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Productivity and the IPC Business Case

- Analysis of Small-to-Medium Size Businesses

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1.0 Executive Summary

IP Communications (IPC) has led to concrete productivity gains within small-to-medium size businesses (defined here as 300 to 999 employees)—benefits which can be categorized into three areas: organizational efficiency, end-user productivity, and IT staff productivity.

- **Organizational Efficiency:** Current adopters report both cost savings and revenue generation benefits from IPC. One example of cost savings comes from decreased reliance on outside vendors. Customers report they are better able to support their telephony systems in-house, as compared to when they had circuit-switched PBX systems. On the revenue generation front, many report improved call center volumes. And those enjoying this benefit report an impressive average increase of 30 inbound calls per agent per day (see Section 3.0). Any doubt about IPC's organization-wide impact? Just ask those who have deployed it: most of these small-to-medium (SMB) survey participants (83%) stated that IPC provides their organizations with a competitive advantage over other organizations in their industries.
- **End-user Productivity.** In this category, the key themes are A) benefits from enabling workers to be more mobile (without sacrificing functionality) and B) benefits due to enhanced communications literacy (see Section 4.0). Perhaps most impressive here is that the IPC benefits apply to end-users so widely. For example, nearly half (48%) report that with IPC, all employees experience less telephone tag—saving an average of 4 hours per week per employee. Imagine a company where even just 100 employees experienced this gain—that alone would extrapolate out to 2,000 hours per year in productivity gains.
- **IT Staff Productivity:** Reducing time needed for normal support tasks—such as moves, adds, and changes—is a common benefit. And, less time providing help desk support for telephony is also key—as users are more able to operate independently (often saving four or more hours per week per IT worker). In fact, several specific efficiencies are gained from IPC that directly impact IT staff efficiency (see Section 5.0).

Based on a survey of 65 SMBs, this paper reports the ways in which real-world IPC adopters experience IPC benefits, including examples of specific time-saving and revenue-generating metrics.

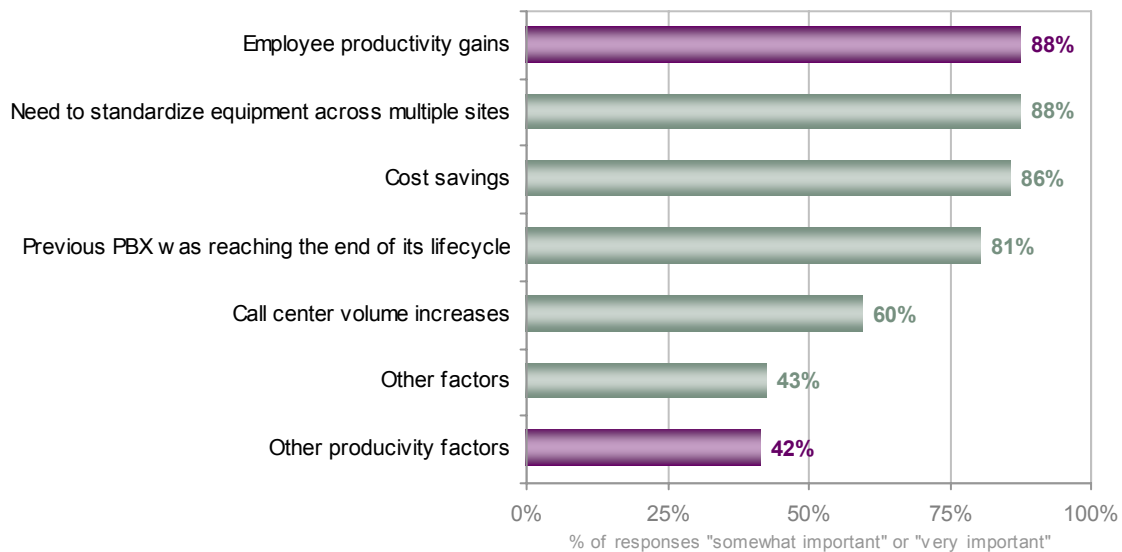
1.1 Why Focus on Productivity?

