

Outsourcing Your Corporate E-mail



Table of Contents

PART I: THE COST OF RUNNING AN IN-HOUSE E-MAIL SYSTEM	3
The Nature of Outsourcing	3
Major Cost Elements:	3
1. Direct Costs	3
a) Messaging Hardware	3
b) Messaging Software Licenses	4
c) Migration & Major Upgrades	5
d) Operations	5
2. Indirect Costs	5
a) Share of Computing Platform	6
b) Productivity Costs	6
c) Depreciation of Capital Assets	7
PART II: DECIDING WHETHER TO OUTSOURCE	7
General Outlook	7
1. Outsourcing Considerations:	7
a) Reasons to Outsource	7
b) Potential Drawbacks to Outsourcing	8
2. Criteria for Evaluating Outsourcers	9
a) Competence	9
b) Preserved & Improved Functionality	9
c) Service Level Agreements	9
d) Costs	9
e) Help Desk Support	10
f) New Applications	10
g) Mobile Users	10
h) Security	10
i) Archiving & Backup	10
PART III: MAKING THE DECISION	11
Outsourcing Your Corporate E-mail: White Paper SaskTel	2

Part I: The cost of running an in-house e-mail system

The Nature of Outsourcing

Outsourcing is where a third-party service provider hosts a family of integrated applications and infrastructure services. E-mail outsourcing is where an organization turns some or all of the management, operation, and maintenance of its e-mail system over to a third party.

For most organizations, the main motivations to outsource an e-mail system are to free up overloaded Information Technology (IT) staff to work on other projects and to maximize the reliability of the system. Saving money is not usually the primary motivation. Nevertheless, it is important to understand the costs of running an in-house system compared to the costs of outsourcing.

Understanding the major cost elements helps determine where the greatest cost savings can be made.

Major Cost Elements:

1. Direct Costs

- Messaging hardware, such as servers that store e-mail, directory, and calendar information; and Personal Computers (PCs) that run gateway software, connecting different types of e-mail systems.
- Messaging software licenses.
- Upgrades or migration costs. Outsourcing is often considered at the time staff need to change e-mail systems (for example, moving from cc: Mail to Exchange or Notes/ Domino), or undergoing a major upgrade (as with Exchange 5.5 to Exchange 2000).
- Technical support staff.

In the case of an outsourced e-mail system, direct costs include:

- The costs of migration to the outsourced system
- The outsourcer's monthly subscription charges
- The costs of staff that manage the outsourcing relationship

a) Messaging Hardware

The major factors to consider here are messaging servers. Typically these provide a message store, a group scheduling database, message transfer services, and directory services. Reliability is important, and these servers are generally well endowed with hard disk and Random Access Memory (RAM). Departmental PCs acting as servers commonly cost in the \$15,000 to \$20,000 range. Unix servers,

which are far more reliable and scalable, can cost up to \$200,000 for very-high-end units.

Additional machines may be needed to run gateways (software that connects two different e-mail systems), directory servers, calendar servers, or Internet mail.

Hardware to run a message switch may also be needed. A message switch provides a central, organized way of connecting three or more different e-mail systems. The required hardware can sometimes be very expensive, such as when a mainframe is required as platform; Unix machines and PCs are also commonly used. Spare server hardware may also be needed. Supplies are also needed, in particular tapes for backups.

Most organizations take out maintenance contracts on their hardware. The annual fees for these contracts are typically about 18% of the purchase cost of the hardware.

b) Messaging Software Licenses

With leading messaging software (such as Exchange, Notes/ Domino, GroupWise, and Netscape Messenger), you usually pay one fee for server software and then pay separately for client access licenses. In another approach, adopted by GroupWise, the server software is free and you pay just for client access. In any case, the cost of the server software component is usually modest. Volume discounts are also available. The result is that most organizations will pay between \$30 and \$80 per mailbox for the basic messaging software, including the cost of server software.

Other types of e-mail-specific software that should be included are:

- Gateways, used to connect different e-mail systems
- Message switches, used to connect different e-mail systems
- Special-purpose security software, such as e-mail encryption tools
- User training software
- Messaging management tools, concerned with such factors as monitoring the system, generating alerts, and reporting on system use

Maintenance contracts are another cost. Normally these include technical support and upgrades.

