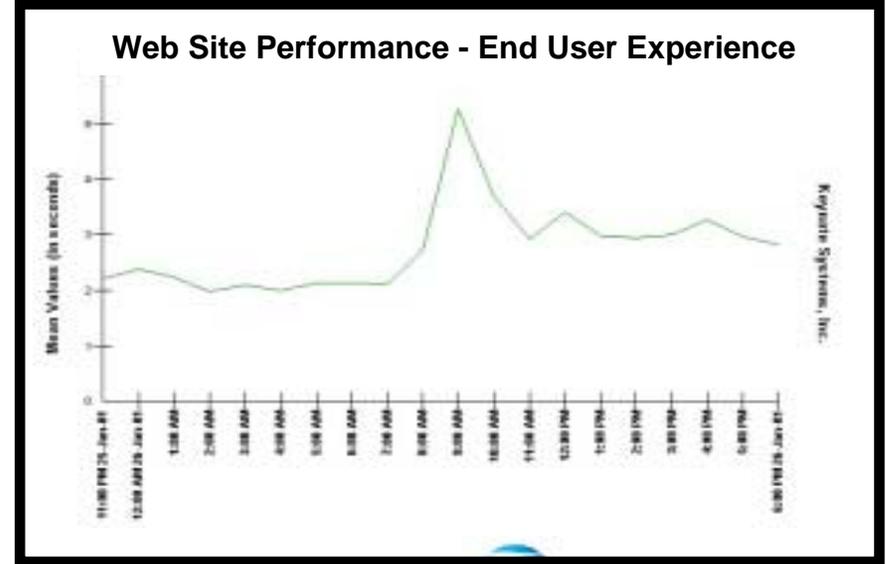
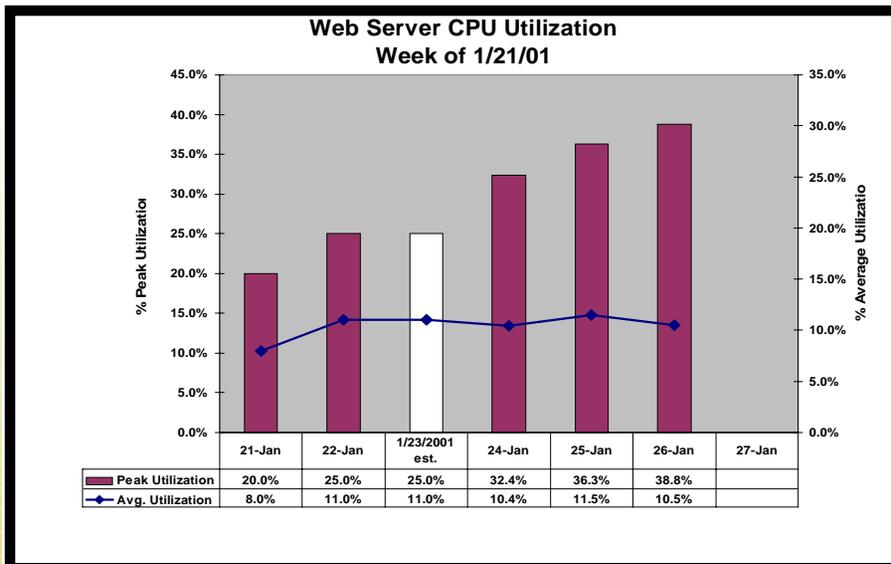
