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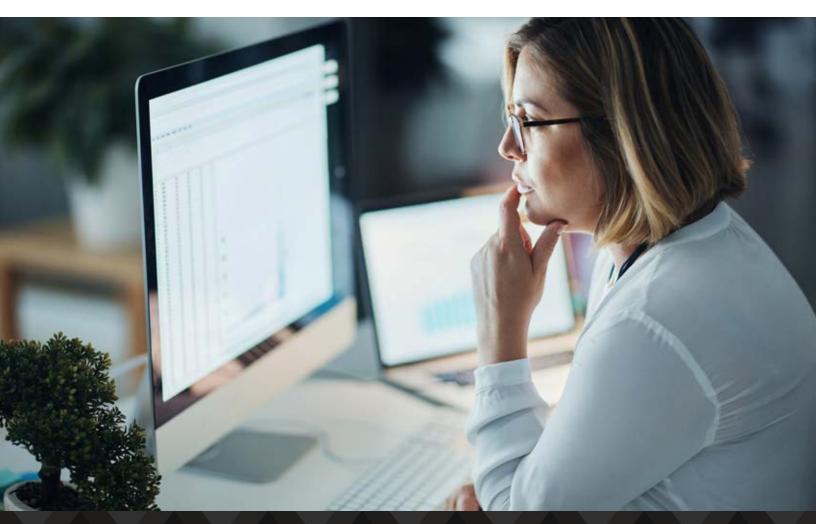
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## **Executive Summary**

The impact of the cloud has been felt across all aspects of business, with communications being a recent application. Until recently, these applications have been hardware-based and considered too strategic to become outsourced. However, the deeper these roots, the harder it becomes to adapt to changing technology. As a result, legacy telephony systems have reduced utility, and premise-based technologies are too limited to support today's collaboration needs.

Small and medium businesses (SMBs) face a distinct set of challenges, not just for modernizing their phone systems, but also to keep pace with technology change, along with the advanced collaboration tools workers are coming to expect. Under the right conditions, these needs could be met by premise-based solutions, but for most SMBs, the cloud is the way forward.

While SMBs are ready for the cloud, they lack vision for choosing the right deployment model, along with a value proposition that takes them beyond telephony to the broader world of collaboration. This white paper builds on current research to further articulate both the limitations of premise-based technologies and the business value of cloud-based collaboration. The analysis provides a foundation for forward-thinking decision making and concludes with guidance on what to look for in a cloud communications, or Voice over Internet Protocol (VoIP), partner.





There are many reasons why businesses "go to the cloud", and this trend has become quite pronounced now for communications applications like telephony. Among SMBs, every situation is somewhat unique, and our research identified a broad range of drivers. To whatever extent your business has adopted the cloud, the summary below will help validate your thinking.

Not surprisingly, a combination of factors is usually involved in making that decision, and when considering the diverse variety, the value proposition only becomes stronger. Whether this leads you to begin a cloud migration or accelerate your adoption plans, it should be clear how this path can help SMBs compete more effectively against larger competitors, and provide the best tools possible to make workers more productive.

Cloud drivers for SMBs can be grouped into two basic categories, as shown in Tables 1 and 2. First pertains to IT staff and how the cloud benefits their role as well as their domain of network operations. Second are the business-level benefits that apply to management or the organization overall.

Table 1: Reasons for IT to Move Communications to the Cloud

Reason	Why Important
Limited IT capabilities	SMBs have limited resources and technical expertise for IT to adopt and support new technologies. Cloud takes on much of that role so IT can manage more complex environments.
Need to stay current	Communications technology is changing, and IT struggles to keep up. Also, premise-based technologies aren't evolving to keep pace with today's needs.
Need new ways to add value	There is no value-add for IT with legacy technology. Cloud frees up IT to focus on higher-value outcomes, like improved customer experience or making the organization more agile.
Requirements to support premise-based telephony	For growing businesses, there's a lot of hardware and cabling to support, which is very labor-intensive. Same applies for upgrades or maintenance—there are diminishing returns for aging infrastructure.
Addressing shadow IT	This activity bypasses IT, and is ungoverned and not secure. Cloud communications allows IT to offer a better solution to workers, reducing the need for them to go around IT.
Maintain network security when adding new applications	Early concerns about security in the cloud have given way to the recognition that in-house security efforts—especially among SMBs—cannot possibly match what cloud providers are doing, especially as new threats keep emerging.

