Outsourcing Messaging:

A 21st Century Practice

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N E T W O R K S

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Executive Summary

How does an organization recognize when trends and factors dictate a shift to the outsourcing of critical technologies?

Several years ago, when Creative Networks, Inc. (CNI) had to make wide-area TCP/IP links, we purchased routers and leased lines, and employed in-house staff to maintain these external links. Suddenly – or what seemed sudden to us – we began "outsourcing" these capabilities to external Internet Service Providers, generally for a cost that dwarfed our internal costs. This pattern of outsourcing technologies has occurred in this century with other critical *power grids*, including electricity and voice communications. There came a time, even with these much-older technologies, that organizations recognized there was more *value* in permitting them to be externally managed.

In the 20th century, there have been three power grids that enterprises have readily outsourced to trusted technology partners: electricity, voice communications and Internet access. All three of these critical technologies were outsourced because these services were standardized – where a neutral third party could leverage this standardization into focused specialization with economies of scale – and the costs could be lowered by acceding technology control for technology economy and efficiency.

In the white paper that follows, CNI examines the phenomenon of outsourcing and the external management of *messaging operations*, in what CNI considers the *fourth power grid* that will undergo wide-spread standardization between now and the early years of the 21st century. Such standardization will create the economies of scale necessary for wide-scale messaging outsource services, because messaging will follow a similar path to these other power grids.

CNI examines three critical areas in order to determine its premise. First, we examine what it is precisely that organizations look for to make an outsourcing decision, or what we call *the value proposition*. Second, we look at cost and the total cost of ownership regarding messaging operations, to definitively determine whether there are true economies in outsourcing, and how much organizations can save in both dollars and *budget predictability*. And lastly, we take a close look at a key piece of the outsourcing equation: *global management capabilities*.

In this report, we single out Compaq Computer Corporation's messaging services (through its recent acquisition of Digital Equipment Corporation), as exemplary of what we call the top-tier outsource service vendors. We were struck by (the pre-acquisition) DIGITAL's focus, not only in the overall services and support arenas where today 60 percent of their revenues are derived from value-added reselling of products from other vendors, but also in specific outsource scenarios; in this case, managing the operations for a Microsoft Exchange network. Compaq has built up impressive credentials around its Exchange services and support groups, having installed nearly 25 percent of Exchange seats worldwide, combining these implementations with "insider" knowledge from having migrated its entire organization to Exchange over the last several years.

In regards to the *value proposition*, CNI has identified numerous functional requirements that organizations should seek in the selection of a messaging outsource services vendor.

They included proven methodologies – of which operations is the most fundamentally important – but may also include integrated capabilities for planning and design services (for both messaging and messaging-related issues), pilot operations, verification and sizing, and implementation and rollout services. Another key value proposition is the rapid deployment of services, which can only materialize with distributed and centralized, homogeneous data and network operations centers, global help-desks, common tools and process engineers (for migration or business process design). Such widespread capabilities suggest the existence of a *global network of management centers*.

As for *cost issues*, a most revealing value proposition, organizations that select outsourcing services will be able to incorporate finitely predictable budgets – with costs charged for outsourcing based simply on per user and service level agreements. CNI also undertook a study of the internal costs of maintaining messaging operations for a Microsoft Exchange system in organizations of 5000 and 12,000 employees, and compared these internal costs to outsource costs, with figures Compaq makes available to its customers and prospects. The cost summaries that follow emphasize that outsourced services can save nearly 50 percent per year on administrative, management and downtime-related costs.

Cost (5000 users)	Non-Outsourced	Outsourced	Outsourced Savings
Administration and management	$369.17	$180.12	51.2%
Downtime productivity loss	$71.87	$44.63	37.9%
Downtime revenue loss	$201.24	$124.95	37.9%
Cost to resolve downtime	$0.86	$0	100.0%
TOTALS	**$643.15**	**$349.70**	**45.6%**

Cost (12,000 users)	Non-Outsourced	Outsourced	Outsourced Savings
Administration and management	$369.17	$157.48	57.3%
Downtime productivity loss	$71.87	$44.63	37.9%
Downtime revenue loss	$201.24	$124.95	37.9%
Cost to resolve downtime	$0.36	$0	100.0%
TOTALS	**$642.64**	**$327.06**	**49.1%**

Through this examination, and detailed in this white paper, CNI took a close look at Compaq and determined it to be a strong player among its peers. Compaq understands the overall outsource value proposition, especially with its recent Microsoft Exchange Utility

Services, and have built a reliable infrastructure that will promise scalability, availability and performance well into the 21st century.

