On Demand
Solutions from HP

Matching IT investments with business cash cycles

Sherri Davis

HP

HP WORLD 2003
Solutions and Technology Conference & Expo

" Under Adaptive Enterprise, HP takes the vision [of delivering total infrastructure solutions] one step further, with plans… to assist customers with business process changes and adaptations, and to align these changes to customers' IT systems…

   With the current IT budget squeeze and the utility-computing trend, HP's On Demand offering is set to play a critical role in its Adaptive Enterprise strategy. "

Agenda

- Imagine these business scenarios
- The agile enterprise
- Details on the On Demand family
  - Instant Capacity
  - Metered Capacity
  - Managed Capacity
- On Demand benefits to you

Imagine computing power installed and ready-to-run when needed

Telecommunication provider *for local and long-distance service with residential and small business customers*

Provides real-time customer service via a web portal, plus customer hotline which can access 4-5 year history of a customer record

problem… The company projects a customer call/ web portal usage increase of 10x or more over the next 6-12 months.

solution… HP servers are installed and ready-to-run but are paid for when activated, allowing an HP CPU to be swapped in real-time if one of the active CPU processors fail, leading to higher availability.

Imagine being able to dial up and dial down server capacity

Large US-based food production company
growing rapidly with unpredictable server requirements for its Oracle ERP system

problem... How to size computing capacity to meet growing demand without having to buy extra, expensive headroom? Average usage is at 50% possibly growing to 80% during peak times.

solution... Two fully-redundant HP 9000 servers — one production and the other fail-over — running HP pay-per-use metering technology.

Capacity available "on demand," paid for as used, with room to grow without administrative issues of server upgrades and a 20% cost savings over a lease arrangement.

Imagine no more desktop support headaches... at reduced costs

A global leader in discrete manufacturing *for the automotive industry with over 34,000 heterogeneous desktops and notebooks for 20,600 users at 250 sites*

problem... How to improve employee workspace satisfaction, quality and service while saving costs stemming from a Six Sigma quality initiative.

solution... An HP Program Management Office oversees the procurement, support and maintenance of all HP and 3rd party desktops and laptops as well as help desk and desk-side support at a price per seat per month.

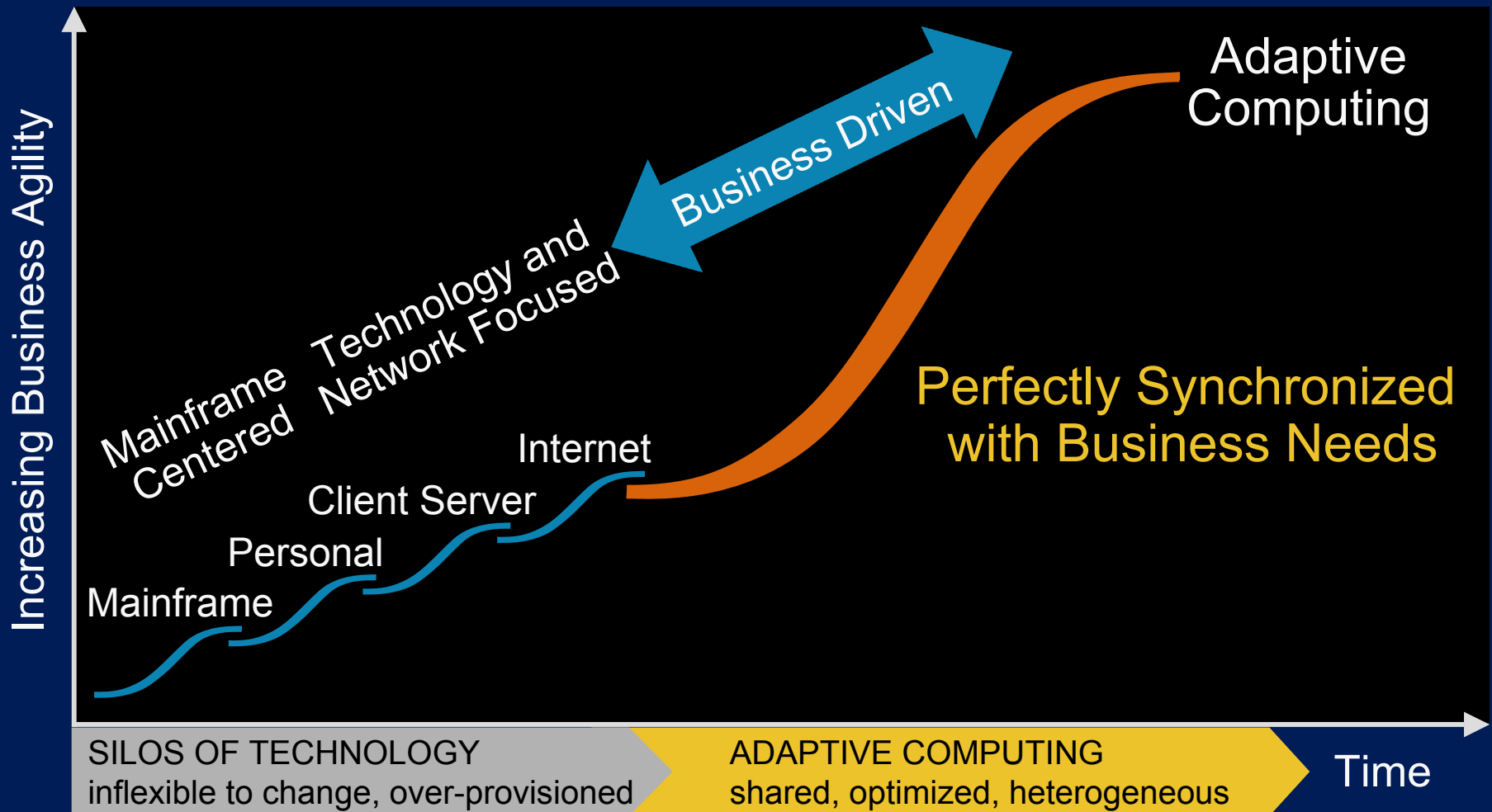# Today's business environment is complex, unpredictable and changing fast

These businesses had to find a way to be more agile

- Take advantage of new technologies

- Rapidly accommodate unanticipated change

- Manage IT as a business with flexibility and accountability

Utilize IT resource options that enable tight alignment of IT costs with business revenue streams

