AE inside HP

Mike Baker

Vice President

CTO for IT

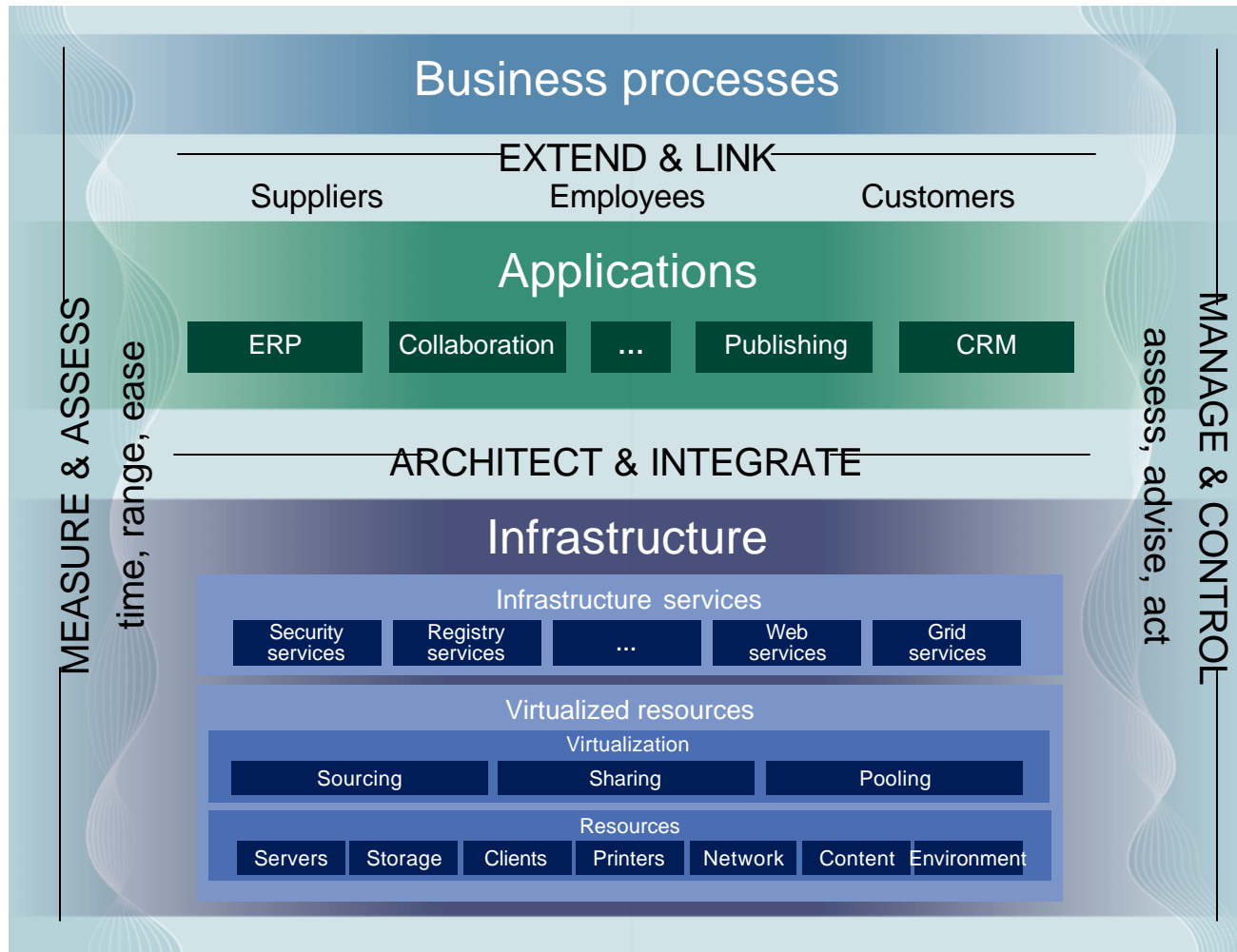# Why Adaptive Enterprise