Introduction

The information age has entered the eve of the 21st century, and certain technologies that were once unique or rare are now taken for granted. One of these technologies is electronic messaging, which has become as ubiquitous as the telephone – and in many cases, a more important means of communication. CNI acknowledges that electronic messaging promises to become another *power grid* for the 21st century.

This messaging power grid is one of several data communications networks that are critical to your organization's continuing competitive advantage. The global, multi-national enterprises of the 21st century demand consistent, reliable, scalable, instantly serviceable, *dialtone*-quality messaging systems. The messaging power grid must be analogous to our electricity, voice or wide-area access power grids, dependable at any time, available everywhere, familiar to any one in any place. Such consistency in electronic messaging can only mean seamless communications, and such a high level of communications can only translate into ongoing increases in global and national productivity. The verdict is in: we as information workers depend on the *uptime* of our messaging systems

Electronic messaging has become, like the Web, an integral part of both our work and personal lives. Because of the Web, and the unparalleled growth in Internet-based technologies, we are entering a golden age of standards-based protocols for electronic mail and messaging. The impact of standardization is creating new developments that were relatively unforeseen several years ago. In today's Internet, for example, messaging giants Microsoft and IBM/Lotus support SMTP/MIME, LDAP3 and POP3/IMAP4 protocols, and are merging their *de facto* standards with *de jure* ones. Yet another key development is the ability for organizations to now *outsource* their messaging and data communications systems, just as we "outsource" our voice communications without thinking twice.

But do think about it! We're not implying that messaging systems are less important; they're more important than ever. CNI would be the first to articulate the incredible impact that the electricity, voice and Internet access power grids have made on our productivity. But note how all these power grids have been placed in the hands of experts. We have shifted our organizations' direct dependency on electricity to clearly focused energy retailers; our reliance on voice needs to telecommunication concerns; and as a more recent phenomenon, our utilization of Internet and data access to Internet Service Providers.

These technologies are all critically important to our business practices, our core competencies and our competitive advantages, and outsourcing them does not diminish their value. Rather, we have taken advantage of these focused sellers of key services because they provide extremely reliable service, while saving our organizations money. More importantly, as we take advantage of these outsourcers who drive these common technologies through their learned economies of scale, we free up our internal resources,

both human and technological, and apply them to other, more pressing, corporate-critical information and knowledge needs. A good example of this may be shifting your organization's resources to Y2K and Euro conversions, and leaving messaging to a *bona fide* outsourcer.

In summary, the inexorable movement toward standards is making it possible for organizations of any size to outsource their messaging practices to focused sellers and administrators of messaging services.

An Important Caveat

There is, however, an important caveat to the global migration to Internet standards: with over 200 million users today of email, and with messaging's 30+ year history, there's still a large number of heterogeneous, mixed messaging environments. Such environments are still common, and their existence continues to be a root cause of high management and administrative costs. This is all the more reason for organizations to consider outsourcing; to diminish or even eliminate these higher costs and put the control of these disparate and troublesome networks in the hands of the experts who can leverage economies of scale and scope to lessen costs.

Therefore, outsourcers could also provide several other *value-add* services: cost-effectively administering heterogeneous enclaves within an organization, providing migration and coexistence services as requested, as well as providing the much needed standardized messaging systems for extremely competitive prices. Outsourcers of messaging systems will become indispensable partners because they will permit enterprises to essentially "lease" embedded distribution mechanisms, like messaging, in order to stay focused on their core competencies and the business- and process-centric applications critical to their business.

Outsourcing: The Value Proposition

As an enterprise seeks to optimize its human and technology resources, one option that has to be considered is outsourcing its messaging system. But what does the enterprise look for from an outsource services vendor? What are the important characteristics of such a vendor that portray their expertise and know-how? And what is the *value proposition* that such a vendor can offer your organization?

When CNI investigated the outsourcing market, we discovered several important value-adds that any enterprise should consider when exploring whether to outsource, or selecting an outsource vendor. The critical components of the outsource value proposition follow below.

Proven Methodology

To outsource your messaging system is to trust in a qualified partner. In order to undertake the external management of a critical communications system, enterprises have to be guaranteed that any transition will not affect business processes or users' productivity. In other words, outsourcing involves a sequence of actions that must all be

considered fully. Strong outsourcers provide what CNI considers a "life-cycle" outsourcing package, which includes the following:

- Planning and design services (for messaging and related issues, including operating system)

- Pilot operations

- Verification and sizing

- Implementation services

- Rollout progression planning

- Deployment

- Operations management, with centralized, global capabilities

An outsourcing decision must consider all of these components, and enterprises that have successfully outsourced their systems acknowledge their necessity.