Business needs demand a new model of computing

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Increasing Business Agility

Adaptive Computing

Business Driven

Mainframe Centered

Technology and Network Focused

Perfectly Synchronized with Business Needs

Internet

Client Server

Personal

Mainframe

SILOS OF TECHNOLOGY
inflexible to change, over-provisioned

ADAPTIVE COMPUTING
shared, optimized, heterogeneous

Time

HP... first with On Demand models

Initial offering launched in 1991

Integrated products and services
designed to deliver IT infrastructure resources
when and where you need them,
with payment based on usage

Instant Capacity

delivering immediate access to additional capacity

Metered Capacity

paying for IT assets based on actual IT usage "dial-up and dial-down"

Managed Capacity

redirecting resources to other core competencies

IT utility acquisition solutions for servers, storage,
access devices, imaging & printing and messaging

12 offerings from HP

Instant Capacity
delivering immediate access to additional capacity

Metered Capacity
paying for IT assets based on actual IT usage "dial-up and dial-down"

Managed Capacity
redirecting resources to other core competencies

Instant Capacity	Metered Capacity	Managed Capacity
■ iCOD for AlphaServer	■ PPU for HP 9000 servers	■ Access on demand
■ iCOD for NonStop servers	■ PPU* for StorageWorks XP	■ Managed storage solution
■ iCOD for ProLiant servers	■ PPU for imaging and printing	■ Exchange 2000 on Demand
■ iCOD for HP 9000 servers		■ Tiered messaging on Demand
■ Pay per forecast for HP products		

*PPU = Pay Per Use

Traditional IT acquisition vs. HP On Demand

Traditional IT acquisition

Cost
- Predicting "headroom" costs more and may be wasted

Quality
- Infrastructure is not flexibly adjusted

Risk
- Financial risk - Hardware and IT capacity not adjusted in real time

Agility
- Can't quickly adjust capacity or IT infrastructure costs or resources as business needs change

HP On Demand acquisition

Cost
- Computing resources delivered at a price based on business usage

Quality
- Computing resources delivered when and where you need them

Risk
- HP shares the risk - reduced risk to you because of creative and flexible acquisition models

Agility
- IT capacity adjusts in real time and is in synch with business change and cash cycles

Do any of these sound familiar?

- Demand for IT capacity is predictable and growing

- You often need immediate access to additional capacity

- You'd like a choice between purchasing and/or financing your IT infrastructure

- You'd like to better align IT costs with service levels

- You'd like these capabilities across HP's entire server line

instant Capacity On Demand (iCOD)

A delayed billing model

- Payment based on planned usage or when activated
- Servers are installed and ready-to-run
- Services include IT resource analysis, installation, start-up, and on-going system support

Benefits to you

- Good model for matching IT costs to usage with lower upfront investment
- Flexibility in terms of asset ownership and financial administration
- Reduction in business risk caused by forecast uncertainty

iCOD – the details

- A form of iCOD is available on all HP server lines

- All have a time period in which you must activate and/or buy the server

- HP 9000 has two additional variants
  - Temporary instant Capacity On Demand (TiCOD)
  - Cell Board instant Capacity On Demand (CiCOD)

Process – iCOD for HP9000 servers

General requirements

- Purchase iCOD "right to access" CPUs
- Receive iCOD processor agent license
- Factory or field installed
- email connectivity with HP is required

instant capacity on demand (standard iCOD)

Inactive processors reside in system

- Does not require iCOD CPU HP support or HP software licensing (HP-UX OE) until activation

CPU purchase includes "activation" fee

- ~80% current CPU list price (less volume agreement)
- Activation with license key received from HP via email

Available on 4 way to 64 way systems

Process – iCOD temporary capacity option

General requirements

- Purchase iCOD "right to access" CPUs or utilize CPUs already installed

- Purchase temporary capacity 30-day license (720 hours) for system
  - Includes temporary license for HP-UX OE and support on system

- email connectivity with HP is required

Processor(s) may be activated and deactivated

- Usage deducted from 720 hour total in 30 minute increments

- Balance can be tracked on web portal

temporary instant capacity on demand

Process – cell board iCOD for HP9000 servers

General requirements

- Purchase iCOD "right to access" CPUs, memory,and cell board
- Receive iCOD processor agent license (no charge)
- Factory installed only
- email connectivity with HP is required
- Available on rp7410 and rp8400

instant capacity on demand (cell iCOD)

Inactive cell board resides in system

- Does not require iCOD CPU HP support or HP software licensing (HP-UX OE) until activation

Cell board purchase includes "activation" fee

- ~80% current list price (less volume agreement)
- Cell board and memory must be activated with one CPU (other CPUs can be activated individually at later times)
- Activation with license key received from HP via email

iCOD temporary capacity web portal

Access information about your TiCOD balance through a secure web portal

Pay per forecast for HP products

An alternative to conventional leasing where HP provides a flexible payment schedule for HP products based on your forecasted usage and or revenue cycles

Pay per forecast – the process

step 1 You determine the capacity forecast for your business

step 2 HP helps you design a solution with the capacity to support the forecast

step 3 You pay for the solution based on your forecast

step 4 You begin payments only after implementation is complete

Do any of these sound familiar?

- Demand is somewhat unpredictable so you'd like to avoid locking up capital in IT infrastructure

- You'd like to pay for IT assets based on actual IT usage (dial-up and dial-down)

