WHITE PAPER

What is the Total Value of Ownership for a Hosted PBX?

An Osterman Research White Paper

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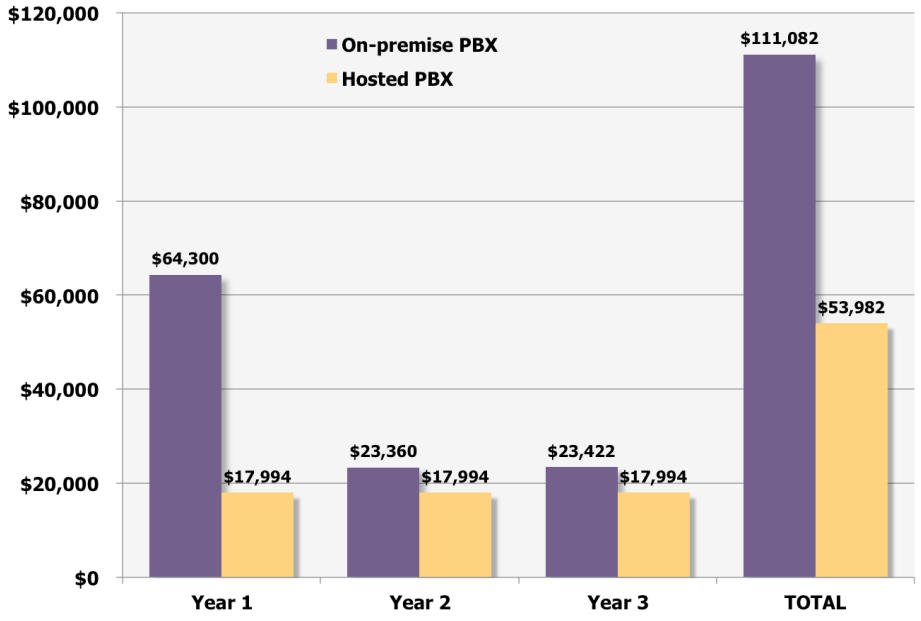
EXECUTIVE SUMMARY

While email and other forms of electronic communication are important, one of the oldest forms of communication – telephony – remains of critical importance to business for a wide range of applications. Even with the advent of smartphones, tablets, unified communication systems and other platforms, telephony remains an integral part of the communications experience for the vast majority of business users, their customers and their business partners.

However, for purposes of cost savings or expediency, many small businesses rely on employees' mobile phones to manage their telephony, or they rely on telephone service designed for residential or individual use. There are a number of disadvantages with this ad hoc approach to telephony, including the presentation of an unprofessional image to business partners, customers and prospective customers; the lack of automated features that can quickly and efficiently route calls to an appropriate individual or department; and potential lost sales.

Organizations should deploy a PBX to overcome these problems. Moreover, small and mid-sized businesses (SMBs) should seriously consider the use of a hosted PBX instead of deploying an on-premise system. Use of a hosted PBX is significantly less expensive than the use of an on-premise system, as demonstrated in the following figure.

Three-Year Cost of Ownership for On-Premise and Hosted PBX Solutions in a 50-User Organization



ABOUT THIS WHITE PAPER

This white paper discusses the benefits of business-grade PBX capabilities, and offers an overview of the benefits and cost savings associated with hosted PBX solutions. Finally, this document presents a brief overview of [INSERT SPONSOR NAME], the sponsor of this white paper, and their relevant solutions.

DEFINITIONS

Telephony is the set of technologies designed to manage voice and fax calls.

A PBX is a computerized telephone system, typically used in business environments that switches calls for users using a set number of local lines coming into an office. It also allows users to share the local lines that are coming into the office.