Rapid Deployment of Services

Outsourcing vendors, in order for outsourcing to be effective and successful, have to offer a full complement of services that provide for rapid deployment. Communication delays of any kind result in time and cost losses. Enterprises expect that once an outsource decision is made, the following components will made available to them:

Data center: off-site, centralized centers whose functions are the collection, analysis and dissemination of information critical to your organization. Such information can be utilized for traffic monitoring, future filtering, billing, or backup and archival purposes.

- Global help-desks: the operative word here is global, since it's one thing to provide a help desk for domestic concerns, but quite another to provide consistent 24x7 help around the globe.

- Tools: messaging, even as it rushes toward standardization, requires tools for migration, tools to support workforce changes, tools for developing workflow and electronic commerce capabilities. These tools should be intuitive and easy-to-use, including Web-based tools for enabling any administrative tasks to be completed quickly and efficiently.

- Process experts: the true value-add of messaging is the process that can be built around it. The best outsource vendors will provide not only the range of tools necessary to fold/embed email into core business processes, but also the expertise to aid organizations in *process design*. Process experts increase productivity dramatically.

- Network operations centers: the most critical component for the rapid deployment of services, expert outsource vendors offer global, networked operation centers. Operations centers are the central nervous system of your messaging network, where the actual message distribution and transactions occur. *An outsource vendor is only as good as its operations centers*. Generally a hub-and-spoke environment, operations centers can be either remote or on your site, depending on your organization's needs.

If you're a multinational organization, you have to be assured that your outsource vendor has operations centers in North America, Europe and the Far East.

Predictable Costs

All organizations, regardless of size, operate under similar constraints: control and reduce expenditures, improve margins and increase revenues. In order to accomplish these basic, bottom-line endeavors, the enterprise must be able to accurately match budget. Estimating and maintaining the costs for an internally managed messaging system can be very difficult. Due to either technological or human error, messaging systems break, and breakage translates into losses and potential budget and cost overruns. Messaging outsourcing, like other power grids, however, offers enterprises totally predictable costs, based on simple per-user and service-level agreement (SLA) rates. Defined pricing for service levels is the core offering among the top-rated outsourcing vendors.

CNI and other industry studies have repeatedly shown that the majority of direct messaging systems costs are in the areas of administration and training. Outsourcing relieves these burdens by providing them at affordable and predictable cost points. Moreover, accurate budgeting is possible because the enterprise can accurately designate its overall messaging system operating expenses, from training to knowing the circuit costs to connect its messaging network, to remote management capabilities (from the outsource vendor's central and/or distributed operations centers). Having this granularity of cost knowledge is indispensable for the enterprise with today's fiscal responsibilities and pressures.

Total Cost of Ownership (TCO)

CNI, a pioneer in TCO studies, has forecast an upsurge in outsourced messaging, because the economies of scale these vendors offer is attractive to many organizations. Their economies come from the traditional focus that market specialization creates. An outsource vendor that specializes in Microsoft Exchange or Lotus Notes can bring to the TCO table person-years of invaluable experience, an experience honed through significant efforts, at a cost savings that is passed on to the more inexperienced enterprise. The specialization of labor in capital markets always follows this path, and now enterprise messaging system operations can benefit.

There are obvious gains in TCO that favor outsourcing standardized products. One area would be the reduction of administrative workload. Industry studies have shown that more than 13 percent of an administrator's overall time is spent on messaging management. TCO can take into account not only the reduction of this time by outsourcing, but can also forecast the opportunity costs that such a reduction permits for the redirection of that administrator's efforts elsewhere in the organization.

CNI data, below, shows comparable TCO that emphasizes outsourcing cost savings, pure and simple.

Minimizing Technology Retraining

We all acknowledge the swift changes in our technology landscape, and organizations' efforts to control costs here are directly related to technology adoption. Outsourcers can

minimize these efforts since they, as your messaging service provider, are responsible for retraining support personnel. Hence, when these support personnel move to new positions and responsibilities, they can take advantage of the outsource vendors' cutting edge understanding of current and future technologies. In order to survive in this very competitive market, outsourcers inherently have a built-in adoption of new skills, processes and technology. They can pass these on to the enterprise at tremendous cost savings.