As current IPC adopters know, employee productivity—whether for end-user or IT employees—is a component of making the business case for such investments. In fact, expected employee productivity gains are a common factor in making the decision to invest in IPC (as reported by the survey participants). Most of the participants (88%) stated that they sought employee productivity gains when planning IPC (see Exhibit 1). Overall, SMBs with IPC are even more intent on employee productivity gains than larger organizations, though it is an important benefit to both segments (88%

of SMBs reported seeking this benefit when planning their IPC investment, compared to 71% of large enterprises (those with 1,000+ employees).

As this research shows, real-world IPC adopters make their business case justification based on a combination of cost savings—both direct (e.g., lower service expense) and indirect (e.g., less spares for standardized equipment), revenue generation, *and* employee productivity gains.

Exhibit 1 • IPC Drivers



1.2 Making the IPC Business Case

Exhibit 2 lists the top IPC benefits realized, as measured in this survey of current adopters. Each benefit is quantified based upon the average experience reported by the participants. For example, about half of the participants (48%) reported that end-users save time because of less telephone tag—saving nearly four hours per week per employee. Please note that these are averages—some companies experienced higher or lower time savings.

The IPC benefits measured in this research can be used by those considering IPC deployment as business case inputs. Using the experiences reported by these 65 organizations, readers can judge for themselves which benefits are likely to apply to their own organizations and extrapolate the potential productivity impact accordingly. All of the key metrics are also presented in Appendix A to help technology planners and technical decision makers build an effective business case for IPC.

Exhibit 2 • Top IPC Productivity Benefits

Realized Benefit	Percent of Population Receiving the Benefit	Average Benefit Level Experienced*
ORGANIZATON WIDE		
Additional sales revenue (e.g., from increased call center activity)	81%	\$3,000 / month / inbound sales agent
Additional inbound sales calls (from integrated call center apps.)	59%	30 calls / day / inbound sales agent
END – USERS		
Less telephone tag for all employees	48%	4.3 hours / week / employee
Improved mobile worker productivity as a result of increased use of features	45%	5.0 hours / week / mobile worker employee
Easier move, add, or change process to enable employees to more readily change workspaces	42%	3 or more moves per year / employee
Improved remote office employee productivity as a result of an increased use of features	39%	4.0 hours / week / remote office employee
IT STAFF		
Faster moves, adds, or changes	45%	2.0 hours / move
Less time spent on vendor management due to using a single vendor to provide an end-to-end solution	43%	5.0 hours / month / IT employee
Less time spent managing telephony-related equipment	42%	4.7 total hours / week
IT time saved because end-users can use telephony features without needing assistance	38%	4.7 hours / week / IT employee involved with telephone support

* The benefit levels quantified here are based on the time per task and metrics (e.g., week or months, individual or department) reported by the participants. Times and metrics will vary depending on the characteristics of an organization.

2.0 Scope & Methodology

In a global economy, getting the maximum return out of resources is the name of the game—and that is certainly true for technology investments. When applied to business communications specifically, revenue generation, cost reduction, and worker productivity are all potential inputs into determining potential investment returns. Yet to date, little information has been available about the ROI impact of IPC on productivity or revenue generation—most have focused strictly on cost savings.

To assist technology planners and technical decision makers in developing IPC business cases, this white paper documents a more comprehensive set of benefits including productivity and revenue generation. Based on the actual experiences of 65 IPC technology professionals in small-to-medium size organizations (300 to 999 employees), these items can be used to help estimate potential employee productivity benefits from an IPC investment.

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

- Responsibility for evaluating, planning, or managing voice solutions in their organization
- Current solution is either a traditional PBX that has been updated to support IPC or VoIP, or an IP-based PBX
- Has deployed an IP PBX solution carrying live traffic in one or more locations

Qualified participants used IP PBX solutions from various vendors.

To create a list of possible productivity benefits, we started this research with three focus groups. By listening to technology professionals discuss their IPC experiences, we were able to put together a list of hypotheses to be tested in the final quantitative survey.