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THE CONTINUED VALUE OF TELEPHONY

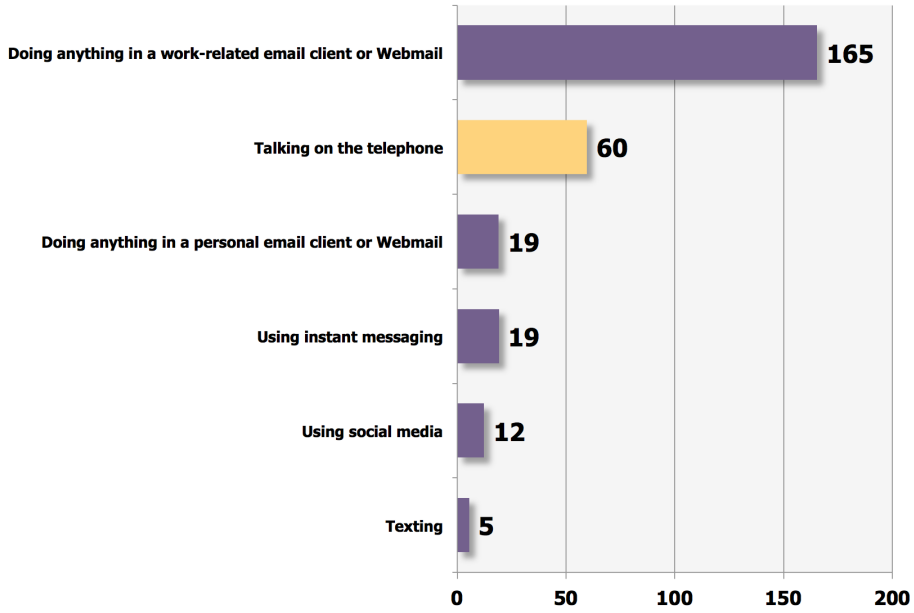
EMAIL IS THE DOMINANT FORM OF COMMUNICATIONS IN BUSINESS…

Email is the leading form of business communication today, with the typical user sending and receiving a combined total of roughly 125 emails on a normal workday. Osterman Research has found that the typical user spends an average of 165 minutes per workday using their email client or Webmail for tasks as diverse as sending or receiving email, sending files, managing appointments, creating task lists or looking for contact information[i].

….BUT TELEPHONY CONTINUES TO BE CRITICAL

Despite the dominance of email as a communication vehicle, telephony continues to be a critical form of communication, coming in second to email, but still consuming 60 minutes of the typical user's workday, as shown in the following figure.

Minutes per User per Day Spent Using Various Communication Tools



Telephony will continue to be an extremely important communications channel, and the ability to manage telephony well will be essential to business success.

Further corroborating the critical role of telephony of all types is that:

- There are 6.92 billion telephones worldwide, representing slightly more than one telephone per person on earth[ii].
- Telephone subscribership in the United States as of July 2011 represented 95.6% of the population of households[iii].
- One study found that 38% of the efficacy of communications – i.e., the ability to convey information in the way it was intended – is contributed by voice tone[iv].
- Telephony is often the best way to transmit sensitive information for which users do not want a record, since voice calls are rarely archived or backed up, unlike emails, instant messages, social media posts and other forms of electronic communication.

MANAGING TELEPHONY WELL IS CRITICAL

Despite the increasing use of the Web, email, mobile device apps and other modes of communication, telephony is still critically important across a wide range of applications, including customer service and sales. For example, the American Express 2011 Global Customer Service Barometer found that 90% of US consumers prefer to resolve their service issues by telephone, compared to face-to-face interactions (75%) and Web/email (67%)[v].

The bottom line is that telephony will continue to be an extremely important communications channel, and the ability to manage telephony well will be essential to business success.

WHAT ARE YOUR OPTIONS?

MANY BUSINESSES USE MOBILE OR RESIDENTIAL PHONES AS THEIR PRIMARY TELEPHONE SYSTEM

Many small businesses use mobile phones or residential lines as their primary telephone system and as the initial telephone interface for incoming calls from customers, partners, and other callers. This is particularly true for organizations that cannot afford a full-time, live receptionist and an on-site PBX to manage incoming calls and routing of calls to appropriate individuals. While reduced cost is the primary motivator to use mobile phones or residential phone lines in this manner, there are a variety of disadvantages associated with doing so:

- The lack of an automated attendant means that incoming calls cannot be routed to the appropriate individual or department in a company based on automated voice prompts. This makes it more time consuming for staff members to route these calls themselves, assuming they are even able or available to do so.
- No advanced calling features are in available in this scheme, such as music or on-hold messages played for callers, automatic routing to mobile phones for users who are out of the office, or updated voice prompts based on users' availability.
- Costs can actually be higher in some cases because of lost employee productivity as highly paid employees are forced to do the work of a receptionist.
- The unprofessional image that this initial contact with the public, potential clients, business partners and others portrays can result in lost business in some cases.