Management with Control

CNI has shown repeatedly over the last three years that the majority of messaging costs revolve around management and administration. The value of an outsource vendor is only as high as the management capabilities it can provide. These capabilities include centralized and distributed management controls, both on-site and remote, with the flexibility for enterprises to choose the mix that best suits their technology and business requirements. Moreover, high value demands sophisticated operations management centers and expert on-site outsource professionals that guarantee reliability and uptime.

Management with controls also includes the following:

- Contracted, guaranteed and recognized SLAs.

- Guaranteed information delivery and response. Such guarantees can be qualified by the service level agreements offered by the outsourcer – service levels that are committed to and delivered through a global infrastructure. The strongest outsourcers can guarantee service availability (server up) on a 24x7 basis, delivery of messages within two hours or notification of non-delivery within three hours of sending a message.

- Customized billing granularity to direct user or department.

- Statistics and asset tracking.

The Value Proposition

An enterprise messaging system is an information asset that distributes vital information and knowledge within and without its environment. CNI has witnessed an increasing number of organizations that prefer to outsource this system, given their needs to focus on other corporate-critical technologies, and given the existence of dependable and reliable outsource providers. Our recommendation to enterprises when selecting an outsourcer is to look for proven methodologies, rapid deployment of services and management with controls, while considering the entire range of cost issues.

Compaq and Microsoft Exchange

Who should an enterprise consider when it sets out to investigate messaging outsource providers? CNI recommends that they include Compaq Computer Corporation's messaging services (through its recent acquisition of Digital Equipment Corporation) on their list of candidates. CNI believes that Compaq delivers the outsource value proposition as well as any messaging outsourcer.

With its acquisition of DIGITAL, Compaq acquired a company with a long history of outsource services. During the 90's, that company transformed itself from a vendor of its own products to a vendor of multiple companies' products, especially those offered by Microsoft. As of December 1997, 60 percent of then-DIGITAL's revenue ($14 billion) came from its reseller channel.

In fact, Compaq with DIGITAL is the largest value added reseller (VAR) for Microsoft Exchange in the world. DIGITAL committed its own messaging network to Exchange and NT many years ago, and has been providing value-added services for Exchange for over two years. They are Microsoft Exchange specialists, and with Exchange numbers at over 13 million and climbing, *any organization considering the outsourcing of their Microsoft Exchange network should consider Compaq's messaging services unit a top-tier candidate*.

Why do we call Compaq's messaging services unit a top-tier outsourcer, especially for Microsoft Exchange? Between 1997 and 1998, they tripled their Exchange implementation business. They've implemented Exchange with over 250 customers, including Lockheed Martin (120,000 seats), Nortel (110,000 seats), British Telecom (100,000 seats), ENEL (60,000 seats), State of California (60,000 seats), Dow Chemical (36,000 seats), and Kvaerner (26,000 seats). As of year-end 1997, Compaq had 25 percent of all Exchange seats under its contracts.

Furthermore, in their Alliance for Enterprise Computing with Microsoft, Compaq was named a worldwide prime integrator for Windows NT. Compaq has more than 800 mail and messaging specialists worldwide and nearly 2,000 Microsoft Certified Systems Engineers, with a commitment to grow to 3,000 MCSEs within a year. In addition, Compaq has over 150 MS Exchange channel partners to assist in small and medium enterprises. Its coverage for Exchange is very impressive, and its strength in numbers and Exchange history bode well for enterprises seeking to outsource their Exchange networks.

As for the value proposition noted above, Compaq has the ability to provide a proven methodology with rapid deployment of services, given its extensive outsourcing experience and transformation to an overall services vendor. CNI views Compaq delivering well on all aspects of the value proposition, but let's take a detailed look at two of them: Compaq's predictable costs/TCO comparison to industry figures for messaging operations and Compaq's overall management (with control) capabilities.

TCO: "Let's Do the Numbers"

Overview

The purpose of the CNI analysis was to compare the costs associated with in-house operations of a Microsoft Exchange environment versus the costs of outsourcing Exchange operations to Compaq. This analysis was based on primary research conducted by CNI during Summer 1998, as well as costs provided to CNI by Compaq in verified customer quotes.

The CNI Cost/Value Model

The CNI cost/value model is a metric developed and pioneered by CNI. The algorithms that underlie the metric are drawn from three key areas: direct or fixed costs, administrative costs and administrative value, and corporate (end-user) value. Costs are dollar outflows; value is dollar inflows (from/to an organization). CNI's Market Research group has a database of over 4000 North American enterprises. This study is based on primary data collected from a selected subset of these organizations.

