EXECUTIVE SUMMARY

The majority of users in the workplace today have available to them a variety of communication and collaboration tools: an email client and/or Webmail on a desktop or laptop computer, access to email on one or more mobile devices, voice communications on both a desktop telephone and a mobile device, instant messaging capabilities, social media via dedicated clients or a Web browser, and other tools. While these capabilities are useful, they are generally not integrated in such a way so that they can easily share data. Moreover, the availability of features and functions in the various communication modes is highly dependent on the venue of an individual’s work and the platforms he or she has available: for example, the tools and communication modes available to a user when working from a laptop at an airport are substantially different than those available when sitting at the desktop computer in an office.

Unified Communications (UC) changes this: by enabling a single, unified platform for various modes of communication and collaboration – email, voice, instant messaging, social media, etc. – the user experience can be virtually identical regardless of the venue for work or the device(s) on which the platform is accessed. Not only does UC enable a richer and more productive experience for end users, it reduces corporate IT and telecom costs and makes organizations more agile and flexible.

However, enabling unified communications is not a simple matter. It requires careful planning of the network that will support the solution, overcoming a variety of cultural issues as organizations shift from independent IT and telecom functions to an integrated management approach, replacing legacy investments that may not have reached their end-of-life, and training for various constituencies within an organization. Add to this the fact that many users have already deployed their own UC capabilities independently, without the blessing of IT and often without their knowledge.

Proper planning, deployment and management of a unified communications platform requires engaging the appropriate partners to help on a variety of fronts: choosing the right platform, planning the network, and addressing the myriad issues that will arise during the deployment and management phases.

ABOUT THIS WHITE PAPER

This white paper discusses the various benefits of unified communications, the problems that organizations can expect to experience as they consider its deployment, and advice about how to engage a trusted partner to assist in the migration to a unified communications platform. Also included is a brief overview of ConnectSolutions, the sponsor of this white paper, and the company’s offerings.

Osterman Research conducted a survey specifically for this white paper, results from which are included throughout. The survey was conducted during late May and early June 2015 with individuals who are knowledgeable about unified communications issues in mid-sized and large organizations.

WHY TRADITIONAL COMMUNICATIONS SYSTEMS HAVE LIMITATIONS

SILOED COMMUNICATIONS SYSTEMS HAVE LIMITATIONS

Using a conventional communications system in the typical workplace, each information worker normally has available to him or her an email client, normally Microsoft Outlook, that includes calendaring and task management along with sophisticated email capabilities; access to a customer relationship management (CRM) system to manage and communicate with customers and prospects; a desktop telephone; an instant messaging client; a social media account; a mobile phone that,
among other things, offers text messaging/SMS services; and availability of a departmental fax machine.

However, this conventional communications paradigm has a number of inherent limitations, including:

- Email messages are accessed in an email client on the computer.
- Voice calls are made and voicemail is accessed through a telephone.
- Instant messaging conversations are conducted in a separate client.
- Social media sharing is accessed through yet a different client.
- When faxes are sent or received, users must walk to a fax machine and process individual pieces of paper.

The result is that there is minimal integration of data between the different communication modes, interoperability between them is minimized, and there is an overall lack of organizational flexibility and agility in accessing the various communications modes and data stores.

**NON-UNIFIED COMMUNICATIONS CREATES DIFFICULTIES FOR EVERY PART OF AN ORGANIZATION**

This typical configuration of separately deployed and separately managed communications tools and interfaces is somewhat workable while the user is in a traditional office setting. However, there are a number of limitations inherent in the conventional, non-unified communications paradigm. For example:

- A growing proportion of users work outside of a typical office setting and so are less productive when doing so with conventional communications capabilities. For example, the survey conducted for this white paper found that 14% of employees currently work from home on regular basis, but this figure is expected to climb to 22% by mid-2017. When users work remotely, their desktop telephone is inaccessible; and fax capabilities are inaccessible without the aid of someone else in the office that can re-send or read the faxed information. Only email works more or less like the in-office experience because browser-based email – such as Microsoft Outlook Web Access (OWA) – operates much like the Outlook client that most users have available to them.

- There is a limited ability to permit information workers to telework or otherwise work remotely, resulting in higher facilities costs because organizations must provide desk space for a larger proportion of the workforce.

- IT costs are typically higher because IT staff members must manage a variety of separate systems, each with its own management interface, training requirements, upgrade cycles, etc.

- Overall organizational agility is restricted because information workers are more limited in their remote work capabilities, and so decision makers have fewer options for employing remote workers or implementing telework programs.