Since viruses mainly arrive via e-mail, it's also reasonable to include virus control software and services in the cost of an e-mail system.

Clearly, when you outsource, most of these costs are shouldered by the service provider. However, you may still need to purchase anti-virus software and updates, since user workstations will still need protection. The costs will be somewhat reduced, because you won't need special anti-virus software for messaging servers.

c) Migration & Major Upgrades

The need for a major system upgrade or replacement, such as going from Notes/Domino R4 to R5 or from Exchange 5.5 to Exchange 2000, is often the catalyst for considering outsourcing. The same is true when a migration to an entirely new system is needed, as when an organization migrates from cc: Mail to Exchange or Notes/Domino.

Substantial costs are incurred, especially those of system deployment and user training. Migrations are a specialized skill, often requiring specialized conversion tools, so it usually makes sense to bring in outside consultants to assist with the migration. Their charges frequently cost \$100 to \$300 per mailbox.

Thus the cost of an in-house system may include migration or upgrade costs. When outsourcing, migration costs will always need to be considered. Outsourcers should be able to handle migrations better and at less cost. Outsourcers conduct them frequently, have limited deployment costs, should have good migration tools, and generally experience great pressure from clients to conduct migrations as quickly and inexpensively as possible.

d) Operations

This is overwhelmingly the cost of technical support staff. The main types of staffers required are:

- Local Area Network (LAN) administrators - They often provide the first line of technical support for users; as much as 10% of these administrators' time can be spent on e-mail-related issues.
- Help desk staff - They also often provide the first line of support.
- Directory administrators - They are clerical staff who keep track of and record information about user moves and changes.
- In-house e-mail system gurus - They have the greatest technical knowledge of the e-mail software you use; they are likely to provide Tier 2 support and act as liaison with your messaging software vendors.
- Message switch and gateway support staff.
- Staff developing messaging-related applications - These may be, for example, tools for workflows or custom messaging management.
- External consultants, supplementing your own messaging support staff.

To calculate the cost of in-house e-mail, calculate how many full time equivalent staff you employ and their average annual cost.

2. Indirect Costs

These are also tangible and are budgeted for, but typically they are paid from non-messaging budgets. The main costs relate to the computing platform upon which e-mail runs: workstation PCs, the network that connects everything, Wide-Area Networks (WAN) links, shared printers, shared file servers and their operating systems, and so on. The costs of the support staff that run the basic computing infrastructure must also be considered. Since this platform supports a variety of applications, a proportion ought to be allocated to e-mail. These costs are incurred whether or not e-mail is outsourced: users still need their workstations, and those workstations still need printers and a connecting network.

a) Share of Computing Platform

Computer applications need a platform. Today, this means such elements as user PCs and their operating systems, the connecting network, an Internet link, servers and their operating systems, printers, and WAN links. In addition to the cost of these elements, the cost of staff required to implement and maintain the computing platform should be considered. Disaster recovery costs may also need to be considered.

The platform is required whether or not you outsource. Most organizations will experience average annual platform costs of between \$3,000 and \$6,000 per workstation. A proportion of this should be allocated to e-mail. Several reasonable approaches are:

- On average, the proportion of time users spend on e-mail, compared to the total amount of time they spend using their workstations.
- The proportion of e-mail traffic on the corporate network, compared to the total amount of network traffic.
- The cost (or number) of e-mail technical support staff compared to the cost (or number) of all IT support staff.

b) Productivity Costs

- Personal e-mail - Users spend time processing personal messages.
- Peer support time - Many users spend a certain amount of time helping colleagues with questions about how to use e-mail.
- Informal learning - Users spend time teaching themselves and experimenting with system features.
- Downtime due to system outages - When the e-mail system is down, some users will simply have to stop work until the system is back up. Others will be able to refocus their work, thus wasting less time. In either case, substantial time is wasted.
- Downtime caused by e-mail-borne viruses - New viruses can easily wreak havoc and hinder use of PCs until the virus is eliminated.
- Spam - Most users receive several unsolicited commercial messages daily; and the quantity is increasing.

