



Whitepaper

Hosted Unified Communications: Benefits and Migration Methods for Modern Businesses

Advances in modern communications technology have forever changed the way that business is done. They have given enterprises of all sizes a previously unimaginable degree of flexibility in terms of where they do business, what goals they set, and how they achieve those goals. Advances in modern communications technology have given resourceful and forward-thinking small and medium-sized businesses the ability to punch well above their weight in the global marketplace, and they have made it possible to recruit and retain the best employees possible based purely on talent rather than on location.

That heightened level of flexibility, however, means that IT departments everywhere have a greater level of onus to stay several steps ahead of the game; they not only must fulfill their traditional role of maintaining the

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technological infrastructure of the company, but now they also must think strategically and find new ways to leverage technology to a greater advantage. This is a game that most IT departments are almost guaranteed to lose.

With the economy as slow to recover as it has been, the increase in IT departments' workloads often has been matched with equally drastic cutbacks in budget, staffing, and training. The more strategic businesses recognize that it is impossible for IT to adequately perform an expanded list of duties with reduced staffing and budget; these businesses choose to reduce their IT departments' scope so that they can direct IT expertise more effectively at targets where IT can do the most good.

One target, which is one of the key technological elements contributing to modern business flexibility, has been the development of unified communications (UC) platforms. UC allows business communications to function seamlessly regardless of geography, time, or chosen medium of communication. Integrating a business's entire communications framework under one interface, decentralizing that system, and making it accessible from anywhere via any number of endpoints or devices has allowed for communications efficiencies and increases in productivity that were unable to be dreamed of as few as 15 years ago.

Such increased efficiency and productivity are so widespread now that they have become both a standard of doing business and a competitive necessity. The question these days isn't "do we need a UC system?"; the question



is “what is the best way to implement a UC system?” The answers can vary from business to business and even from one time frame to another within the same business, but, increasingly, businesses respond to the question by choosing to employ a third-party, hosted solution.

This whitepaper will provide an overview of which business needs are served by UC in general, what benefits are found in a hosted solution, and how different types of businesses potentially could profit from a hosted UC solution.

■ **Needs That UC Meets**

From one perspective, the term “unified communications” can be misleading. The tendency, when considering business communications, is to think of traditional mediums such as telephone, email, and voicemail. The data-based nature of UC, however, broadens the category of business communications to include not only traditional modes but also multi-party conference calling, video communications, and videoconferencing. Treating all communications as data also has further implications in terms of storage, manipulation, and sharing.

Although the benefits of a UC system are many, they can generally be grouped into four categories: collaboration benefits, mobility benefits, data sharing and analysis benefits, and productivity benefits.

■ **Collaboration Benefits**

The benefits of collaboration have been known to the business world for a very long time. This is the impetus



behind the good, old-fashioned business conference. Getting a group of people together in the same place and at the same time provides a unique opportunity for widespread sharing of knowledge and expertise, and conferences provide a way to obtain multiple perspectives on persistent issues of business concern.

The major problems with traditional business conferences and the reason that even the largest corporations hold them only infrequently is that they are expensive both financially and logistically. The financial burden for even a medium-sized company in terms of transportation and hotels for a significant number of employees is not something to take lightly. Likewise, the cost in terms of downtime and reduced productivity while employees are away from the office can have a significant impact on a business's bottom line.

Unified communications systems—especially those that incorporate videoconferencing technology—provide a similar sense of face-to-face interaction as traditional conferences do, but UC systems do not require travel, hotels, or extended absences from the office. The process is generally so convenient that some corporations have their annual departmental, regional, and corporate conferences every month via UC systems.

The real-world effects of this simplified, convenient, and immediate conferencing ability are actually farther reaching than one might expect. One of the less obvious effects is that stakeholders who might have traditionally been excluded from discussion of an issue because they



are only partially or tangentially involved can now easily be included in the conversation. This helps to ensure that decisions made about significant issues are the right ones, and it results in minimizing or completely eliminating unintended consequences of those decisions.

The final major benefit that UC has on the ability of an organization to collaborate effectively involves the data-manipulation capabilities that a UC system enables. Because everything that goes through a UC system is treated as data, it can be manipulated as data as well. The applications of this are both fundamental and far-reaching.

Audio and video conference calls, for example, can be saved and then played at a later time for the review of those present in the meeting or for the edification of those who were unable to attend. The saved recordings can be sent to other users on the system by email, instant messaging, or as a link to a shared storage location. UC systems can free an organization not just from the limitations of geography but also from those of time.