- You'd like to do capacity planning less often

- You want enhanced alignment of costs with service levels

Metered Capacity On Demand
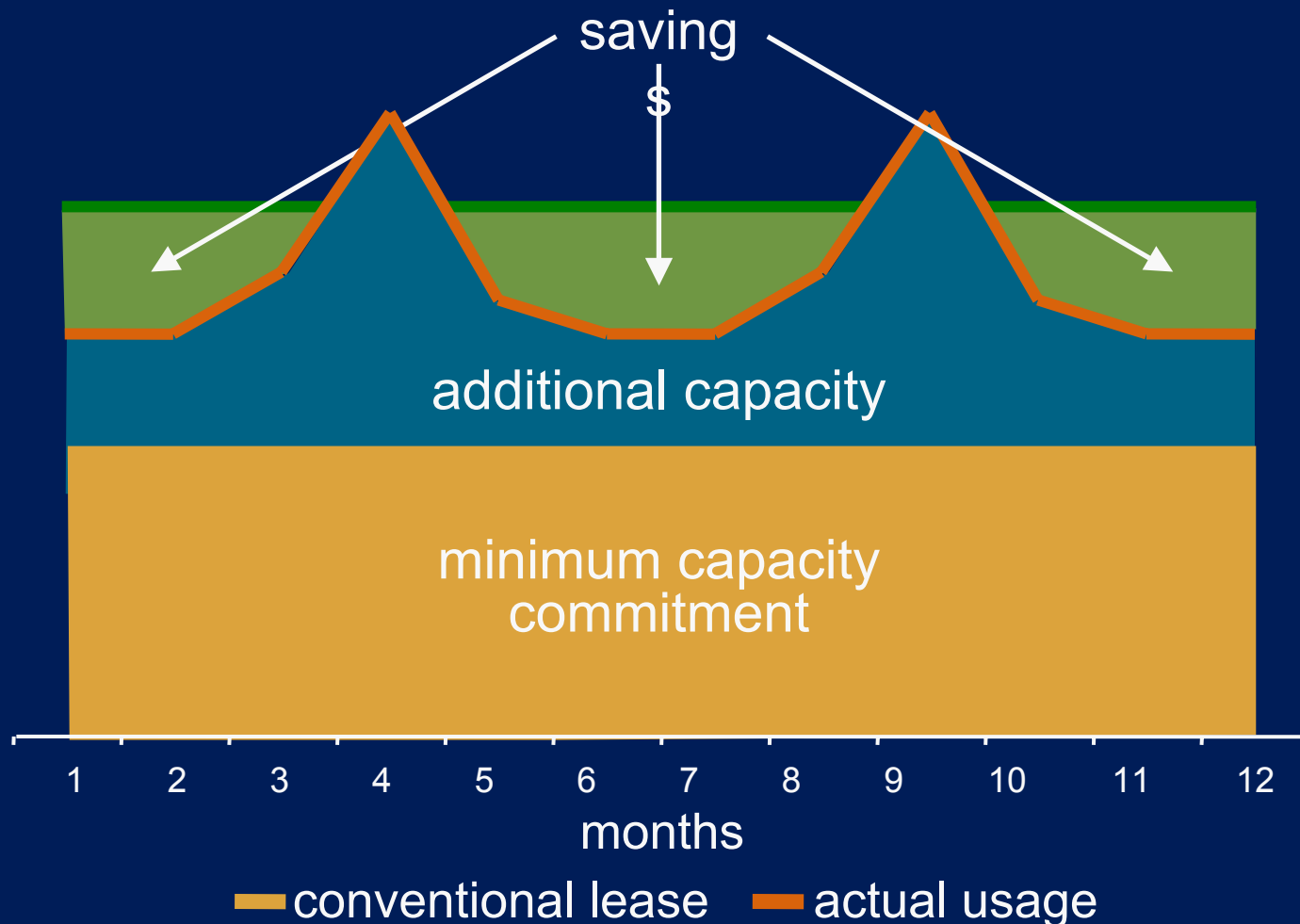
A pay per use leasing model

- Immediate access to additional computing resources when requirements are unpredictable
- Pay for IT assets as you dial-up and dial-down actual usage
- Services include IT resource analysis, installation, start-up, and on-going system support

Benefits to you

- Better model for matching IT costs to usage with lower upfront investment
- Reduces frequency of need for capacity planning
- Reduction in business risk caused by business-volume uncertainty

