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Productivity and the IPC Business Case

- Analysis of Large Enterprises

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1.0 Executive Summary

IP Communications (IPC) has led to concrete productivity gains—benefits which can be categorized into 3 areas: Organizational Efficiency, End-user Productivity, and IT Staff Productivity.

- **Organizational Efficiency:** Current adopters report 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, one of the key examples quantified in this study is due to improved call center volumes. Any doubt about IPC’s organization-wide impact? Just ask these current deployers themselves: more than two-thirds of survey participants (67%) stated that IPC provides their organizations with a competitive advantage over other organizations in their respective industries (see Section 3.0).
- **End-user Productivity.** In this category, the key themes are A) benefits from enabling workers to be more mobile (without sacrificing functionality) and B) those due to enhanced communications literacy (see Section 4.0). These end-user benefits do more than deliver isolated pockets of efficiency—they impact organizational success factors as well. For example, 38% of participants reported less customer frustration because customers can reach mobile workers easily thanks to IPC.
- **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 3 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 83 large enterprises, 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). Almost three-quarters of the participants (71%) stated that they sought employee productivity gains when planning IPC (see Exhibit 1). Thus, as this research shows, real-world IPC adopters make their business case justification based on a combination of cost savings, revenue generation, *and* employee productivity gains.

Exhibit 1 • Benefits Sought When Planning IPC**1.2 Making the IPC Business Case**

Exhibit 2 lists the top IPC benefits realized, as quantified in this survey of current adopters. Each benefit is quantified based upon the average experience reported by the participants. For example, 54% report that end-users save time by using a missed call list feature—saving nearly 2 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 83 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*
ORGANIZATIONAL		
Additional sales revenue (e.g., from increased call center activity)	88%	\$3,000 / month / inbound sales agent
Additional inbound sales calls (from integrated call center apps.)	59%	30 calls / day / inbound sales agent
END – USERS		
Easier move, add, or change process to enable employees to more readily change workspaces	67%	3 or more moves / year / employee
Employees working from home using IPC avoid lost work time	54%	3.0 days / year /employee
Access to missed call list saves time	54%	1.8 hours / week /employee
Increased corporate headquarters employee productivity as a result of increased use of features	52%	3.9 hours / week / employee
IT STAFF		
Faster moves, adds, or changes	71%	1.4 hours / move
IT time saved because end-users can use telephony features without needing assistance	53%	4.3 hours / week/ IT employee involved with telephone support
Reduced need for IT staff to travel	52%	14 hours / month / IT employee
Improved productivity within the IT department	52%	3.6 hours / week / IT employee

* 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 IP Communications (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 83 IPC technology professionals in large enterprises (1,000 or more 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.

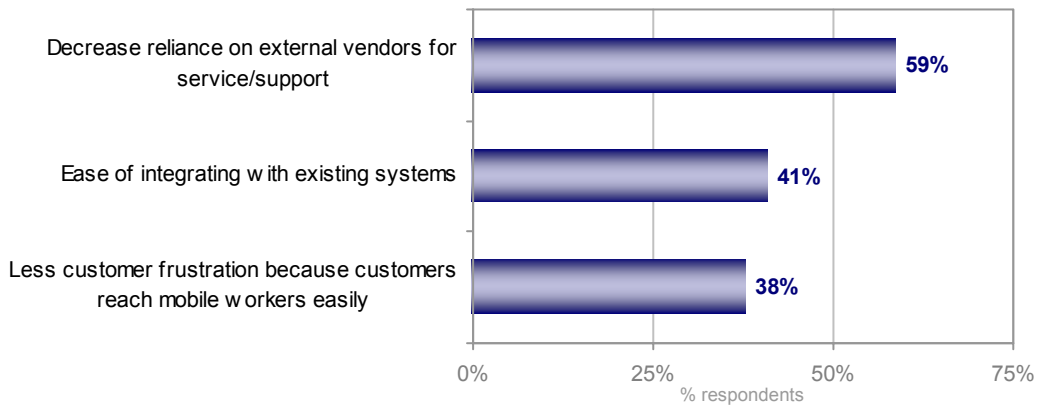
3.0 Organizational Efficiency Benefits

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

Cost Savings: More than half of the participants (59%) reported decreased reliance on external vendors for service and support (see Exhibit 3). With IPC solutions, they report needing less outside help in maintaining and servicing their telephony solutions—as compared to previous circuit-switched based PBXs. This 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: An impressive 38% of 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).

