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Should Your Email Live In The Cloud? A Comparative Cost Analysis

by Ted Schadler

for Information & Knowledge Management Professionals

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Should Your Email Live In The Cloud?
A Comparative Cost Analysis
Cloud-Based Email Is Often Cheaper Than On-Premise Email

This is the first document in the "Email In The Cloud" series.

by Ted Schadler
with Matthew Brown, Christopher Voce, and Sara Burnes

EXECUTIVE SUMMARY

When Google launched Google Apps Premier Edition for $50 per user per year, it raised the question, "How much should we be paying for email?" But it's not just this eye-popping price that should trigger the question about where you should run your email. Instead, every time you have to upgrade, switch, or add users to your email system, you should examine your fully loaded costs and consider the delivery alternatives. This report presents a spreadsheet cost model to help you calculate your fully loaded on-premise email costs and compare it against cloud-based alternatives. Bottom line: Cloud-based email makes sense for companies or divisions as large as 15,000 users. And every company can benefit from occasional users or email filtering to a cloud-based provider.

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NOTES & RESOURCES

Forrester surveyed 53 user companies, interviewed 12 of those companies, and interviewed 22 vendors, including Accenture, Appirio, AT&T, Azaleos, Capgemini, Cisco Systems, Dell, EDS, Google, HP, IBM, Intermedia. net, LiveOffice, MessageLabs, Microland, Microsoft, Novell, Proofpoint, Rackspace, Symantec, Synchronica, and USA.NET.

Related Research Documents

"Should Your Email Live In The Cloud? An Infrastructure And Operations Analysis"
January 5, 2009

"Talking To Your CFO About Cloud Computing"
October 29, 2008

"Forrester's SaaS Maturity Model"
August 14, 2008

"Get Ready For Collaboration In The Cloud"
March 18, 2008

EMAIL COSTS TRIGGER THE CLOUD QUEST

Forrester recently surveyed 53 IT professionals at North American and European enterprises to find out where they run their email, calendar, contact, and task list services (what Forrester refers to as messaging or email services). We spoke directly with IT professionals at 12 of those firms and with executives at 21 vendors. From that foundation of primary research, we analyze the costs of moving email to a cloud-based service provider in this report and the barriers and workloads in a companion report, "Should Your Email Live In The Cloud? An Infrastructure And Operations Analysis."[1]

Of the 53 firms Forrester surveyed, 36 are considering or have considered a change in their email service delivery. Cost is the trigger for 15 of these enterprises, and a further 13 are sparked by a transition — a consolidation, vendor switch, or version upgrade (see Figure 1-1). In the words of some of the IT professionals we interviewed:

> "Three years from now when my license comes due, I'll strongly evaluate hosted email options. In the meantime, driving down to a consolidated environment is huge. If every group has its own email server, it's a nightmare." (Manufacturing company)

> "We understand that IT isn't a core competency for us; it's a support mechanism. Do we need to spend time and resources to support email? We're looking at ways to cut costs. Outsourcing email might be something we can do." (Manufacturing company)

When Forrester asked about which service delivery architecture these 36 firms are considering, seven said that they plan to outsource email in its entirety to a cloud-based provider, and a majority (20) of respondents said they plan to use a hybrid model, keeping their mailbox servers in the corporate data center (on-premise) and running others like inbound email spam and virus filtering as a cloud-based service (see Figure 1-2). In their own words:

> "We moved message filtering to a hosted service because it's technically difficult and resource-intensive. The hosted service is head and shoulders above what we are able to produce ourselves from both a functional and cost perspective. But the true value has been limiting the volume of emails we've had to process." (Financial services company)

> "Issues with spam pointed out that we're really distracted in the space. We did a comparison and decided it was more cost effective for us to go hosted. So we have outsourced SMTP, and antispam and antivirus and are in a hybrid environment today. It was an easy way to test the waters and save some money." (Telecommunications company)

Figure 1 Costs And Transitions Trigger Most Cloud-Based Email Investigations

1-1   **"What is triggering your evaluation or change?"**
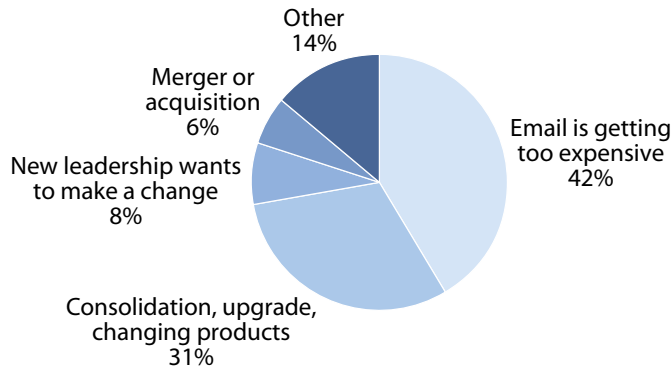
Base: 36 IT professionals responsible for providing email at North American and European businesses
that have previously or are currently evaluating alternative options for managing and providing email
(percentages may not total 100 because of rounding)

1-2   **"What delivery model do you think you will use?"**
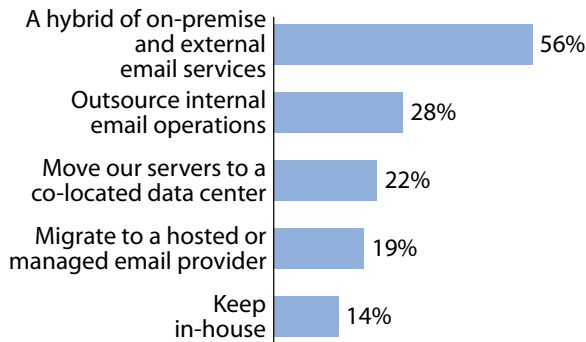
Base: 36 IT professionals responsible for providing email at North American and European businesses that are have previously or are currently evaluating alternative options for managing and providing email (multiple responses accepted)