**UNIFIED COMMUNICATIONS CAN MAKE ORGANIZATIONS MORE EFFICIENT**

The conventional and widely used approach to workplace communications described above allows users to be productive, but only to a point. Alternatively, consider the benefits of a communications system in which all of the capabilities are unified into a holistic solution:
• Information workers can send or receive email, make telephone calls, access their voicemail, have instant messaging conversations, and send or receive faxes from a single interface. Plus, data can be shared digitally between all of these communication modes.

• These various communications modes are accessible on any platform available to the user, regardless of their location – a desktop computer, a laptop computer, a smartphone or a tablet – using a thick client or virtually any Web browser.

This "unified communications" approach is exactly what its name implies – an integrated set of communication tools that are accessed via a single interface and managed as a single platform. Unified communications includes a variety of communications and collaboration tools: email, calendaring and scheduling, voice/telephony and real-time communications capabilities that are available to a user through a thick client and/or a browser-based interface. Other functions that may be included in a unified communications system are Web conferencing, text messaging/SMS capabilities, and mobility services. A number of unified communications systems also integrate security capabilities like intrusion prevention and email filtering services.

The survey conducted by Osterman Research for this paper found that the deployment of unified communications is growing at a healthy pace, and in conjunction with the deployment of business-critical applications in the cloud, as shown in Figure 1.

Figure 1
Penetration of Unified Communications and Cloud Applications
2015 and 2017

45% 23%
2015

66% 41%
2017

Users served by a unified communications solution
Business-critical applications delivered via the cloud

Source: Osterman Research, Inc.

Clearly, the unified communications scenario is preferable for information workers who need to work more efficiently, particularly when traveling or when they work from home. However, a unified communications platform is also preferable for IT and telecom staff members because they no longer need to manage individual communication silos, but instead can manage a single, integrated system. This results
in synergies and efficiencies that would not be achievable in a conventional communications paradigm.

Organizations that deploy unified communications systems also benefit in other ways:

- Information workers who have access to all of their communication capabilities from a single interface can be just as productive when on the road or when working from home as when they are in the office. This gives corporate decision makers the flexibility to allow their employees to work from any location, resulting in an enhanced user experience and potentially greater retention of employees.

- Information workers who have access to all of their communications capabilities from any computer can be much more productive after a natural or other disaster, enabling an organization to return to normal operations more quickly. For example, a survey conducted by an HR consultancy\(^1\) found that 93% of organizations surveyed permit their employees to telecommute after a disaster has taken place. Obviously, if all employees have access to a complete set of communication tools from any location, they can telecommute far more effectively following events that will displace them from their normal place of work.

- From a more strategic perspective, however, employees who have access to all of their communication capabilities from a single interface can be highly productive when working remotely on a regular basis. This permits organizations to operate with less office space than they would otherwise require if an office or cubicle must be provisioned for every employee. Osterman Research estimates that the typical organization can save several hundred dollars per employee per year (or more) in facilities costs alone when employees can work from home even just one day per week.

The bottom line is that unified communications permits organizations to reduce their overall costs of communications management and enable greater employee productivity.

**WHAT ABOUT NON-UNIFIED, UNIFIED SYSTEMS?**

While unified communications solutions offer a number of advantages, there are different degrees of what is considered “unified”. For example, there are a number of solutions for IP-based telephony, instant messaging, Web conferencing and other key elements of a unified infrastructure that are not offered as part of a primary desktop solution. While these solutions do offer benefits and provide functionality as part of the desktop, laptop or mobile device experience, they require use of a separate interface – in essence, users must leave their primary email and desktop productivity application experience in order to use other communication tools.

For example, Cisco WebEx is a useful Web conferencing platform that has been deployed in thousands of organizations. However, the experience is not delivered as part of the most commonly used email platform – Microsoft Outlook accessing an Exchange or Office 365 backend – or via the most commonly used desktop productivity suite – Microsoft Office. Consequently, while WebEx offers robust functionality, the experience is not as unified as it could be if it were tightly integrated with Outlook and Office.

Moreover, while it is possible for a non-Microsoft unified communications solution for telephony or Web conferencing to provide integrated email and desktop productivity applications, the reality is that such an approach really isn’t going to happen anytime soon. Osterman Research has determined through multiple surveys that email is the primary application used by information workers – the typical email user spends

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roughly 150 minutes per day doing work connected with their email client. Moreover, Word, Excel and PowerPoint have become deeply entrenched in the user base, and so displacing them would require a level of justification that most decision makers would not be able to provide. Consequently, because Outlook and the Office suite have become the “anchor” applications for most users, with additional capabilities like telephony and Web conferencing as the secondary capabilities, displacing these email and desktop productivity experiences is simply not practical or likely to happen at any point during at least the next several years.