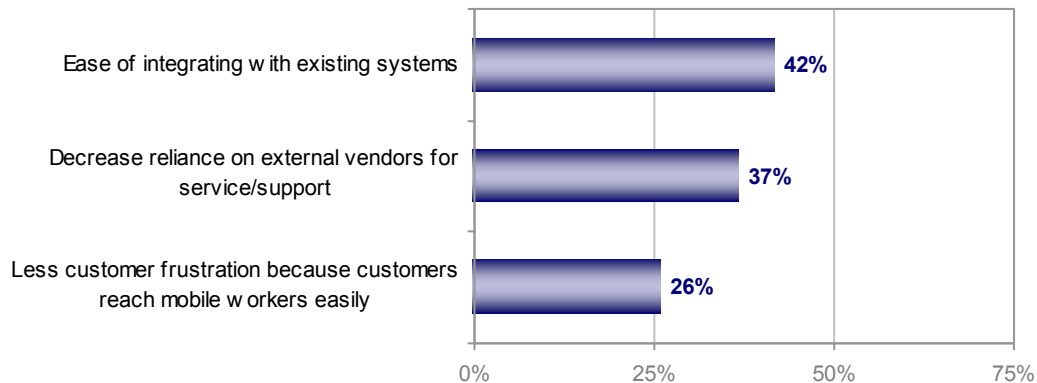
3.0 Organizational Efficiency Benefits

Benefits that directly impact cost-savings and revenue generation are always the most compelling in any ROI analysis. While employee productivity benefits (as detailed in the next two sections on end-user and IT productivity) are substantive, this research also quantified select cost-savings and revenue-generation factors too. For example:

Cost Savings: More than a third of the participants (37%) reported decreased reliance on external vendors for service and support (see Exhibit 3). With IPC solutions, they reported needing less outside help in maintaining and servicing their telephony solutions as compared to previous circuit-switched based PBXs. This point is consistent with a related research finding where technical decision makers indicated a decrease in the number of vendors needed and in the number of spares maintained for IPC systems (as compared to circuit-switched PBX-based systems).

Revenue Generation: Twenty-six percent of the participants reported less customer frustration because customers can reach mobile workers easily with IPC. Ultimately, a decrease in customer frustration can reduce customer turnover rates. In addition, when deployed in call centers, IPC yields even more direct revenue generation results (see Section 3.1).

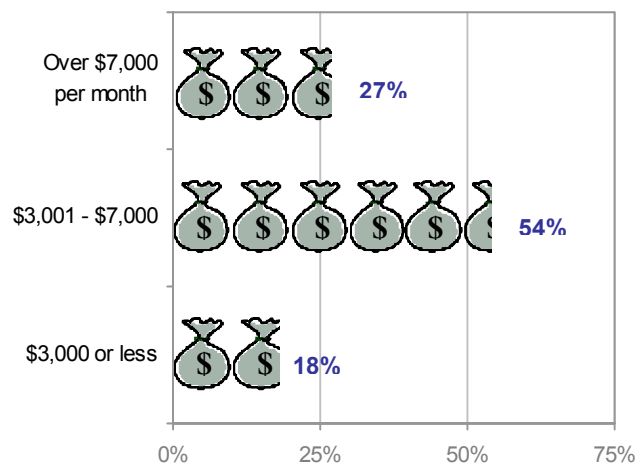
Exhibit 3 • Organizational Productivity Benefits



3.1 Call Center Impact

Participants with IPC in their call centers were asked to report if they had experienced benefits—and, if so, to what extent. The results were compelling. For example, more than three-quarters of the participants (81%) who realized increased inbound call center agent sales revenues as a result of using IPC reported more than an additional \$3,000 per month per inbound sales agent (see Exhibit 4).