Architecture?
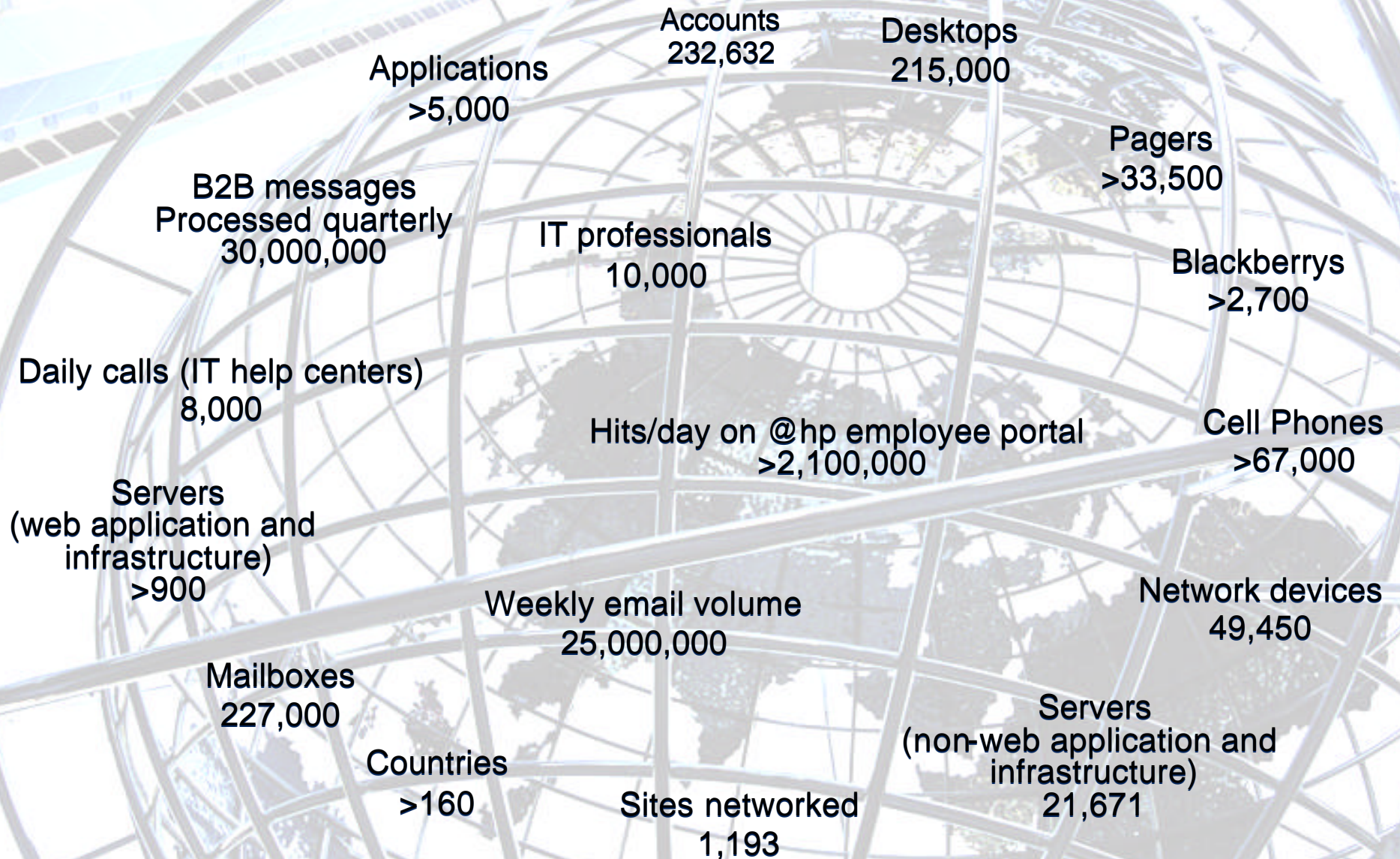Customers demand A better platform for managing change