Assumptions

For purposes of this analysis, we have used the following assumptions:

	Non-Outsourced	Outsourced
Administrator Assumptions		
Mean administrator/liaison annual salary	$84,000	$84,000
Users per FTE administrator/liaison	519	1 for all users
Percent of time devoted to Exchange	55.1%	-
Person-days of initial training for administrators	7.3	-
Help-Desk Personnel Assumptions		
Mean help-desk personnel annual salary	$55,290	-
Users per help-desk person	445	0
Person-days of initial training for help-desk personnel	3.0	-
Technical Support Personnel Assumptions		
Mean tech-support personnel annual salary	$76,939	-
Users per technical support person	494	0
Person-days of initial training for tech-support personnel	3.0	-

Other Assumptions		
Hours per work year	2,000	2,000
Mean worker annual salary	$50,000	$50,000
Ratio of revenue generation to salary	2.8	2.8

Please note that we have included the cost of a single administrator/liaison for the outsourced environment, regardless of the number of users; this individual would be responsible for the management of the interface with Compaq.

We also use the following pricing assumptions provided by Compaq for their outsourcing services.

Monthly Prices per Mailbox

Mailboxes	Price	Discount
2,000 to 4,999	$14.50	-
5,000 to 9,999	$13.61	6.2%
10,000 to 24,999	$12.54	13.5%
25,000+	$11.17	23.0%

Scenario 1: 5,000 Users

In this scenario, we assumed an Exchange environment of 5,000 users. Based on the assumptions identified above, the total annual administration and management cost of the in-house managed Exchange environment would be $1,845,848, or $369.17 per employee. The outsourced Exchange environment, assuming one administrator/liaison and a monthly price of $13.61 per mailbox per month, would cost $900,600, or $180.12 per employee per year.

In addition to the costs of administration and management, we also factored in the cost of downtime. In this scenario, we found that the in-house managed Exchange environment experiences 1,693 minutes of downtime per year (1.63 downtime incidents per month, each lasting a mean of 86 minutes). Further, we found that during a typical downtime, 38.9 percent of employees are adversely affected by it and, for those users affected by the downtime, productivity is reduced by 26.2 percent. Therefore, the typical user experienced productivity loss of 172 minutes annually (1,693 minutes x 38.9 percent x 26.2 percent): the cost of this downtime was $71.87. In addition, the impact on revenue was assumed to be 2.8 times the fully burdened annual salary, or an additional $201.24. We also factored in administrator involvement in resolving downtime of 5.46 person-hours per downtime incident. The total downtime-related cost of the in-house managed Exchange environment was $273.97 per employee.

In the outsourced environment, we assumed that the percentage of employees affected by downtime, as well as the productivity loss associated with this downtime, was identical. However, we assumed that the outsourced environment provides 99.8 percent uptime or annual downtime of 1,051 minutes annually. Therefore, the total per-employee cost of downtime was $44.63 with an additional revenue loss of $124.95, for a total downtime-related cost per employee is $169.58.

The total costs for an organization of 5,000 employees is summarized below.

Cost	Non-Outsourced	Outsourced	Outsourced Savings
Administration and management	$369.17	$180.12	51.2%
Downtime productivity loss	$71.87	$44.63	37.9%
Downtime revenue loss	$201.24	$124.95	37.9%
Cost to resolve downtime	$0.86	$0	100.0%
TOTALS	**$643.15**	**$349.70**	**45.6%**

Scenario 2: 12,000 Users

In this scenario, we assumed an Exchange environment of 12,000 users. As in the scenario above, the costs were very similar: the per-employee administration and management cost for the in-house managed environment was still $369.17, while the outsourced cost dropped slightly to $157.48 because of the deeper discount for Compaq's outsourced services at this volume. The productivity and revenue costs associated with downtime remained virtually unchanged at this volume level with the resulting costs as shown below.

Cost	Non-Outsourced	Outsourced	Outsourced Savings
Administration and management	$369.17	$157.48	57.3%
Downtime productivity loss	$71.87	$44.63	37.9%
Downtime revenue loss	$201.24	$124.95	37.9%
Cost to resolve downtime	$0.36	$0	100.0%
TOTALS	**$642.64**	**$327.06**	**49.1%**

In summary, to outsource in most cases provides definitive cost advantages approaching 50 percent savings, while giving organizations the predictable costs and uptime they need to secure productivity gains.