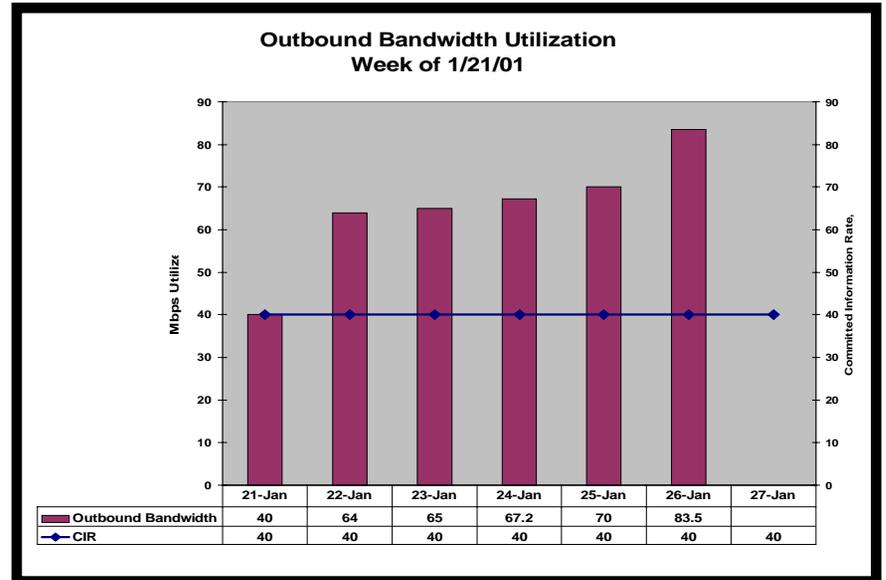
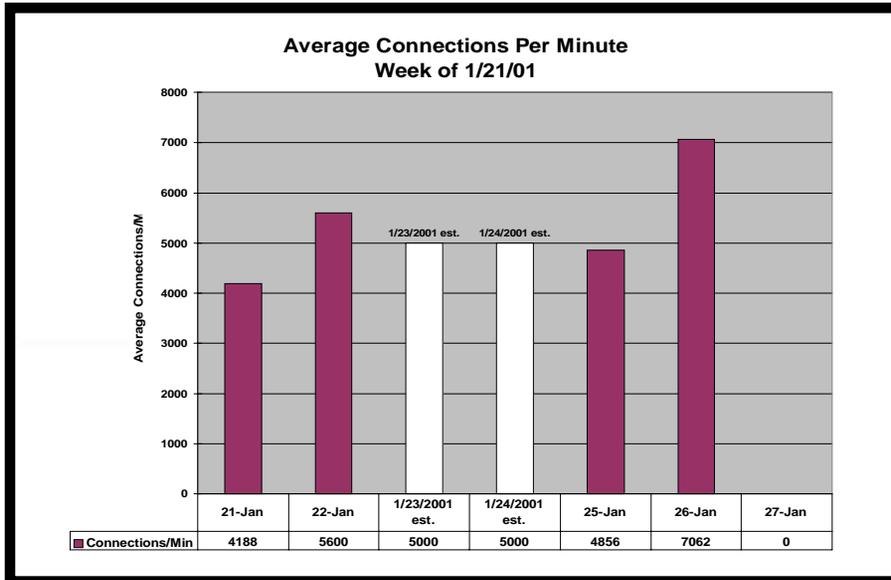
PERSONALIZED PORTALS