■ **Mobility Benefits**

UC systems generally run on a combination of a private intranet and the public Internet. Because of this, the system can be configured so that any employee can connect to the communications system from anywhere with an Internet connection; therefore, employees can be just as in touch with the rest of the company as if they were sitting at their desk. Thanks to mobile broadband, the proliferation of smartphones, and wireless hotspots for laptops, employees can stay connected even while in transit between locations.



While this can be useful for any employee who works from multiple locations, most companies will see significant benefits in this regard with key staff and with employees who have a specialized expertise. The biggest issue that most companies face with employees who were hired for a very specialized skill set is under-utilization. With these employees, the ability to effectively be in more than one place at the same time can be invaluable, and a business can utilize their skill set in multiple locations, obviating the need to hire multiple staff to cover what would effectively be one position if geography weren't an issue.

■ **Data Sharing and Analysis Benefits**

One of the biggest challenges facing any business, especially one that is spread out over multiple locations, is keeping the flow of information both timely and accurate. Good information leads to good decisions, and bad information more often than not results in bad decisions. Data sharing and shared analysis tools allows every department in all locations to operate from the same current and accurate information.

The key element of data sharing is that it is possible to determine ahead of time what types of data from which departments will be shared with other specific departments. It is also possible to design reports that incorporate data from multiple sources and to populate those reports with that data as it is entered into the system. This means that members of one department are no longer dependent on members of other departments for the information they need.



■ **Productivity Benefits**

Productivity benefits can be subdivided into benefits related to improving workplace efficiency and benefits related to increasing the likelihood of “extracurricular” work.

Much workplace inefficiency is the direct result of two factors: either being unable to reach stakeholders when you need to speak with them or being unable to access a piece of information when you need to access it. With UC, it is possible not only to know where anyone is in real-time, but UC also makes it possible to know what the best way to reach them is at any given time. This knowledge can significantly reduce the amount of time that employees spend waiting to connect with one another, thereby boosting overall productivity—oftentimes by surprising amounts.

On the other hand, further productivity benefits relate to what one might term “extracurricular” activities. These benefits are the result of making it easy to connect to the communications system from any location with an Internet connection and from almost any device. By making it easy for employees to connect to the office from home or while in transit, businesses that use UC systems make it more likely that employees will continue performing work-related duties outside of “normal” working hours. If employees are always able to log into the communications system, employees are more likely to be more productive.



Why Hosted Services?

■ Reduction of Cost

The most obvious advantage to a hosted UC solution is a general reduction in telecom expenses through centralized SIP trunking. SIP trunking allows the majority of a business's traditional voice communications to be carried over the host providers' private intranet or the public Internet.

For internal communications, including between offices in different cities or countries, the entire communication chain occurs over toll-free data networks rather than pay-as-you-go telephone networks. For external communications, which would include customers, the majority of the chain can take place over the data network with only the last mile requiring use of the telephone network. This means that the call is considered a local call as opposed to a long-distance one, and no long-distance charges are incurred.

While this is obviously of greater benefit for companies that are more spread out geographically or who do business over a larger area, even small, localized businesses can gain some benefit from going this route.

■ Reduction of Risk

Opting for a hosted-service structure as opposed to a premise-based one can reduce business-related risks in two ways: through reduced capital investment and through geographical dispersal of infrastructure.



Many companies already have moved or are in the process of moving from a capital expenditure (CAPEX) business model to an operating expense (OPEX) model. There are sound reasons for this, particularly with regards to business communications. With technology as complex as it currently is and with the rate of innovation moving at an exceedingly fast pace, the OPEX model seems to make more sense because it allows a business to pay lower monthly costs and to pay for services needed per-seat.

Organizations looking to invest in communications infrastructure frequently face the realization that it is becoming impossible to effectively navigate the choices available in the communications technology field without the expertise that comes from specializing in the industry. IT departments are generally not able to justify retaining someone to maintain that level of telecom expertise, and so the choice becomes either to guess at what the best choice is or to bring in a third-party expert in a consulting capacity. A further lack of incentive for choosing a premise-based solution is the fact that by the time all the new, expensive equipment has become amortized, it almost certainly will be several years obsolete.

By migrating those capital expenditures to a third-party hosting provider, it becomes possible to alleviate or to avoid the financial risks inherent in the CAPEX model. Budgeting communications infrastructure under operating expenses (as opposed to capital expenses) also allows for a more predictable cost-per-quarter, which often has the roll-on effect of making strategic planning much easier.



Because third-party hosting providers make telecommunications technology the whole of their business—rather than just a means to an end—it is in their best interest to keep up with the state of the art in the field. Because they derive direct benefit from having the most up-to-date technology, they can likewise be counted on to consistently upgrade their systems and offerings as soon as new advances are made and new technologies become available. Hosted service providers reduce the risk of both capital expenses and of technological obsolescence.

