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Adding On or Moving On? Assessing IP Telephony Options

August 2003



220 North Main Street, Suite 203

Natick, Massachusetts 01760

Telephone: 508.655.5400

www.sageresearch.com

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Research at a Glance

Organizations seeking to evaluate IP telephony typically pursue one of two options. They either pilot a pure IP PBX, or they IP-enable an existing PBX. In both cases, these pilots tend to be restricted to a specific workgroup or a subset of the broader employee base.

An interesting result from a recent survey of 100 technology professionals with live IP Telephony (IPT) deployments is that many organizations are not yet fully deployed. Many are doing so by IP-enabling an existing PBX, but these same users also plan to do their full deployment with a pure IP PBX. In that survey, Sage had 65 participants currently using IP-enabled or “hybrid” PBXs. Of that subset, 38 were already planning to migrate to a “pure” IP PBX. Sage conducted in-depth interviews (IDIs) with nine of these people, finding that most were satisfied with this early IPT experience and were now planning to move to a broader production deployment with pure IP PBXs.

This white paper looks at both IPT paths, with an analysis of how the two groups (those with IP-enabled PBXs and those with pure IP PBXs) expect and realize IPT benefits. This paper also presents insights gathered from the IP-enabled PBX adopters planning to conduct their full deployment with pure IP PBXs to understand their deployment strategy.

1.0 Introduction

IT decision makers usually consider two options when pursuing IPT: go directly to a pure IP PBX, or start with an IP-enabled, or hybrid, solution by IP-enabling an existing PBX.

During a survey of 100 IT decision makers querying them on the productivity benefits of IPT, Sage found that many (65%) were using hybrid PBXs. From this initial survey, we discovered that of those who start with a hybrid PBX, over half intend it as a short-term solution—a way station on the road to pure IP PBX deployment. Among the reasons for evaluating IPT via a hybrid solution are a lack of time and/or budget, and an unwillingness to scrap the typically massive investment in the legacy PBX in one fell swoop.

Many of these organizations are satisfied with their IPT experience. For example, 60% of the survey respondents using a hybrid PBX report they experience improved productivity within their IT division, and the same number claim that they can open new offices much faster than before.

However, despite their satisfaction, these organizations intend to stick with their original plan of moving on to a pure IP PBX implementation. By completing this migration, the companies expect to reduce costs of staff, support, and service providers, improve the productivity of both end users and IT staff, and get more and better features than they do with their existing system.

2.0 Methodology

Initially, Sage Research conducted a *quantitative* survey of 100 technology professionals to identify which productivity benefits they realize from IPT, and to measure the degree to which these benefits impact employees.

To qualify for participation, professionals had to meet the following criteria:

- Responsibility for evaluating, planning, or managing voice solutions in their organization
- Have at least one year of experience in this role
- Current solution is either A) a traditional PBX that has been updated to support IPT or VoIP, or B) an IP-based PBX
- Has been carrying live IPT traffic in one or more locations for at least six months

Qualified participants came from a mix of small, medium, and large organizations, although most (68%) were in the 500+ range. They used IPT solutions from various vendors.

An interesting result was that of the 100 people surveyed, 35 had deployed pure IP PBXs. The remaining 65 were using hybrid PBXs. Of these 65 organizations, *58% reported they had plans to replace it with a new IP solution*. Most of them were planning to do so within 18 months.¹

To investigate why so many were already abandoning their migrated IPT solution, Sage carried out a *qualitative* stage of research, conducting in-depth interviews (IDIs) with nine of the respondents. All of these have an IP-enabled legacy PBX that is being (or will be) replaced with a new IP PBX.

¹ Of the 65 using a hybrid PBX, 21 use a hybrid PBX only, while 44 use both a hybrid and pure IP PBX. For the purposes of this document, the data for hybrid PBX users is for the 21 using only a hybrid PBX.