1-3   **"How many mailboxes do you run per server?"**
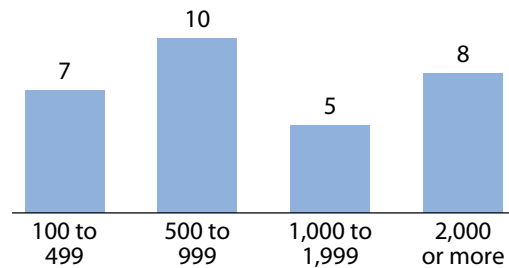
Base: 30 IT professionals responsible for providing email at North American and European businesses

Source: Q3 2008 North America and Europe Email Architecture Online Survey

46302   Source: Forrester Research, Inc.

Many Firms Underestimate Email's Full Cost

Forrester also asked about how many servers and mailboxes our respondents are supporting today. The responses reflect the range of firms that we surveyed, and when we calculated the number of mailboxes per server, the results were not surprising – they were all over the map (see Figure 1-3).

When Forrester asked the firms what they thought their email cost them, we were surprised by the lowball estimates and the lack of consistency. These execs think that email costs them anywhere between $2 and $11 per user per month, with the majority guessing $10. When we spoke with these executives, their reasons were many: "Our system is fully depreciated," "Hardware and support are in someone else's budget," "We get email for free in our enterprise client license."

But even a rough calculation shows that the monthly cost for email hardware and software alone is more than that. And when you add in the costs of staff, maintenance, storage, archiving, mobile email, and financing, it can be four times higher. So while the cost to an individual budget holder might look low, the fully loaded cost of email is surprisingly high.

WHY SHOULD YOU CONSIDER CLOUD-BASED EMAIL?

Before we get to the detailed cost analysis of on-premise and the cloud-based email alternatives, we must first explain the different email architectures and the benefits of a cloud-based service.[2] You can run your email services in any one of four service architectures (see Figure 2):

1. **On-premise email: All email services are in the corporate data center.** Most large and midsized organizations run their own email systems, including mail servers, gateways, client access servers, internal routing servers, public folders, email filtering, mailbox storage, and archiving where necessary. Microsoft and IBM are the dominant suppliers today, though Novell has a long history and strong presence in smaller and midsized companies, and Sun, Oracle, and various others are present. Many firms run older versions and email systems from multiple suppliers.

2. **Hosted email: All email services are in a hosted or cloud-based email service provider.** Two things define cloud-based email: Someone else runs it, and it runs in someone else's data center. This category thus includes some traditional outsourcers, hosted Microsoft Exchange providers like Intermedia.net, Rackspace, and AT&T Hosting & Application Services, and next-generation multitenant providers like Microsoft itself, IBM, and Google. While cloud-based email has historically appealed to very small businesses, the costs and hassles of on-premise email and the rising capabilities of these providers means that their sweet spot is growing to customers with 10,000 or even 15,000 mailboxes.

3. **Hosted support services (hybrid): Some email services run in the cloud.** In this case, you keep mailboxes on-premise while moving email filtering, archiving, or perhaps continuity and management to a cloud-based provider. For example, Azaleos handles Microsoft Exchange

monitoring remotely, Yahoo Zimbra and Iron Mountain offer cloud-based message archiving, and Google Postini and Symantec MessageLabs offer cloud-based email filtering services.

4. **Split-domain email (hybrid): Some users run on-premise, some run in the cloud.** In this situation, you can keep your mobile executives and information workers in an on-premise email system and host your occasional users at a cloud-based provider. In this hybrid situation, every employee has the same email domain (the same ".com" address, for example) and an email router splits the domain. Any cloud-based provider can support this architecture.

Figure 2 You Can Run Email Services On-Premise Or In The Cloud

Architecture	Description	Benefits	Challenges
On-premise email	All email services (mailboxes, filtering, etc.) run on company-owned servers.	• Traditional, hence comfortable • Easier integration with other applications and resources	• Expensive to maintain • Consumes IT staff time and resources
Hosted email	All email services are delivered by a hosted mailbox service provider.	• Pay-as-you-go financing model • Always-current software and protection • Operated by someone else	• Integration with directory and business applications • Exposure to business failure by service provider
Hosted ancillary services (hybrid)	Some ancillary services like filtering or archiving are delivered by a cloud-based provider.	• Offload maintenance of specialty services • Often less expensive • Keeps core email on-premise	• Culture shift to trust provider • Potential of conflict in implementing archiving and eDiscovery processes
Split-domain email (hybrid)	Some employees use the on-premise email and some use a hosted mailbox service.	• Move occasional users or new users to a hosted service • Easier to provision new users or acquired companies	• Integration with directory and other business applications • Different experiences for workers using on-premise and hosted email

46302   Source: Forrester Research, Inc.

The Benefits Of Hosted Delivery Go Beyond Cost

As our model will demonstrate, cloud-based email services can be cheaper than running your email on-premise. But shifting email to a cloud-based provider also allows you to:

- **Rapidly provision new users.** With providers like Google onboarding 100,000 users a week, it's clear that a cloud-based email provider can help you provision a new subsidiary or perhaps your summer interns in hours or days, instead of weeks or months. For example, universities like Arizona State University, Bryant University, and Clemson University are using cloud-based email providers like Microsoft and Google to provision their alumni or incoming freshmen.