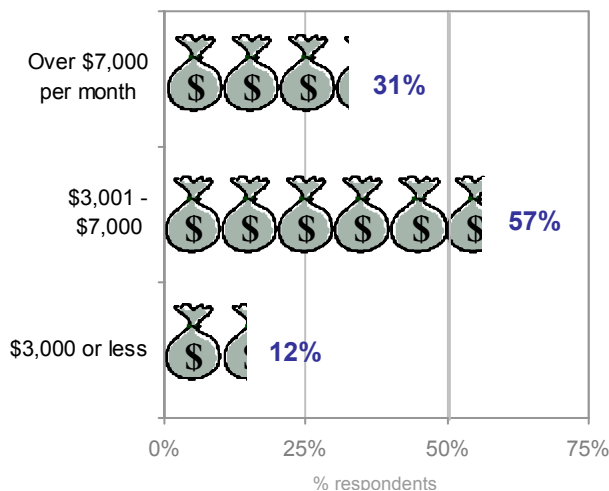
Exhibit 3 • Organizational Productivity Benefits



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 are compelling. For example, most of the participants (88%) 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).

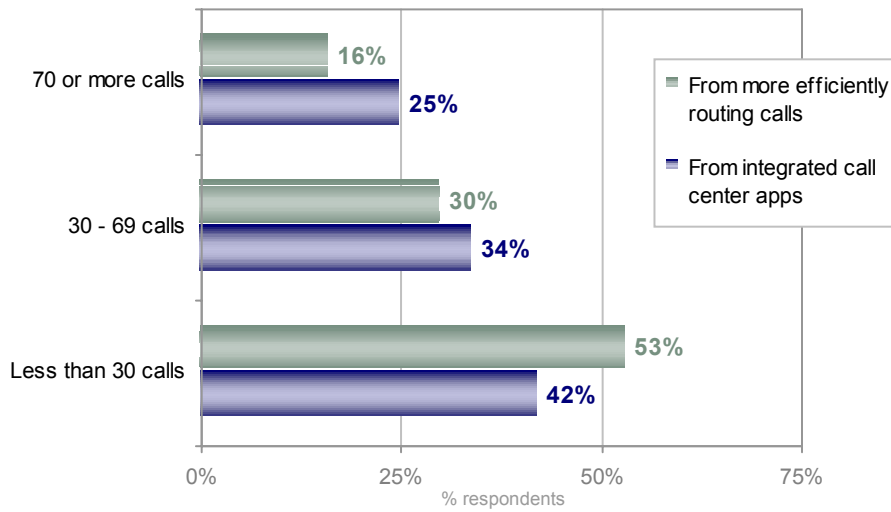
Exhibit 4 • Additional Sales Revenue per Month



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 increases as inbound (and outbound) agents are 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