A BUSINESS-GRADE PBX OVERCOMES THESE PROBLEMS

Business-grade PBXs directly address these problems by providing important capabilities that the use of mobile phones or residential phone lines cannot:

- An automated attendant will automatically answer incoming calls, prompt callers to choose from a list of options, and then route calls to an appropriate individual, department or voice mailbox. This permits calls to be answered more quickly and more accurately, and can route calls based on pre-determined criteria, such as individual availability or current workloads.
- A business-grade PBX provides advanced calling features, such as extension dialing, find me/follow me functions, voicemail that can be delivered to email, hunt groups, etc.

The use of a business-grade PBX permits even very small businesses to look like larger, professional organizations. The problem, however, is that a fully installed PBX system can be prohibitively expensive for a small or mid-sized business. While costs for a fully deployed PBX system can vary widely, the initial deployment cost is roughly

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$1,000 per user. It is important to note, however, that these costs do not include the expenses associated with incoming phone lines, maintenance of the system, the costs associated with adding additional lines over time, or the use of in-house staff to address problems as they occur.

While large businesses may be better served with an on-premise PBX system, the ideal candidate for a hosted PBX solution is a small or mid-sized business that needs to present itself on a par with much larger businesses, and that must portray a professional image to customers and others without the burden associated with managing on-premise infrastructure.

WHY CONSIDER A HOSTED PBX?

There are three basic options for organizations that need to deploy a professional, business-grade PBX capability: a) do nothing and suffer the consequences of using mobile phones or residential phones to provide business telephony, b) deploy an on-premise PBX, or c) use a hosted PBX.

There are a number of important and compelling reasons to use a hosted PBX solution:

- **No up-front costs for deployment**
  As is the case with hosted email services, there are no up-front costs associated with hosted PBX services. This means that organizations do not have to deploy a PBX or the other hardware and software that might be necessary to support the system. The shift from a capital expenditure (CAPEX) to an operating expense (OPEX) model is one of the most compelling arguments for cloud computing, particularly in an era of tight IT budgets or for organizations that do not have the in-house staff necessary to manage on-premise infrastructure.

- **More predictable pricing**
  As with any cloud-based service, pricing is more predictable for a hosted PBX than it is for an on-premise PBX. This is because costs for a hosted PBX are known up-front and will remain unchanged over the life of the contract with the hosted provider. With an on-premise PBX, there is less predictability because of unforeseen hardware repairs, capacity expansion and other issues that may necessitate an on-site visit from a consultant or technician.

- **No need for on-premise staff to manage the system**
  Another important advantage of a hosted PBX solution relative to its on-premise counterpart is that no in-house staff is required to manage the system, address system problems, perform upgrades, etc. While on-premise PBXs are not typically the most labor-intensive systems that an organization will operate, they do require some level of maintenance and support – a hosted PBX will eliminate the need for these activities.

- **Online administration permits remote management of the system**
  One of the fundamental advantages of a hosted PBX is that, as a cloud-based system, it can be managed completely on-line. That means that services, features and functions can be turned on or off as employee counts change, and that specific services, such as hunt groups, can be changed or added through an on-line console from any Web browser.

- **Users can manage their own profiles**
  Related to the online administration capabilities of a hosted PBX is the ability for users to manage their own profiles. For example, this capability permits users to change their find me/follow me numbers, change their PIN for accessing voicemail, modify the email address to which their voicemails will be sent, or modify their mobile phone settings.

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- **Extremely high levels of uptime**
  One of the chief advantages of a hosted PBX is the extremely high level of uptime that such a system affords. This is not only important for normal, day-to-day operations, but also for business continuity purposes after a natural disaster, a power outage or some other unforeseen event. Using a hosted PBX that manages telephony capabilities in a remote location permits not only very high reliability, but true disaster preparedness, as well.

- **Lower cost of ownership**
  In many cases, a hosted PBX solution can provide a much lower cost of ownership compared to an on-premise system, particularly for a small business. For example, if we assume that an on-premise PBX for a 50-user business is $1,000 per seat, the cost of annual maintenance is $9,000 per year, toll and trunking charges will be $1,025 per month, and an average of one-hour of employee staff time per week is required to manage the system, the total cost of the PBX in Year 1 will be $64,300 and the three-year cost will be $111,082. A hosted PBX solution priced at $29.99 per user per month will cost $17,994 for one year (a cost savings of $46,306) and $57,100 over three years (a savings of 51%), as shown in the following table.