Compaq's Total Operations Management Centers

As an information-driven enterprise, consider the physical aspects of your messaging system: a dynamic, global distribution network that links much of your human and technology resources. The pressure to outsource brings you full circle to a momentous decision: to whom can you entrust this dynamic and vital resource?
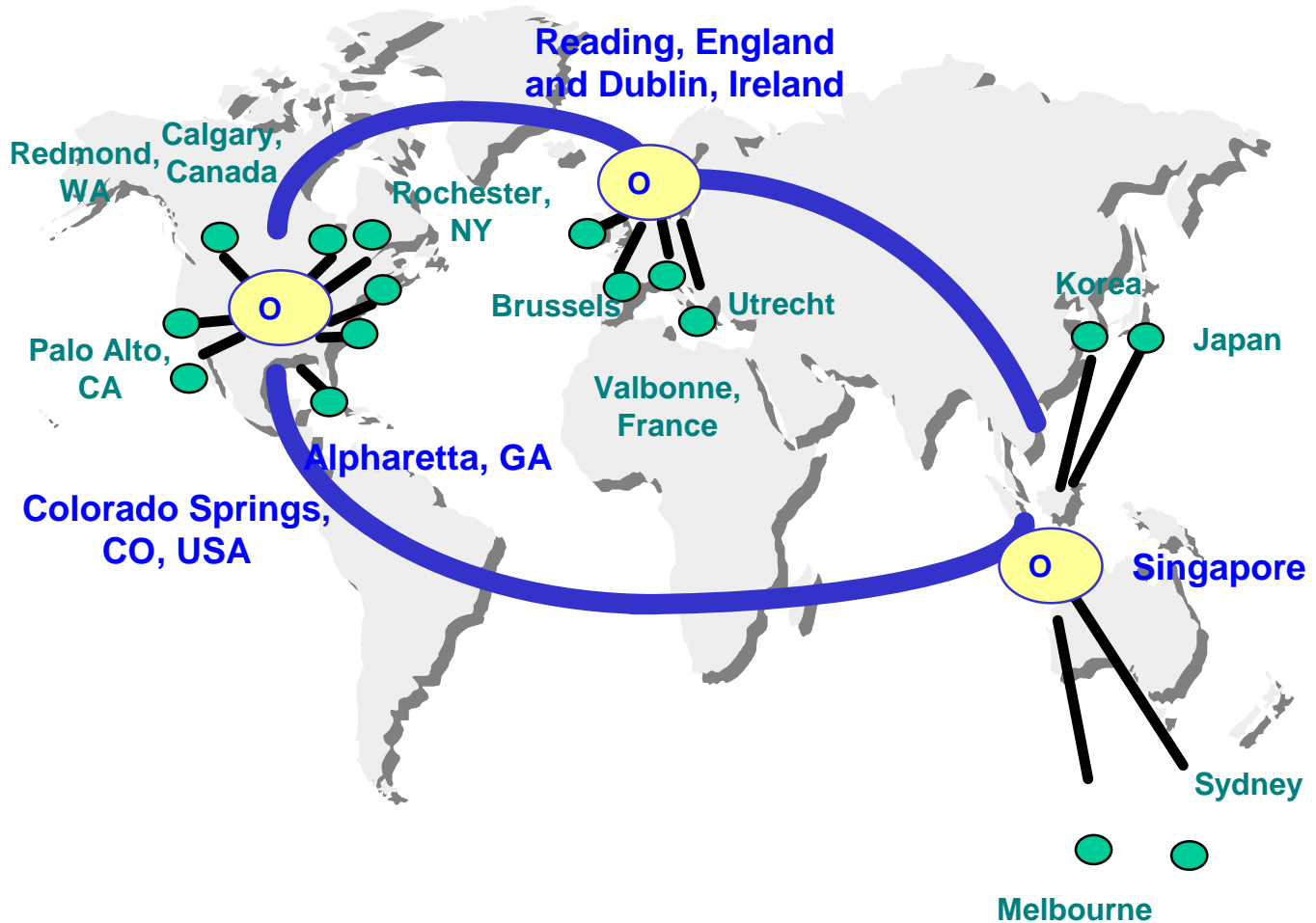
Consider your environment: one that is technologically diverse, one that spans continents, and one that incurs global time zones. You must have a technologically competent outsourcer that can rapidly deliver services anywhere in the world at any time, that has the infrastructure to match and exceed your growing global reach and business practices. You must have the expertise to engineer, implement and manage a complex messaging environment, from the desktop to the data center.