Pay Per Use

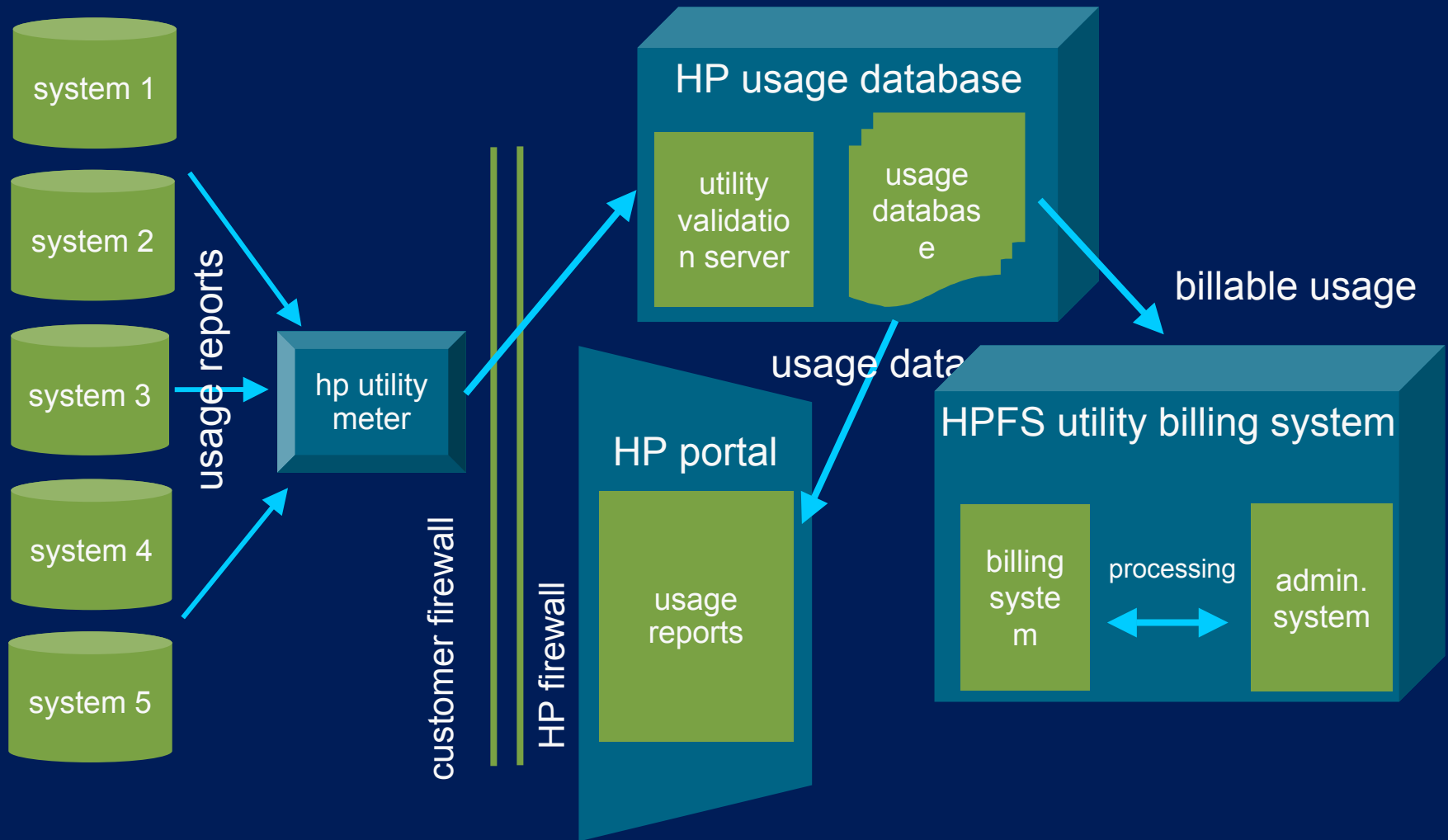*Pay for capacity only when you use it*

PPU for HP 9000 mechanics

- All CPUs are active and available for processing workloads all of the time

- Capacity is monitored by a unique utility meter (a ProLiant server) and free metering software

- The metering technology gathers data daily and automatically exports it, encrypted, to HP

- Metering technology resides securely behind your firewall

- Access HP's web portal at any time to view and monitor your utilization

PPU for HP 9000 details

- You are billed for your average monthly usage on a 36 month term

- Server is comprised of full (4 CPU) cells

- Target monthly base charge is approximately 60% of a standard lease; 40% is variable (configuration dependent)

- 25% of capacity is included monthly base fee

The system behind PPU for HP 9000

system 1

system 2

system 3

system 4

system 5

usage reports

hp utility meter

customer firewall

HP firewall

HP usage database

utility validation server

usage database

HP portal

usage reports

usage data

billable usage

HPFS utility billing system

billing system

processing

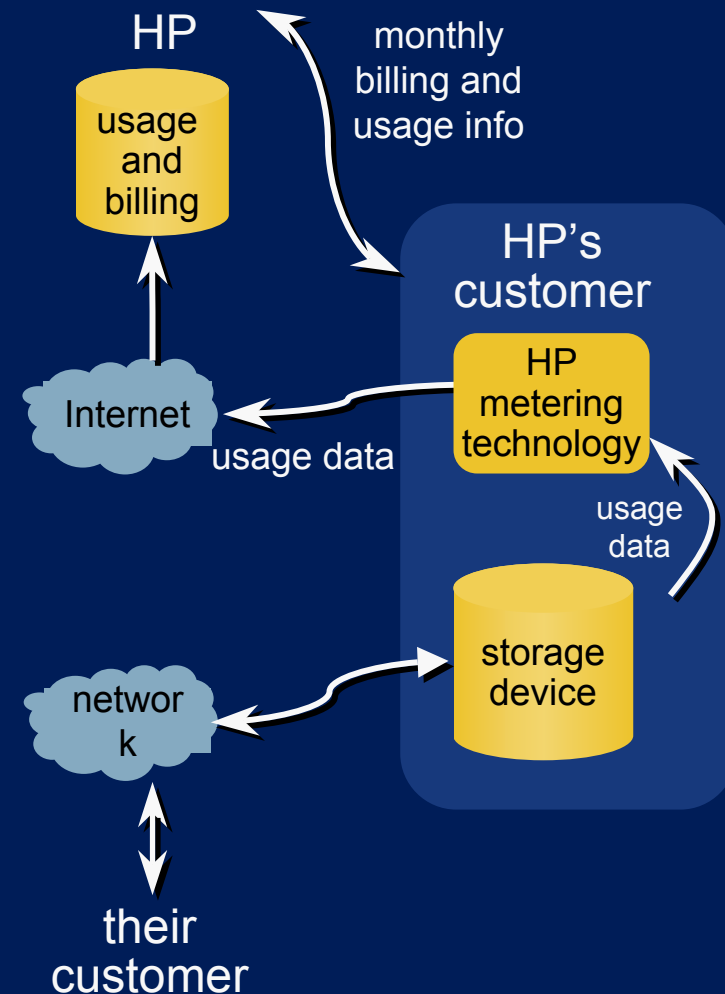admin. system

Pay Per Use for StorageWorks XP

Ready to use on demand storage

- Capacity without having to pay for it unless it's used

- Payments are based on measured usage

- Enough capacity to meet your unpredictable storage needs without spending without the upfront capital costs
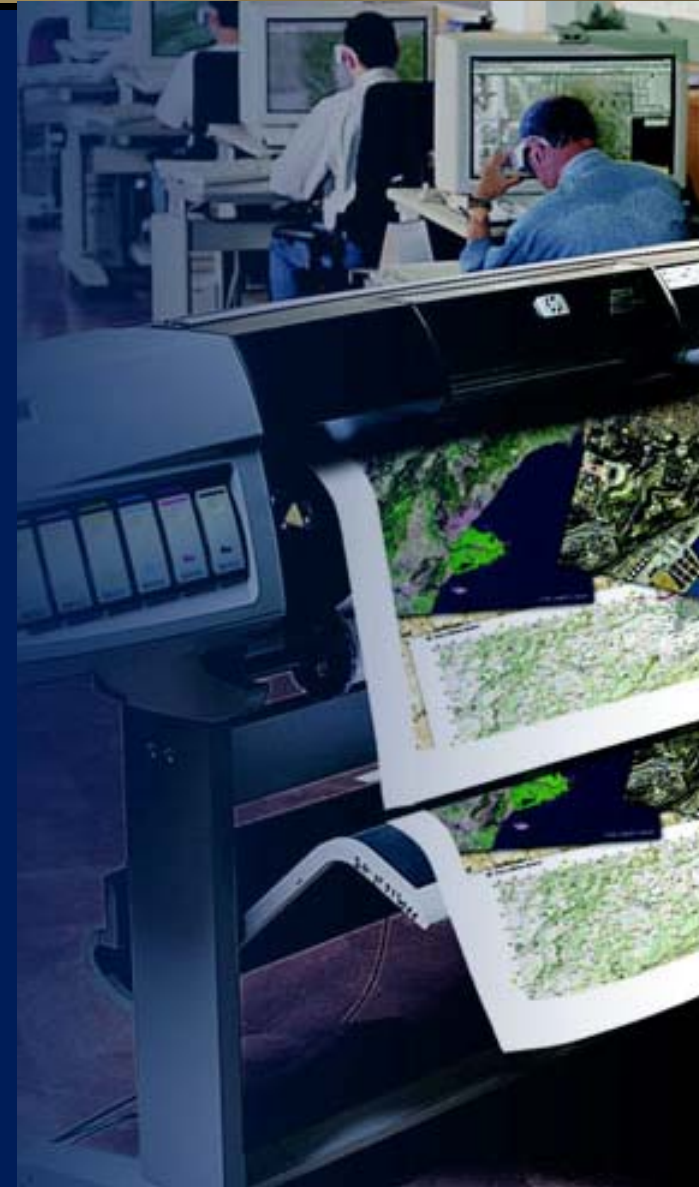
Pay Per Use for storage model