- Brings standardization to the entire IT environment

- Eliminates vertical islands of automation

- Embraces heterogeneity and legacy IT environments

- Uses automation to scale and reduce complexity

- Virtualizes all IT assets

- Helps convert fixed costs to variable costs

HP's Darwin Reference architecture
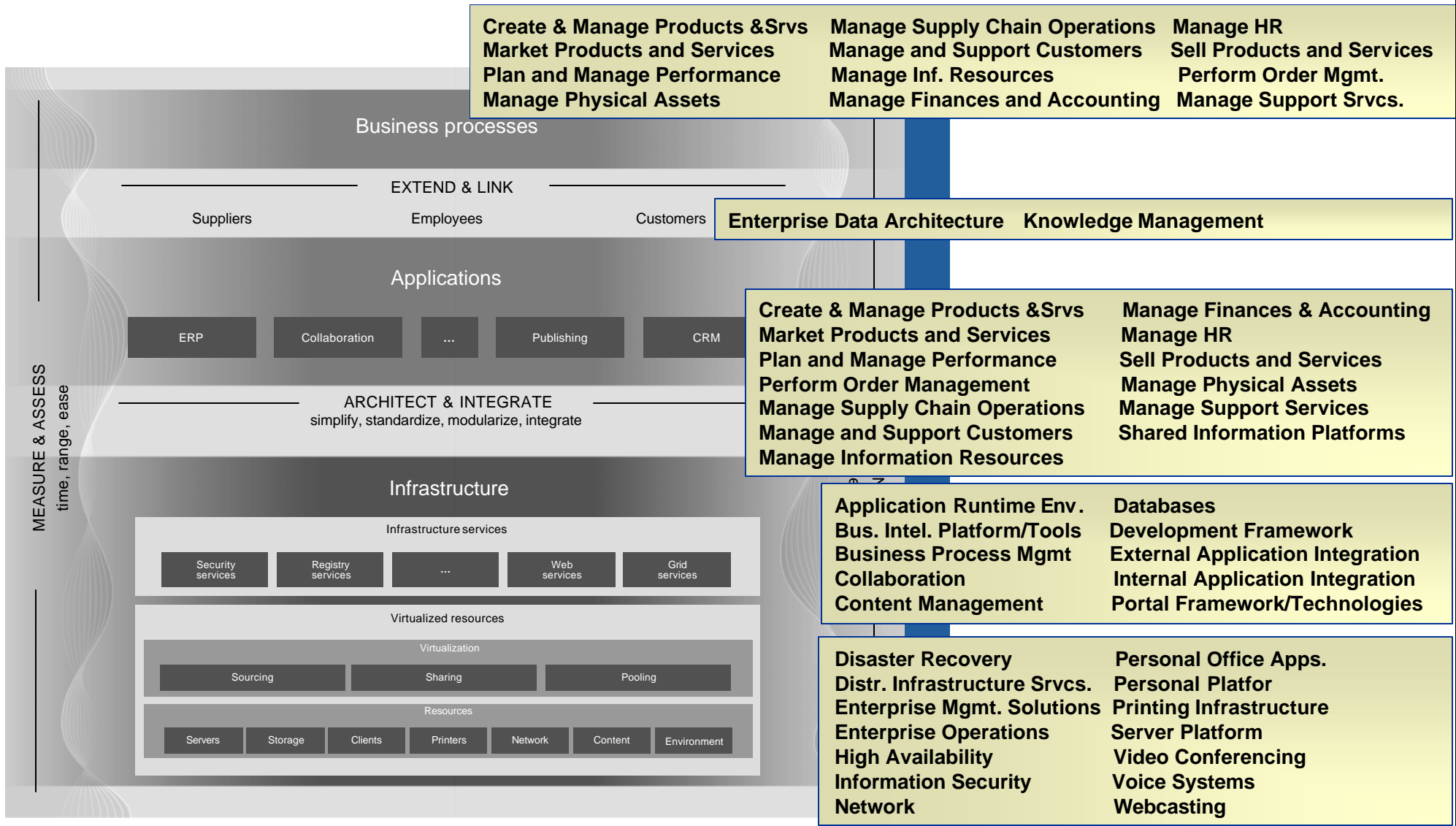## Elements of an adaptive enterprise architecture

Darwin in action inside HP
Mapping HP business processes

HP invent

Create & Manage Products &Srvs   **Manage Supply Chain Operations**   **Manage HR**
Market Products and Services   **Manage and Support Customers**   **Sell Products and Services**
Plan and Manage Performance   **Manage Inf. Resources**   **Perform Order Mgmt.**
Manage Physical Assets   **Manage Finances and Accounting**   **Manage Support Srvcs.**