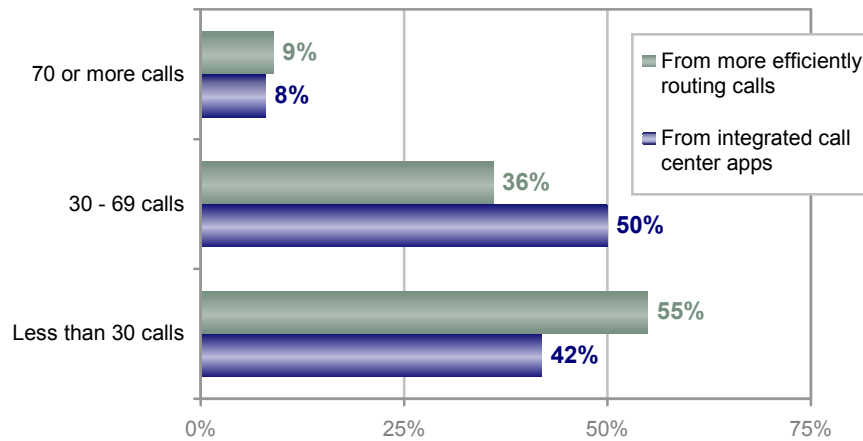
Exhibit 4 • Additional Sales Revenue per Month



Note: N=16. Only those participants who had implemented call centers with IPC were allowed to respond. This information is directional only because of the small sample size.

Call center employee productivity increased as inbound (and outbound) agents were able to field more calls per day. For example, for incoming calls, more than half of the participants (59%) realized increased agent productivity from customer contact solutions. Those participants, using integrated call center applications, reported that each agent was able to handle thirty or more additional calls per day (see Exhibit 5).

Exhibit 5 • Additional Inbound Calls per Day



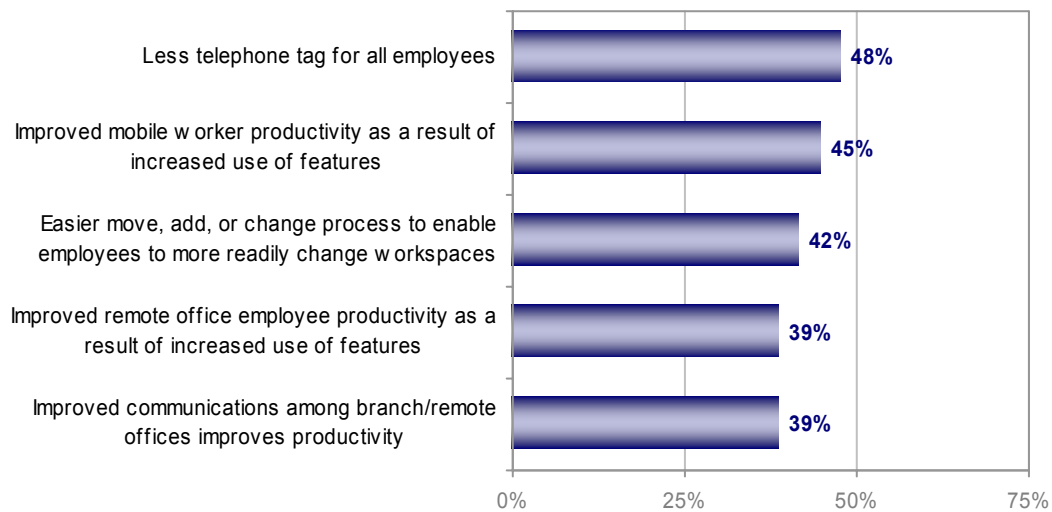
Note: N=30 (from routing calls), N=24 (from integrated apps). Only those participants who had implemented call centers with IPC were allowed to respond. This information is directional only because of the small population.