- Storage devices and metering technology physically reside at the your site

- Metering technology regularly measures the amount of configured capacity (capacity assigned to a port) and sends it to hp

- Usage data is averaged and generates a monthly bill

- Monitor and validate usage data via a web portal

- HP owns storage assets

- Support contract is included

How can HP measure my imaging and printing usage?

- Using remote query technology, your print devices are polled

- Usage information is then sent back to HP and reconciled against the pay-per-use agreement that you have with us for billing purposes

Total solution for imaging and printing

- A total printing solution that allows you to streamline your printing environment by reducing time, cost, complexity and risk with
  - HP printer technology and cartridges
  - HP maintenance and support
  - HP financing
- One monthly invoice
  - Easy budgeting — fixed amount, no hidden costs

- Premium support
  - Dedicated call center, single point of contact
- HP print monitoring service
  - Automated supplies & maintenance ordering
  - Break-fix alert (optional)
- On demand print cartridge delivery
  - Provided within 24 hours
- Printing online
  - Usage reporting allows adequate deployment of printers

Do any of these sound familiar?

- You want to redirect IT resources to other core, more strategic competencies

- Change is difficult to manage and you'd like to reduce the complexity

- You'd like to avoid locking up capital in IT infrastructure expenditures

- You'd like some help managing the IT lifecycle to ensure optimal alignment of costs with service levels

Managed Capacity On Demand

A complete managed service

- Flexible end-to-end IT solution management, covering total cost of ownership
- Usage-based payment models
- Includes the most comprehensive lifecycle service offering
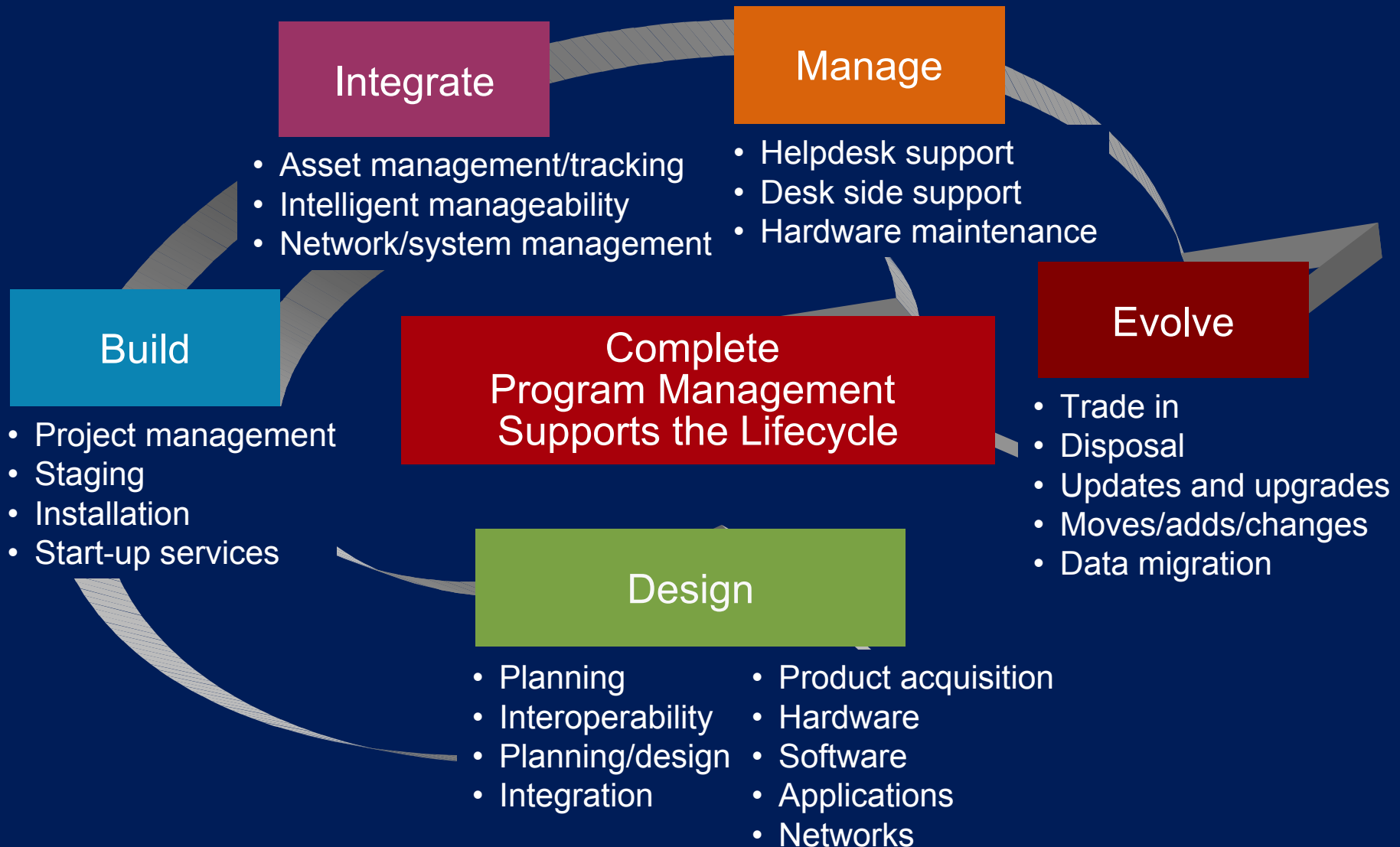
Benefits to you