**WHAT HAPPENS WHEN CONSUMERS LEAD IT ALONG THE PATH TOWARD UNIFIED COMMUNICATIONS?**

One of the most profound shifts in corporate IT of the past several years has been the growth of “shadow IT”, also known as the “consumerization” of IT or the BYO (Bring Your Own) movement. Regardless of its moniker, the trend is for users to implement their own capabilities in the context of devices, applications and cloud services to either supplement or replace the capabilities that IT has deployed.

While there is clearly a negative aspect to shadow IT, as we discuss in the next paragraph, the impetus for users to become their own IT department generally has sound underpinnings: individual employees, seeking to be more productive or gain more advanced capabilities than IT can afford, download and deploy their own tools that can make them more productive while traveling or while working from home, or that can reduce costs for their employer. For example, using a mobile phone while traveling in another country can be prohibitively expensive given the high cost of data roaming and voice charges. However, if a user has downloaded Skype and Dropbox, accessing a free Wi-Fi connection will provide users with voice services and file access very inexpensively.

However, shadow IT carries with it some fairly serious consequences that many users generally do not consider in their quest to become more productive or more efficient. For example:

- Content in applications that have been deployed by end users generally bypass the archiving systems that IT departments in most organizations have deployed. This means that a significant proportion of content will never be archived, and so will be unavailable to the organization when it’s needed for eDiscovery, regulatory compliance or other purposes. This can create serious risks for an organization that is unable to respond properly to requests for information from courts or regulators.

- The content in user-deployed applications typically does not pass through content-filtering systems that IT has deployed. This increases the likelihood that malware will be introduced into a corporate network, for example from a user’s personal PC that has infected a work-related file a user was accessing while working from home. Moreover, if an organization has deployed a data loss prevention solution that will scan outgoing content for sensitive or confidential information, user-deployed systems will typically bypass it, creating a greater risk of a data breach.

In short, users typically mean well when deploying their own IT tools, but the consequences can be serious and raise the overall risk that the organization faces.

**THE EVOLUTION OF SKYPE**

The consumer version of Skype has been in use for many years in the workplace as an alternative to company-provisioned telephony because of its utility, call quality, free long-distance calling, and flexibility in enabling telephony for remote users whose organizations have not yet deployed unified communications. In short, Skype is already widely used as a key component of a de facto, employee-deployed unified communications system as part of the shadow IT problem discussed above.
However, while Skype was often deployed without the blessing of IT and often was not officially supported, IT decision makers have been warming to the idea of Skype for some time. For example, Osterman Research has been tracking the “legitimacy” of various applications for many years, asking IT staff in mid-sized and large organizations if they consider these applications to be legitimate for use in their organizations. In 2010, for example, only 42% of those surveyed by Osterman Research believed that Skype was a legitimate application for use in their organizations. By 2012, however, 52% of decision makers believed this was the case, and 55% believed Skype to be acceptable for use by 2014. Indicative of the growing acceptance of Skype as a business-grade communications platform is the fact that 61% of IT decision makers we surveyed for this white paper are interested in migrating to Skype for Business – the survey also revealed that 71% will be interested in doing so in 12 months, as shown in Figure 2.

**Figure 2**
Interest in Deploying Skype for Business
2015 and 2016

![Interest in Deploying Skype for Business](source: Osterman Research, Inc.)

**UNDERSTANDING THE BENEFITS OF SKYPE FOR BUSINESS**
Microsoft has offered real-time communications capabilities for a number of years via offerings in both the consumer and enterprise markets. Previous offerings included Live Communications Server (introduced in 2003), Office Communications Server (introduced in 2007), and Lync Server (introduced in 2010). In late 2014, Microsoft announced that Lync would become Skype for Business and, like Lync, would be offered as both an on-premises solution and in the cloud as part of Office 365.

Aside from the name change, Microsoft has made substantive improvements in Skype for Business relative to Lync, including:

- For organizations that have deployed Skype for Business Server 2015, users can employ their existing desktop phones as part of an on-premises PBX system to make calls.

- Skype for Business has a new look and feel, although Microsoft has retained Lync’s Quick Action buttons that allow users to establish an instant messaging conversation or call someone on their contact list.
• The ability to preview file transfers before downloading.

• Integration with the Skype directory.

• The ability to match the Skype interface to participation in a call, switching back and forth between a full Skype for Business window and a smaller version of the window when simply listening in on a call.