CNI believes that Compaq does this extremely well, and also believes that part of the answer to your selection process comes from the old adage "there's safety in numbers." With their successful implementation of over 3 million Exchange seats, Compaq has developed an extensive network of *Operations Management Centers* (OMC) that emphasizes the Compaq value proposition. These OMCs are designed to support an enterprise's ever-expanding, ever-changing business objectives, to accommodate ever-increasing messaging traffic and transaction capabilities, and to provide best-of-breed enterprise process management.

The Compaq OMC network functions at four distinct, interconnected levels, providing exceptional distribution and balance of services, and guaranteeing an immediacy of access tailored for individual enterprises anywhere in the world, on a 24x7 basis. The four levels are the following:

- Operations Management Centers: these centralized sites are strategically located on three continents, North America (Alpharetta, GA and Colorado Springs), Europe (Dublin and Reading, England), and Asia (Singapore). They provide a rigorous and robust worldwide data network and messaging backbone, and are staffed with messaging experts from all corners of the globe. Each OMC includes a global help-desk operation, class A data center, network operations center and field engineering staff.

- Shared "satellite" delivery center: these regional sites are distributed over four continents, and closely interlinked to the OMCs. They include, in North America: Palo Alto, Redmond (WA), Rochester NY, and Calgary; in Europe: Utrecht, Brussels, and Valbonne (FR); and sites in Korea, Japan and Australia (Melbourne and Sydney).

- Off-site, customer-dedicated "satellite" delivery center: distributed locally throughout the Compaq services network at Compaq offices worldwide.

- On-site, customer-dedicated center: when required, Compaq puts its own personnel on-site to help manage an enterprise's messaging system.

- What does such guaranteed delivery and access look like today? The figure below illustrates Compaq's global reach.

Reading, England and Dublin, Ireland

Calgary, Canada

Redmond, WA

Rochester, NY

Brussels

Utrecht

Korea

Japan

Palo Alto, CA

Valbonne, France

Alpharetta, GA

Colorado Springs, CO, USA

Singapore

Sydney

Melbourne

In Compaq's outsource offering, an enterprise can select their own respective access with any combination of above service components. Such a hierarchy of flexible offerings provides a guaranteed blanket of management capabilities and functions. The OMC topography ensures that regardless of the topography or location of an enterprise, Compaq's presence can be made available however an organization demands it.

CNI believes that Compaq understands the outsource value proposition extremely well, has delivered it, and will continue to deliver this value in the coming months and years.

Compaq Microsoft Exchange Utility Services

Capitalizing on their expertise and leveraging their considerable know-how about Exchange, Compaq has just announced its Microsoft Exchange Utility Services. This comprehensive plan for managed enterprise mail services is comprised of complete, off-the-shelf administrative and end-user support services, as well as other customized features. At its heart, this service provides a subscribed end-user with a Microsoft Exchange mailbox, 40 MB of server storage space and mail client support for MS Outlook 98, Eudora POP3 or the Netscape and Microsoft Web browsers. The pricing alone is compelling, with one fee per user per month.

Microsoft Exchange Utility includes a full Exchange server management strategy that merges NT system and user administration with the messaging system management and monitoring. Installation and configuration are absorbed into the monthly pricing, while the service provides second- and third-level help desk. (Enterprises may select first-level help desk as an option.) Microsoft Exchange Utility provides guaranteed message delivery and support with 99.7 percent availability; non-deviating worldwide SLAs and pricing, plus global delivery through the Compaq OMCs; user administration services, *e.g.*, automated adds, changes, deletes, backups/restores; mobile user support with optional RAS and FAX services; and reporting and billing/charge-back.

The complete Compaq Microsoft Exchange Utility base package is as follows:

- Administrative Support Services:

  - Hardware and software installation and configuration.

  - Easy registration and mail box assignment.

  - 24x7 monitoring and management of the Exchange environment to ensure service availability.

  - Guaranteed delivery of all messages in defined time limits (based on a service level agreement).

  - Creation of global distribution lists.

  - Level 2 help desk support (the Exchange Infrastructure Service).

  - Public folder access.

- End User Services:

  - Email and Web client support.

  - Expert assistance to address user problems.

  - Online user registration.

  - Access to public folders.

Optional features include direct end user support: Level 1 help desk, telephony integration services for Exchange, integration with existing mail systems, additional storage space and access to Compaq's PC utility.