3.0 IP-Enabled PBX: Expected vs. Realized Benefits

As mentioned above, more than half of the organizations that have gone the hybrid PBX route did so as a temporary measure, before implementing a pure IP PBX. These organizations are actually quite satisfied with their initial IPT experience in general, including the hybrid PBX's performance and features. In spite of this, none of the organizations Sage interviewed intended to make their hybrid system a long-term solution. All plan to continue their migration to a pure IP PBX solution.

The IDI participants stated a variety of reasons for starting with a hybrid PBX (see Exhibit 1). Some of those interviewed were simply evaluating IPT in a limited scope deployment before migrating to a pure IPT system. Others were restricted either by budget (the company was unable to fund a complete IPT migration all at once), or time (IPT was an urgent need, but there was no time to fully research solutions before initial deployment). Another reason for starting with a hybrid PBX is that the organization had too much invested in the existing PBX to justify replacing it all at once. Finally, one interviewee has a hybrid PBX as an interim solution to address a specific need—using IPT for on-premises wireless phones.

Still, from the quantitative survey, we know that most IPT adopters enjoy some common benefits—regardless of the path they chose. This is particularly true regarding end-user benefits, such as increased employee productivity, and the increased ease of making moves, adds, and changes to the system. But when we examine the survey results in detail, notable differences emerge. For example, there are some key differences in terms of the IT benefits the two groups expect to realize from their IPT deployments.

Exhibit 1: Reasons for Hybrid PBX Adoption**Hybrid PBX benefits as compared to Pure IP PBX**

Organizations that have gone with hybrid PBXs differ somewhat from pure IP PBX users regarding the benefits they expected from IPT.² While we cannot conclude from this research why these differences exist, one hypothesis is that hybrid users may be more entrenched with legacy PBXs. For example, reducing need for IT staff to travel makes sense coming from an organization with a large installed base of legacy PBXs—where many configuration changes can require onsite attention.

Also, despite the differences between expected and realized benefits for hybrid PBX adopters, there is some overlap. For example, “Open new office more quickly” is both widely expected and realized.

For the purpose of comparison in the following sections, we focus on those benefits that scored highest in both “expected benefits” and “realized benefits,” choosing the top seven benefits from each category.

² In the quantitative study, expected and realized benefits are measured separately for IT and end users, as shown in Exhibits 2 through 5.

Benefits comparison: IT staff

For IT staff at hybrid PBX organizations, the following benefits score high in both expected and realized benefits (Exhibit 2). For example, 67% expected and 60% realized “Opening new office can be completed more quickly” as a benefit:

- “Opening new office can be completed more quickly”
- “Reduced need for IT staff to travel”
- “Faster moves/adds/changes to improve IT staff efficiency”
- “IT staff time saved because end users use telephony features without assistance”

At pure IP PBX organizations, the benefits scoring high as both expected and realized are for the most part markedly different (Exhibit 3):

- “Less telephony-related equipment required”
- “Less time spent managing telephony-related equipment”
- “Less cabling required”
- “Opening new office can be completed more quickly”
- “Faster moves/adds/changes to improve IT staff efficiency”

Most notable from this comparison is that pure IP PBX users cite more equipment-related benefits, while their hybrid PBX counterparts mention timesaving benefits more often. One hypothesis for understanding this difference is that the more complete equipment turnover required in a pure IP PBX installation makes equipment-specific benefits more tangible.

Also of note from the comparison of IT staff responses:

- In a surprising coincidence, 62% of both hybrid and pure IP PBX organizations expected “decreased reliance on external vendors for service/support,” but it did not score as high as a realized benefit with either group.
- “IT staff time saved because end users use telephony features without assistance,” was expected by 62% of hybrid PBX organizations but realized by only 43%.
- “Improved productivity within IT division” (60%) and “Less customer frustration because mobile workers reached more easily” (55%) both scored much higher with hybrid PBX organizations as realized benefits than as expected benefits (43%) for both. That is, customers gained benefits they weren’t expecting.