4.0 End-user Productivity

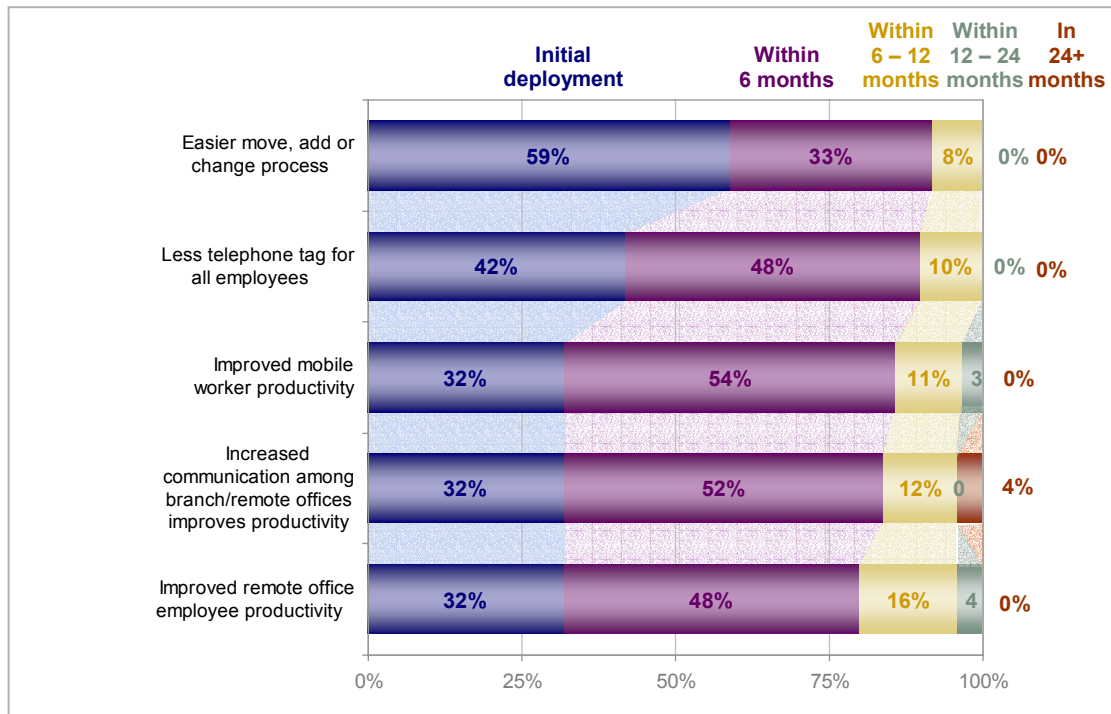
IPC gives end-users mobility, enabling workers (particularly remote office and mobile employees) to effectively do their job almost anywhere (see Exhibit 6). Additionally, IPC empowers employees to use more telephony features and use them more often (as compared to previous systems)—for improved communications and collaboration.

While impressive results, end-users in SMBs have not yet used IPC to its fullest. With greater use of IPC capabilities, this market segment will realize greater employee productivity gains in the future.

Exhibit 6 • Top End-User Productivity Benefits



Research participants realized IPC end-user benefits quickly, with the most significant gains usually coming within the first six months of deployment. For example, most of the participants who experienced the benefit of improved mobile worker productivity did so within the first half year of use (see Exhibit 7).

Exhibit 7 • Timeframe for Realizing End-user Benefits

4.1 Mobility

Mobility is an exciting theme—no longer are workers tethered to a desk. With IPC, employees are more available regardless of their physical location. Employees can work from anywhere and be readily accessible to management or customers, as evidenced by the productivity gains reported for remote and mobile workers.

Mobility gains can occur within an office building, at remote offices, and to employees traveling or otherwise on the move, as Exhibit 8 shows. Employees are changing workspaces more often and are better able to work off premises with IPC.

And, while nearly all participants reported IPC-driven mobility benefits, the degree to which they were realized increased with the use of specific IPC applications (see Exhibit 8). For example:

- Almost two-thirds of participants (65%) who use unified messaging reported improved **mobile employee** productivity, compared to only 33% who did not use unified messaging
- Sixty-seven percent of the participants who use collaborative conferencing realized improved **remote office employee** productivity, compared to 30% who did not use collaborative conferencing

Exhibit 8 • IPC Applications Drive Productivity Benefits

Percentage realizing improved mobile employee productivity	Use Find me/Follow me	Don't use
	62%	33%
	Use Unified Messaging	Don't use
Percentage realizing improved remote employee productivity	65%	33%
	Use Collaborative Conferencing	Don't use
	67%	30%
Percentage realizing improved telecommuter productivity	Use Videoconferencing	Don't use
	59%	31%
	Use Collaborative Conferencing	Don't use
	53%	34%

* Ns vary. Find me/follow me (N=23). Unified messaging (N=26). Collaborative conferencing (N=15). Videoconferencing (N=17). This information is directional only because of the small population.