Determining Professionalism: Service Level Agreements

Compaq is backing up the Microsoft Exchange Utility offer with a consistent service/support network of professionals. They have defined both a general service level performance standard and service level agreement for Microsoft Exchange Utility that follow below. These two standards/agreements are extensive, reasonable and compelling for an enterprise to select these outsourcing capabilities.

- General Service Level Agreements Matrix.

The following matrix illustrates a comprehensive approach to service level support for both NT and Exchange administration. CNI notes the high Exchange availability (a minimum of two-tenths of a percent of downtime is attractive), and the guaranteed delivery of all but one percent of an enterprises messages within the hour is high. Additionally, both the NT and Microsoft Exchange Utility administration modifications are reasonable.

Service	Performance Matrix	Performance Standard
Microsoft Exchange Utility (Microsoft Exchange Service) Availability	Available	Equal to or greater than 99.8%
Microsoft Exchange Utility Message Delivery Performance	Available	95% of messages in 15 minutes, 99% of messages in 1 hour
Hardware Failure	Technician On-Site	Within 6 hours
NT and Microsoft Exchange Utility Administration Add Single User Account	Completed Request	Within 1 day
NT and Microsoft Exchange Utility Administration Add <100 User Accounts	Completed Request	Within 1 day
NT and Microsoft Exchange Utility Administration Add >100 User Accounts	Completed Request	Within 2 days
NT and Microsoft Exchange Utility Administration	Completed Request	Within 8 hours or 1 business day

Service	Performance Matrix	Performance Standard
Move Single User Account		
NT and Microsoft Exchange Utility Administration Move <25 User Accounts	Completed Request	Within 24 hours
NT and Microsoft Exchange Utility Administration Move >25 User Accounts	Completed Request	Within 2 days
NT and Microsoft Exchange Utility Administration Modify Existing User Accounts	Completed Request	Within 4 hours
Directory Replication/ Synchronization	Completed	Every 2 hours
Second Level Help Desk	Available	24 hours/7 days/365 days
Third Level Help Desk	Available	24 hours/7 days/365 days
Setup External Directory Replication/ Trusts (i.e. with Partners)	Available	2 days from receipt of information from partner

- Base Level Microsoft Exchange Utility Server.

Looking at the Microsoft Exchange Utility service specifically, Compaq is guaranteeing SLAs that usually exceed what an organization itself can provide. Adding hardware, directory, global address book and public folder management complements a full offering.

Service	Service Level
Microsoft Exchange Utility (Microsoft Exchange) Availability	Greater or equal to 99.8%
Hardware Failure	Tech on-site in 4 hours
Microsoft Exchange Utility Server Management	
• Message Delivery	Within 1 hour
• Microsoft Exchange Utility add < 25 users	Within 4 hours
• Microsoft Exchange Utility add > 25 users	Within 8 hours

• Microsoft Exchange Utility move <25 users	Within 24 hours
• Microsoft Exchange Utility move >25 users	Within 48 hours
• Microsoft Exchange Utility modify existing accounts	Within 4 hours
Global Address Book management	Current within 8 hours
Public Folders Management	Available 99.8%
Directory Replication/Synchronization	Every 24 hours
Second Level Help Desk	24x7x365
Third Level Help Desk	24x7x365
Mailbox Re-creation	1 day
Monitoring	
• Message Delivery	24x7x365
• Network Availability	24x7x365
Reporting	
• Message Delivery	Weekly
• Second Level Help Desk Call Status	Daily
• Escalation	4 hour increments
• Backup	Dependent on server location

Conclusion: Outsourcing and You AND Compaq

When CNI investigates an issue like the external management of a messaging system, we take into account the costs your organization incurs to deliver a messaging system comparable to the SLAs noted above, and the value returned to the enterprise by parlaying resources in other areas. We've noted the advantages that outsourcing has in costs above. But as both cost *and value* experts, we measure time as one dependent variable of value, and this is where we believe that externally managed messaging provides the best bang for your buck. When you consider the reduced effort on your own IS/IT staff, their opportunity to apply their resources elsewhere in the organization, and their ability to focus on the real technology "fires" in your environment, outsourcing becomes very compelling. Add to this the obvious trends toward Internet-based messaging and the ever-increasing messaging market share taken by vendors like Microsoft, and the reasoned case for permitting a technology partner to externally manage your messaging network becomes apparent, if not necessary. Compaq can be such a partner for your enterprise.