Exhibit 2: Hybrid PBX IT Staff—Expected vs. Realized Benefits

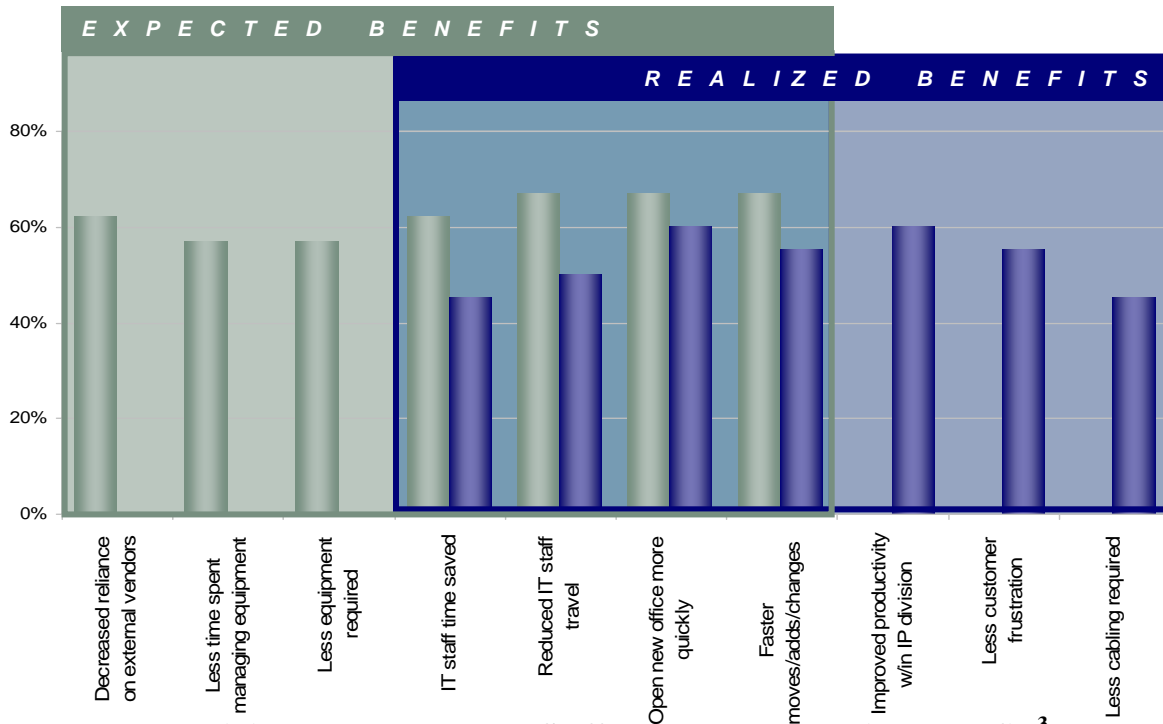
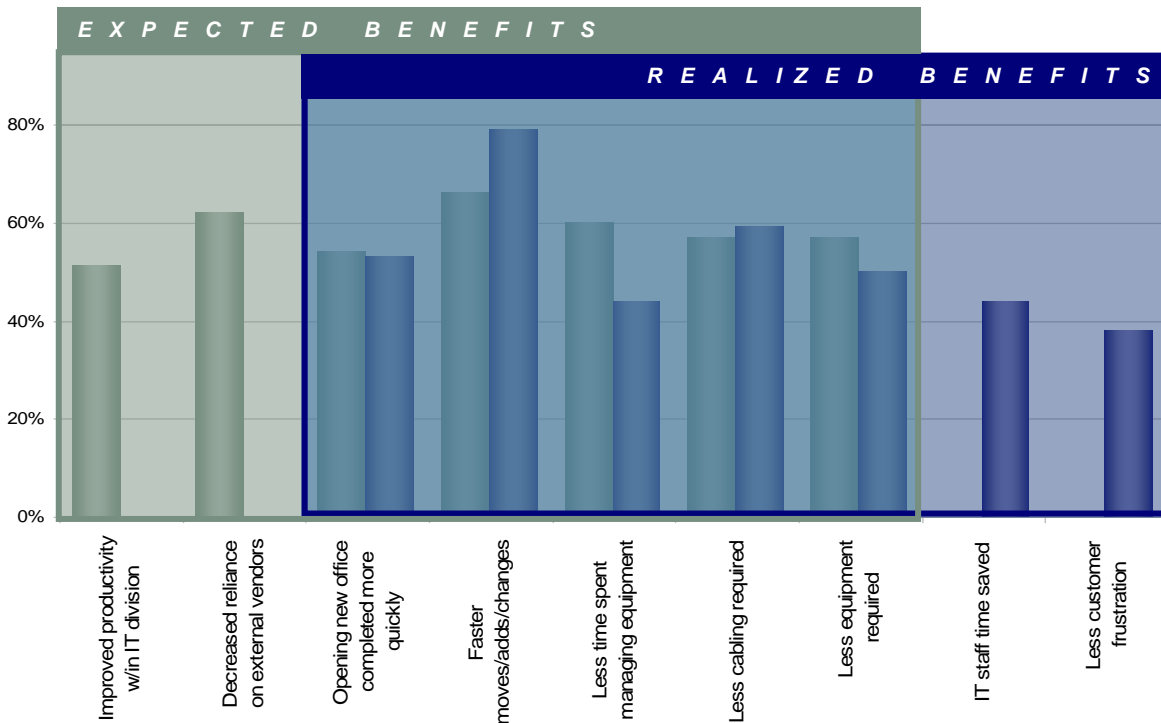