4.2 Communications Literacy

IPC-enabled employees are more communications literate.¹ In the past, telecomm managers have often been frustrated that end-users did not fully utilize their PBX systems' features—or required help using the most basic functions (such as needing help desk support to make conference calls). With IPC, workers use more features and with less support than in the past. For example:

- More than half of the participants (59%) cited IT staff time saved because end-users can use telephony features without assistance (clearly a benefit to both the end-users and the IT staff who support them)

Communications literacy means employees are more able to leverage telephony with IPC. For example, the greatest productivity gain realized for all employees in SMBs, as reported by the participants in our survey, centered on employee communications. Similarly, the use of other IPC features reduces employees' dependence on others.

Not only does communications literacy boost individual productivity—it also improves peer collaboration. For example, with IPC, employees can initiate conference calls on the fly bringing

¹ In the past, computer literacy has often been used to refer to the degree to which a person uses computer and software features independently. We often refer to people as more or less computer literate. Similarly, communications literacy refers to the degree to which a person is able to use communications systems independently. Communications literacy is often assumed—after all, everyone knows how to use a phone, right? Wrong. In reality, many end-users have been using only the most basic features (such as voicemail), and avoiding any features requiring less intuitive command sequences (such as 3-way conference calling).

dispersed workers together in lieu of in-person meetings to quickly make decisions or solve problems. These conference calls can be done without in-house assistance or any third-party scheduling. While the function existed with previous systems, research participants report that with IPC end-users now leverage the function more often and require less support.

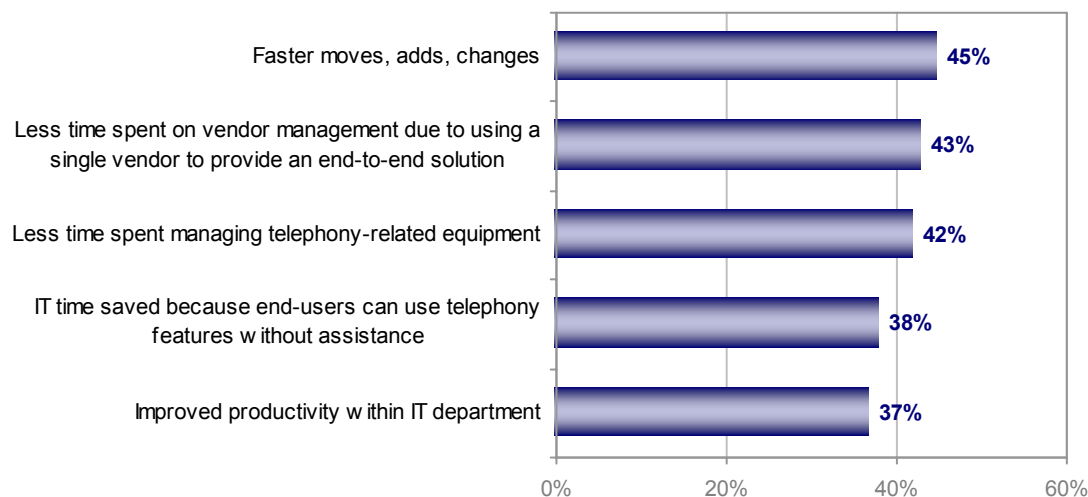
5.0 IT Staff Productivity

IPC eases IT's ability to manage voice and data services. Additionally, employees' increased communications literacy frees up IT staff for other tasks.

While faster MACs tops the list of realized IT staff benefits (45% reported improved IT staff efficiencies in handling user telephony moves, adds, or changes with IPC), other items were also compelling (see Exhibit 9). For example, 42% of the participants reported less time spent managing telephony equipment with IPC. Further, with IPC enabling employees to be more communications literate, IT staff can support more employees at the same staffing levels, including those employees located at remote sites.