A No Jitter survey\(^2\) found that the majority of Skype for Business users employ the platform for a variety of applications, including instant messaging, presence notification, audio conferencing and Web conferencing. While most do not yet use it for enterprise voice/PBX replacement, a substantial 25%+ of those surveyed are using Skype for Business as their primary voice solution. Among organizations that have adopted Skype for Business as their PBX replacement solution, the vast majority has found it to be better than the voice solution it replaced.

DEPLOYING UNIFIED COMMUNICATIONS CAN BE PAINFUL IF NOT MANAGED PROPERLY

Unified communications (UC) brings with it a variety of important benefits that will improve employee productivity, lower the costs of delivering IT and telecom services, improve organizational agility, and provide new business opportunities. The vast majority of those we surveyed for this white paper agree: 59% of those we surveyed believe there are “significant” benefits to be realized from the deployment of unified communications and another 12% believe there are “enormous” benefits.

However, the transition to unified communications can be a painful one if it is not managed properly. In this section, we will discuss some of the key issues that organizations can face as they consider a migration to unified communications and as they undertake the steps necessary to bring it about.

CONVINCING IT AND BUSINESS DECISION MAKERS ABOUT THE BENEFITS OF MOVING TO UNIFIED COMMUNICATIONS IS ESSENTIAL

The first step in any migration to unified communications is convincing the powers that be of the benefits that it can provide and overcoming the variety of barriers that can prevent an organization from even considering it. Because some of the benefits of unified communications are not easy to quantify – such as improved employee productivity, faster decision making, greater organizational agility, the ability to get up and running more quickly after a disruptive event, or more efficient work for traveling or other remote employees – many decision makers are reluctant to sign off on a migration to unified communications.

The key, therefore, is convincing both business and IT decision makers about the value of these “soft” benefits, along with the “hard” savings that can be realized from consolidating communications functionality and retiring legacy investments that are expensive to maintain. However, our survey found that many decision makers do not yet have a clear view of the implications of unified communications in their organizations, as shown in Figure 3 on the next page.

\(^2\) http://www.nojitter.com/slideshows/240169916/no-jitter-research-presents-skype-for-business-adoption-trends?pgno=1
UNIFIED COMMUNICATIONS CAN BE A FEARFUL UNDERTAKING IF NOT HANDLED PROPERLY

One of the more important inhibitors to the adoption of unified communications is that many decision makers fear such a significant shift in the way their organization communicates:

- Unified communications represents a paradigm shift from the status quo of standalone and siloed communications solutions, and so requires a rethinking about how communications will be accomplished and the solutions that will deliver it.

- Most organizations lack the in-house expertise to evaluate, deploy and manage unified communications solutions. Consequently, this can be a key stumbling block for many organizations simply because they do not know where to begin.

- More traditional organizations that have separate IT and telecom departments can face cultural and “turf” issues because unified communications represents the melding of these traditionally separate disciplines.

- Unified communications also requires potentially significant changes to the corporate network, which might include adding more bandwidth, migrating key services to the cloud, and thinking about service delivery in new and innovative ways.

Our research revealed that a significant proportion of decision makers fear a migration to unified communications. For example, in 26% of the organizations we surveyed, IT decision makers are “somewhat” or “very” fearful about migrating to unified communications; for business decision makers, this figure is 39%.

Figure 3
“Whether or not your organization has moved forward with unified communications, do your IT and business decision makers feel as though they have a clear view on the impact that unified communications could have on your business operations and employees’ productivity?”

Source: Osterman Research, Inc.
Why The Paradigm Shift of Unified Communications is Worth the Effort

REPLACING LEGACY INVESTMENTS IN CURRENT COMMUNICATIONS SYSTEMS IS ESSENTIAL

Virtually every company has made significant investments in IT and telecom systems – email servers, PBXs, applications, and a variety of other systems in support of the various communications modes on which users rely. These major infrastructure investments, as well as investments in the applications that run on the current infrastructure, are substantial and, in most cases, have not been fully depreciated.

Not surprisingly, many decision makers are reluctant to deploy unified communications, at least in part, because of these legacy investments. For example, our research found that 29% of decision makers agreed or strongly agreed with the statement, “In general, our organization wants to eek out every last dollar from our legacy technology investments before replacing them.” Add to this the fact that one out of six organizations we surveyed agreed or strongly agreed with the statement, “Our legacy investments in telephony and related systems would be a key factor in holding back our potential deployment of a unified communications solution.”