Business processes

EXTEND & LINK

Suppliers   Employees   Customers

Enterprise Data Architecture   Knowledge Management

Applications

| ERP | Collaboration | ... | Publishing | CRM |

MEASURE & ASSESS
time, range, ease

Create & Manage Products &Srvs   **Manage Finances & Accounting**
Market Products and Services   **Manage HR**
Plan and Manage Performance   **Sell Products and Services**
Perform Order Management   **Manage Physical Assets**
Manage Supply Chain Operations   **Manage Support Services**
Manage and Support Customers   **Shared Information Platforms**
Manage Information Resources

ARCHITECT & INTEGRATE
simplify, standardize, modularize, integrate

Infrastructure

Infrastructure services

| Security services | Registry services | ... | Web services | Grid services |

Application Runtime Env.   **Databases**
Bus. Intel. Platform/Tools   **Development Framework**
Business Process Mgmt   **External Application Integration**
Collaboration   **Internal Application Integration**
Content Management   **Portal Framework/Technologies**

Virtualized resources

Virtualization

| Sourcing | Sharing | Pooling |

Resources

| Servers | Storage | Clients | Printers | Network | Content | Environment |

Disaster Recovery   **Personal Office Apps.**
Distr. Infrastructure Srvcs.   **Personal Platfor**
Enterprise Mgmt. Solutions   **Printing Infrastructure**
Enterprise Operations   **Server Platform**
High Availability   **Video Conferencing**
Information Security   **Voice Systems**
Network   **Webcasting**

Progress Inside HP since May
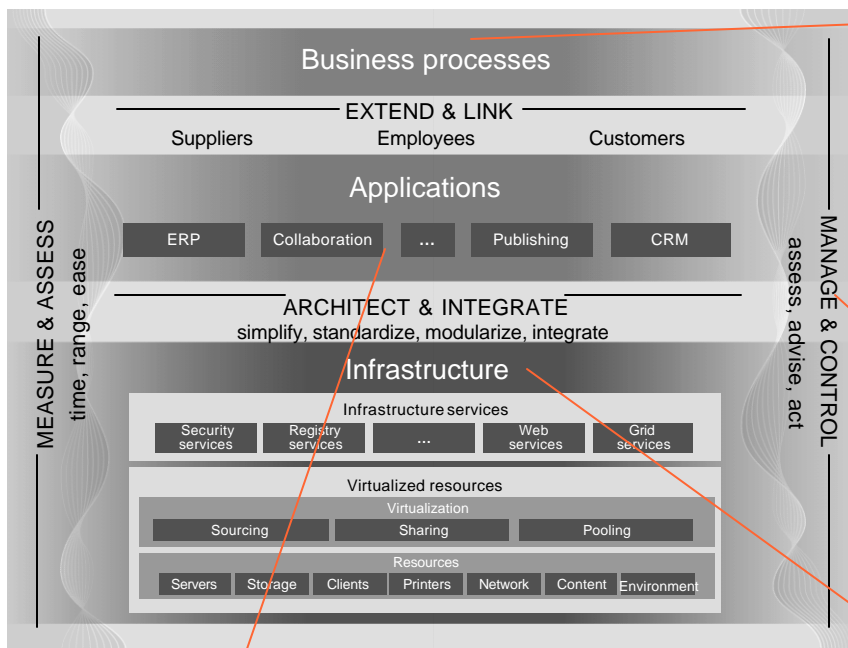
Business Processes

- Instantiated 20 IT operation principles and 13 policies based on business strategy

- AE directions & technologies defined for 95% of the current 191 IT subject areas ("domains")

- Integrated worldwide orders, shipments, revenue & margin into a single finance data warehouse

Management & Control

- Currently have over 12,000 OV agents installed and plan to increase this to 16,000 by the end of 2003.