Exhibit 3: Pure IP PBX IT Staff: Expected vs. Realized Benefits³



³“Ease of integrating with existing systems” also ranks 7th among IP PBX IT staff expected benefits, while “Decreased reliance on external vendors for service/support” also ranks 7th among IP PBX IT staff realized benefits.

Benefits comparison: End-users

Scoring highest as both expected and realized end-user benefits for hybrid PBX organizations (Exhibit 4) are:

- “Easier moves/adds/changes to enable end users to more readily change workspaces”
- “Less telephone tag for all employees”
- “Improved remote office employee productivity through improved use of features”
- “Improved telecommuter productivity through improved use of features”
- “Improved corporate headquarters employee productivity through improved use of features”

Pure IP PBX organizations cite similar end-user benefits to the hybrid PBX organizations:

- “Easier moves/adds/changes to enable end users to more readily change workspaces” (by far the most popular of this list)
- “Improved remote office employee productivity through improved use of features”
- “Intra-organizational communication is facilitated”
- “Improved corporate headquarters employee productivity through improved use of features”
- “Improved telecommuter productivity through improved use of features”
- “Less time checking voicemail as the result of unified messaging capabilities”

The similarity of the benefits may be due to the fact that compared to IT staff, the end users experiences are similar between hybrid vs. pure IP PBXs.

Also of note from the comparison of end user benefits:

- “Improved productivity within functional groups” was expected by 74% of hybrid PBX users, but only realized by 47%. Conversely, while the benefit was also realized by 47% of pure IP PBX users, it scored much lower as an expected benefit (29%).
- “Improved corporate headquarters employee productivity from increased use of features,” “Intra-organizational communication is facilitated,” and “Less time checking voicemails because calls follow employees” all scored high (over 60%) as realized benefits for hybrid PBX users, though all three scored 47% or lower as expected benefits.
- For pure IP PBX users, “Ability to access integrated call center applications” scored 41% as an expected benefit, but only 18% as a realized benefit.