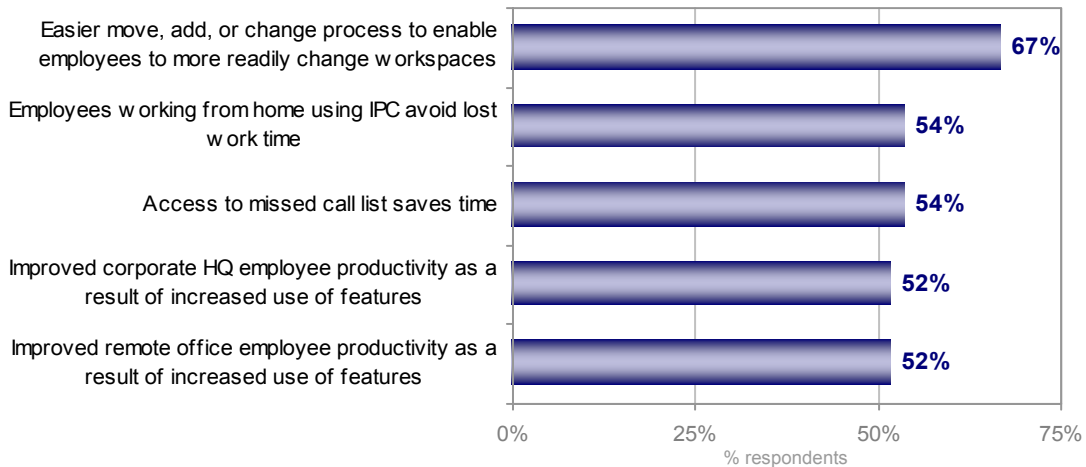


Note: N=30 (from routing calls), N=24 (from integrated apps). Only those participants who had implemented call centers with IPC were allowed to respond. This information is directional only because of the small population.

4.0 End-user Productivity

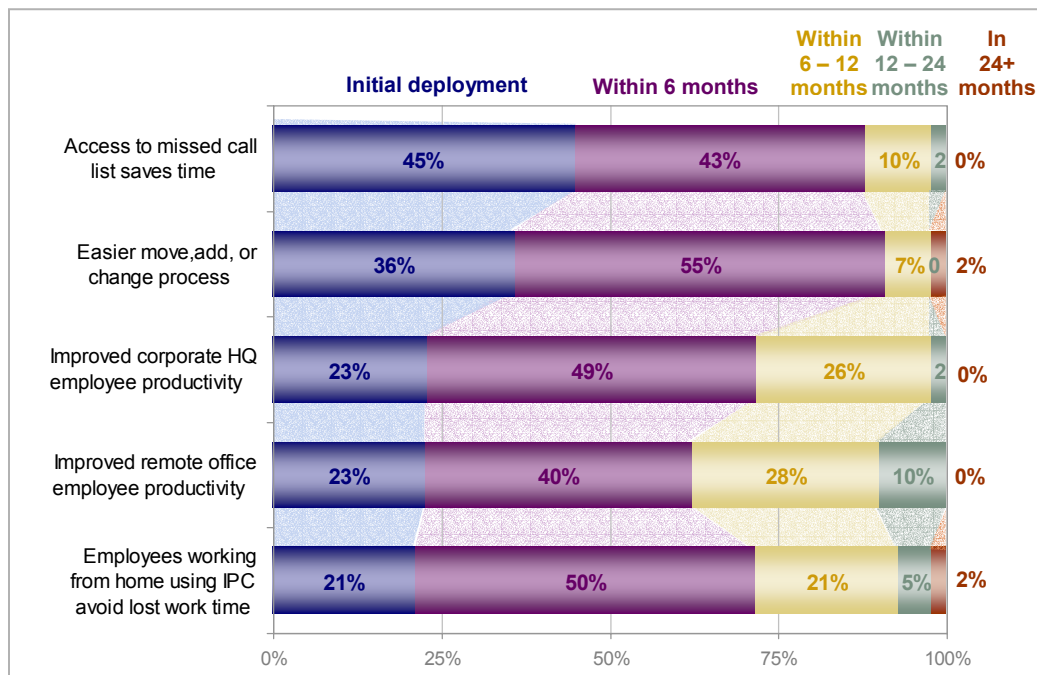
IPC’s productivity benefits are not restructured to the IT staff. Large enterprises commonly cited end-user benefits as well (Exhibit 6). IPC gives employees mobility, enabling workers to effectively do their job almost anywhere. Additionally, IPC empowers employees to use more telephony features and use them more often (as compared to previous systems)—for improved communications and collaboration.