Costs of On-Premise and Hosted PBX Solutions

Cost	Year 1	Year 2	Year 3	TOTAL
PBX System	$50,000	-	-	**$111,082**
Annual maintenance	-	$9,000	$9,000	
In-house IT staff (salary growth at 3%/year)	$2,000	$2,060	$2,122	
Toll and trunking charges	$12,300	$12,300	$12,300	
TOTAL COST OF ON-PREMISE PBX	$64,300	$23,360	$23,422	
TOTAL COST OF HOSTED PBX	$17,994	$17,994	$17,994	**$53,982**
SAVINGS FROM USE OF A HOSTED PBX	**$46,306**	**$5,366**	**$5,428**	**$57,100**

- **Other benefits**
  In addition to the quantifiable benefits of using a hosted PBX solution there are a number of benefits that are harder to quantify. These include improved employee productivity, freeing up staff time that otherwise would have been devoted to managing an on-premise PBX, improved customer satisfaction from being able to reach an individual more quickly, etc.

The bottom line is that a hosted PBX solution can provide greater value to an organization, particularly a smaller business, than an on-premise PBX.

NEXT STEPS

Osterman Research recommends that any organization evaluating their telephony requirements undertake a two-step approach to evaluating these requirements:

- First, corporate decision makers need to understand why they should implement a professional, business-grade PBX capability. While seemingly obvious to some, not all decision makers will fully appreciate the importance of improving their corporate image by having a professional telephony presence, they may not appreciate the link between a robust PBX feature set and their ability to provide good customer service, and they may not realize the improvements in overall communications and corporate image that a PBX can provide.

One of the chief advantages of a hosted PBX is the extremely high level of uptime that such a system affords. This is not only important for normal, day-to-day operations, but also for business continuity purposes after a natural disaster, a power outage or some other unforeseen event.

In essence, we are arguing for decision-maker buy-in to the notion that PBX capabilities are worth the expense, even though the benefits of a more professional image or improved customer service may be more difficult to quantify.

- Second, organizations need to evaluate their PBX deployment options. A careful analysis should be undertaken to determine the costs of an on-premise PBX deployment and a hosted PBX solution. The former must take into account all of the costs associated with deploying and managing the PBX, such as the initial cost of the hardware and software, maintenance contracts, cabling, updates, upgrades, the cost of outages, and the opportunity cost of using in-house staff to manage the infrastructure. These costs need to be weighed against the predictable, per seat per month cost of a hosted PBX solution.

CONSIDERING THE VALUE VERSUS COST OF OWNERSHIP

It is also important to consider not only the *cost* of the various options (doing nothing, deploying an on-premise PBX or using a hosted PBX), but also to consider the *value* provided by each option. For example:

- The cost savings associated with doing nothing – i.e., maintaining the status quo of mobile phone or residential line use – are high, but the value associated with presenting an unprofessional image or reducing employee productivity is extremely low.

- An on-premise PBX can provide much greater value by presenting a professional image and offering other benefits as discussed above, but the cost of doing so can be much higher than if a hosted PBX solution is used.

- A hosted PBX solution can provide higher value than an on-premise PBX system because of its greater reliability and flexibility, and because it can be supported on a 24x7 basis. The cost for a small business to support any part of its infrastructure on a 24x7 basic is prohibitive in most cases.

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SUMMARY

A PBX can provide a number of important advantages compared to using mobile phones or residential telephone lines in a business setting. These advantages include presentation of a more professional image to customers and business partners, fewer lost sales, and greater employee productivity. While on-premise PBX systems are widely available, a hosted PBX solution offers many advantages over on-premise systems.

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[i] Source: *End-User Survey on Social Media and Messaging Issues*; Osterman Research, Inc.
[ii] http://www.totaltele.com/view.aspx?ID=464922
[iii] Source: *Telephone Subscribership in the United States*, FCC, December 2011
[iv] Source: *Inference of Attitudes from Nonverbal Communication in Two Channels*, Dr. Albert Mehrabian
[v] http://about.americanexpress.com/news/docs/2011x/AXP_2011_csbar_market.pdf