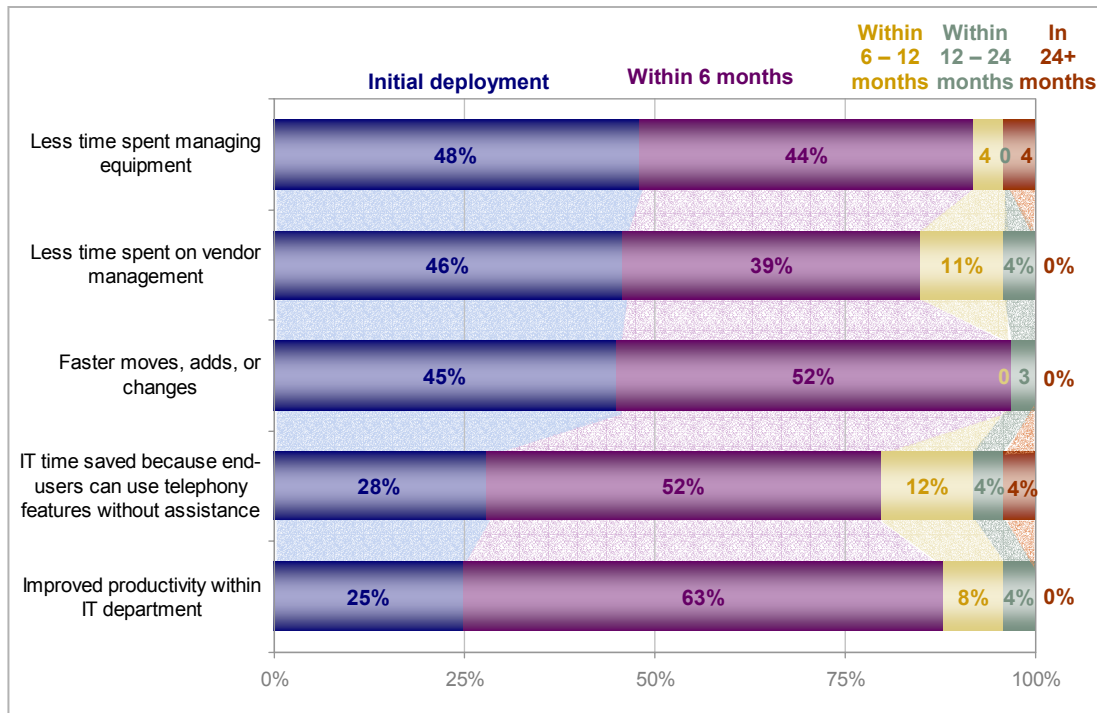
Going forward, the IT staff time saved with IPC can be applied to new telephony enhancements or to other business applications and services. In this way, organizations can take advantage of new telephony trends and continue to exploit the competitive-edge reported by many of the survey participants using this technology.

Exhibit 9 • Top IT Staff Benefits



Not only are many benefits realized—they are experienced quickly (typically within six months). For example, of survey participants realizing faster moves, adds, or changes, 97% did so within six months of deployment (see Exhibit 10).

Exhibit 10 • Timeframe for Realizing IT Benefits



6.0 Conclusion

IPC delivers organizational efficiency and employee productivity gains. Some benefits, such as the call center gains, correspond directly to revenue. Others, including those benefits making employees more mobile and communications literate, are more indirect—but still key to the investment decision. Using the actual benefits as measured by 65 IPC adopters in small-to-medium size businesses, technology decision makers can assess for themselves which of the benefits quantified in this white paper could apply to their own organizations, and use them as inputs to their own IPC business case analysis.

For more information about this study, contact Kathryn Korostoff (kathryn@sageresearch.com) or Cathy Leonard (cathyl@sageresearch.com), at Sage Research, +1 508-655-5400.

7.0 Appendix A: Business Case Metrics

IPC business cases will vary by organization, depending on a wide range of factors such as existing technology solutions, organizational structure, and possibly industry and regulatory needs. To aid readers in building individual IPC business cases, the top productivity benefits tested in this research are included here with associated metrics (see Exhibits 11 and 12). Readers can apply and extrapolate these metrics for their own specific business case development, using the average experiences of these 65 organizations as a guide.² Of course, while this white paper reported on the most common productivity gains, other benefits may also be relevant depending on the organization where IPC would be deployed.

When building this survey, we listened carefully to how technology professionals discussed the benefits they realized. Some benefits were discussed in terms of hours per week, while others were discussed in terms of hours per month. In some cases, benefits were specific to individuals, while others spanned a department. Therefore, the metrics for the benefits align with how the technical decision makers themselves described them. In some organizations, other basis of measurement may be more relevant—and the items would be adjusted accordingly.