- **Allocate valuable IT professionals to more business-centric projects.** The opportunity cost of running email on-premise is that your staff must spend time on email support, rather than revenue-generating projects. How much more valuable might that email administrator be if she were available to help roll out a cross-sell application in the call center or to improve data quality on a business metric like churn risk or seasonal demand forecast?

- **Always run the latest software and configurations without upgrade hassles.** As any IT professional knows, keeping client and server software upgraded and safe is a headache nonpareil, while doing the job well goes unnoticed. A cloud-based provider like Symantec MessageLabs or a hybrid provider like Proofpoint takes on the burden of keeping your message filtering software and configurations always up to date, so new viruses don't sneak through.

- **Shift the financial burden from upfront capital expense to ongoing operating expense.** For a business executive, the biggest benefit of cloud-based email is that you no longer carry the debt liability and the hardware and software assets on the balance sheet. The financing benefit of paying as you go rather than in a big upfront investment will appeal to any budget holder and certainly to the CFO, particularly in these capital-constrained times.[3]

HOW TO EVALUATE YOUR FULLY LOADED EMAIL COSTS

To give information and knowledge management professionals the tools to do a cost comparison between their on-premise email and the hosted or cloud-based alternatives, Forrester built a comprehensive spreadsheet cost model. You can use this spreadsheet to calculate your own fully loaded costs. This model comes to life as you take three steps to calculate what you should be spending:

- **Step one: Segment your workforce to determine each group's email needs.** Not everyone needs or wants the same things in a PC. Why should we assume everyone on staff needs the same email tool kit? An accurate cost analysis begins with a clear understanding of your workforce and what it needs.

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- **Step two: Calculate your fully loaded email costs.** To calculate the cost of email, it's not enough to look just at the software licensing or staffing costs. A fully loaded cost analysis must factor in every cost component — even if it's a bundled license or lives in someone else's budget.

- **Step three: Compare on-premise email against cloud-based alternatives.** With a fully loaded cost in hand, you can compare on-premise email against cloud-based alternatives, including traditional outsourcers, Microsoft Exchange hosters, and new entrants like Google, IBM, and Microsoft.

Step One: Segment Your Workforce To Determine Its Email Needs

Most of the firms we interviewed offer all employees the same set of email services: a dedicated email client, the same mailbox size, and the same storage and archiving policies. The only difference is who gets a BlackBerry device and who doesn't. To analyze the costs of providing email in a way that reveals where costs can be controlled, it's important to segment your employees based on what they actually need. We have created a simple segmentation for a 25,000 person company based on each employee's need for email and calendaring services (see Figure 3):

- **Mobile executives need big mailboxes and mobile messaging.** Mobile executives — employees who spend most of their time away from their desks — typically need extra messaging services, particularly BlackBerry devices or other smartphones. This group is also the most likely to keep big document attachments lying around in their inboxes, so plan on 2 gigabyte mailboxes.

- **Information workers typically need a dedicated email client but smaller mailboxes.** Many employees with PCs spend an hour or more in their email client every day, so they expect a Notes or an Outlook email and calendaring client. This group might be trained to keep their inboxes purged of large attachments, so a 1 gigabyte mailbox could suffice.

- **Occasional users don't need big mailboxes or dedicated email clients.** This third group, which includes people who don't sit in front of a PC all day or who work part-time or as interns, is either overprovisioned with features they don't need — or left without a business email address at all. But this group is very likely to have email at home — and 70% of those online are using Web mail clients already.[4] Support them with a Web mail client and small mailbox.

Figure 3 Segment Employees Based On Their Email Needs

Segment	Mobile executives	Information workers	Occasional users
Percentage of workforce (example)	10%	70%	20%
Mailbox size	2 gigabytes	1 gigabyte	250 megabytes
Need email client software?	Yes	Yes	No
Archive mailbox?	Yes	Yes	Yes
Need mobile email?	Yes	No	No

46302   Source: Forrester Research, Inc.

Step Two: Calculate Your Fully Loaded On-Premise Email Costs

It's hard to figure out what email actually costs. We know because it took us months to track down all the costs. Even breaking out the email client software costs is difficult, particularly in an era of bundled pricing and maintenance costs for desktop licenses. And when you throw in complex server licenses, hardware managed by someone else far away, ever-accumulating storage, support services provided by other IT groups, and financial costs like deprecation and the cost of capital, it gets downright ugly. Our email cost model includes all of these costs and more (see Figure 4 and see Figure 5).[5]

- **Software costs include maintenance and support.** To calculate the client and server email software costs, you have to include annual support costs and the cost of installing and maintaining the systems. And to calculate the cost of the email license in a bundled product, you have to estimate what each piece of functionality is worth to the firm. For example, you must assign a cost of the Outlook client software if you are a Microsoft client. In our model, the fully loaded software costs are 20% of the total cost of serving a mobile executive.

- **Storage and archiving costs accumulate over time, as attachments pile up.** Email attachments are the biggest storage cost for email, and that cost is growing rapidly as attachments soar in size and accumulate forever. And archiving, continuity, eDiscovery, and regulatory reporting add significant cost to email. In our model, the fully loaded storage and archiving costs are 31% of the total cost of serving a mobile executive.

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- **Staffing costs include the administration of every piece of the solution.** Each cost component — hardware, software, storage, and so on — has staffing costs associated with it. We show these details in the spreadsheet model itself, but here we aggregate them into a single staffing cost. In our model, the fully loaded staffing costs are 14% of the total cost of serving a mobile executive.

- **Hardware costs include operating systems, power, and data center costs.** The purchase and installation costs depreciated over three years are just the start of a fully loaded server cost. To calculate the actual cost, you must add in these other factors. Power alone is much more expensive than the kilowatt hours; it also includes the cost of power backup, cooling costs, and power redundancy. In our model, the fully loaded hardware costs are 2% of the total cost of serving a mobile executive.