The other way that hosted solutions help reduce risk is by keeping the most vulnerable and difficult-to-replace parts of your communications infrastructure geographically separate from the rest of your business. In the case of a fire, flood, or other natural disaster that damages or destroys a place of business, recovery of even partial operations can be both time consuming and expensive. For companies working with a premise-based communications system, water damage to the PBX or other routing hardware can shut down all communications for days or even weeks, and it might require replacing the entire hardware system.

A business with a hosted system, by contrast, can be back up and running in a matter of hours simply by relocating to an alternate space with an adequate Internet connection and by purchasing a number of standard, inexpensive IP handsets. (If employees already have laptop computers equipped with the UC user interface, the additional IP handsets are unnecessary.) Given the proliferation of broadband Internet in households, it is entirely feasible that a company in this situation might



send all employees home to continue working while alternate office space is arranged. The use-anywhere nature of hosted UC systems doesn't just mean a single employee can be mobile, it means that the entire office can be mobile if the need arises.

■ **Strategic Focus for IT**

Another significant advantage of hosted UC solutions is that they allow IT departments, which in the current economy are inevitably understaffed, to keep their focus and their time firmly directed where it will do the company the most good: on strategic planning.

Despite the often extensive skills, knowledge, and credentials of their staff, many IT departments spend the majority of their time repairing hardware, resolving conflicts between less-than-compatible hardware and less-than-compatible software, and doing basic routine maintenance. This seldom is the best use of a very specialized and valuable human resource.

IT department staff are often uniquely positioned because they have a well-rounded and relatively deep understanding of the possibilities of current available technology, and they have a thorough grasp of the company's present position and goals for the future. By moving the onus for installation and maintenance of hardware and software to a third party, IT can spend their time leveraging those tools for the greatest benefit of the company. This might include managing staff usage to ensure that tools are being used to full effect, analyzing how tools are actually being used, and discovering ways to



use tools that will generate new efficiencies and profit opportunities.

■ **Staying Flexible**

Perhaps the most compelling argument in favor of a hosted UC solution is that of flexibility. Hosted solutions help maintain flexibility in three distinct ways: user scalability, service scalability, and enabling real-time decision making.

■ **User Scalability**

User scalability refers to how easy or difficult it is to scale the number of users of the system up or down as business needs change. With a premise-based system, it is easy enough to change the number of users, but the financial impact of scaling up is considerable, and the impact of scaling down is negligible.

Scaling up—adding users to the system—often necessitates the purchase of additional, expensive hardware.

Removing users from the system unfortunately does not remove that hardware expense from the ledger. Many businesses running a premise-based UC system find that they need to overspend by a significant margin just to provide a buffer if they need to suddenly increase capacity, which means that they are paying for hardware and capacity that is unused much of the time.

With a hosted solution, though, companies pay only for what they use. When a company adds users, they pay only for the addition of those users, not for the addition of a new server rack that is full of equipment. If the company later removes some users from the system, it no longer



pays for those users. There is no paying for unused capacity, and the buffer that all businesses need is maintained by the hosting provider.

■ **Service Scalability**

Unified communications solutions are not monolithic, homogeneous software packages but, instead, are a collection of disparate applications that work together to provide a seamless user experience.

Attempting to add or remove service components to and from a premise-based UC system can be an expensive and frustrating experience for everyone involved. Generally, specialized hardware is necessary, and that hardware must be configured to work smoothly with all other hardware that is already in the system. This is not always possible.

Once the hardware is installed, the software applications that use the hardware have to be integrated into the system, often requiring re-coding of the user-interface package. Even if everything in the system is completely standards compliant, which is not generally the case, this process is fraught with potential conflicts and coding errors.

With hosted solutions, issues such as these become issues for the hosting provider rather than for the in-house IT department. They will have already worked out most or all of the issues with integrating the various components of their UC offerings and, therefore, will be able to offer a truly modular experience. Provisioning new services or decommissioning those that are proving less useful can be as simple as checking or un-checking a box in the



web-based management software, and the services can often go live or be removed on the same day.

■ **Who Benefits the Most?**

While it's true that almost any business can benefit from integration of some form of hosted UC strategy, some types of businesses stand to benefit more than others and in different ways. Likewise, a business doesn't need to dive headfirst into hosted-UC waters to derive many of the benefits available. Before a business decides to shift from a traditional premise-based communications system to a hosted UC platform, it is important to understand exactly what aspects of unified communications are likely to yield the best returns. This might differ based on the type of company in question.