² For example, to calculate less telephone tag for all employees, identify the number of potential hours saved per week per employee resulting from the increased use of telephony features (such as call forwarding and conference calling). Next, multiply this number by the number of employees in the organization. Using the results of our survey for a fictitious organization with 500 employees, the increase in employee productivity is 2,150 hours per week (i.e., 4.3 hours x 1 week x 500 employees). Refer back to Exhibit 2 for average results.

Exhibit 11 • End-user Benefit Metrics

Potential Benefit	Average Benefit Metric
E N D – U S E R S	
Easier move, add, or change process allows employees to move workspaces more often	Number of more moves per year
Improved corporate headquarters employee productivity as a result of increased use of features	Hours / week / headquarters employee
Improved mobile worker productivity as a result of increased use of features (e.g., call forwarding, conference calling, etc.)	Hours / week / mobile worker employee
Less time spent checking voicemails because calls follow employees	Hours / week / employee
Less time spent checking voicemail as a result of using unified messaging capabilities (Defined as a unified end-user inbox—email, voicemail, fax access in a common client—and telephone access to email via text to speech)	Hours / week / employee
Improved remote office employee productivity as a result of increased use of features (e.g., call forwarding, conference calling, etc.)	Hours / week / remote office employee
Less telephone tag for all employees	Hours / week / employee
Improved telecommuter productivity as a result of increased use of features (e.g., call forwarding, conference calling, etc.)	Hours / week / telecommuter
Less training for end-users	Hours / year / employee

Potential Benefit	Average Benefit Metric
E N D – U S E R S	
Ability to access voice integrated supply chain management or sales force automation applications	Hours / week / employee
Time saved because it is easier for employees to playback messages and save them in different formats (i.e., wave format)	Hours / week / employee
Speech recognition for dial-by-name access to a common directory saves employee time	Hours / week / employee
Internal dialing plans for nationwide and/or international offices saves employee time	Hours / week / employee
Increased availability of coworkers (through find me/follow me functions and/or unified messaging) facilitates workflow process	Hours / week / employee
Improved functionality within functional groups in the organization (i.e., sales, customer service, finance, etc.)	Hours / week / functional group employee
Administrative staff can more efficiently direct incoming phone calls due to easy-to-use telephone line monitoring system	Hours / week / administrative employee
Increased use of conference calling improves overall employee workflow rate	Hours / week / employee
Access to missed calls list saves employee time	Hours / week / employee
Ability for employees to work from home using IP Telephony avoids time lost when they cannot travel to office (e.g., due to bad weather, etc.)	Days / year / employee
Increased communication between branch and/or remote offices improves employee productivity	Hours / week / employee

Potential Benefit	Average Benefit Metric
END – USERS	
Increased sales revenues generated by inbound agents	Revenue / month / inbound agent
Ability to access integrated call center applications (e.g., an inbound caller's customer profile pops up on the agent's screen)	Percent (%) of inbound agents saving time
Improved inbound call center productivity as a result of more efficiently routing calls to appropriate agents	Calls / day / inbound agent
Improved outbound call center productivity	Calls / day / outbound agent
Improved inbound call center agent productivity as a result of being able to handle two or more customer requests simultaneously through different media (voice, instant messaging, chat, email, etc.)	Additional calls / day / call center agent

Exhibit 12 • IT Staff Benefit Metrics

Potential Benefit	Average Benefit Metric
IT STAFF	
Faster moves, adds or changes	Hours per move
Reduced need for IT staff to travel	Hours / month / IT employee
Less time spent on vendor management due to using a single vendor to provide an end-to-end solution (e.g., hardware, software, and core applications including messaging and call center)	Hours / month / department-wide
Less time spent managing spares for multiple brands	Hours / month / department-wide
New office openings completed quicker	Days per new office opening
IT staff time saved as end-users can use telephony features without help	Hours / week / IT employee involved with telephone support
Less training for IT staff	Hours / month / IT employee
Less time spent managing telephony-related equipment	Hours / month / department-wide
More completed technical support calls per employee	Calls / day / IT employee