- Focus on core, strategic business
- Best model for matching total IT cost to usage
- Reduces business risk caused by the effect of uncertain IT demand on total cost of ownership

Access On Demand

- **Total lifecycle solution for desktop acquisition, management and support**

- Custom-configured solutions and payment plans

- Scalable to any size environment

- Managed to service level agreement

Access On Demand — a lifecycle solution

Integrate
- Asset management/tracking
- Intelligent manageability
- Network/system management

Manage
- Helpdesk support
- Desk side support
- Hardware maintenance

Build
- Project management
- Staging
- Installation
- Start-up services

Complete Program Management Supports the Lifecycle

Evolve
- Trade in
- Disposal
- Updates and upgrades
- Moves/adds/changes
- Data migration

Design
- Planning
- Interoperability
- Planning/design
- Integration
- Product acquisition
- Hardware
- Software
- Applications
- Networks

Access On Demand — reference configurations

Components

- Evo hardware
- Windows XP operating system
- Hardware installation
- Hardware maintenance
- Help Center support
- Program management
- Asset reporting
- Technology refresh

Compaq Evo Systems

Evo D310v value desktop

Evo D510 e-PC enterprise desktop

Evo D510 USDT space saving desktop

Evo D510 CMT convertible microtower

Evo D510 SFF small form factor desktop

Evo N410c ultra-portable

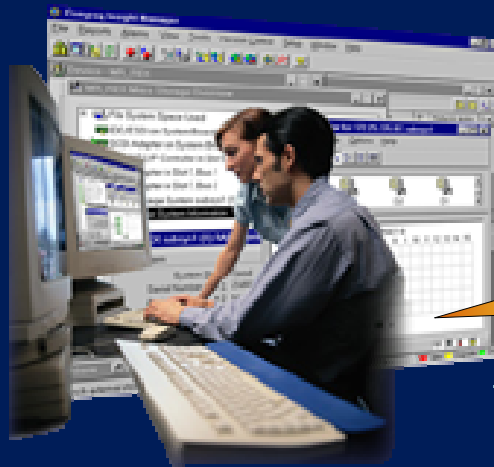Evo N610c high performance portable

Evo T30 thin client

Managed Storage solution

Offerings

- **Storage capacity package**
  - Full remote multi-vendor storage management and support with capacity increment and decrement for HP storage
  - Storage and services priced on a monthly per-use basis

- **Multi-vendor storage management**
  - Management of heterogeneous storage environments with price based on usage
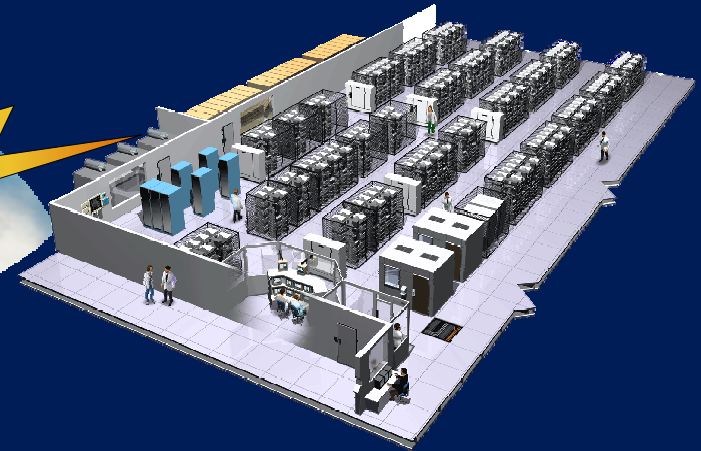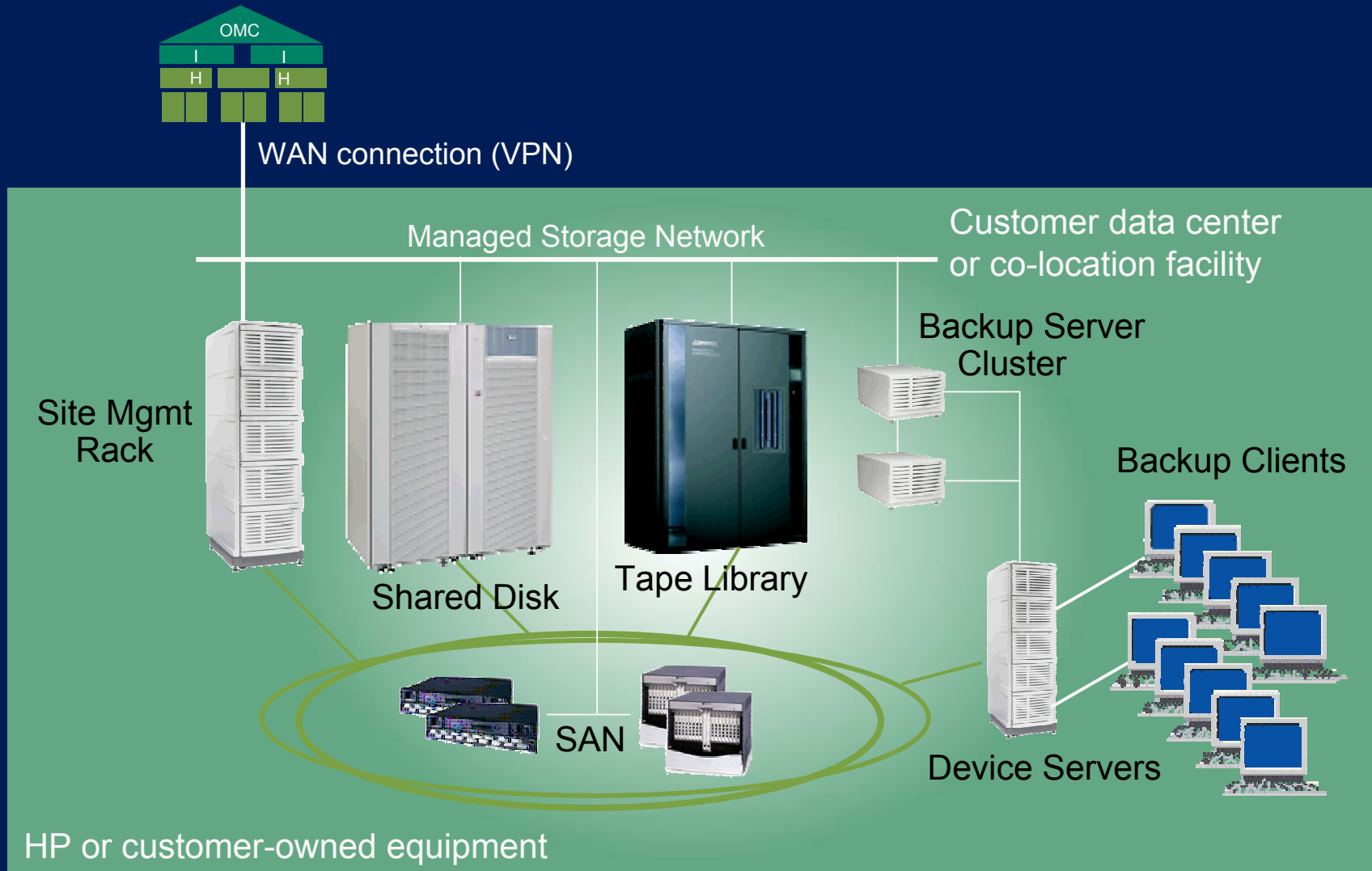
Managed Storage solution example