Exhibit 6 • Top End-User Productivity Benefits



Research participants realized end-user benefits IPC quickly, with the most significant gains usually coming within the first six months of deployment. For example, most of the participants experiencing the benefit of access to missed call lists do 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.

Sometimes mobility can be mobility within an office building, as Exhibit 8 showed. Thus, 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 are realized increases with the use of specific IPC applications (see Exhibit 8). For example:

- Almost two-thirds of participants (63%) who use unified messaging reported improved **mobile employee** productivity, compared to only 45% who did not use unified messaging.
- Sixty-eight percent of the participants who use collaborative conferencing realized improved **telecommuter** productivity, compared to 38% 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
	58%	45%
Percentage realizing improved remote employee productivity	Use Unified Messaging	Don't use
	63%*	45%
Percentage realizing improved telecommuter productivity	Use Collaborative Conferencing	Don't use
	68%**	44%
Percentage realizing improved telecommuter productivity	Use Videoconferencing	Don't use
	63%*	37%
Percentage realizing improved telecommuter productivity	Use Collaborative Conferencing	Don't use
	68%**	38%

* Note: N=24. This information is directional only because of the small sample size.

** Note: N=19. This information is directional only because of the small sample size.

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

¹ Computer literacy is often used to refer to the degree to which a person uses computer and software applications independently. We refer to people as more or less computer literate. Similarly, communications literacy refers to a person's ability 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

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.

- More than half of the participants (53%) 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, by using IPC call logs, employees can quickly identify missed calls (and, possibly missed opportunities) even if the caller did not leave a message—and decide whether or not to return the call. For customer-facing roles, the ability to make a quick decision on a missed call could mean the difference in making a sale or retaining a troubled customer. 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 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 leverage them 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.

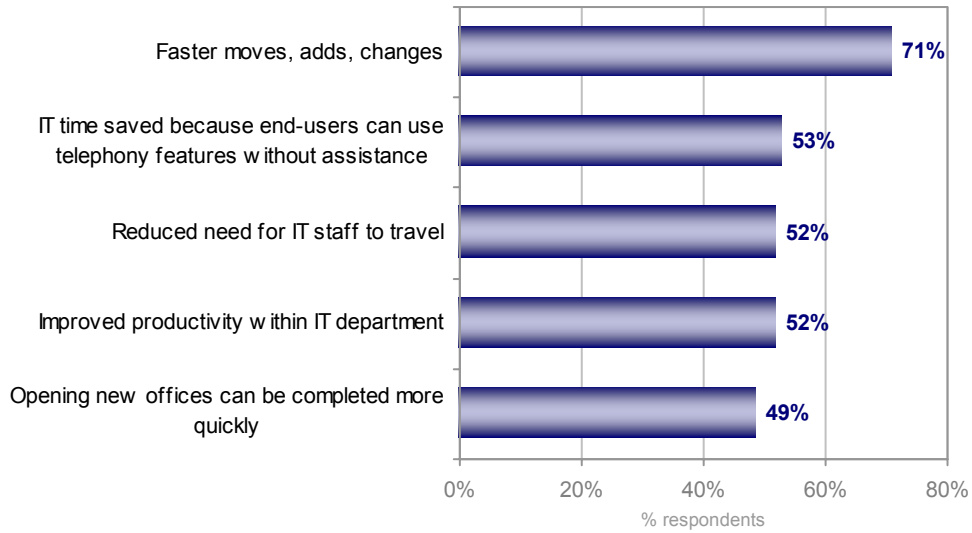
While faster MACs tops the list of realized IT staff benefits (71% reported improved IT staff efficiencies in handling user telephony moves, adds, or changes with IPC)—other items are also compelling. In fact, almost half of the participants (49%) reported opening new offices more quickly with IPC (see Exhibit 9).

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. Similarly, many participants reported time saved because of a reduced need for IT staff to travel to support branch offices or 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.