- **Financing costs are calculated here as the cost of borrowing.** When Wall Street calculates what your share price should be, they use a "weighted average cost of capital" to determine how expensive your assets really are. But instead of this higher rate (often 12% or 15%), we use the much lower financing cost of 7% in this model to calculate the financing costs of hardware, software, and storage. In our model, we bundle financing into the individual line items for hardware, software, and storage. But if were to break it out, the fully loaded financing costs are 3% of the total cost of serving a mobile executive.

Figure 4 On-Premise Email Includes Hardware, Staffing, And Financing Costs

Category	Cost factors
Hardware	Servers, operating system, data center costs, power
Server software	Mail server software, client licenses, maintenance
Client software	Client-installed software, maintenance
Storage	Storage, redundancy, power
Message filtering	Installed filtering hardware or filtering service
Message archiving	Archiving monthly costs
Mobile messaging	Mail delivery and administration
Staffing	Administration for hardware, software, storage, and mobile
Financing	Cost of financing servers, storage, and software

46302   Source: Forrester Research, Inc.

Figure 5 Comparing The On-Premise Costs For Different Worker Segment
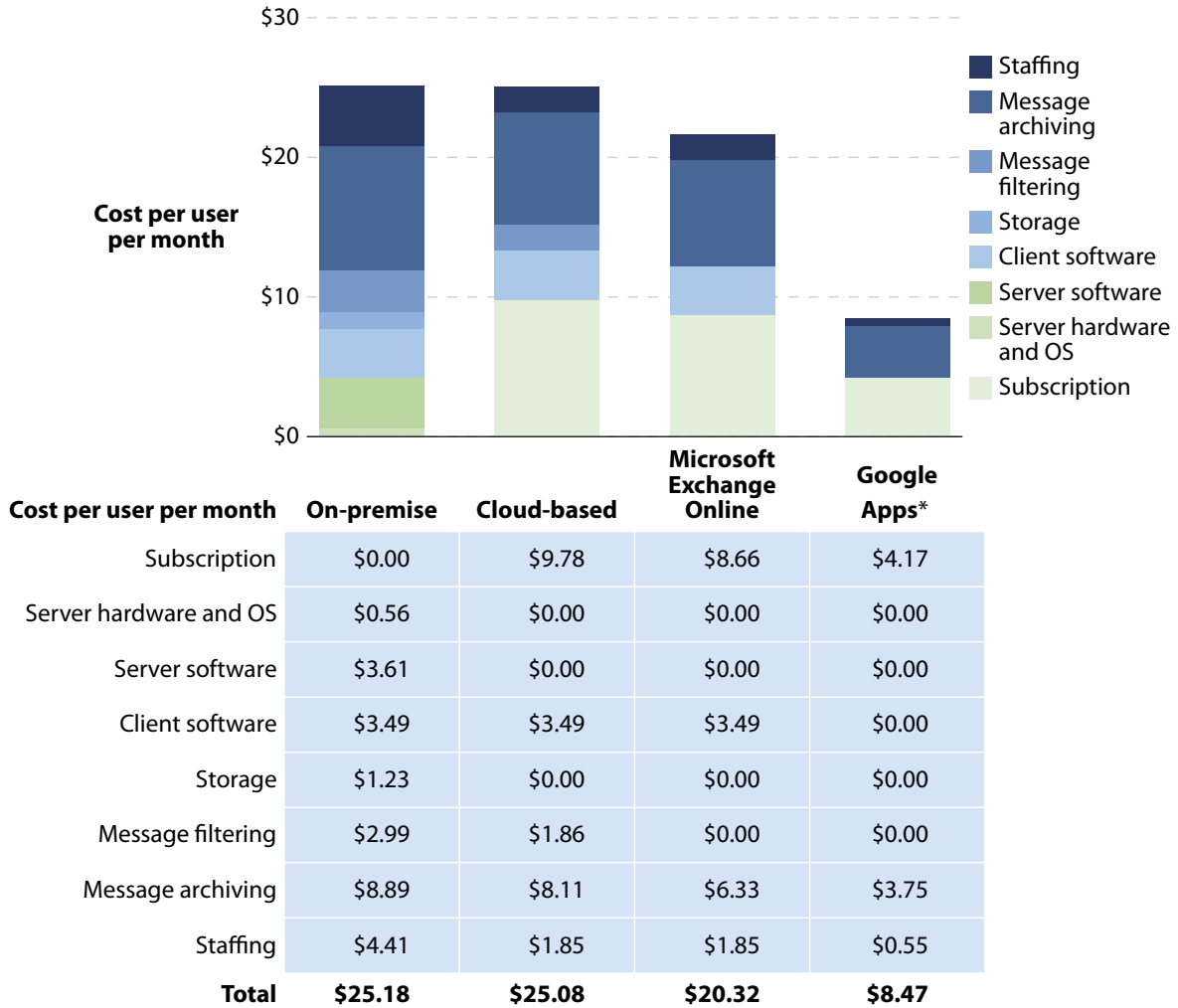
Cost per user per month	On-premise	Cloud-based	Microsoft Exchange Online	Google Apps*
Subscription	$0.00	$9.78	$8.66	$4.17
Server hardware and OS	$0.56	$0.00	$0.00	$0.00
Server software	$3.61	$0.00	$0.00	$0.00
Client software	$3.49	$3.49	$3.49	$0.00
Storage	$1.23	$0.00	$0.00	$0.00
Message filtering	$2.99	$1.86	$0.00	$0.00
Message archiving	$8.89	$8.11	$6.33	$3.75
Staffing	$4.41	$1.85	$1.85	$0.55
Total	**$25.18**	**$25.08**	**$20.32**	**$8.47**

* Google doesn't currently offer an offline email client.
Note: The pricing and features available in each architecture vary by provider. This is a scenario for 15,000 employees with email.