Table 2: Business-Level Reasons to Move Communications to the Cloud

Reason	Why Important
Benefits of software-as-a- service (SaaS) model	SMBs can no longer justify a capital expenses (Capex) model for premise-based phone systems, and SaaS is more cash flow friendly.
Better value for the business	Shifting to an operating expenses (Opex) model may not actually save money, but overall benefits provide less risk and more reward.
Business continuity	Uptime for communications is vital for both internal operations and supporting customers. Cloud model can deliver five nines reliability, even under adverse or extreme weather conditions.
Minimal disruption when deploying	SMBs may be certain about going to the cloud, but less so for the deployment model. Cloud offers the flexibility to deploy gradually or all at once without disrupting business operations.
Seamless communications under changing conditions	Supporting premise-based systems is a challenge for SMBs when moving locations or extending reach to new sites. In these scenarios, the cloud is particularly more effective.
Allows business to focus on what's most important	Most SMBs are more interested in growing the business than adopting the latest technologies. Cloud communications addresses the latter better than premise-based, making it easier to focus on growth.
Familiarity	SMBs may not realize they've already been using and trusting the cloud—Office 365, customer relationship management (CRM) software, storage, etc.—so doing the same with communications won't be that much of a change or risk.

# Constraints for Being Premise-Based—Things You Can't Do but Need to Be Doing for Collaboration

Moving to the cloud for communications and other needs is an important trend overall, but the drivers are even more compelling when considering the current situation for most SMBs. In particular, for businesses still using premise-based telephony, there are inherent constraints that limit the ability for workers to collaborate effectively.

Below is a summary of key constraints from our research, all of which reflect things SMBs should and would like to be doing for collaboration but cannot while still relying on premise-based telephony.

Constraint	Implication
Unable to integrate telephony with other applications	Workflows are no longer telephony-centric, and are driven more by multi-modal communication. So long as telephony remains an island, the effectiveness of voice will be limited.
Lack of support for enhanced telephony features, like HD audio or call recording	Cannot provide workers with the latest features that add value for telephony both for everyday communication and when collaborating on tasks.
Going beyond conventional telephony	Collaboration solutions are still evolving, and the cloud is enabling the next generation of capabilities that will bring new forms of business value, such as artificial intelligence, analytics, chatbots and digital assistants.
Supporting remote workers	SMBs have valid reasons for moving to a distributed organization structure, and there's a growing preference among younger works to work remotely. Premise-based telephony is a real constraint on both, especially when trying to provide a consistent collaboration user experience (UX) for all modes of working.
Providing an engaging UX	Younger workers—digital natives—expect a consumer-style UX at work, one that is easy to use, mobile-centric, supports touch screens, supports social sharing, etc. They don't use landlines at home, and won't be inclined to use their desk phones if the UX isn't relatable to them.
Customizing applications for workers	Digital natives highly value personalization, and legacy telephony systems have limited capability for this. Voice is central to the collaboration experience, and if telephony cannot be customized as easily as other cloud-based applications, end-user adoption will lag, undermining your investment.



# How the Cloud Addresses the High Cost of Telephony

While SMBs may be ready for the cloud, many are not sure yet about telephony, which is the first and most crucial step in moving towards a cloud-based model for all modes of communications. As outlined above, there are many compelling reasons for the cloud, but telephony has a distinct set of drivers around which a business case can be made. Without these, SMBs will not get to the point where they can leverage the cloud for integrated solutions like Unified Communications and the collaboration capabilities needed in today's digital workplace.

Most SMBs have premise-based deployments for telephony, either as switched systems—namely private branch exchanges (PBX) or key telephone systems (KTS)—or unswitched systems where each worker has a dedicated phone number. In some cases, these legacy modes have been updated to an Internet Protocol (IP) PBX, but they are all hardware-based and represent a major investment for the business. Not only are there sunk costs for the phone systems—sometimes capitalized—but there are ongoing associated costs, both for the telephony service and system maintenance. Often these are locked in with long-term contracts.

In this context, SMBs face a particular challenge for getting a better ROI on telephony, especially given the alternatives available when using VoIP. On its own, the economics of VoIP are attractive, but the rationale becomes even stronger with cloud-based offerings. Given the need for SMBs to be cost-conscious, a logical starting point for the cloud is the position that telephony is more expensive than it needs to be.