Both in-house and outsourced e-mail systems incur these productivity costs. However, many organizations will experience less downtime, increased reliability and better virus and spam control with outsourced systems; in such cases the amount of time lost by users is substantially reduced.

c) Depreciation of Capital Assets

Certain costs are usually amortized, or spread over, a period of several years. This is the case, for example, with messaging servers and the costs of migrating to an outsourcer.

Part II: Deciding Whether to Outsource

With the frontiers of innovation moving so rapidly, no one company alone can stay ahead of the rest of the world. Dominant firms have dipped into the knowledge bases of their suppliers to innovate, while entire industries from electronics to automobiles have reorganized in this way. Innovation is particularly rapid in messaging and communications-based collaborative technologies. Like the need for constant innovation, these functions have become an integral aspect of the operations of knowledge-based firms; many are turning to outsourcers for help in keeping up.

Outsourcers typically charge for services on a per-user-per-month basis. You pick and choose from a menu. Discounts may apply depending on the number of services chosen. For corporate outsourcing, the costs are commonly in the range of \$10 to \$30 per mailbox per month. Whether or not Tier 1 help desk is included is usually a major factor. Some outsourcing services charge as little as \$1 to \$2 per month for webmail.

General Outlook

Most businesses depend upon e-mail. Organizations have traditionally been reluctant to outsource their areas of core competence, and rightly so: these areas provide their distinctive advantages over competitors. Although messaging is increasingly entwined in crucial business processes, it is not usually an area of expertise that differentiates one business from another. It is ideal for outsourcing.

1. Outsourcing Considerations

a) Reasons to Outsource

- **Resource Focus** - Handing off routine messaging functions permits limited IT staff to focus on core business problems.

- **Greater Reliability** - Improved reliability in uptime of e-mail servers, redundancy, and quality of Internet connections leads to improved end-user satisfaction.
- **Cost Savings** - At rates ranging from \$1 to \$30 per outsourced mailbox per month, companies can save by outsourcing as much as 90% of their current costs of internally supported e-mail.
- **Up-to-Date Content Filtering** - An outsourcer should be able to do a substantially better job of controlling viruses, suppressing Spam, and other message content management.
- **Access to Expertise** - Outsourcers offer a way to tap into highly skilled messaging specialists.
- **Predictable Costs** - Messaging obtained through an Outsourcer provides a predictable cost structure to help accurately determine budgets.
- **Technical Superiority** - Outsourced solutions tend to include automatic hardware and software upgrades. In addition, outsourcer staff is more likely to stay current with the latest messaging technology.
- **Reduced Administration Efforts** - The outsourcer may have better tools than clients, helping it provide support more efficiently.
- **Superior Scalability and Flexibility** - Outsourcing offers universal access to e-mail and makes it easier to quickly add new mailboxes across dispersed locations or to handle spikes in message traffic.
- **Access to New Services** - Outsourced messaging specialists are more likely to offer wireless services and advanced security options than most clients.

b) Potential Drawbacks to Outsourcing

- **Reduction of Control** - Organizations that operate their own messaging system have the final say on when things get done. With an outsourced system, the customer's priorities may compete with those of the outsourcer and those of other customers. This issue may be alleviated if an organization goes with a messaging provider that is flexible in its response and resolution time agreements.
- **Risk** - Outsourcing in some cases entails migration costs. If the service provider fails to perform adequately or goes out of business, it will be necessary to migrate to another outsourcer or bring messaging back in-house. In either case, user service would be disrupted and there would be costs and a substantial sudden demand on a company's IT resources.

An organization should go with a messaging provider that is experienced and financially stable.

- **Security** - Whenever corporate data moves across networks and resides on servers outside the corporation, customers need assurances that the data and any related account information or transactions will remain private and secure in the outsourced environment. A credible messaging provider should have a confidentiality/privacy policy.