46302   Source: Forrester Research, Inc.

Step Three: Compare On-Premise Email Against Cloud-Based Alternatives

We have published our spreadsheet model for calculating the cost of email for on-premise email and generic hosted Exchange or Notes, as well as for the recently announced Microsoft Exchange Online and for Google Apps Premier Edition. To simplify the cost comparison between the different email service architectures, we use the scenario of a 25,000 person company, where 10% are mobile executives, 70% are information workers, and 20% are occasional users (see Figure 6). However, the cost calculator can show the costs and cost differences for your company size, your cost of hardware, staffing, etc., and for your mix of mobile executives, information workers, and occasional users.

Figure 6 For The "Information Worker" Segment, Cloud-Based Email Is Often Cheaper

Cost per user per month	On-premise	Cloud-based	Microsoft Exchange Online	Google Apps*
Subscription	$0.00	$9.78	$8.66	$4.17
Server hardware and OS	$0.56	$0.00	$0.00	$0.00
Server software	$3.61	$0.00	$0.00	$0.00
Client software	$3.49	$3.49	$3.49	$0.00
Storage	$1.23	$0.00	$0.00	$0.00
Message filtering	$2.99	$1.86	$0.00	$0.00
Message archiving	$8.89	$8.11	$6.33	$3.75
Staffing	$4.41	$1.85	$1.85	$0.55
Total	**$25.18**	**$25.08**	**$20.32**	**$8.47**

* Google doesn't currently offer an offline email client.
Note: The pricing and features available in each architecture vary by provider. This is a scenario for 15,000 employees with email.
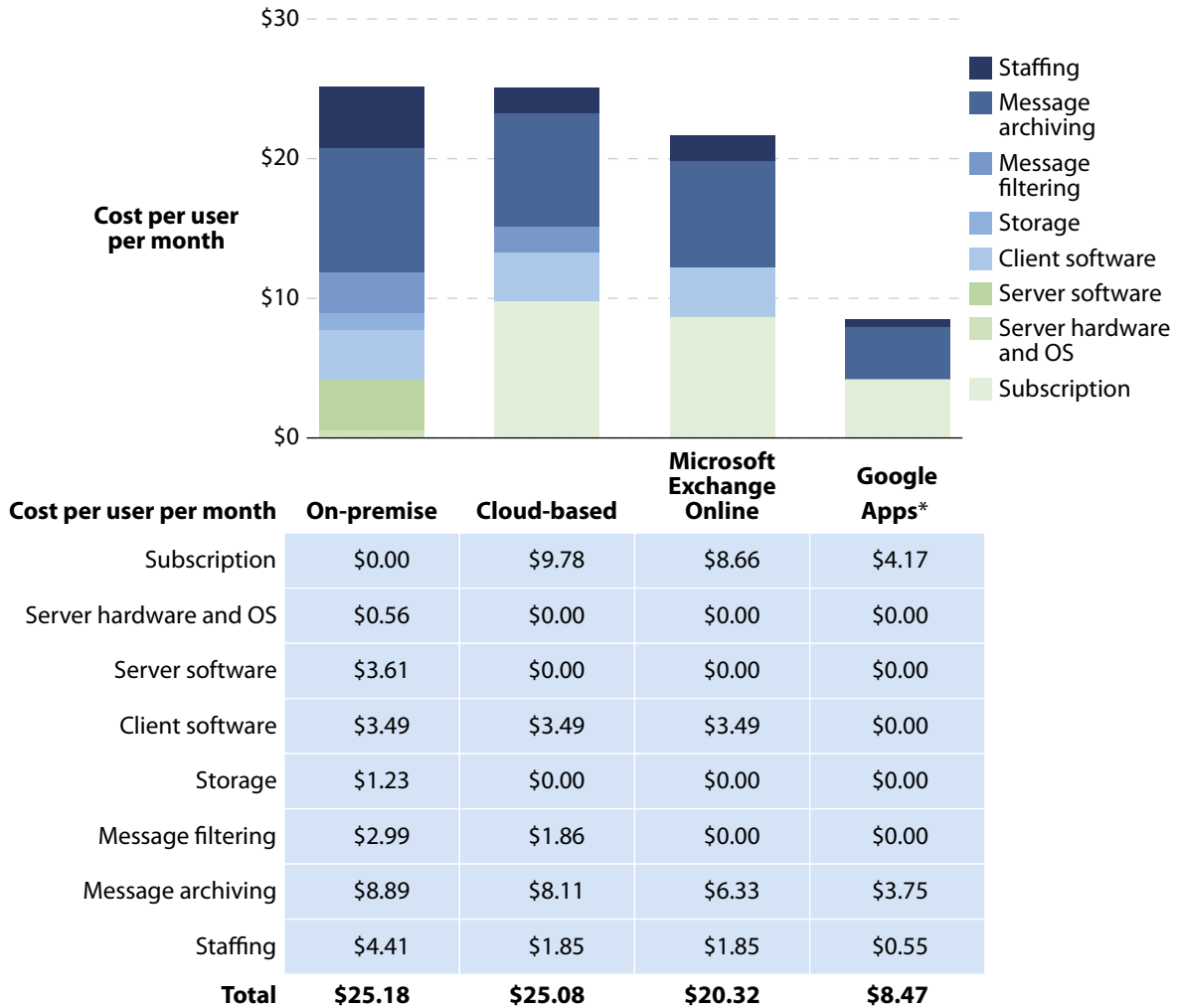
46302   Source: Forrester Research, Inc.