That position may be self-evident, but it becomes clearer when considering the wide range of factors that impact the cost of legacy telephony. For businesses that have not updated their telephony systems recently, this broader reality may not be top of mind, and Tables 3 and 4 address that. Table 3 summarizes the hard costs that truly make legacy telephony expensive, but beyond that are hidden costs that indirectly add to the situation.

Taken together, these challenges provide a strong rationale for cloud-based telephony solely on economic grounds. While this alone should justify the transition, the rationale becomes even stronger when considering the impact on collaboration, and that will be assessed in the next section.

Table 3: Drivers for the High Cost of SMB Telephony—Hard Costs

Challenges	Impact on Telephony ROI
Acquisition costs	Many phone systems are Capex-based, making these either too expensive for SMBs, or require a high investment that is hard to justify.
Maintenance costs	Aside from being a high cost, legacy phone systems are declining assets that don't warrant this level of support.
Cost of telephony service	VoIP users will be familiar with the many ways legacy service from incumbents is expensive—monthly line charges, a la carte features, long distance calling and long-term contracts. Add to that the inflexibility of legacy trunking, often requiring SMBs to overprovision and overpay to support growth.
Right-sizing your spending	Many aspects of legacy telephony are fixed or have limited flexibility, leading SMBs to overspend when growing, or there are peaks and valleys in demand for service.
Weak controls over use of phones	Most premise-based phones are not actively monitored or require authentication to use. This makes them vulnerable to unauthorized use, which can result in costly long distance charges.

Table 4: Drivers for the High Cost of SMB Telephony—Hidden Costs

Challenges	Impact on Telephony ROI
End-of-life support from vendors	Staying with these systems will lead to relying on costly gray market parts and make it harder to get proper servicing.
No new features	Also part of end of life, the phone system is no longer able to support end-user needs. As you outgrow your phone system, you will need to use patchwork fixes to keep up, and that gets expensive.
Disappearing legacy expertise	Whether from within your IT ranks or out in the marketplace, this attrition is happening as telephony goes digital. The longer you maintain the status quo, the more expensive that help will become as needs arise.
False sense of security for legacy	Even if not meeting your needs, SMBs are inclined to keep using their phone systems so long as the system works. Inertia takes over, with IT supporting a solution that keeps their life easy, but is not cost-effective for the business.
Consumer-grade perceptions of VoIP	Many businesses have stayed with legacy telephony due to the poor reputation VoIP initially had for quality. This perception or uncertainty has held SMBs back from adopting a technology that is now business-grade, along with providing a better ROI.

## Collaboration—Getting Beyond Telephony

Compared to collaboration, migrating telephony to the cloud is relatively straightforward. The cost factors are known, and since the financial benefits are measurable, there is a clear business case to support the move. Furthermore, since everyone knows how to use their phones, and the UX remains unchanged, barriers to adoption will be low.

The scenario is different for collaboration, and while more factors are involved for deployment and adoption, the benefits are significant and go well beyond the utility provided by telephony. Like telephony, collaboration isn't new, but the current approaches aren't very effective, especially those in premise-based environments.

This creates pain points for SMBs, not just because the need for collaboration is intensifying, but the constraints of being premise-based present major challenges for IT. Not only are these technologies difficult for IT to manage, but they often translate into complexity for end users, and that inhibits adoption, which is so critical for the success of a collaboration initiative.

This is the context for understanding the value proposition of cloud-based collaboration, and the use cases where the cloud really makes sense. Premise-based deployments can certainly be effective, but for SMBs in particular, there are many distinct challenges and limitations. Table 5 summarizes these. From there, the case will be made for how cloud-based telephony provides the foundation for SMBs to easily extend that model into collaboration.