2. Criteria for Evaluating Outsourcers

a) Competence

The prospective service provider should demonstrate its operational competence. Ideally, it should have experience and good references from customers using the same messaging system as the prospective client. Buyers should ask about the provider's procedures for managing the overall operation with clearly documented processes for installations, backups, restorations, and new user or service provisioning.

b) Preserved & Improved Functionality

An outsourcer should preserve the functionality of a client's internal messaging system. For example, users should not have to learn a new interface and directory synchronization processes with internal corporate systems should still operate. The new service should also bring with it new, useful features, such as improved virus and spam control.

c) Service Level Agreements

SLAs for administration and support are one of the most important aspects of the outsourcing relationship. SLAs should cover such things as, system-availability with 99% up time. Other things SLAs should address are items like time-to-repair, system-wide performance, directory propagation, disaster recovery, and administration details of, for instance, time to add new sets of users.

d) Costs

Service providers typically offer e-mail on a per mailbox/per month basis. When issuing requests for proposals, prospective customers should have the various respondents detail not only the features included in their base price, but also charges for services above this base for such items as additional storage per user, secure socket layer (SSL) connections for encrypted sessions, virus or spam control, and disaster recovery.

Prospective customers should also determine the bandwidth costs for connecting to the provider: it is usually the customer's responsibility to provide the wide-area

network (WAN) connectivity. Failure to ensure sufficient WAN throughput can degrade performance and discourage end users through no fault of the provider.

e) Help Desk Support

Potential customers should note the terms of the help-desk support in the SLA - the hours of support (often 24x7), the allowable number of calls, and who may be serviced - whether Tier-1 support for end users, Tier-2 for administrators doing user adds or removals, or Tier-3 for assistance to the corporate IT department. Many SLAs may just include one tier in their standard bundled service but offer the option of adding other tiers for additional fees.

f) New Applications

Beyond the standard offerings, customers should assess the provider's ability to support enhanced and future functionality such as instant messaging and presence detection, real-time collaboration, groupware, or other messaging-based applications that may be needed in the future.

g) Mobile Users

Although more complex, a prospective buyer may want to examine the SLA separately for its remote-access coverage and support to mobile workers who have special needs. The provider should have appropriate connectivity through its network partners and sufficient infrastructure of remote-access servers, dial-up modem banks, and virtual-private-network or dedicated connections to ensure the service level that is required.

h) Security

While SSL is the most commonly used security protocol, some companies require even more security. These organizations, in particular, should check whether their data will be stored on the same hosted server being used for other customer companies, since such shared arrangements increase the risk of unauthorized disclosure. The SLA should state the parameters for such security arrangements and the performance expectations for any filtering features for virus control and content blocking.

i) Archiving & Backup

Storage requirements for enterprise messaging are rapidly expanding and are likely to continue to do so in the future as unified messages, video-mail, and larger multimedia message attachments clog mail inboxes. With ever more communication flowing over IP networks in digital form, many companies now need sophisticated message archiving and back-up techniques. The outsourcing provider's hosting infrastructure should have such robust capabilities in case of server outages or corporate audits. The SLA should specify how long it will take to recover the customer's data when needed.

Part III: Making the Decision

Organizations are not always cognizant of the true total costs they incur to deliver e-mail to their employees, when evaluating whether to make the change from in-house to outsourcing all costs involved should be considered to calculate the potential savings to be leveraged.

Assessing the advantages and disadvantages discussed in the prior section, there are both quantifiable and qualitative factors for determining whether to outsource corporate messaging. Outsourcing makes sense for a variety of situations - whether a company is entering the realm of Internet e-mail or has geographically dispersed and mobile users. It makes the most sense for businesses that have a strained IT staff, can't find or afford an e-mail technical resource or make costly hardware and software investments in the latest technology. Larger organizations that struggle to provide consistent and reliable e-mail, directory and multi-protocol support, are also good candidates for outsourcing.

For most companies, messaging is not their core-competency, but is still critical for day-to-day operations. Outsourcing messaging applications offers the use of the latest technologies without the costs of buying an e-mail server, hardware and software. It allows businesses to free up resources and concentrate on their actual business.

NOTE: This report is based upon information believed to be accurate and reliable. Neither SaskTel nor its agents make any warranty, express or implied, as to the accuracy of the information or the opinions expressed. We shall have no liability for any errors of fact or judgment or for any damages resulting from reliance upon this information. Trademarked names appear throughout this report. Rather than list the names and entities that own the trademarks or insert a trademark symbol with each mention of the trademarked name, SaskTel is using the names only for editorial purposes and to the benefit of the trademark owner with no intention of infringing upon that trademark.