FOR MIDSIZED COMPANIES, CLOUD-BASED EMAIL IS OFTEN CHEAPER

After entering the cost factors and turning the crank, the model shows that the cost of on-premise email is higher than the cloud-based alternatives for smaller companies or divisions (see Figure 7).

• **Cloud-based email is always cheaper for companies with fewer than 15,000 users.** The crossover point for when generic cloud-based email is cheaper than on-premise email is about 15,000 users. While many factors, including staffing efficiency, mailboxes per server, and

operating systems costs, can move this crossover point, this 15,000-user crossover is a rule of thumb that is validated by the number of firms of this size moving to a hosted Exchange provider.

• **Microsoft Exchange Online Standard is about 10% cheaper than many cloud-based providers.** Microsoft recently announced its Exchange Online multitenant service available in the United States immediately and globally in 2009.[6] Microsoft offers a standard version with full support for mobile execs and information workers and a "deskless worker" version with browser-only support at a much lower price point.[7] While email is only one of the services that Microsoft is offering online, it is the driver of many deals, with companies like Coca-Cola Bottling, Eddie Bauer, and Pitney Bowes already using the Exchange online service.

• **Google is setting a new price floor on email and archiving costs.** Google has launched its Google Apps Premier Edition at a cost of $50 per user per year ($4.17 per user per month).[8] Google also offers unlimited storage for $45 for 10 years of archiving. But can the company make money at these prices? We journeyed to Mountain View to find out. Google told us about its recent SAS 70 Type II certification, a brief on the number of companies served, and how Google uses automation and massive scale to achieve an order of magnitude lower cost of service than a typical enterprise.[9] We believe that Google can make money at this price, and that the service will handle some firms' or users' needs well, including its bigger customers like Genentech and Avago Technologies. However, we're waiting to see how much executive attention Google gives the service; we're also holding out for better mobile support, an offline email and calendar client, and a clearer view of the product road map.[10]
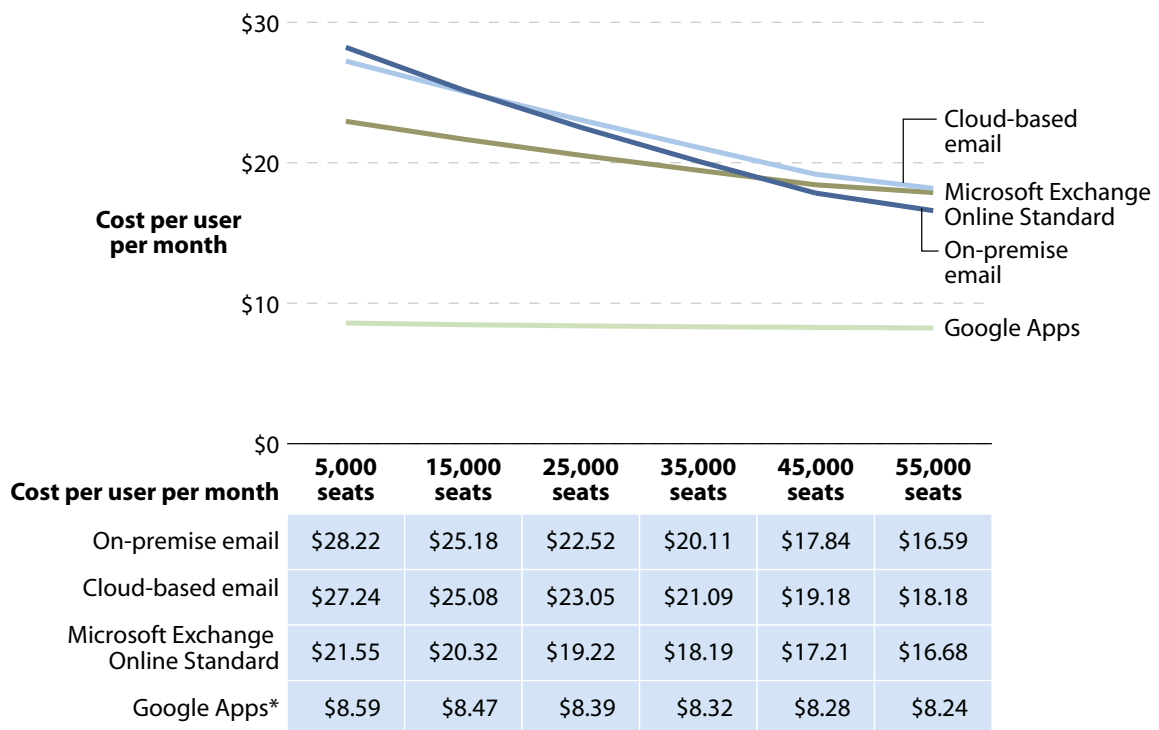
A MARKET OVERVIEW OF EMAIL PROVIDERS

The email provider market is large and complex. We have labeled the key capabilities of the 42 most important providers and can talk with you about each as your needs dictate (see Figure 8). The email provider market breaks down into five categories, with a growing number of providers spanning multiple categories, including IBM, Microsoft, Google and soon, Cisco:[11]

1. **On-premise email suppliers.** This category has been dominated by IBM and Microsoft in the enterprise and by Novell and Microsoft in the small and medium business market. But even today, new entrants like Oracle and Cisco PostPath are coming into the market.

2. **On-premise email support service providers.** A large portfolio of suppliers provides on-premise email services, for example, Barracuda Networks and Symantec for message filtering, CA (formerly Computer Associates) and Mimosa Systems for message archiving, and AppAssure Software and NetApp for email continuity.