OMC

I   I
H   H

WAN connection (VPN)

Managed Storage Network

Customer data center or co-location facility

Site Mgmt Rack

Backup Server Cluster

Backup Clients

Shared Disk

Tape Library

SAN

Device Servers

HP or customer-owned equipment
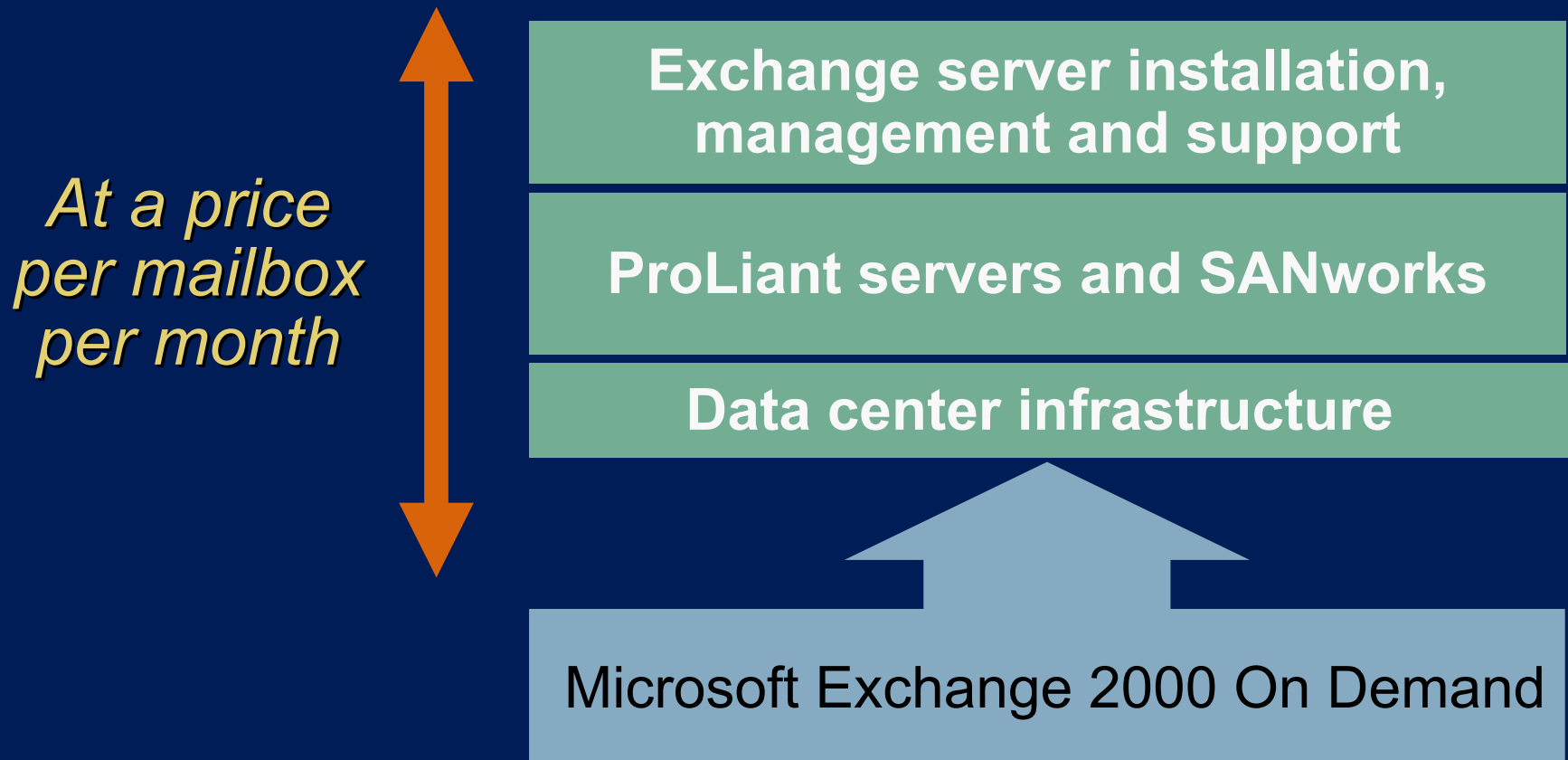
Messaging On Demand

- Packaged, completely managed messaging solutions priced per mailbox per month

- Service delivery provided by HP Services

- Servers are located either at your site or at an HP Operations Management Center

- Number of seats can be increased or decreased annually as needs require

- Two Messaging On Demand solutions to fit every need
  - Microsoft Exchange 2000 On Demand
  - Tiered Messaging On Demand