Exhibit 4: Hybrid PBX End Users—Expected vs. Realized Benefits⁴

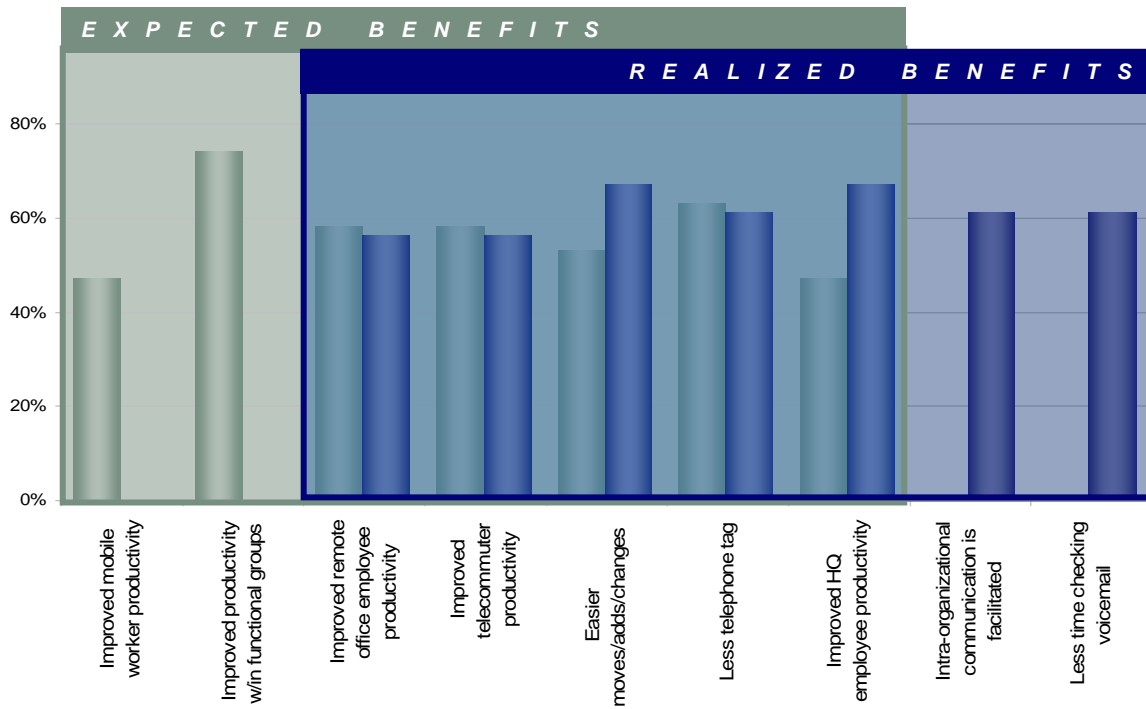
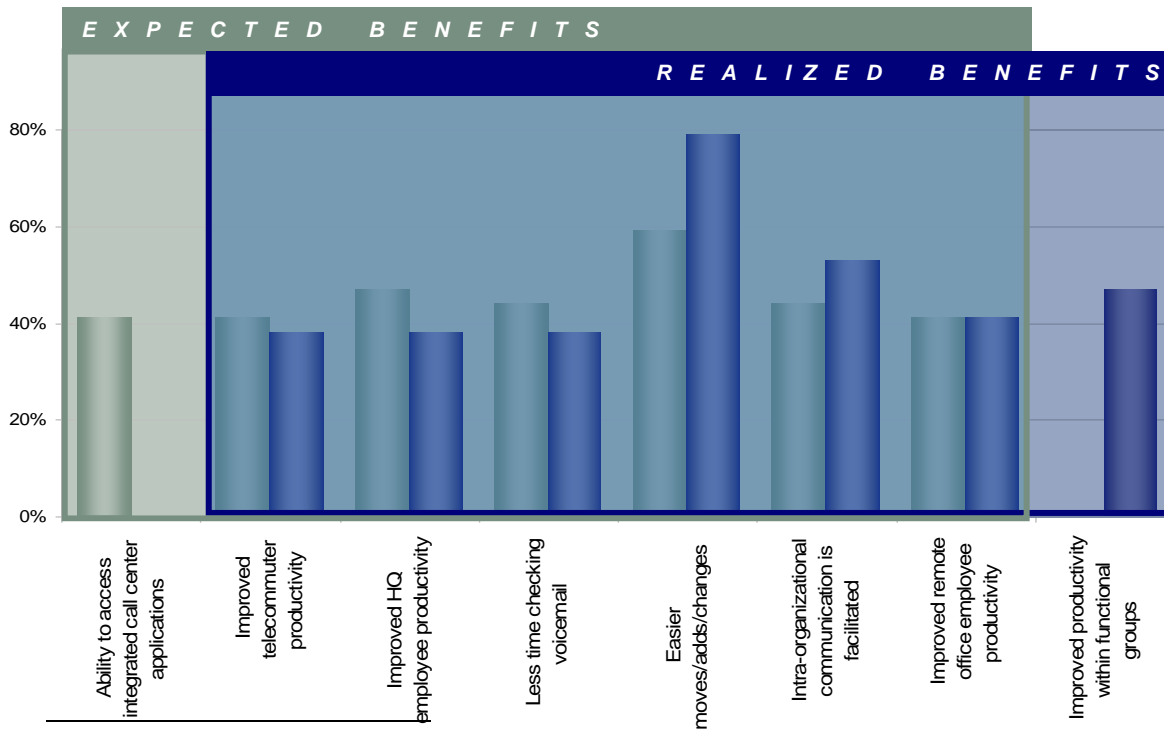