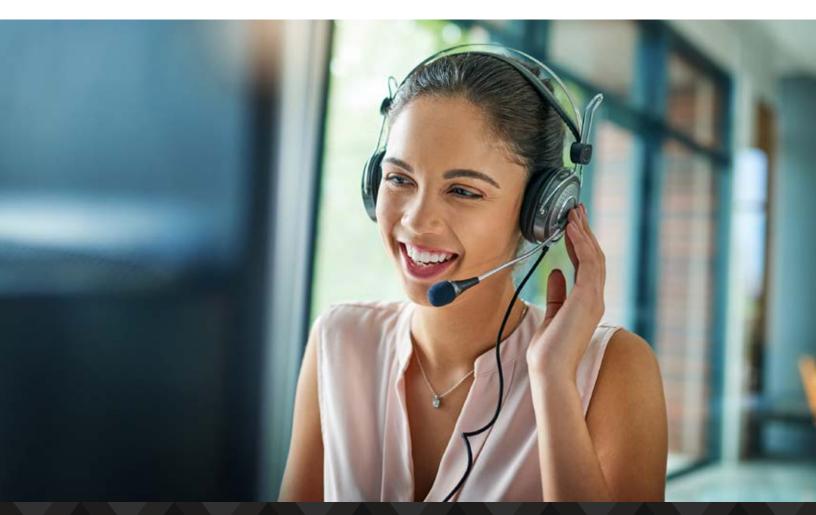


Table 5: Collaboration Challenges with Premise-Based Systems

Challenges	Impact on Ability to Collaborate
Current approach is a patchwork of applications—voice, video, chat, conferencing, etc.	This ad hoc approach to adding point solutions does not serve the overall business well. Applications aren't integrated and the UX isn't standardized, making collaboration results difficult to gauge. There's also duplication of effort, making this more expensive than with a centralized approach. Also, IT lacks visibility into how resources are being used, limiting their ability to optimize the network and support end users.
Managing multiple platforms	Related to the above, this approach leads to multiple platforms being used for the same application—chat, conferencing, video, etc. Aside from being inefficient, it's difficult to integrate or connect different platforms for the applications, hindering the effectiveness of collaboration efforts.
Managing the mix of deployment models	In some cases, there's a mix between on-premise and cloud applications. With cloud being new for many vendors, the capabilities and features will not be equal in both cases. This will be difficult for IT to manage, and creates an inconsistent UX for workers.
Managing all the vendors	The greater the variety in these scenarios above, the more challenging this will be for IT. Not only could there be many telephony-based vendors to manage, but also service providers offering hosted solutions. Compatibility across all of this will always be an issue, and, ideally, IT would rather consolidate and work with just one or a few partners.
Managing all the applications	Another fallout from the above is "app fatigue", where workers simply have too many choices, making it difficult to choose the right ones for each set of collaboration needs. A common concern is how end users spend too much time managing applications, and not enough getting real work done.
Supporting growth and change	On a broader scale, SMBs are not usually in a steady state. They are often growing, adding offices, opening new locations or moving. All of these modes of change are challenging for premise-based technologies, not just for moving around hardware and cabling, but for providing all workers with a consistent set of applications for collaboration.
Supporting remote workers	This is a subset of the above, but an important and growing trend in the workplace. Basic tasks such as adding remote workers to an existing meeting are problematic with premise-based technology, making this a fundamental constraint for collaboration.
Lines of business bypassing IT	Another recurring issue is where lines of business pursue their own path independent of IT. There are many reasons for this, but the end result is having islands of collaboration platforms that aren't integrated or even support the same applications.
Workers bypassing IT	As per the above, but on an end-user level. The drivers here are very different, starting with digitally-savvy Millennials who follow a user-centric model of getting what they need from the cloud rather than waiting for IT. This usually results in using consumer-grade applications that lack the features needed for workplace collaboration. They may be free of cost and easy to use, but can lead to a Tower of Babel that makes the business as a whole less productive, not more.
Complexity of collaboration offerings	Conversely to Millennials, SMBs will have their share of workers who are not tech-savvy. Premise-based collaboration offerings are often complex, not just to deploy, but for workers to use. In cases where these applications are either too technical or unfamiliar, workers won't use them, undermining your best intentions to remain premise-based with collaboration.
Ability of telephony vendor to support the cloud	Telecom vendors have been shifting to the cloud to support their core business out of necessity. Collaboration solutions are more complex, and for vendors that have only recently added this, they may have limited capabilities. As such, sticking with an incumbent telecom vendor with deep legacy roots may curtail your plans for cloud-based collaboration.



When considering cloud-based telephony, ROI is a key driver, and the benefits are easy to measure. Cloud-based collaboration is different in two regards. First, since the solution—often Unified Communications—isn't as tangible as telephony, the value proposition isn't as intuitive. Furthermore, the outcomes—like improved productivity—are difficult to measure, making the efficacy hard to gauge. Secondly, these solutions are largely software-based and are best delivered by the cloud, so they don't follow the conventional ROI model that is so familiar to SMBs.