■ **Companies That Fluctuate in Size**

This category of company includes seasonally-based businesses that tend to be very busy at certain times of the year and less busy at other times. It also includes businesses in industries that historically have been prone to drastic growth or drastic cutbacks, such as the technology sector, the financial sector, and some segments of the manufacturing and sale sectors.

Hosted UC can be an invaluable tool to businesses in these areas, primarily because of the ease with which capacity can be added or removed as needed. Additional benefits are the ability to adjust service levels and, therefore, costs on an ongoing basis to reflect the company's current cash-flow situation.



Situations that can cause issues for these types of businesses migrating to a hosted UC solution are similar to those experienced by any established company that migrates to a new telecommunications infrastructure. It sometimes can be difficult to integrate the new hosted components with already-present premise-based technology, but generally this can be handled by an experienced provider or systems integrator.

■ **Large Enterprises**

Large enterprises can generally benefit the most from hosted UC because of the shift from a CAPEX to an OPEX model. The ability to pay a per-user amount in exchange for an all-inclusive and integrated communications infrastructure that includes full desktop services and remote management capabilities can be invaluable to any large organization.

The per-user nature of the financial piece of this can result in very significant savings to the bottom line when compared with a premise-based solution, and the management tools that are part and parcel of UC systems can result in enormous increases in efficiency and, therefore, productivity for IT staff.

The biggest obstacle that most large enterprises encounter when upgrading the communications infrastructure is in regards to legacy equipment and past investment. Many companies end up committed to certain communication models as a result of pre-existing equipment. Migrating to a hosted UC solution allows them to slip off the shackles



of past capital expenditures without necessitating further capital expenditures that will eventually result in the same untenable situation.

■ **Small and Medium-Sized Businesses**

The main benefits for small and medium-sized businesses that switch to a UC platform are in the ability to stay lean and focused. Because hosted services scale so economically to even very small groups, hosted UC stays cost-effective regardless of the size of the organization. A hosted system also allows smaller organizations to reduce or eliminate the need for all technical support staff, freeing up resources that would be better spent on core competencies and aspects of the business that directly drive revenue.

■ **Companies with Amortized Infrastructure**

For companies whose communications infrastructure has amortized and who are in a situation where replacing their entire infrastructure is the most tenable option, moving to a hosted UC solution can make a lot of sense.

For companies in this situation, the disruption that results from replacing their entire communications infrastructure from end-to-end is counterbalanced by the much lower upfront costs that hosted services provide over premise-based services. Additionally, if the company is considering a total replacement scenario, then that disruption was inevitable. The reassurance of knowing that a reputable hosted UC provider can have the entire system up and running in a very short timeframe, thereby minimizing disruption, can be very valuable.



A more common situation when companies are faced with having to build an entire communications infrastructure from the ground up is when opening a new branch office or other place of business where there is no infrastructure already in place. In these situations, especially if the location is likely to experience significant growth over the near future, it can be much more economically viable to go with a hosted solution for that location, primarily because of the scalability and the lack of lower upfront expenditures.

■ **Companies That Have Wide Geographical Ranges**

It is becoming increasingly common for businesses to operate with a number of smaller locations spread out across several states or even countries. It can be extremely advantageous to have personnel on-site at numerous locations, but the costs of operating a business in this way have traditionally been prohibitive in a large part because of the cost of maintaining an effective communications infrastructure.

With a hosted UC system in place, of course, geography becomes largely irrelevant. The UC software will route calls to wherever the employee or branch office is located. The cost-per-user of maintaining a hosted system is also much lower than that of a traditional premise-based system. This is true for medium to large offices, and it is even more true when dealing with small offices of only a few employees. In particular for newer companies, a hosted UC provider is the only viable option to operate a business that is spread out geographically.



■ Other Companies

Finally, there are companies that don't quite fit any of the above categories but that are interested in taking advantage of new capabilities and technologies. For those who are not interested in the sometimes prohibitive capital expenditures necessary to get new capabilities and technologies in-house, running a small pilot or trial program at a selected location or even within a smaller workgroup or team can be a good way to test the hosted UC waters.

The speed to roll out the system, the lack of upfront expenditures, and the flexibility in provisioning new users and new services on-the-fly make test driving hosted UC services a truly viable proposition. Once everyone is comfortable with the system after any kinks have been ironed out, and after new, more efficient workflows have been developed, the system can be rolled out to the rest of the company either gradually, in several bigger steps, or all at once.

Depending on the results that each individual business obtains, it might be beneficial to go the route of a full end-to-end replacement, or it may be a better idea to continue with a hybrid approach that utilizes legacy technology as well as cutting-edge hosted services. Which approach works best will depend on each individual business, and the ability to “try before you buy” will allow businesses to make that decision with confidence.