3. **Traditional email outsourcers and hosters.** This category is replete with outsourcing giants like Accenture, EDS, and IBM; outsourcing specialists like Microland; and email hosters like AT&T Application & Hosting Services, Intermedia.net, Rackspace, and USA.NET.

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4. **New multitenant cloud-based email service providers.** This is an active category, with traditional hosters like USA.NET and AT&T Hosting & Application Services now delivering multitenant Exchange, and now with Google, IBM, and Microsoft offering competing solutions.

5. **Cloud-based email support service providers.** This category includes services like Google Postini and Symantec MessageLabs for message filtering, Autonomy ZANTAZ and Zimbra (Yahoo!) for message archiving, and Dell MessageOne for email continuity.

Figure 7 Cloud-Based Email Is Cheaper, Even For Midsized Companies

Cost per user per month	5,000 seats	15,000 seats	25,000 seats	35,000 seats	45,000 seats	55,000 seats
On-premise email	$28.22	$25.18	$22.52	$20.11	$17.84	$16.59
Cloud-based email	$27.24	$25.08	$23.05	$21.09	$19.18	$18.18
Microsoft Exchange Online Standard	$21.55	$20.32	$19.22	$18.19	$17.21	$16.68
Google Apps*	$8.59	$8.47	$8.39	$8.32	$8.28	$8.24

* Google doesn't currently offer an offline email client.
Note: The pricing and features available in each architecture vary by provider.

46302   Source: Forrester Research, Inc.

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Figure 8 On-Premise And Cloud-Based Email Providers Compete For Your Attention

Provider	Mailboxes	Message filtering	Message archiving	Email continuity
Accenture*	Both	Both	Both	Both
AppAssure Software				On-premise
Apptix	Hosted	Hosted	Hosted	Hosted
AT&T Hosting & Application Services	Hosted	Hosted	Hosted	Hosted
Autonomy ZANTAZ			Both	
Azaleos	Hosted†			
Barracuda Networks		On-premise	On-premise	Both
BT (formerly British Telecom)	Hosted	Hosted		
CA (formerly Computer Associates)		On-premise	On-premise	Both
Capgemini*	Both	Both	Both	Both
Cemaphore Systems				Both
Double-Take Software				On-premise
EDS (HP)*	Both	Both	Both	Both
EMC			Both	Both
Global Relay Communications	Hosted	Hosted	Hosted	Hosted
Google	Hosted	Hosted	Hosted	Hosted
HP Services*	Both	Both	Both	Both
IBM Global Services*	Both	Both	Both	Both
IBM Lotus	Both	Both	On-premise	On-premise
Intermedia.net	Hosted	Hosted	Hosted	Hosted
Iron Mountain			Hosted	
LiveOffice	Hosted	Hosted	Hosted	Hosted
Mailtrust (Rackspace)	Hosted	Hosted	Hosted	Hosted
MessageOne (Dell)		Hosted	Hosted	Hosted

*Outsourcer that can also host email infrastructure in its data center
†Provides hosted monitoring and management of Exchange

46302   Source: Forrester Research, Inc.

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Figure 8 On-Premise And Cloud-Based Email Providers Compete For Your Attention (Cont.)

Provider	Mailboxes	Message filtering	Message archiving	Email continuity
Microland*	Both	Both	Both	Both
Microsoft	Both	Both	Both	Both
Mimosa Systems			On-premise	
NetApp				On-premise
Neverfail				On-premise
Novell	On-premise	On-premise		
Open Text			On-premise	
PostPath (Cisco)	Both			
Proofpoint		Both	Both	Both
Quest Software			On-premise	
Sophos		On-premise		
Symantec MessageLabs		Both	On-premise	Both
Teneros				On-premise
Trend Micro		Both		
USA.NET	Hosted	Hosted	Hosted	Hosted
Verio	Hosted	Hosted	Hosted	
Verizon Business	Hosted	Hosted	Hosted	Hosted
Zimbra (Yahoo!)	Both	Both	Hosted	Hosted

*Outsourcer that can also host email infrastructure in its data center
†Provides hosted monitoring and management of Exchange

46302   Source: Forrester Research, Inc.

RECOMMENDATIONS

TACKLE THE BIG BUCKETS OF EMAIL COST

Whether you're running email on-premise or in the cloud, there are things you can initiate immediately to reduce your email costs:[12]

- **Consolidate on-premise mailboxes on a single vendor and version.** There are many organizational and political challenges to upgrading or consolidating email. To help get it done, information and knowledge management professionals should elevate the fully loaded costs of maintaining dual systems or running an outdated and inefficient version. Seeing the three- or five-year fully loaded costs might shake free even the most tightly controlled budget.

- **Reconsider which employee segments need full email clients and big mailboxes.** A clear understanding of what your workers need will make it easier to create a provisioning plan for each segment. In particular, you may be able to move your occasional users to a Web-only email client (they're probably using one at home already — 63% of all online US adults are) or to a cloud-based email provider.[13] The cost savings could be $6 to $10 per user per month.

- **Archive mailboxes for only employees that meet regulatory requirements.** Archiving is expensive, as much as $9 per user per month. And these costs seem inevitable with the pendulum on compliance swung so far towards caution. (It will probably stay there as hard economic times and new bankruptcy cases drive the legal discovery process.) However, even the most stringent industries often have different rules for customer-facing communications and internal communications. If different rules apply, then use a provider like Dell MessageOne or Proofpoint that allows you to tailor the archiving and retention period by individual worker.