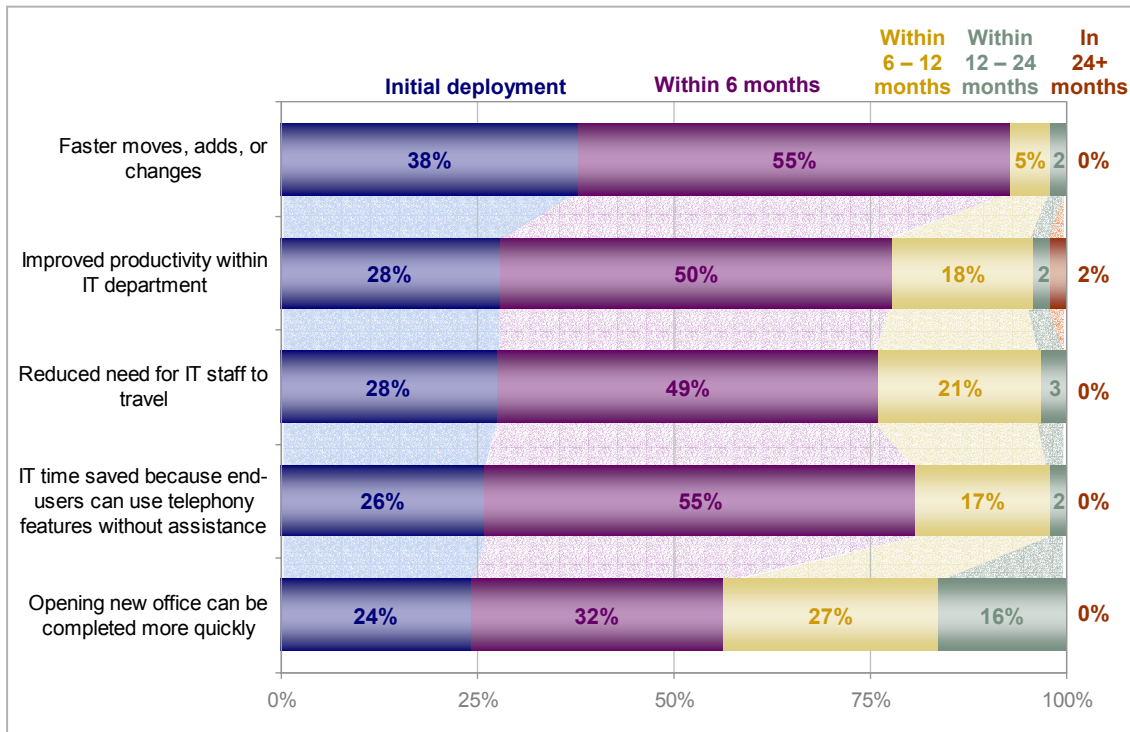
been using only the most basic features (such as voice mail), and avoided any requiring less intuitive command sequences (such as 3-way conference calling).

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, 93% do 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 83 IPC adopters in large enterprises, 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 83 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 below would be adjusted accordingly.

² For example, to calculate improved corporate headquarters employee productivity, 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 corporate headquarters based workers impacted. Using the results of our survey for a fictitious organization with 1,000 employees at headquarters (assume all headquarters based workers benefit); the increase in employee productivity is 3,900 hours per week (i.e., 3.9 hours x 1 week x 1,000 headquarters employees). Refer back to Exhibit 2 for average results.

Exhibit 11 • End-user Benefit Metrics

Potential Benefit	Average Benefit Metric
END – USERS	
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 (e.g., call forwarding, conference calling, etc.)	Hours / week / headquarters 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 time spent checking voicemail as a result of using unified messaging capabilities	Hours / week / employee
Increased availability of coworkers (through find me/follow me functions and /or unified messaging) facilitates workflow process	Hours / week / 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

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 / new office opening
IT staff time saved as end-users can use telephony features without needing assistance	Hours / week / IT employee involved with telephone support
Less time spent managing telephony-related equipment	Hours / month / department-wide
More completed technical support calls per employee	Calls / day / IT employee