The challenges presented in the above tables reflect the shortcomings of premise-based approaches for both telephony and collaboration. While there's a clear trend for SMBs to adopt the cloud, there's also a clear need for better collaboration capabilities.

Each business will have a distinct set of circumstances that could lead them in this direction, and for those in the early stages of trying to develop a collaboration roadmap, here

are three core use cases to build upon. Many others exist, but this will provide a solid starting point for extending cloud beyond telephony and into collaboration.

## Use Case 1: Adopting a Distributed Organizational Model

As SMBs grow, their base of operations will expand to support a wider customer base. With premise-based infrastructure being highly centralized, this becomes problematic to support, especially for real-time communications.

In contrast, the cloud scales seamlessly, regardless of the number of office sites or endpoints, as well as by geography. The cloud also scales quickly and cost-effectively, allowing SMBs to keep pace with growth and enter new markets before their competitors do. As operations become more distributed, so does the need for collaboration, and this is where the cloud truly becomes strategic.

## Use Case 2: Managing Change Events

SMBs may be ready for the cloud, but they often lack a specific use case. In this scenario, a particular need or event is the trigger for a cloud deployment, and it could come at any time. For telephony, the trigger event will be the point at which a change is needed, even if it was not planned. Legacy phone systems are built to last, but at some point, there will be a breakdown or failure. Since most businesses cannot dispense with their phone system, a replacement must be found quickly.

A variation would be a phone system that still works reasonably well, but has reached too many points of capacity and can no longer support everyday needs. In either case, the cloud usually represents the best way forward, at which point its merits for collaboration become easier to understand.

Another change event for this broader consideration would be around a move or opening new locations. These are essentially greenfield opportunities, where the business can start with a clean slate and effectively move on from premise-based technology. Given all the constraints outlined herein, this should not be a hard decision to make when planning for collaboration.

## Use Case 3: Keeping Pace With Change

This is perhaps the most strategic reason for using the cloud for collaboration. Most SMBs are early on this journey, and may not realize that the collaboration value proposition is quite fluid. As technology keeps evolving, so do the use cases for collaboration, making this very different from telephony, where the use case doesn't really change.

Not only will there be more collaboration applications coming, but the platforms will need to integrate with more business applications, such as Office 365, CRM software, etc.

Furthermore, as collaboration tools become more widely used, there will be a growing need to develop and support applications that are customized for lines of business or specific vertical market requirements. As such, integrating telephony with other communications applications is just the starting point, and IT needs flexibility to ensure the business can keep pace with changing end-user needs and changing technologies.





Technology is a great enabler, and SMBs in particular must make good choices, not just to operate more efficiently, but to compete more effectively against larger players. The constraints of having limited IT resources—or budgets, for that matter—are no excuse for deploying state-of-the-art technology, and the cloud makes this available to businesses of all sizes.

This white paper has addressed the two key decision points SMBs must reach before choosing the right cloud communications partner. First is recognizing the cloud as the way forward in today's market, and second would be the same for the cloud as being the best deployment model for collaboration. Telephony may be the initial use case, but in terms of providing the best outcomes for the business, collaboration is where cloud delivers the most value.

With that in mind, here are two sets of considerations for SMBs to identify the right cloud communications partner. The starting point would be the offering itself and aspects of the underlying technology that fit your needs. Complementing that would be a set of strategic considerations, and these will help you determine the provider's fit in terms of being a good business partner.

### Technology-Level Considerations

#### Ease of use

Aside from being a must-have for the

end-user experience, this also applies to IT. When IT resources are limited, requirements such as onboarding, provisioning and configuring also need to be easy. This may not be top of mind for SMBs, but it will be critical for deployment success, so you need to think broadly about ease of use.

#### Single-source partner

Cloud-based collaboration has a short track record, and newer entries are more likely to be built on third-party partnerships rather than being a native, internally-developed offering. These offerings can certainly perform well, but this characteristic should be carefully vetted. Not only will a single-source partner have seamless integration across applications, but it will be easier in terms of doing business and getting support.

#### **Analytics**

This is an emerging value driver, especially for cloud applications, where everything is digital. Once communications applications become digitized, these applications can be measured in a multitude of ways. For IT, this means better network utilization, but also tracking the adoption and usage of applications by workers.