Should an organization replace its legacy technology investments before they have fully reached the end of their useful life? In most cases, the answer is “yes” if a strong business case can be made that the benefits from the new technology will be greater than the residual value in the legacy infrastructure and applications. For unified communications, that business case is generally fairly easy to make.

DEVELOPING THE JUSTIFICATION FOR MOVING TO UNIFIED COMMUNICATIONS

There are two key ways in which the migration to unified communications can be justified:

- Nearly one-half of the organizations surveyed would employ traditional return-on-investment (ROI) calculations to do so. Because of the consolidation of individual communications solutions into a single platform in a unified communications solution, there are inherent cost savings for infrastructure, administration, power and other key cost elements compared to separately deployed and managed communications systems like email servers and PBXs. The result can be a significant ROI from just the infrastructure savings, a benefit that often is greater when on-premises systems are replaced with cloud solutions.

- Our research revealed that nearly two-thirds of organizations would consider improvements in employee productivity to be important or extremely important in justifying the migration. Improved employee productivity, combined with related benefits like the ability to establish robust telework programs, reduced facilities costs, and greater appeal to a younger workforce, can provide strong justification for the move to unified communications even if a legacy infrastructure still has several years before it must be replaced.

ENGAGING PARTNERS TO HELP

Finally, it is essential to choose the right unified communications technology from the right vendor with the right roadmap. For very small organizations, relying solely on an “out-of-the-box” solution might suffice, but for anything but the smallest and least sophisticated unified communications deployments, a trusted partner will be an essential element of the migration. Because the right trusted partner can dramatically ease the pain of moving to unified communications, it is essential to engage an experienced vendor to manage the various issues that will need to be addressed before, during and after the migration, such as:

- What are the pre-deployment activities that must occur, such as the creation of cross-functional teams and convergence of the IT and telecom teams to ensure that the migration goes as smoothly as possible?
Why The Paradigm Shift of Unified Communications is Worth the Effort

• What will be the impact of unified communications on long term plans to migrate to a service-oriented architecture?

• What changes are necessary to the existing local area and wide area networks to ensure that the new unified communications solution works as planned, particularly with regard to bandwidth, network performance and traffic flows?

• How will pilot deployments be managed?
• How will IT and business units sell the concept of unified communications to end users to ensure that users actually employ the new investments and don’t revert to the old way of doing things?

• How will employee, IT and other training be carried out and when in the deployment process?

• How can the changes be implemented during the migration with no negative impact on the existing infrastructure?

• How will users be migrated from existing, legacy systems to the new unified communications platform with the least possible impact on their productivity and the organization’s ability to deal with customers?

• What training will be required for IT and telecom staff members before, during and after the transition to unified communications?

• What are the security implications of the move to unified communications, particularly with respect to remote users accessing the system, sharing of sensitive data, malware infiltration, etc.?

SUMMARY

Unified communications offers a number of important benefits that can have positive impacts across an organization: improved employee productivity through the integration of different communication modes, faster decision making, the ability to enable robust telework programs, and improved organizational flexibility and agility. Even though the deployment of a unified communications solution will often require the replacement of legacy systems before they are fully depreciated, the benefits of doing so will almost always outweigh their cost. Moreover, proper deployment of a unified communications solution will require use of a trusted partner that can address the variety of issues that will arise during the planning, deployment and management phases of a migration.

WHY CONNECTSOLUTIONS?

With over eight billion minutes of cloud collaboration delivered and over a million voice seats deployed, CoSo products, services, and unrivaled expertise are relied upon by mid-market businesses, global enterprises and government agencies to deliver a superior customer experience in the deployment and ongoing management of mission-critical collaboration systems.

CoSo Cloud™ private managed service offerings exceed the security, reliability and quality requirements of typical collaboration systems and are favored by organizations that need to trust the implementation and ongoing operations of mission-critical communications.

CoSo Cloud for Microsoft® Lync and Skype for Business™ is a secure, reliable and mission critical private-cloud solution for enterprise communications, conferencing and collaboration, coupled with ConnectSolutions’ unrivaled customer service and domain knowledge. It is an enterprise-level managed deployment of Microsoft Skype.
for Business and is favored by Office 365 customers and government agencies desiring cloud-based conferencing and collaboration systems that exceed the security and reliability of typical service offerings. CoSo Cloud for Microsoft Skype for Business is available in three different service offerings.

CoSo Cloud for Microsoft Skype for Business relies on the CoSo Cloud Platform. The Platform consists of purpose-built global infrastructure, premium services and specialized tools for integrating voice conferencing and other systems as well as monitoring tools and dashboards that provide insights into everything occurring in the private-cloud.
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