- Real Time Reports
 - On all above metrics
- Historical Reports
 - Daily E-Commerce Transaction
 - Daily Web Application
 - Monthly Response Time
 - Monthly Response Time Threshold

PERFORMANCE LEVEL COMMITMENTS

- Transaction
 - Transaction Availability
 - Transaction Resp. Time
- Server / Application
 - Availability
- Network
 - Availability
 - Latency
 - Packet Loss
- Resolution Management
 - Time to Respond
 - Time to Cure

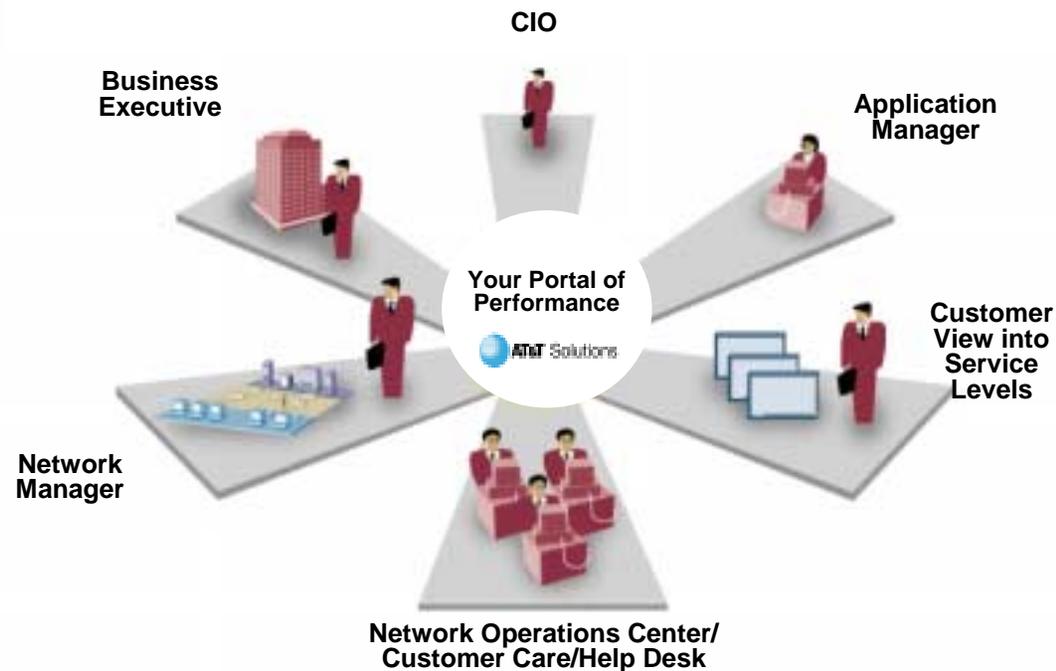
Application Performance Reporting



Performance & Cost Improvement

Metric	In-Sourced	AT&T Hosted	Improvement
End-User Response Time	3 - 5 seconds	< 2 seconds	30% - 60%
Bandwidth Utilization	79Mbps max (upper limit)	115Mbps max actual, 200Mbps upper limit	45% - 150%+
Page Views / Mnth	36 M	68 M	89%
Visits Per Month	3 M	5.7 M	90%
Page Views Per Day	1.2 M	2.2 M	83%
Visits Per Day	97K	186K	92%
Average Web Server CPU Utilization	55%	12%	78%
e-Infrastructure	NT only No SQL cluster	Converted to Win2000 SQL cluster	e-Business Professional Services
Security	1 zone	Multi-tiered firewalls and zones of security	Increased
Performance Reports & SLAs	Typical WebTrends reports	Additional SLA reports	Increased
Change Management	On-demand, more than 100 MACs per month	Scheduled changes, managed to fewer than 100 MACs per month	20%+ improvement in productivity
Headcount	4 FTE	0.5 FTE	88%
Cost Per Year	\$1.6M	\$1.3M	20% - 40%+

Client Portals: Window to Management Services



PERSONALIZED TOOLS & INFORMATION

- Enhanced Personalization
- Publishing to Portal
- Service Line Information
- Collaboration Tools
- Real-Time Alerts
- Escalation Paths
- e-Trouble Tickets
- e-Network Maps
- e-Performance Reports
- e-SLAs
- e-Ordering & Provisioning for all Clients
- e-Inventory
- e-Billing
- e-Contracts
- Stewardship Reporting



5/22/2001

The Home Depot

\$19B Home Improvement Chain



Retail
Industry

Challenge:

To improve customer service and better control inventory and labor costs while providing long term scalability with an open systems architecture

Solution:

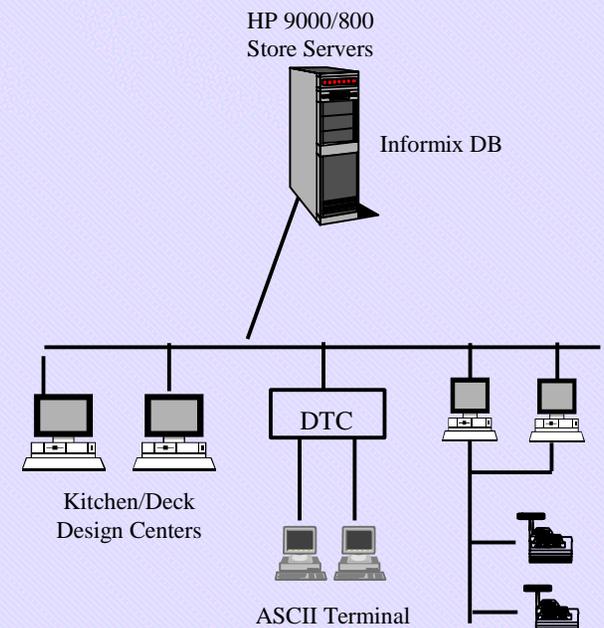
Migration from proprietary DG systems to an open systems client/server architecture

- Several hundred HP 9000 Business Servers
- Informix database/customized store solutions

Open store architecture for store systems integration

Benefits:

- Quicker check-out due to ISP and front-end processor sharing data for customer credit checks
- Improved market basket analysis due to data availability for analytical processing of information
- More efficient cabinet design/paint mixing/matching



AT&T: Your Trusted E-Infrastructure Partner

- **Trust** - main currency of the business
- **SLA's** in plain business language
- **Management Platform**
- **Remote Monitoring**
- **Five Key Services:**
 - *Security*
 - *Customer Care*
 - *Reporting*
 - *Testing*
 - *Storage*
- **Next Challenges:**
 - *Scalability*
 - *Storage on Demand*
 - *Servers on Demand*

Interactive Week.com - Feb 13, 2001



AT&T Delivers.....