- **Move email filtering services to the cloud to offload hassles and staff costs.** Email filtering, which includes inbound filters to shut down spam and intercept viruses and outbound filters to prevent sensitive material from going to the wrong person, is a huge headache for most firms. Thus filtering is a prime candidate to move to the cloud or into a hybrid model (e.g., a cloud-based interceptor to capture the worst offenders, and an appliance inside the firewall for final filtering and a cloud-based interceptor). Providers like Google Postini, Microsoft Exchange Services, Proofpoint, and Symantec MessageLabs are good options to consider.

WHAT IT MEANS

CLOUD DELIVERY WILL EXPAND EMAIL UBIQUITY

Email is an entitlement, as ubiquitous and expected as an office chair. But email is also a burden of ever-burgeoning attachments, ever-increasing regulation, and ever-expanding usage. Cloud-based email will lower the cost of basic email and improve some of these situations, but it will simultaneously improve the convenience of email and thus expand its use.

- **Price transparency will drive email costs down.** One of the big benefits of cloud-based email is that the costs become extremely public and visible. Google has already set a price floor, and Microsoft has undercut its channel. This cost transparency will elevate the competition on price, and that will drive costs down.

- **Cloud delivery will increase the value and pervasiveness of email.** In a surprising and counterintuitive effect, we believe that cloud delivery will make email the go-to tool for even more situations than today. Consider this: If your email is available from any device, anywhere, any time, then why wouldn't you use it? Especially if the alternatives — accessing a wiki or firing up an instant messaging client — are not available so conveniently.

- **Cloud delivery will help make mobile email ubiquitous among information workers.** Today, only mobile executives get BlackBerry or Windows Mobile devices. And it's clear why: Mobile email is expensive, basically $10 per user per month for BlackBerry device support. But cloud delivery and the ramped up competition from Microsoft, from likely new entrants like Cisco, and from innovative providers like Synchronica will help drive these costs down and make it possible to deliver basic mobile email to the masses at a much lower cost.

SUPPLEMENTAL MATERIAL

Online Resource

The online versions of Figures 5, 6, and 7 provide an interactive spreadsheet tool to help you record your fully loaded email costs and calculate your cloud-based email service provider costs.

Companies Interviewed For This Document

Accenture	Intermedia.net
Apperio	LiveOffice
AT&T Application Hosting Services	MessageLabs
Azaleos	Microland
Capgemini	Microsoft
Cisco	Novell
Dell	Proofpoint
EDS	Rackspace
Google	Symantec
HP	Synchronica
IBM	USA.NET

ENDNOTES

[1] In a companion report, we evaluate the challenges of moving your email services to a cloud-based provider and give specific recommendations for what part of your email system to move off-premise: smaller firms or divisions, some email support services, and occasional users. See the January 5, 2009, "Should Your Email Live In The Cloud? An Infrastructure And Operations Analysis" report.

[2] Skeptics will point out that hosted email was all the rage a few years ago, and that it in fact has been a de facto solution for smaller companies ever since. But many larger companies took a look and decided to keep email on-premise. What's different now is that the capabilities of the multitenant hosting providers — like AT&T Hosting & Application Services, Microsoft, and USA.NET — have grown to the point that midsized companies and subsidiaries of enterprises can consider this option.

[3] Even in a downturn, companies must get real work done. But in capital-constrained times, the upfront cash outlay and financial risk of on-premise solutions can prevent many projects from being funded. Fortunately, cloud-based collaboration service providers offer a cash-flow-friendly alternative to on-premise installation for projects including email overhauls, wiki workspaces, and Web conferencing. See the October 29, 2008, "Talking To Your CFO About Cloud Computing" report.

[4] Source: Forrester's North American Technographics Benchmark Survey, 2008.

[5] We also leave some costs out of this model, including bandwidth, PC hardware and operating system software, archiving staffing, and data center cooling and power backup.

[6] Microsoft is offering its single-tenant service for companies with more than 5,000 seats globally today. For the multitenant version (targeted at smaller firms), the service uses the multitenant version of Exchange 2007.

[7] The deskless worker version of the Exchange Online Service is list priced at $2 per user per month, well below Google's price of $4.17 per user per month. This service is targeted at occasional users.

[8] The Google Apps Premier Edition service includes 24x7 phone support, email, calendaring, mobile email, team sites, productivity tools, employee-generated video, and 25 gigabytes of storage per mailbox. The service launched in early 2007, and Google claims 10 million mailboxes and 300,000 businesses.

[9] "SAS No. 70 provides guidance on the factors an independent auditor should consider when auditing the financial statements of an entity that uses a service organization to process certain transactions. It also provides guidance for independent auditors who issue reports on the processing of transactions by a service organization for use by other auditors." Source: SAS No. 70 and Service Organizations (http://ebpaqc.aicpa.org/Resources/General+Accounting+and+Auditing/SAS+No.+70+and+Service+Organizations/) SAS No. 70 is a common and important certification that many service providers, including Microsoft's online services, also have.

[10] Google does have Capgemini and BearingPoint onboard as implementation and support partners, as well as smaller service partners like Appirio.

[11] Many of these providers fit the software-as-a-service definition of delivering a software service over the Internet. Forrester's SaaS maturity model provides an assessment of the solutions and underpins our

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guidance on realistic strategy transformation for software vendors and services providers considering a SaaS business model. See the August 14, 2008, report "Forrester's SaaS Maturity Model."

[12] Should you move your email services to the cloud? In a companion report, we evaluate the challenges of moving your email services to a cloud-based provider and give specific recommendations for what part of your email system to move off-premise: smaller firms or divisions, some email support services, and occasional users. See the January 5, 2009, "Should Your Email Live In The Cloud? An Infrastructure And Operations Analysis" report.

[13] Source: Forrester's North American Technographics® Benchmark Survey, 2008.

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