Exhibit 5: Pure IP PBX End Users: Expected vs. Realized Benefits⁵



⁴ “Improved inbound call center productivity” also ranks 7th among hybrid PBX end user realized benefits.

⁵ “Less telephone tag for all employees,” “Less time checking voicemails,” and “Improved inbound call center productivity” also rank 7th among pure IP PBX end user realized benefits.

4.0 Plans to Migrate to Pure IP PBX

Despite their overall satisfaction with their early IPT deployments, the in-depth interview participants are pursuing their original plans to migrate fully to pure IP PBX systems. Why? Because they still believe they will receive further cost, productivity, and feature benefits from a pure IP PBX (listed in random order in Exhibit 6).

Among the benefits they expect from migration to a pure IP PBX system are lower support costs due to reduced staffing and a reduced reliance on VARs. One participant reported that his company currently spends \$13,000 a year with their VAR for PBX support—a cost he expects to cut with the future IP PBX. They also expect reduced carrier costs, as IPT deployment typically goes hand-in-hand with VoIP deployment.

The interviewees anticipate improved employee productivity as well, for both IT staff and end users (a benefit that Sage measured in the quantitative study that formed the basis for these interviews). Additionally, expected feature benefits include better conferencing, advanced “follow-me” features, and integration with Microsoft Exchange and Outlook (effectively, “unified messaging,” though the term was not used). Finally, the interviewees are counting on the ability to extend features to remote sites cost-effectively.

Exhibit 6: Migration from Hybrid to Pure IP PBX—Expected Benefits



5.0 Conclusion

Organizations starting their IPT deployments have choices of how to do so. In fact, as we know from our survey, just 35 out of 100 such organizations are currently using a pure IP PBX. And this is not surprising, given that many organizations will choose to leverage their existing voice infrastructure as long as possible.

Still, it is curious that many organizations conduct their initial deployment with a hybrid approach when their ultimate plan is to deploy a pure IPT system. After all, there are still costs when IP-enabling a legacy PBX, and not all lessons learned in a hybrid approach will apply to a pure IP PBX installation. So why not go straight to the pure IP PBX solution? The answer, from this research, is that many organizations simply had timing, budget and existing investment constraints that made an initial hybrid approach an easier choice—even though many intend to replace it in the not-too-distant future.

The track record of hybrid users moving to pure IP PBXs begs the question of how the next wave of IPT adopters will choose to conduct their early deployments; will they also tend to start with a hybrid approach, or will they move directly to the longer-term investment in a pure IP PBX? Our expectation is that as word of mouth spreads about how satisfied current IPT adopters are, it is likely that organizations will find moving directly to a pure IP PBX solution a more cost-effective solution.

For more information about this study, contact Kathryn Korostoff (kathryn@sageresearch.com) or Cathy Leonard (cathyl@sageresearch.com), at Sage Research, (508) 655-5400.