Microsoft Exchange 2000 On Demand package components

*At a price
per mailbox
per month*

Exchange server installation, management and support

ProLiant servers and SANworks

Data center infrastructure
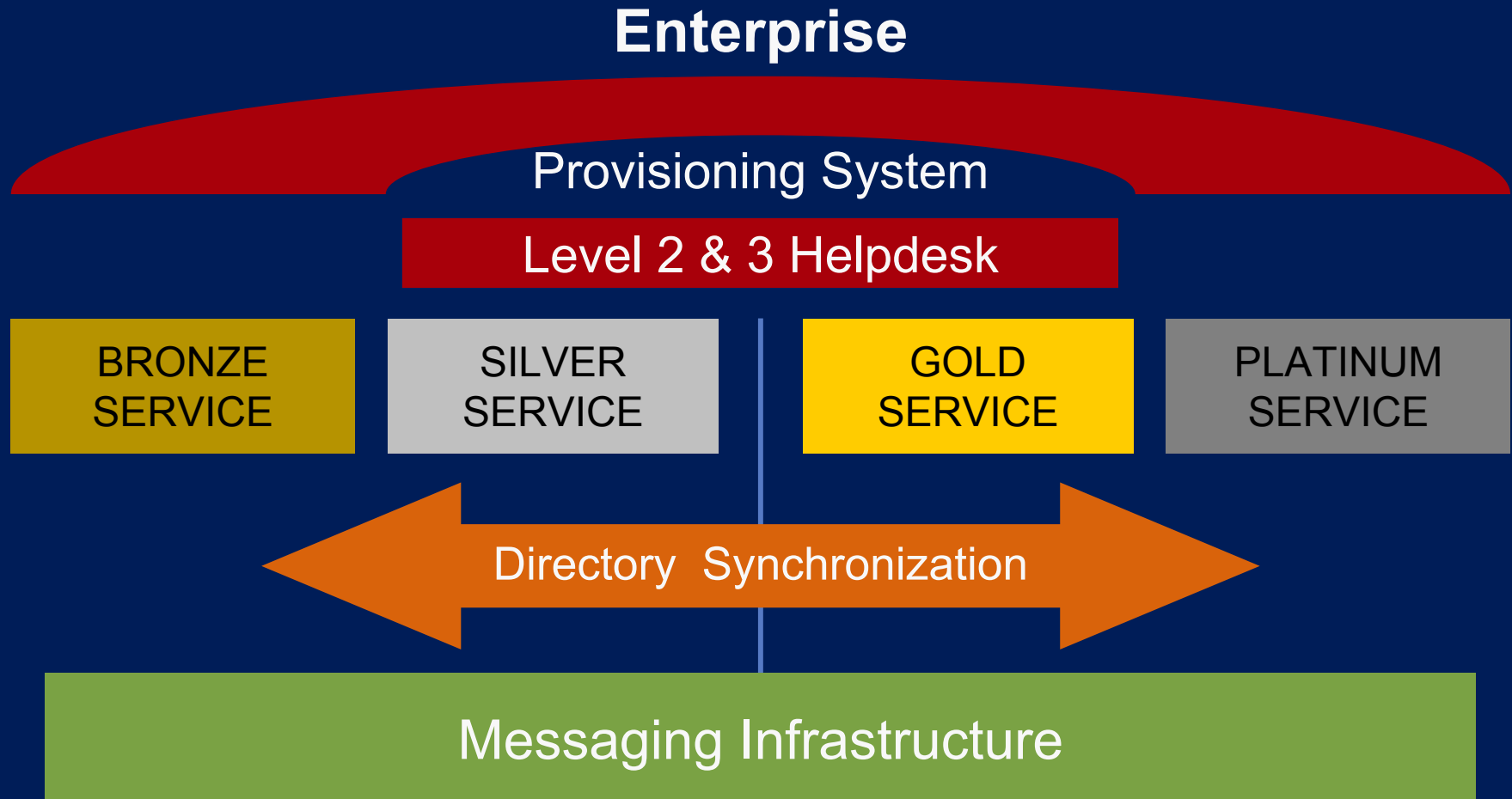
Microsoft Exchange 2000 On Demand

Services at the heart of the Exchange On Demand solution

- Server installation and configuration
- 24x7 proactive systems monitoring and support
- User admin and client account processes
- Public folders: 1 MB public folder of storage per user
- Complete software license management
- Standardized monthly usage and performance reports
- Basic recovery services utilizing the standard MS Windows/ MS Exchange recovery mechanisms

- Exchange 2000 support from an Outlook client:
  - Full Outlook
  - Outlook Express
  - Outlook Web Access Clients
- 50MB of mailbox storage per user
- User authentication with domain and password
- Secure outlook web access available for remote users as alternative to full outlook

Tiered Messaging On Demand features

- Includes hardware, software, and lifecycle services

- Meets mail and messaging needs of all users, from email "power users" to "deskless" workers

- Lets you increase or decrease number of mailboxes annually

- Offers your choice of four service levels

- Based on HP Services best practices and delivered according to a service level agreement

Standard services...
plus many options

BRONZE	SILVER	GOLD	PLATINUM
Web Browser Access	Browser/ POP3/ IMAP Access	MAPI Outlook/ OWA/ POP3 Access	Full Outlook/ OWA/ POP3 Access
10MB Mailbox	20MB Mailbox	50MB Mailbox	80MB Mailbox
Personal Address Book	Personal Address Book	Personal Address Book	Personal Address Book
Antivirus	Antivirus	Antivirus	Antivirus
Corporate Directory	Corporate Directory	Corporate Directory (AD)	Corporate Directory (AD)
	Personal Calendar	Personal Calendar	Personal Calendar
	Task management	Task management	Task management
	SSL/ TLS	Group Scheduling (Note 1)	Group Scheduling (Note 1)
			Instant Messaging (Microsoft IM)
			Conferencing (Netmeeting)
			Public Folders

Note 1 – Group scheduling between Gold and Platinum users only

The HP difference

- 65,000 IT service professionals in 160 countries around the world

- #1 in mission-critical services, Microsoft enterprise services, and a leader in SAN and storage services

- Only vendor providing one-stop shopping for storage capacity and storage management needs

- Unparalleled multi-vendor infrastructure expertise and history of purposeful innovation

- Collaborative style that puts you in control and provides choices

HP's On Demand solution portfolio

Delivers superior business advantage

- Optimize IT efficiency
- Enable transformation towards IT as a service enabler
- Minimize your risk
- Align costs with utilization
- Ensure the availability of service capacity to meet business needs
- Accelerate IT deployment
- Create a self-managing environment

Interex, Encompass and HP bring you a powerful new HP World.