Not only will this help SMBs understand how best to use collaboration tools, but analytics can also provide accountability to support the business case to management. New forms of analytics are coming all the time, and understanding what partners can bring here will really help SMBs get full value from the cloud.

#### Local number porting

Technology-wise, this might be an afterthought, but it's essential for large-scale cloud migrations. Public switched telephone network parameters will be with us for years to come, so this capability in a partner must be well understood. The more global your footprint, the harder local number porting is to do both for your office locations and the various carrier partners that support them. Not all cloud partners are created equal here, so don't assume this will be a given.

### Strategic-Level Considerations

#### Transparency

The maxim of being able to do what you say you can do applies to all businesses, but it's particularly applicable to cloud communications. While the cloud creates new forms of value for SMBs, it also enables new players, so the competition is intense.

Since new players don't have a customer base, they must aggressively compete, and will often overpromise to win business. Most partners can provide the core cloud capabilities to SMBs, but when it comes to the more challenging, higher-value applications, you have to be wary of what's being said. Your best defense is to get references from customers in terms of transparency for how they do business and how well promises are kept.

#### Being proactive

Established cloud partners will know best from broad experience what SMBs need and what new features they should be using. Many SMBs come to the cloud from a basic level, using a basic phone system—they are not sophisticated enterprise users. They are also not necessarily aware of all the features that can be used to take collaboration to the next level, so if partners listen and ask questions, their suggestions will be welcome.

As such, it's not correct for partners to assume that customers know what they want. The right-fit partner is the one that understands how SMBs are basically too busy with their day-to-day to be thinking about what's new for collaboration.

#### Helping IT be more strategic

A good partner understands that IT teams in SMBs are always stretched, and that the business relationship is more than just selling technology. By this point, it should be clear how cloud-based collaboration is far more manageable for IT than premise-based offerings.

While this might be enough to win the business, a richer differentiator would be helping IT remain strategic as staff sheds long-held roles in managing premise-based technology. Cloud-based collaboration presents an opportunity for some re-invention, and a way for IT to take a leadership role with new technology. This could take the form of driving innovation projects or devising new metrics to gauge productivity, and these ideas should be viewed as another vector for evaluating cloud partners.

#### Flexible TCO model

Most SMBs have tight cash flows, especially when operations are largely funded by current receivables. For these businesses, the shift from Capex to Opex is a major draw for the cloud, and from there, SMBs will adopt technology that can be supported by existing cash flows. This reality will continue to hold so long as collaboration solutions are focused on productivity.

As SMBs mature, their focus will broaden to include revenue generation, at which point collaboration will be more than a Capex line item. For now, however, collaboration will not directly contribute to day-to-day revenue streams, so can only be viewed in terms of a total cost of ownership (TCO) model. Regarding what to look for in a business partner, this translates into having flexible licensing plans that can be tailored to your cash flow needs.

## Conclusion

There is no shortage of partners that purport to address all the needs outlined herein, and without a considered analysis, SMBs could easily make a hasty decision, especially if under pressure to move quickly. Cloud-based solutions can certainly be deployed quickly, and can scale even faster, but if your needs aren't properly assessed, the benefits will be underwhelming.

The starting point is recognizing that premise-based telephony is more expensive than it needs to be, along with how the multitude of associated limitations can be overcome by moving to the cloud. From there, a second level of recognition is needed around how communications is much more than telephony, and what's really needed is an integrated approach to managing this.

To date, SMBs have not been thinking along these lines, and that's the mindset this white paper serves to address. The cloud provides an unprecedented opportunity for SMBs to communicate, collaborate and engage with customers just as effectively as enterprises. However, that opportunity cannot be realized unless the potential of the cloud is understood, along with the characteristics that make for the right fit among the many cloud partners you'll likely need to evaluate.

To learn more about how your business can leverage cloud communications to lower costs, increase workforce collaboration and engage customers, contact an 8x8 Solutions Expert at 1.866.879.8647 or visit 8x8.com.

This white paper was produced by J Arnold & Associates, an independent technology analyst practice, and sponsored by 8x8. The contents reflect J Arnold & Associates' conclusions about the SMB collaboration market drawn from ongoing research and industry-based interviews. For more information, please contact jon@jarnoldassociates.com.

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