- UDC in Palo Alto – 2 more implementations planned for early next year in Houston and Stockholm

Infrastructure Consolidation

- Completed 50% of planned global site consolidations

- Achieved significant savings through consolidation of vendor relationships

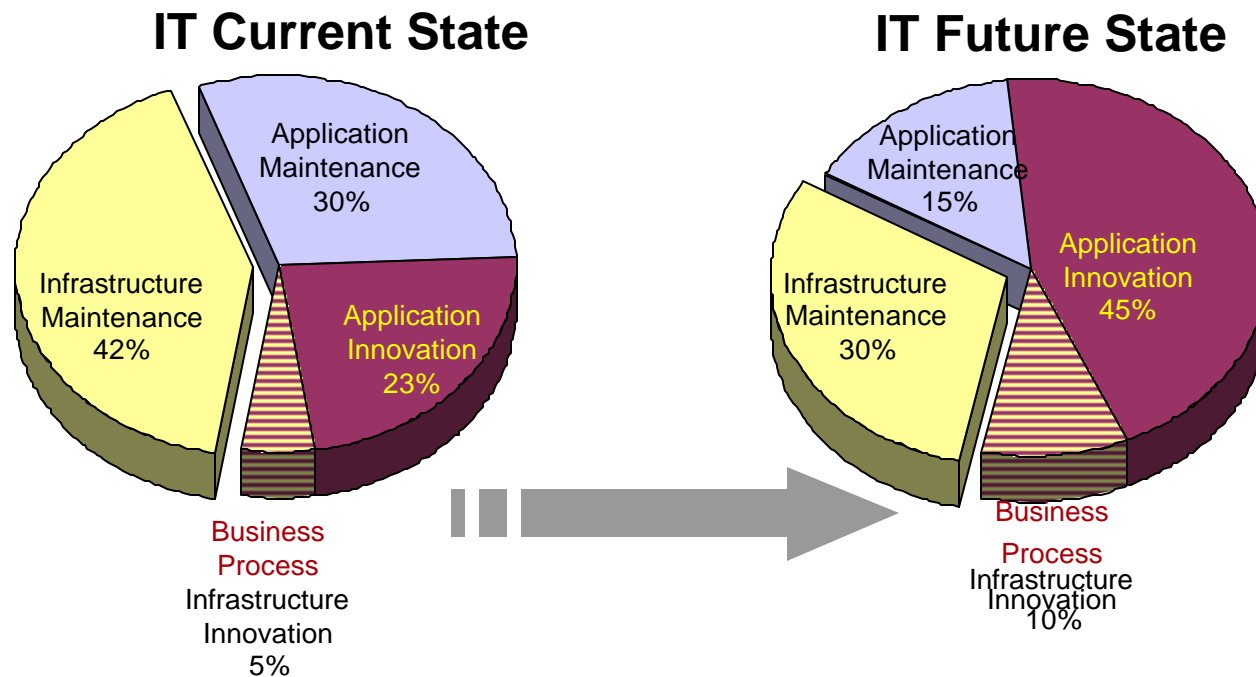- Implemented network core backbone - 90% complete, $8.8M savings

Application Optimization

- Retired 622 apps & 1372 instances in FY03 (as of August) driven by business process decisions – this alone equaled annual savings of > $18M

How AE inside translates into real value for HP

- <u>Real</u> simplification of IT environment

- Radical reduction of IT infrastructure operating cost

- Infrastructure completely renewed every 4 years

- Innovation instead of maintenance

- Automating management vs adding people

IT Current State

Application Maintenance 30%

Infrastructure Maintenance 42%

Application Innovation 23%

Business Process Infrastructure Innovation 5%

IT Future State

Application Maintenance 15%

Infrastructure Maintenance 30%

Application Innovation 45%

Business Process Infrastructure Innovation 10%

Architecture enables business strategies

HP Strategy

Business market strategy
- Best RoIT by leveraging HP's portfolio of products & services

Consumer market strategy
- Simple & rewarding experiences

World-class cost structures

Focused innovation

Architecture Strategies

A mature, active IT enterprise architecture drives RoIT

IT solutions are presented as loosely-coupled services that are simple & adaptable

A reduced & radically simplified IT portfolio drives low cost investments

Solutions & core infrastructure are being renewed continuously

'04 – '06 Architecture Objectives

- Enterprise-wide standardization & collaboration
- Service-oriented, loosely-coupled architectures everywhere
- Radical reduction of the application portfolio enabling best TCE
- Standardized messaging for the real-time enterprise
- Shared application infrastructure platforms
- Perpetual optimization of infrastructure elements
- 60% reduction goal of infrastructure "units"